



AWARD AGREEMENT
Partners of the Americas Foundation
and
Universidad Nacional de Colombia

This document states the award agreement of the project **“Creating Diverse Scientific Communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM Collaboration”** celebrated between Partners of the Americas Foundation, duly represented by its Vice President, Education & Global Citizenship, JULIANA ARAUJO, and the National University of Colombia- Manizales Campus, with NIT 899.999.063, duly represented by Professor DOLLY MONTOYA CASTAÑO, named Rector by means of Resolution No 018 of 2021 and Possession Certificate No. 001 of 2021, acting according to articles 15° of the Agreement 011 of 2005, article 13 of Decree 1210 of 1993 and the article 3 of the Agreements and Contracts Manual adopted by Resolution of Rectory No 1551 of 2014, in name and representation of the UNIVERSIDAD NACIONAL DE COLOMBIA, autonomous entity of the Colombian state, attached to the Ministry of National Education of Colombia, governed at the moment by Decree 1210 of 1993, with address in Carrera 45 No 26 – 85 Edificio Uriel Gutiérrez in the city of Bogotá D. C. – Colombia”

Background

In response to the grant application for the U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships of the 100,000 Strong in the Americas Innovation Fund, Partners of the Americas Foundation (Grantor), hereby referred to as “Partners”, is pleased to award Universidad Nacional de Colombia (Grantee) a small grant to implement the activities described in the grant proposal (Annex A).

ACUERDO DE SUBVENCIÓN
Fundación *Partners of the Americas*
y
Universidad Nacional de Colombia

Este documento establece el acuerdo de subvención del proyecto **“Creating Diverse Scientific Communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM”** celebrado entre Partners of the Americas, debidamente representado por su Vicepresidente, Educación y Ciudadanía Global, JULIANA ARAUJO, y la Universidad Nacional de Colombia, debidamente representada por la Profesora DOLLY MONTOYA CASTAÑO, en su condición de Rectora nombrada mediante Resolución No. 018 de 2021 del Consejo Superior Universitario y Acta de Posesión No. 001 de 2021, actuando de conformidad con los artículos 13 del Decreto 1210 de 1993, 15 del Acuerdo 011 de 2005 del Consejo Superior Universitario -Estatuto General-, 7 del Acuerdo 2 de 2008 del Consejo Superior Universitario y 3 del Manual de Convenios y Contratos adoptado mediante la Resolución de Rectoría No 1551 de 2014, en nombre y representación de la UNIVERSIDAD NACIONAL DE COLOMBIA, ente universitario autónomo del orden nacional, vinculado al Ministerio de Educación Nacional de Colombia, regido actualmente por el Decreto 1210 de 1993 y sus propios estatutos, con domicilio en la Carrera 45 No 26 – 85 Edificio Uriel Gutiérrez de la ciudad de Bogotá D. C. – Colombia”

Antecedentes

En respuesta a su aplicación para la Convocatoria de subvenciones: Estados Unidos y Colombia para proyectos en la educación superior del siglo XXI del Fondo de Innovación de *100.000 Strong in the Americas*, la Fundación de *Partners of the Americas* (Donante) se complace en otorgar a la Universidad Nacional de Colombia (Beneficiario) una



subvención para implementar las actividades descritas en la propuesta (Anexo A).

1) Purpose of Agreement

The purpose of this Agreement is to provide general guidelines for the grant.

2) Period of Performance

The anticipated period of this Agreement will be between **November 1, 2021** and **October 31, 2022**, and can be extended as necessary upon approval from Partners and the subscription of the amending agreement to this grant. Requests for extension must be sent in the form of a formal letterhead prior to the end date of the period of performance.

3) Grant Amount and Payment

The amount of this Agreement is **USD\$26,090.00** at the exchange rate on the day of disbursement to the beneficiary, and is hereby obligated for project expenditures as described in the grant proposal. Payment of the grant amount shall be made by Partners of the Americas Foundation through a one-time electronic disbursement after submission of this fully executed agreement. No other funds shall be provided under this agreement.

3.1) Subaward

The Grantee will provide a Subaward to University of Texas Rio Grande Valley corresponding the traveling costs of its students and faculty so UTRGV can process internally all the traveling processes with their corresponding approvals from administration.

This subaward is necessary, because UTRGV has its own internal protocols to guarantee the safety and well-being of its students, faculty, and staff when they participate in international activities. Directors/Department Chairs and Deans play a key role in reviewing all requests for travel,

1) Propósito del Acuerdo

El propósito de este Acuerdo es brindar guías generales para la Subvención.

2) Periodo de Ejecución

La vigencia de este Acuerdo será entre el **1 de noviembre de 2021** hasta el **31 de octubre de 2022**, y puede ser extendida tanto como sea necesario mediante aprobación de *Partners* y *suscripción del acuerdo modificador a la presente subvención*. La solicitud para la extensión debe ser enviada antes de la fecha de terminación del periodo de ejecución.

3) Monto de la Subvención y Pago

El monto de este Acuerdo es **USD \$26.090,00** a la tasa de cambio del día del desembolso al beneficiario, y se obliga a los gastos del proyecto descritos en la propuesta de subvención. La Fundación Partners of the Americas realizará el pago del monto de la subvención mediante un único desembolso electrónico después de la presentación de este acuerdo completamente ejecutado. No se proporcionarán otros fondos en virtud de este Acuerdo.

3.1) Sub-concesión

El beneficiario otorgará una sub-concesión a la Universidad Texas Rio Grande Valley correspondiente a los gastos de viaje de sus estudiantes y docentes, así UTRGV podrá proceder internamente con los procesos de viaje y con las aprobaciones necesarias de la administración.

Esta sub-concesión es necesaria ya que UTRGV tiene sus propios protocolos internos, los cuales buscan garantizar la seguridad y el bienestar de estudiantes, docentes y funcionarios, cuando estos participan en actividades internacionales. Directores/jefes de Departamentos y Decanos juegan un rol primordial en la revisión de requisitos



especially international travel, which require a substantial investment of funds.

para viajar, especialmente para viajes internacionales que requieren una inversión sustancial de fondos.

4) Terms of Agreement

a. This Agreement is effective, and obligation is made as of the date of the full execution of this letter and shall apply to commitments made by the Grantee.

b. Partners shall not be liable for reimbursing the Grantee for any costs in excess of the obligated amount.

c. This Agreement is made with the understanding that the funds will be administered in accordance to the Project and with local laws and regulations of the Grantee.

d. Partners does not assume liability for any third-party claims for damages arising out of this Project.

e. Any dispute under or relating to the Project shall be handled by the Grantee.

f. This Agreement can be terminated at any time by either party, after providing thirty (30) days written notification to the other party. In the event that Grantee terminates this Agreement under this provision, the Grantee shall immediately terminate obligations that it may have entered into involving the grant funds provided under this Agreement and shall settle all outstanding liabilities and all claims resulting from the termination of the grant agreement and all other obligations. Any balance of funds received from Grantor that are unused and found to be unnecessary to

4) Términos del Acuerdo

a. Este Acuerdo es efectivo y la obligación se constituye desde la fecha del completo perfeccionamiento de esta carta y aplicará para los compromisos hechos por el Beneficiario.

b. *Partners* no será responsable de reembolsar al beneficiario por cualquier costo que exceda la cantidad obligada.

c. Este Acuerdo se hace con el entendimiento que los fondos serán administrados de acuerdo con el Proyecto y con las leyes y regulaciones locales del Beneficiario.

d. *Partners* no asume responsabilidad por cualquier reclamo de una tercera parte por daños originados por este Proyecto.

e. Cualquier controversia bajo o relacionada con el Proyecto será manejada por el Beneficiario.

f. Este Acuerdo puede darse por terminado en cualquier momento por cualquiera de las partes, después de proporcionar treinta (30) días de notificación por escrito a la otra parte. En caso de que el Beneficiario rescinda este Acuerdo según esta disposición, el Beneficiario deberá rescindir inmediatamente las obligaciones que haya contraído con los fondos de la subvención provistos en el presente Acuerdo y liquidará todos los pasivos pendientes las reclamaciones que resulten de la terminación del acuerdo y cualquier otra obligación pendiente. Cualquier saldo de fondos recibidos del



liquidate outstanding obligations shall be returned to Partners.

g. If Partners determines that Grantee has breached or failed to comply with any material term or condition of this Agreement, and Grantee fails to cure, or take steps to cure, such breach or noncompliance within thirty (30) days of written notice from Partners, in Partners' sole discretion, Partners may terminate the Agreement upon written notice setting forth the reasons for termination. Upon receipt of Partners notice to terminate, Grantee shall immediately terminate obligations that it may have entered into involving grant funds and shall settle all outstanding liabilities and all claims resulting from the termination of the grant agreement and all other obligations. In the event of termination under this paragraph, Partners reserves the right to take such action as may be necessary to recover any unexpended, unobligated, and unallowable grant funds provided hereunder.

5) Use of Proprietary Information

- a. Each of the parties agrees to use reasonable efforts to protect the proprietary information of the other party.
- b. Neither party shall be liable for the inadvertent nor accidental disclosure of proprietary information if such disclosure occurs despite the exercise of the same degree of care as such party normally takes to preserve and safeguard its own proprietary information.
- c. The provisions under this heading shall survive any Agreement termination for twelve (12) months.

6) Intellectual Property

Partners que no se hayan utilizado y que no sean necesarios para liquidar las obligaciones pendientes se devolverá a *Partners*.

- g. Si *Partners* determina que el Beneficiario no cumplió con cualquier término o condición de este Acuerdo, y el Beneficiario no logra resolver o tomar medidas para resolver dicho incumplimiento dentro de los treinta (30) días de la notificación por escrito de Partners, al exclusivo criterio de *Partners*, *Partners* puede rescindir el Acuerdo previa notificación por escrito que establezca los motivos de la terminación. Una vez recibido el aviso de *Partners* para terminar, el Beneficiario deberá rescindir inmediatamente las obligaciones que haya contraído con los fondos de la subvención y liquidará todas las obligaciones pendientes y todas las reclamaciones que resultan de la terminación del acuerdo. En caso de rescisión según este párrafo, *Partners* reserva el derecho de tomar las medidas que sean necesarias para recuperar los fondos de la subvención no gastados, no comprometidos y no permitidos que se proporcionan debajo.

5) Uso de la Información de Propiedad

- a. Cada una de las partes acepta hacer esfuerzos razonables para proteger la información de propiedad de la otra parte.
- b. Ninguna de las partes será responsable de la divulgación involuntaria o accidental de información de propiedad si tal revelación ocurre a pesar de ejercer el mismo grado de cuidado como lo hace dicha parte normalmente para preservar y salvaguardar su propia información de propiedad.
- c. Las disposiciones bajo este encabezado sobrevivirán cualquier terminación del Acuerdo por doce (12) meses.

6) Propiedad Intelectual



Under the performance of this Agreement, title to all inventions or discoveries made solely by Grantee shall reside in Grantee, title to all inventions or discoveries made solely by Partners shall reside in Partners, and title to all inventions and discoveries made jointly by Partners and Grantee shall reside jointly in Partners and Grantee. At the end of this Agreement, the Grantee may retain title to the property with no further obligation to Partners.

7) Conflict of Interest

Both parties confirm that they do not have an actual or potential conflict of interest for the work contemplated by the Project. Both parties agree that they will inform the other party should a potential conflict of interest arise during the course of this grant.

8) Project Contacts and Notices

The primary contacts to this Agreement are outlined in Annex B: Key Personnel. Changes to the list of personnel must be amended by a written modification to the Grantor to either add or remove personnel as appropriate. Any notice or other written submission required or permitted shall be directed to the specific person(s) designated below to represent the Grantor.

9) Coordination

In order to facilitate the agreement's development and ensures its correct implementation and follow up, Universidad Nacional de Colombia will designate a Coordinator. The designated coordinator is Professor Emer de Jesús Lopera, Assistant Professor, attached to the Department of Mathematics and Statistics, edloperar@unal.edu.co, or the person who executes his functions.

Bajo el marco de este Acuerdo, la propiedad de todos los inventos o descubrimientos realizados únicamente por el Beneficiario residirá en el Beneficiario, la propiedad de todos los inventos o descubrimientos realizados únicamente por Partners residirá en los Partners, y la propiedad de todos los inventos y descubrimientos realizados conjuntamente por Partners y El Beneficiario estará compartido entre Partners y El Beneficiario. Al final de este Acuerdo, el Beneficiario puede retener el título de la propiedad sin más obligaciones para con Partners.

7) Conflicto de Intereses

Ambas partes confirman que ellas no tienen un conflicto de interés actual o potencial para el trabajo contemplado en el Proyecto. Ambas partes aceptan informar a la otra parte si un potencial conflicto de interés surge durante el desarrollo de la concesión.

8) Contactos del Proyecto y Avisos

Los contactos principales de este Acuerdo se describen en el Anexo B: Personal clave. Los cambios a la lista de personal deben enmendarse mediante una modificación por escrito al Donante para agregar o eliminar personal según corresponda. Cualquier notificación u otra presentación de solicitud escrita requerida se dirigirá a las personas específicas designadas abajo para representar al Donante.

9) Coordinación

Para facilitar el desarrollo del acuerdo y velar por su correcta ejecución y seguimiento, la Universidad Nacional de Colombia designará un coordinador. El coordinador designado es el Profesor Emer de Jesús Lopera, Profesor Asistente, en dedicación exclusiva, adscrito al Departamento de Matemáticas y Estadística de la Facultad de Ciencias Exactas y Naturales de la Sede Manizales edloperar@unal.edu.co, o quien cumpla sus funciones de manera temporal o permanente.



Grantor/Donante:		Address written notices to/Dirija las notificaciones escritas a:	
<p>Partners of the Americas Foundation 1424 K Street NW, Suite 700 Washington, D.C. 20005</p>		<p>Name/Nombre: Juliana Araujo Title/Cargo: Vice President, Education & Global Citizenship Phone/ Teléfono: (202) 637-6224 Email: jaraujo@partners.net</p>	
For contractual issues/Para asuntos contractuales:		For program-related matters/Para asuntos programáticos:	
<p>Name/Name: Penelope Kim Title/Cargo: Director, 100,000 Strong in the Americas Innovation Fund Phone/Teléfono: (202) 637-6213 Email: pkim@partners.net</p>		<p>Name/Name: Laura Cossette Title/Cargo: Sr. Program Officer, 100,000 Strong in the Americas Innovation Fund Phone/Teléfono: (202) 637-6230 Email: lcossette@partners.net</p>	

10) Cost Share

During the period of this grant, the participant institutions in the project (UNAL Manizales and UTRGV) agree to contribute \$ 26,642.00 from its own funds and/or project costs financed with cash, services, or property contributed or donated to the Grantee. UNAL Manizales will contribute with a total amount of \$18.892.

10) Costo Compartido

Durante el periodo de esta subvención, las instituciones participantes del proyecto (UNAL Manizales y UTRGV) acuerdan contribuir USD \$26,642.00 de sus propios fondos o costos de proyecto financiados con dinero en efectivo, servicios o bienes contribuidos o donados al Beneficiario. Del valor relacionado previamente, UNAL Manizales contribuirá con un monto total de \$18.892

11) By accepting this small grant, the Grantee agrees to:

- Use the funds received from the Partners responsibly and in accordance with the expenditures described in the proposal submitted by the Grantee;
- Submit narrative and financial reports according to the timeline and format specified by Partners, and a final narrative and financial report no later than sixty (60) days after the conclusion of the period of performance. The reports must detail how the funds were used, what was

11) Al aceptar esta subvención, el Beneficiario acuerda:

- Usar los fondos recibidos de *Partners* responsablemente y en concordancia con los gastos descritos en la propuesta presentada por el Beneficiario.
- Presentar informes narrativos y financieros según el cronograma y formato especificado por *Partners*; y un informe narrativo y financiero acumulativo final a más tardar sesenta (60) días después de la conclusión del período de ejecución. Los informes deben detallar cómo se utilizaron los fondos, qué se logró y qué



accomplished, and what long-term impact can be expected, using the format provided by Partners.

impacto a largo plazo se puede esperar, utilizando el formato proporcionado por *Partners*.

c. Promptly return any unused funds unless a written justification, which may be provided in the final report, is submitted indicating how the excess funds will be distributed and the purpose they will serve.

c. Devolver prontamente todos los fondos no utilizados a menos que se presente una justificación escrita indicando como será distribuido el excedente de los fondos y el propósito que van a cumplir.

12) General Provisions

The required mandatory provisions are hereby incorporated in their entirety into this Agreement by reference and can be found in Annex C ("Partners of the Americas Standard Provisions").

Please sign the original copy of this Agreement and return to Partners of the Americas to acknowledge your receipt and approval of this small grant.

12) Disposiciones Generales

Las disposiciones obligatorias requeridas se incorporan en su totalidad a este Acuerdo por referencia y se pueden encontrar en el Anexo C ("Disposiciones estándar de *Partners of the Americas*").

Por favor firme la copia original de este Acuerdo y regréselo a *Partners of the Americas* para acusar recibo y aprobación de esta subvención.

Sincerely,	Aceptado por,
	
<u>10 / 29 / 2021</u>	<u>26/10/2021</u>
Juliana Araujo <i>Vice President, Education & Global Citizenship</i> Partners of the Americas	Prof. Dra. Dolly Montoya Castaño <i>Rectora</i> Universidad Nacional de Colombia

Annexes:

Annex A: Proposal, including Budget
Annex B: Key Personnel
Annex C: Partners of the Americas (POA) Standard Provisions

Anexos:

Anexo A: Propuesta, incluido el presupuesto
Anexo B: Personal clave
Anexo C: Disposiciones estándar de *Partners of the Americas* (POA)

The Grantee confirms that no changes need to be made to the terms and conditions of this award.

El Beneficiario confirma que no es necesario hacer cambios en los términos y condiciones de este acuerdo.



For Internal Use Only Agreement Approval Cover Sheet

This form is to be filled out with the proper approvals and submitted for ALL agreements. The final approved form should be included with all payment requests in lieu of full agreement.

Requesting Department: EGC

Date: Jul 19, 2021

Urgent:

☐

Petitioner: Penelope Kim

Contractor/Grantor/Grantee* Name: Universidad Nacional de Colombia

* Contractor is vendor, organization or individual receiving agreement

Contractor/Grantor/Grantee Contact Name: International Relations Office at the Manizales campus
(ori_man@unal.edu.co)

Financial Obligation Total:

	Price
	\$26,090.00

Agreement Dates:

Start: 11 / 01 / 2021

End: 10 / 31 / 2022

Addendum Dates:

Start:

End:

Current Agreement Purpose:

Formalize 100K grant and disburse funds to Grantee so that they may implement project activities as described in their approved proposal.

Agreement Type: Pass-through Agreement

Funding sources and % or \$ breakdown:

100% from POAF Acct. 3216 - ICETEX

(List out all sources and breakdown to cover cost of contract)

Has Partners worked with
this contractor in the past?

Yes

☐

No

☒

VP or Depart. Director Approval:

Juliana Araujo

VP, Education & Global Citizenship

Name & Title

By signing above, I certify that I have read and understand the terms of this agreement and have appropriate authority to submit this agreement on behalf of my department. I further certify that the agreement is complete and includes all exhibits, attachments and pages.

Fiscal Officer Review:

Debra Cooper

Debra Cooper, CFO
Name & Title

A.N.

By signing above, I certify that the contract is within the budget categories for the identified funding sources and is within the approved budget.



President & CEO Approval:

John McPhail, President & CEO
Name & Title

May 20, 2021

Emer de Jesus Lopera Arias
Assistant Professor
Department of Mathematics
Universidad Nacional de Colombia - Sede Manizales
Carrera 27, 64-60
Manizales, Caldas

Dear Emer de Jesus Lopera Arias & Dr. Erwin Suazo,

Congratulations! On behalf of the *100,000 Strong in the Americas* (100K) Innovation Fund at Partners of the Americas and the Bureau of Western Hemisphere Affairs at the U.S. Department of State, we are pleased to inform you that the 100K grant proposal submitted by **Universidad Nacional de Colombia - Sede Manizales** in Colombia and **The University of Texas Rio Grande Valley** in the United States has been selected to receive an Innovation Fund award in the **USA-Colombia Competition for 21st Century Higher Education Partnerships**. This Innovation Fund competition is supported by the *Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior, Mariano Ospina Pérez* (ICETEX) and the Bureau of Western Hemisphere Affairs at the U.S. Department of State (WHA/DOS), with the U.S. Embassy-Bogota.

NOTE: This Innovation Fund award is contingent on the final approval of your submitted 100K grant proposal revisions. The Partners of the Americas team will contact you should any further revisions be required.

Your team's proposal — "*Creating Diverse Scientific Communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM Collaboration*" — reflects the objectives of the **100K Innovation Fund** to create higher education institutional partnerships between Colombia and the United States that will lead to new, innovative academic exchange and training programs for students in both countries. We appreciate the efforts of your teams to design and plan for the implementation of this 100K partnership and student exchange program, and we are confident that the proposed 100K programming will significantly impact your students and faculty in both countries.

The 100K Innovation Fund is the trusted public-private sector collaboration among the U.S. Department of State (WHA/DOS), U.S. embassies, Partners of the Americas, along with over 30 companies, foundations, and regional government entities working to stimulate and support partnerships between higher education institutions (HEIs) in the United States, Latin America, and the Caribbean and innovative academic exchange and training programs that provide more students with opportunities to gain technical/linguistic/cross-cultural skills, work in teams, solve real-world problems, and prepare for workforce demands.

Public Announcement of new 100K Innovation Fund grant winning teams between U.S. and Colombia:

Our team at Partners of the Americas is working with our colleagues at WHA/DOS, U.S. Embassy-Bogotá, and ICETEX on plans for a special, virtual event during which the public, official announcement of these new 100K grant-winning teams will take place. This event will be hosted by the U.S. Embassy-Bogotá, and we anticipate the participation of senior-level government and academic leaders from both countries.

Action request: We invite your 100K grant-winning team to hold Thursday, June 3, 2021 at 11:00 AM EDT for this virtual 100K Winners Announcement event. In coming week(s), we will provide details, including the link to this hybrid live virtual event, along with bilingual versions of the 100K Winners press release and social media guidelines for amplification of your team's 100K award with your networks.

IMPORTANT: We request that your 100K team in the USA and Colombia please embargo this 100K award notification until the public announcement on June 3, 2021. Thank you for keeping this confidential until the official 100K program announcement.

If you have questions about this information and/or the Innovation Fund award, please contact our staff: Laura Cossette, Senior Program Officer (lcossette@partners.net), and Penelope Kim, Director of the Innovation Fund at Partners of the Americas (pkim@partners.net), copied on this message.

Along with our colleagues at the Bureau of Western Hemisphere Affairs at the U.S. Department of State in Washington, D.C., the U.S. Embassy in Bogotá, and the *Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior, Mariano Ospina Pérez* (ICETEX), we congratulate your team again on this 100K Innovation Fund award and for your teams' commitment to creating and implementing innovative student exchange and training opportunities between Colombia and the United States.

We look forward to staying in touch, and to ensuring the success in your Innovation Fund partnership.

Sincerely,



John McPhail
President & CEO
Partners of the Americas

cc: Dr. Erwin Suazo, The University of Texas Rio Grande Valley

ANNEX A

Profile: Universidad Nacional de Colombia - Sede Manizales

Record Title

Universidad Nacional de Colombia - Sede Manizales

Linked Applicant Email

edloperar@unal.edu.co

Applicant Profile Information

Prefix

Prefer not to specify

First Name

Emer de Jesus

Last Name

Lopera Arias

Job Title/Position

Profesor asistente

Department/Unit

Departamento de Matemáticas

Work Email

edloperar@unal.edu.co

Work Phone

(057)3007539513

Name of Higher Education Institution

Universidad Nacional de Colombia - Sede Manizales

Country

Colombia

Size and Setting

L4: Large four-year; >10,000

Type of Higher Education Institution

Public

Address Line 1

Carrera 27, 64-60

Address Line 2**City**

Manizales

Region/Province

Caldas

Postal Code

Institutional Branding

The following information will be used only in the case that your application is selected as a winner and will be used only in promotional materials for the Innovation Fund.

Website

<http://manizales.unal.edu.co>

If your institution has a web page with the logos available for download, please insert the link here. Otherwise, upload your logo below.

Institution Logo 1**Institutional Logo 2****Facebook Page**

<https://www.facebook.com/unmanizales>

Twitter Handle**Instagram Handle**

2. HEI Partner Info: University of Texas Rio Grande Valley|https://www.utrgv.edu/

Name	Attachments
University of Texas Rio Grande Valley https://www.utrgv.edu/	No

Record Title
University of Texas Rio Grande Valley|https://www.utrgv.edu/

Linked to Application Form
Universidad Nacional de Colombia - Sede Manizales|Creating Diverse Scientific Communities in the ...

Linked to Partner Info Request
The University of Texas Rio Grande Valley

Institutional Information

Name of Higher Education Institution
University of Texas Rio Grande Valley

Country
United States

Address Line 1
1201 West University Dr.

Address Line 2

City
Edinburg

U.S. State
Texas

Zip Code
78539-2909

Type of Higher Education Institution
Public

Is your institution a minority-serving institution (MSI)?
Yes

Please indicate which type.
Hispanic-Serving Institution

Primary Project Contact

Institutional Branding

The following information will be used only in the case that your application is selected for funding and it will be used only for promotional materials for the Innovation Fund.

Website
https://www.utrgv.edu/

Logo

Facebook Page
Twitter Handle
Instagram Handle

Prefix
Dr.

First Name
Erwin

Last Name
Suazo

Title/Position
Associate Professor

Department/Unit
School of Mathematics and Statistical Sciences

Email
erwin.suazo@utrgv.edu

Phone Number
4802750391

Secondary Project Contact

Prefix
First Name
Last Name

Application Form: Universidad Nacional de Colombia - Sede Manizales|Creating Diverse Scientific Communities in the ...

Record Label

Universidad Nacional de Colombia - Sede Manizales|Creating Diverse Scientific Communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM Collaboration

Linked Profile

Universidad Nacional de Colombia - Sede Manizales

Linked Grant Competition

30 : The U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships

Have you registered in the 100,000 Strong in the Americas Innovation Network?

Yes

Please confirm the Innovation Fund Grant Competition for which are you applying.

CLOSED: 2020 Colombia-U.S.

Proposal Summary

Title of Proposed Program

Creating Diverse Scientific Communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM Collaboration

Please confirm Applicant Country.

Colombia

How many Institutions are you partnering with?

1

Expected Partner Institution 1

The University of Texas Rio Grande Valley

Expected Partner Country 1

United States

Type of Partnership(s) with proposed partner(s)

New partnership

How did you identify/connect with your proposed partner?

Provide a summary of your proposed program, including what makes it innovative.

Our program will create a productive international research team in mathematics comprised of UNAL Manizales and UTRGV faculty and students. All students will enroll in credit-bearing independent study courses at their home universities under the mentorship of program faculty coordinators in both the fall and spring semesters 2021-2022. Students and faculty from both campuses will join together virtually every week for a seminar where they will share research progress. In June 2022, UTRGV students will travel to Manizales to participate in a 2-week language and cultural exchange, with their UNAL Manizales student counterparts as hosts. All students will present at the II Semestral International Congress of Analysis and Partial Differential Equations. In July 2022 UNAL Manizales students will travel to Texas for their 2-week language and cultural exchange with their UTRGV student counterparts as hosts. After nine months of working together, the research groups will each publish an academic paper.

Project Goals and Objectives If you have more than three objectives, you may combine multiple objectives in any of the fields below, but please make sure to number them.

Primary Goal

The main goal of our proposed pilot research exchange program JUUNTOS is to strengthen STEM research capacity and collaboration in the Americas by creating productive international research groups, namely research collaborations in mathematical modeling and applications to the sciences and engineering between students (undergraduate and graduate) and faculty from Universidad Nacional de Colombia, Manizales campus (UNAL) and the University of Texas Rio Grande Valley (UTRGV).

Theme(s) of Proposed Program: List at least two area(s) of study.

Proposed Travel Information

Objective 1

To increase participation of underrepresented groups in mathematics, statistics and computer science. UTRGV is the third-largest Hispanic Serving Institution in the USA, and a high proportion of students are first generation college students. UNAL Manizales is a public university leader in mathematics and sciences, serving a region called “Eje Cafetero,” one of the most agricultural regions of the country. It presents great potential to develop scientifically and promote the economical growth in this region.

Objective 2

To provide students with opportunities to improve linguistic skills (UNAL students in English and UTRGV students in Spanish) and deepen cultural understanding, thus preparing them to become better international leaders in their fields.

Objective 3

Consolidate and grow a productive international team of faculty, undergraduates, and graduate students in the field of mathematical modeling for STEM areas.

Theme 1

Analysis and Partial differential equations

Theme 2

Mathematical modeling

Theme 3

Computational and data science

Travel from Latin America/Caribbean/Canada to the U.S.

Describe the type of credit that students will earn through the proposed program.

Students will receive credit two ways: directly through enrollment in an independent studies course and indirectly by using the project research to finish their research project and graduate.

Proposed number of Latin America/Caribbean/Canada students traveling to the U.S.

4

To the best of your ability, please provide the estimated dates of travel.

From

If not applicable, select Not Applicable for the Month and leave the Year blank. **To**

Month

June

Year

2022

Month

June

Year

2022

Travel from the U.S. to Latin America/Caribbean/Canada

Proposed number of U.S. students traveling to Latin America/Caribbean/Canada

4

To the best of your ability, please provide the estimated dates of travel.

From

If not applicable, select Not Applicable for the Month and leave the Year blank. **To**

Month

June

Year

2022

Month

June

Year

2022

Project Director Contact Information

Are you the Project Director?

Yes

Proposal Documents

A. Technical Narrative (12 pages max)

Your Technical Narrative should include the following:

- Cover Page (1 page)
- Table of Contents (1 page)
- Technical Narrative (10 pages)
 - Executive Summary
 - Program Description
 - Sustainability Plan
 - Institutional Capacity, Challenges, and Opportunities for Growth
 - Monitoring & Evaluation Plan: ([Download the M&E Plan Template.](#))

For a full description of the requirements of the Proposal Narrative and Budget, [please read our Proposal Format and Design Guidelines.](#)

Upload the Technical Narrative

Submitted Proposal.docx

B. Budget (5 pages max)

Please upload the Budget, as stipulated in the RFP and in the Proposal Format and Design Guidelines.

- [Download the Budget Summary Template.](#)
- [View a sample of a Budget Narrative.](#)

Budget Summary

Budget_UNAL_V5.xlsx

Budget Narrative

Budget Narrative.pdf

C. Supporting Documents (no page limit)

Letters of Support

Letters of Support_Both
Institutions.pdf

CVs of Project Directors

CVs_Project Directors.pdf

Additional Attachments

Supporting documents.pdf

[INTERNAL] Summary of Evaluation Scores

Acceptance of Terms & Conditions

By submission of this proposal, the Applicant accepts the requirements, terms, and conditions of the grant competition and the provisions listed in the request for proposal (RFP). Once this application is submitted, it will not be possible to claim ignorance on what is written in the RFP.

The Applicant declares that the information provided is true and accurate. In case of any inconsistencies in the information or documentation provided, the 100,000 Strong in the Americas Innovation Fund and the competition sponsors may, at any time, reject the application, without prejudice to the corresponding legal actions.

Confirmation of Acceptance

I agree with the Terms & Conditions.

Signature

José Emer Lopera

Signature Date

03/15/2021

Your submission may be viewed at any time by logging into your profile; however, we recommend that you please save a copy of this completed application form for your records in case of technical issues that you may encounter during the submission process.

Phase 1 Average

89.63

Phase 2 Average

85.45



Emer de Jesus Lopera Arias
Assistant Professor
Mathematics Department
Universidad Nacional de Colombia - Sede Manizales
Carrera 27, 64-60
Manizales, Caldas, Colombia

Dear Emer de Jesus Lopera Arias,

Thank you for submitting a proposal for the U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships. On behalf of the Innovation Fund team, I am pleased to inform you that the Review Committee has recommended the proposal "*Creating diverse scientific communities in the Americas JUUNTOS: Joining UNALM and UTRGV in the Development of STEM Collaboration*," submitted by Universidad Nacional de Colombia - Sede Manizales, to be considered to receive an Innovation Fund grant!

In order for your proposal to receive final approval, your team must address the following points. Please note that if the following conditions are not addressed, the offer for this Innovation Fund award may not be confirmed.

Program Description

- 1) Provide detailed explanation on what makes the proposed program innovative.
- 2) Provide further details on linguistic development, as this is difficult to achieve with only two weeks abroad.
- 3) Elaborate on plan to recruit motivated students given the independent nature of the program.
- 4) Explain the involvement of the U.S. partner in the administration of the program.
- 5) Provide justification for the necessity of in-person, international exchange for the program, as it seems that the program could be successfully completed virtually.

Sustainability Plan

- 1) Include more details and specificity on plans and next steps to ensure sustainability.

Institutional Capacity, Challenges, and Opportunities for Growth

- 1) Include more information on the U.S. partner.
- 2) Acquire a Letter of Support from the International Office at University of Texas, Rio Grande Valley to further demonstrate institutional support.

Monitoring & Evaluation Plan

- 1) Reformat M&E Plan using 100K template, which can be found at <https://www.100kstrongamericas.org/app-format/>.

Budget

- 1) Revise Budget Narrative to explain/justify expenses and include breakdown of cost estimates. For instance, specify what is meant by "maintenance" costs and "project memories."

Please respond to the requests above by completing the [Proposal Addendum Form](#) by **Tuesday, May 18, 2021 at 11:59 PM EDT**. If the conditions are not addressed, your team's proposal may not be approved for funding.

Please direct any questions or concerns to Laura Cossette at 100kstrongamericas@partners.net. On behalf of the Innovation Fund's Review Committee, we appreciate your time and efforts to submit your grant proposal, and we look forward to reviewing the revisions as requested.

Sincerely,

Laura Cossette
Senior Program Officer, *100,000 Strong in the Americas* Innovation Fund
Partners of the Americas

Title/Position

Department/Unit

Email

Phone Number

Have you registered in the 100,000 Strong in the Americas Innovation Network?

Proposal Addendum: [UNAL Manizales-UTRGV - UNAL Manizales and UTRGV](#)

Name	Attachments
UNAL Manizales-UTRGV - UNAL Manizales and UTRGV	Yes

Linked Application

Universidad Nacional de Colombia - Sede Manizales|Creating Diverse Scientific Communities in the ...

Proposal Addendum Web Form

Congratulations on advancing to this stage of the selection process!

In this form, please address any of the requested proposal revisions by proposal section. The information provided in this form will be added to your original proposal as an addendum.

Please note, it is only necessary to complete the fields for which you received requested revisions. If your institution did not receive a request for revision in a given proposal section, you do not need to complete that section.

Name of Applicant Higher Education Institution

Universidad Nacional de Colombia - Sede Manizales

Name of Partner Institution(s)

UNAL Manizales-UTRGV

Project Title

UNAL Manizales and UTRGV

Program Description

1) Provide detailed explanation on what makes the proposed program innovative.

Our program is innovative because it does not stop at providing opportunities for cultural exchange during the two weeks UTRGV students visit Colombia and UNAL students visit the U.S. On the contrary, those physical exchange periods are the culmination of a more collaborative goal: To create a productive international research team in the area of mathematical modeling in STEM areas. In mathematics and other sciences, it is fairly common that professors of different countries work in collaborative research projects. Most of these often start with a visit from one professor to a partner in another city or country for several weeks. To carry out this kind of activity is particularly difficult for the students due to financial issues. Since this kind of collaborative work should start during the early stages of the formation of mathematicians and since the youngest and underrepresented students deserve more opportunities, we believe our program to be innovative.

We have carefully designed all aspects of our program to fully support this innovative goal of creating an authentic research team that will be able to hit the ground running when they finally meet physically for the international exchanges. Students (graduate and undergraduate) and faculty will be working on collaborative research projects throughout the academic year; they will meet virtually every Friday (and maintain other research communications as needed) for seminar-style instruction in mathematics, English/Spanish language workshops, to share their research progress, and also to build interpersonal connections as a research team. When they meet physically for the cultural exchanges, they will be able to seamlessly transition to in-person research experiences. The most important of these research experiences are the presentations in professional conferences. We consider these conference presentation opportunities in both languages and cultural settings to provide invaluable experience in building professional and long-lasting international connections.

2) Provide further details on linguistic development, as this is difficult to achieve with only two weeks abroad.

Our linguistic goals are dual: To improve technical and professional oral presentation skills as well as conversational skills in the two target languages (English for UNAL Manizales students and Spanish for UTRGV students). In order to ensure a greater impact on the linguistic development of our students, they will have a language training before their physical exchanges. According to the academic needs and projections of the participants of UNAL Manizales, and in order for them to have the necessary tools in Foreign Language (In this case, academic English), there will be developed a special laboratory in EFL with academic focus, where

the participants will be provided with the necessary knowledge (considering their current EFL level) to ensure they have a good performance during the implementation of the project and during the in-person mobility.

This laboratory will be ideally guided by the PSL Team of the Academic Directorate at UNAL Manizales, which is the one specialized in developing high academic knowledge in foreign language in our campus. If the PSL Team is in charge of this special training, the laboratory will be structured, set and developed, regarding the focus, time and needs of the participants (Professors, students and researchers).

In addition, as part of our weekly COIL sessions, students will report their progress through brief informal presentations. On the weeks that UNAL Manizales students report their progress, they will log on 30 minutes early for instruction on and practice for their presentations. UTRGV students will do the same on the weeks that they report their progress. Additionally, the first ten minutes of the session will be spent in a target-language icebreaker/team-building exercise.

During the physical exchanges in the summer, students will continue this linguistic development with intense target-language conversation courses, with a sub-objective of formal presentation skills. Ideally, the host students of each country will also participate in segments of these courses as target-language practice partners.

3) Elaborate on plan to recruit motivated students given the independent nature of the program.

Applications will be open to students immediately after we are awarded the grant. Some of the students potentially engaged in the program are graduate students already involved in research activities with professors of the team and already have enough background to pursue research. Also, undergraduate students that attend seminars offered by professors from both universities will be encouraged to participate in the program. Since many students attend those seminars, a selection will be made according to their mathematical and language skills. Professors in charge of each university will measure the skills for each student based on their active participation in the seminars, performance in advanced undergraduate classes necessary to pursue research in the team, and overall GPA. We will also consider presentations by students on the topics covered in these seminars and the score provided by the language center of their home institution.

4) Explain the involvement of the U.S. partner in the administration of the program.

In an effort to make the management of the program streamlined and efficient, UTRGV will administer the program through a sub-award from UNAL Manizales (or directly from 100,000 Strong in the Americas) corresponding to the expenses of UTRGV faculty and students. In this way through the Office of Sponsored Programs UTRGV can manage their funding and coordinating travel. There are University of Texas (UT) system travel warnings/restrictions in place, so UTRGV as part of the UT system will follow all protocols to consider and approve travel prior to that travel taking place for UTRGV students and faculty. Also, all actions will be subject to the same restrictions, terms, and conditions as the those followed by UNAL Manizales, as outlined by 100,000 Strong in the Americas.

5) Provide justification for the necessity of in-person, international exchange for the program, as it seems that the program could be successfully completed virtually.

The crucial in-person nature of the international exchanges, consider that the whole team of students and faculty (about 10-12 people) will spend a total of four weeks working together, two at their home institution and two at their host institution. These four weeks of seminar instruction, research collaboration, and presentations (not to mention the cultural exchanges and language courses!) mirror the same kind of intensity of most traditional research experience for undergraduates (REUs) funded by NSF and a pivotal tool for the creation of the future leader researchers at USA, which justifiably take place in-person, not virtually. We want to provide our students the same caliber of experience.

Physical mobility is a very important part of the project since it will allow participants to further develop different competencies and abilities worked throughout the implementation of the project during the virtual phases; in particular, it will facilitate interactions and strengthen the intercultural dialogue, teamwork, expansion of global networks, mutual understanding and trust. During the international exchange there will be a strong collaboration between the visiting students and local faculty and students. Despite the short length of the stay (for budget reasons), participants will overcome language difficulties, putting into practice their language skills in a real context and facing intercultural barriers. Thus, both institutions are committed to include travels to the other country to guarantee the immersion experience. We are hopeful that we can obtain more funding from other sources in order to increase the length of the student international interchange period.

On the other hand, student's mobility is completely necessary to develop some of the planned activities and achieve all our goals. Thus, students will participate in the STEM face-to-face courses during their stay abroad. Moreover, during their stay in the United States, students will have a graduate school preparation training, focused on the submission of their applications, Graduate Record Examinations GRE and TOEFL exams, among other important information related to the admission process.

Furthermore, the international exchange will increase the mobility flows, that will have a very high impact on the indicators of our university in the National Higher education Information System, as well as in the specific goal of diversifying the countries we are receiving and sending students to. The mobility of teaching staff will allow the interlocution with different institutional representatives in the partner institution, that will play a fundamental part of a long-standing collaboration between our institutions. In addition, they will have the opportunity to visit the campus, laboratories and discover new teaching methodologies that could be implemented in their home institutions.

During their stay abroad, students will deepen cultural understanding. Besides, the project includes some cultural activities, on the one side, American students will discover one of the main natural treasures, the Nevado del Ruiz Volcano, will discover the

unique landscape of the coffee region and will try Colombian food. On the other side, Colombian students will visit the SpaceX Texas Launch Site in Boca Chica, a unique and enriching experience for them where team-building and target-language practice will occur naturally. These experiences cannot be replicated online.

In regard to the virtual components of the program, the weekly COIL sessions serve to create the foundation for an international team, not to replace in-person collaboration. In these sessions students and faculty will be working on their collaborative research projects, presenting informal progress reports, receiving seminar-style instruction, and participating in team-building activities. These virtual meetings are designed to create a rich collaborative environment with existing interpersonal connections and a strong sense of teamwork when the students and faculty meet physically during the in-person exchanges at each university. Indeed, this is part of what makes our program innovative; we want the students and faculty from both of our universities to interact closely as a team during these exchanges instead of attending isolated, independent events. Rather than starting from scratch at the beginning of their physical exchange periods, we want them to experience the intense and exciting collaborative academic environment that can only happen in-person. We particularly want them to experience presenting their work in a formal, professional setting so that they can enjoy the fruits and culmination of their labor as a united team. Again, we believe this can only happen in-person.

Sustainability Plan

1) Include more details and specificity on plans and next steps to ensure sustainability.

We are currently preparing applications for funding to continue this program for at least two more years.

The sustainability of the program rests mainly in the coming agreement of cooperation between UTRGV and UNAL Manizales, which Dr. Erwin Suazo as international faculty fellow from University of Texas Rio Grande Valley (UTRGV) and Dr. Emer Lopera from Universidad Nacional de Colombia, Manizales campus (UNAL) have been developing since 2019. Indeed, the coincidences in their programs (Ph.D and Master in Mathematics) and other aspects that complement each other motivated them to work together into this arrangement which consists of an agreement of cooperation (general) and a program agreement (specific). The agreement would allow students from UNAL and UTRGV to attend classes at the partner university and to obtain credits to get their degrees. Specifically, any participating graduate student from UNAL must attend 27 credits at UTRGV, 6 of which could be online, and UTRGV will approve for each student 9 credits from UNAL. Reciprocally, any student of UTRGV admitted to the graduate program at UNAL must attend 30 credits at UNAL, 16 of which correspond to optional courses, 4 to a seminar and 10 to the thesis project. UTRGV and UNAL will also provide opportunities for faculty exchanges. Within four weeks of the end of each semester, each institution will forward to home institution official grade reports of each student in the program.

We expect to begin this agreement within the next academic year and is expected to be effective until 2025; receiving this 100,000 Strong in the Americas would accelerate and solidify the final acceptance of the inter-university agreement and commence a mutually beneficial recruitment mechanism between the formal inter-university agreement and our proposed program.

Institutional Capacity, Challenges, and Opportunities for Growth

1) Include more information on the U.S. partner.

The University of Texas Rio Grande Valley (UTRGV) is one of 14 institutions comprising the University of Texas System. UTRGV was created by the Texas Legislature in 2013 in a historic move that brought together the resources and assets of UT Brownsville and UT Pan American and, for the first time, made it possible for residents of the Rio Grande Valley (RGV) to benefit from the Permanent University Fund - a public endowment contributing support to the University of Texas System and the Texas A&M University System. Spanning the entire RGV, with a presence in each of the major metropolitan areas of Brownsville, Edinburg, Harlingen, and McAllen, UTRGV is also home to a School of Medicine. UTRGV serve as a gateway to the Americas and advance a mission that includes nurturing students to become confident innovators and leaders, promoting regional economic development, and improving the health and quality of life along the Texas-Mexico border. UTRGV enrolled its first class in the fall of 2015, and the School of Medicine opened in 2016. With an enrollment of 30,000 students by Spring 2021, UTRGV is the third the largest Hispanic- serving institutions in the country, with 89% of our students being of Hispanic descent. In 2015 UT Pan American, one of UTRGV's legacy institutions, was ranked by The Hispanic Outlook in Higher Education at number three in the nation for awarding mathematics and statistics bachelor's degrees to Hispanics.

UTRGV is now 1 of 9 Texas four-year public institutions with an enrollment of over 30,000, joining Texas A&M, UT Austin, Houston, UT Arlington, Texas State, North Texas, Texas Tech, and UT San Antonio. U.S. News & World Report ranked UTRGV 1st among public universities in the nation for the least student debt upon graduation, see

<https://link.utrgv.edu/2020annualreport/#lp-pom-block-517>

The data showed that UTRGV students who graduated in 2017 incurred an average debt of \$10,054, compared to that year's national average of \$30,000. Overall, among public and private universities, UTRGV ranks fourth behind Harvard (\$6,100), Princeton (\$7,500), and Duke (\$9,200). In February 2020, UTRGV received the largest single donation in the history of higher education in South Texas. The \$38 million gift from the Valley Baptist Legacy Foundation will establish a unique medical hub for scientific discovery focused on improving health in the Rio Grande Valley. With the assistance of this gift, UTRGV should move into the top 200 American Universities in both philanthropic giving and total research expenditures. In January 2020, UTRGV was one of just 119 colleges and universities in the United States to receive this year's Carnegie Community Engagement Classification. This was UTRGV's first time receiving the designation, which honors an institution's commitment to community engagement and its collaborations with local, regional, state, national, and global partners. In November 2020, UTRGV broke ground on the new UTRGV Institute for Neuroscience, a \$30 million, world-class clinical and research site within the School of Medicine. The building is funded by the Permanent University Fund, with the interdisciplinary work that will be conducted there to be funded in part by a \$15 million gift from the Valley Baptist Legacy Foundation, announced in February 2017.

2) Acquire a Letter of Support from the International Office at University of Texas, Rio Grande Valley to further demonstrate institutional support

OK (in attachment)

Monitoring & Evaluation Plan

Monitoring & Evaluation Plan

Overall Objective: To strengthen STEM research capacity and collaboration in the Americas by creating productive international research groups, namely research collaborations in mathematics between students (undergraduate and graduate) and faculty from Universidad Nacional de Colombia, Manizales campus (UNAL Manizales) and the University of Texas Rio Grande Valley (UTRGV).

General Goal #1: To increase participation of underrepresented groups in mathematics, statistics and computer science.

Specific Objectives Performance Indicators (Output/Outcomes) Data Collection Source/Tools Target Goal

(How much? How many?)

To recruit promising students in mathematics from underrepresented groups in STEM to participate in research groups. Program flyers and invitations will be sent to appropriate listserves as well as mathematics faculty at both campuses for distribution to promising individual students.

Timeline: September 2021. Student applications, program coordinators. Eight students will be recruited, four from each campus, including at least one graduate student per campus.

To establish a collaborative weekly seminar in mathematical modeling for STEM areas through PDEs, called COILS (Collaborative Online International Learning Sessions). Through COILS, students will be able to describe the problem-solving process (comprehension), and they will solve research problems through the application of scientific methods (application). Students will work effectively as a member of a team. They will apply the principles of math and science to a technical problem.

Timeline: Weekly. Program coordinators. All 8 students will participate weekly; at least one student will present their research status weekly.

To provide students an opportunity to present their work to the greater academic community.

Students will practice and receive coaching for their presentations; students will register for and present at the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar.

Timeline: June 13-15. Seminar organizers/Program Faculty

All student participants will present their research at the at the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar.

General Goal #2: To provide students with opportunities to improve linguistic skills (UNAL students in English and UTRGV students in Spanish) and deepen cultural understanding, thus preparing them to become better international leaders in their fields.

Specific Objectives Performance Indicators (Output/Outcomes) Data Collection Source/Tools

Target Goal

(How much? How many?)

Students will participate in 2-week long intensive courses in English (at UTRGV) and Spanish (UNAL Manizales). In each case, program participants from the host country students will serve as target language conversation partners. Students will report an increase their confidence in their target-language skills.

Timeline: June 6-17 at UNAL Manizales and July 11-22 at UTRGV. Entrance and exit interviews and language inventories; language coordinator Nicole Nicholson, UTRGV Faculty. All students.

Students will improve their multicultural skills by interacting with their host-country program participant counterparts through cultural and social events and excursions. Students will report an increase in their understanding of the host country culture and values.

Timeline: June 6-17 at UNAL Manizales and July 11-22 at UTRGV.) Entrance and exit interviews; faculty coordinators and language coordinator. All students.

General Goal #3: Consolidate and grow a productive international team of faculty, undergraduates, and graduate students in the field of mathematical modeling for STEM areas.

Specific Objectives Performance Indicators (Output/Outcomes) Data Collection Source/Tools Target Goal

(How much? How many?)

Publish results of the research projects in a peer-reviewed journal article. Students and faculty will actively engage in the collaborative writing, formatting, revising, and editing process.

Timeline: After the conclusion of the program. Publishing in a journal. At least one peer-reviewed journal article.

Promote collaborative international advisories for producing graduate theses and dissertations for students from both institutions.

At least one advisor from UTRGV on a UNAL Manizales graduate committee and vice versa for at least one student per institution.

Timeline: Ongoing and after the conclusion of the program. Faculty and students. At least one advisor from UTRGV on a UNAL Manizales graduate committee and vice versa for at least one student per institution.

Contribute to the development of the Masters, Ph. D and Post-doctoral programs of the participating institutions through short and long research visits. Attendance of graduate students at research talks by visiting faculty (UTRGV at UNAL Manizales and vice versa) during physical visits and virtual meetings; at least two guest lectures/visits from research faculty beyond program coordinators at each institution.

Timeline: Throughout the program and ongoing. Faculty/Seminar attendance records. At least one graduate student in attendance per talk.

At least two guest lectures/visits from research faculty.

Budget - Description of Changes

1) Revise Budget Narrative to explain/justify expenses and include breakdown of cost estimates. For instance, specify what is meant by "maintenance" costs and "project memories."

BUDGET NARRATIVE

Personnel

This project is supported by the faculty and staff members, and its cost is covered by the institutions to which they belong. As was mentioned in the proposal, each participant has clear tasks depending on his/her role in the project. The personnel will devote two hours per week in order to follow up and guarantee the success of the project implementation. Moreover, the faculty members will support and monitor the research activities that the students will develop during the project. On the other hand, the administrative staff will be in charge of the administrative matters, monitor the activities developed in her/his institution, and report to the funding institutions. Values varies depending on the salary of the staff members.

Program cost

Travel

The program costs include international airfare in economic class, round trip Matecaña Airport (Pereira)-McAllen Texas- Matecaña Airport (Pereira) and McAllen Texas Airport- Matecaña Airport (Pereira)-McAllen Texas Airport. The local transportation to and from Pereira will be covered as a cost-shared by UNAL Manizales.

Accommodation

Accommodations for Colombian students will be provided by the Housing at the UTRGV Residence Halls and American students will stay in a hostel near to UNAL Manizales. Faculty will stay in a nearby hotel.

Maintenance

The word "Maintenance" refers to food (per diem). Thus, there will be three meals provided per day that will be taken at the university cafeteria.

Course

The budget also includes the implementation of the courses and follow ups; through the institutional platform; the production of the audiovisual materials and printed materials, among others. It is important to mention that the involved institutions count on a zoom license to facilitate on-line sessions, this means that this item will be the cost-share of the participating institutions, as well as the online and onsite courses in the United States and in Colombia.

This category also includes an intensive English course at UTRGV that will be led by Pr. Nicole Nicholson, language coordinator at UTRGV. Prior to the mobility to the United States of America, Colombian students and faculty will participate in an English Lab that will provide them with the necessary knowledge and will support the strengthening of their language skills, this item will be funded by UNAL Manizales through its Second Language Program.

Project memories

We plan to have a jointly publication describing the project results and goals achieved. In addition, we will record some testimonies of our students that will be disseminated through our institutional websites and social networks, the idea is to share their experience and motivate other students to have an international mobility. This item will be cost-share of the participating institutions

Events

Cultural events: The program also includes some cultural activities to enrich the experience of the students. At least one excursion will take place in each country (SpaceX South Texas Tracking Station, Boca Chica in Houston and The Ruiz Volcano in Manizales, for example). Requested funds will allow to carry out the planned visits in the United States and in Colombia, they will cover transportation and snacks.

Joint seminar logistics: The organization and implementation of the seminar will be funded by the participating institution.

Closing event: In order to share the experience and results of the project, we will organize a closing event in which, we will count on the participation of other higher education institutions in Colombia, local authorities and stakeholders. This will be funded by the participating institutions.

Other costs: The program includes visa costs, SEVIS (required immigration documentation), and health insurance for students and one professor from UNAL Manizales, as well as the costs of domestic flights Manizales-Bogotá-Manizales, accommodations and meals for participants that need to obtain visas in Bogotá.

Finally, the budget table indicates the contribution each institution provides to the project implementation. In addition to the personnel contribution, each institution will organize a language course preparation. UNAL Manizales the Academic Direction will offer a three-month English Lab specifically tailored to these students and faculty. Mirroring this, UTRGV will implement a two-week English course for Colombian students.

Upload Revised Technical Proposal

Submitted Proposal_V2.pdf

Upload Revised Budget Summary & Narrative

Budget Narrative_V2.pdf

Upload Supporting Documents

UTRGV support letter_2020_annual report.pdf

Upload Request for Proposal Revisions Letter

Conditions for Funding - Universidad Nacional de Colombia - Sede Manizales.pdf

Proposal Addendum: UNAL Manizales-UTRGV - UNAL Manizales and UTRGV File Attachments

Upload Revised Technical Proposal

Submitted Proposal_V2.pdf

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UTRGV support letter_2020_annual report.pdf

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Conditions for Funding - Universidad Nacional de Colombia - Sede Manizales.pdf

COVER PAGE

Project Title

Creating diverse scientific communities in the Americas JUUNTOS: Joining UNAL Manizales and UTRGV in the Development of STEM Collaboration

Applicant Institution

Universidad Nacional de Colombia, Manizales Campus (UNALM), Colombia

Partner Institutions

The University of Texas Rio Grande Valley (UTRGV), The United States of America

Contact for the Applicant Institution

Mr. Emer de Jesús Lopera
Professor- Department of Mathematics
Project Director
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E-mail: edloperar@unal.edu.co
ori_man@unal.edu.co

Legal Representative and Contracting Authority

Camilo Younes Velosa
Vice-Rector
Universidad Nacional de Colombia, Manizales Campus
Address: Carrera 25 # 62-23, 170003, Manizales, Colombia
Telephone: +57 300 2062498
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**Creating diverse scientific communities in the
Americas JUUNTOS: Joining UNAL Manizales and UTRGV
in the Development of STEM Collaboration**

I. EXECUTIVE SUMMARY

1. **Program Goals and Objectives.** The main goal of our proposed pilot research exchange program JUUNTOS is to strengthen STEM research capacity and collaboration in the Americas by creating productive international research groups, namely research collaborations in mathematical modeling and applications to the sciences and engineering between students (undergraduate and graduate) and faculty from Universidad Nacional de Colombia, Manizales campus (UNAL) and the University of Texas Rio Grande Valley (UTRGV). The Mathematics researchers involved in this project have already discussed research projects to pursue together, and their institutions are in the final stages of approving an exchange program that would allow for students to obtain credit from their host universities toward completing their degrees, both graduate and undergraduate. This was part of the work carried out by Dr. Suazo as International Faculty Fellow 2019-2020 at UTRGV. Our proposed project will propel that newly formed partnership, focusing on the area of mathematical modeling and applications to the sciences and engineering. Not only is the proposed collaboration scientifically significant but also mutually advantageous to the participating institutions and countries by bringing together successful researchers to prepare students from North and South American mathematical related areas communities to be leaders in STEM areas. Specifically, we will attain our goal by meeting the following objectives:

- a. To increase participation of underrepresented groups in mathematics, statistics and computer science. UTRGV is the third-largest Hispanic Serving Institution in the USA, and a high proportion of students are first generation college students. UNAL Manizales is a public university leader in mathematics and sciences, serving a region called “Eje Cafetero,” one of the most agricultural regions of the country. It presents great potential to develop scientifically and promote the economical growth in this region.
- b. To provide students with opportunities to improve linguistic skills (UNAL students in English and UTRGV students in Spanish) and deepen cultural understanding, thus preparing them to become better international leaders in their fields.
- c. Consolidate and grow a productive international team of faculty, undergraduates, and graduate students in the field of mathematical modeling for STEM areas.

Our goals are thus in alignment with Partners of the America’s values, especially that of partnership; the foundation of our proposal is the creation of sustainable working groups that are “mutually beneficial relationships that are multicultural, diverse, and built on empathy, respect, and collaboration” (Partners).

2. **Key Activities and Anticipated Results.** UNAL Manizales and The University of Texas, Rio Grande Valley propose to run a research and cultural exchange program (JUUNTOS) for academic years 2021-2023. Every year, a group of four students from each institution will be led by faculty members from each institution. The students will study and undertake research at their corresponding home institutions for nine months. During that time, they will travel for two weeks to the partner institution to improve their second language skills and to further develop the research project through intense seminars and interaction with their student counterparts

and host faculty mentors. The students will also have plenty of cultural activities. **The program will provide the students with educational and research skills and intercultural experiences. Since credit will be given for successful program participation, students will also be closer to completing their degrees. It will also provide graduate school exam preparations to better prepare them for graduate school.**

Since the students will be working collaboratively in groups on research projects in applied mathematics, mathematical modeling and computational and data science during their exchange visits, we anticipate that the program will **culminate in the submission of a peer-reviewed paper coauthored jointly with the faculty, one per institution.** One of the Principal Investigators at UTRGV (Dr. Erwin Suazo) has published papers with similar activities with students during the Summers 2018 and 2019 MAA NREUP held at UTRGV. Students will have the opportunity to present their research at the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar. The first one was organized previously by UNAL Manizales in 2018 by two of the of the PIs (Drs. Emer Lopera and Fernando Gallego), and it was in this scenario where the PIs of this proposal met.

Student exchange visits will also include linguistic development in the form of language tutoring sessions, which will take place prior to the mobility exchanges and cultural excursions, attended by students from the host institution as well. Notably, **student researchers will develop research relationships with their student counterparts from their partner institutions, broadening their perspectives and further preparing them to be international leaders in STEM fields.**

We fully anticipate that the techniques developed in carrying out this project will be useful for other physics and computational phenomenon models by partial differential equations. We also believe that more research problems will arise in the course of pursuing our goal during virtual Friday weekly meetings, which will further enrich and sustain our future collaborative research agenda.

3. Managerial Resources

Project director: Dr. Emer Lopera, responsible for completing and submitting the application forms and being the link between faculty and students from both institutions in every issue concerning the program. **Coordinator at UTRGV: Dr. Erwin Suazo**, responsible for co-directing the virtual COILS (Collaborative Online International Learning Sessions), mentoring UTRGV student researchers, and directing the 2-week exchange at UTRGV. **Coordinator at UNAL Manizales: Dr. Fernando Gallego**, responsible for co-directing the virtual COILS, mentoring UNAL Manizales student researchers, and directing the 2-week exchange at UNAL Manizales. **Coordinator at UTRGV for ESL activities: Nicole Nicholson, MTESL**, responsible for organization and instruction of ESL and cultural exchange activities at UTRGV. **Administrative coordinator at UNAL Manizales: Heidy Quintero**, responsible for mobility, advising and follow up of all the administrative matters. **Administrative coordinator at UTRGV: Mari Perez**, responsible for following the administrative matters of the grant.

We will also rely on the excellent staff at both universities, including a close relationship with the UTRGV Office of International Programs and Partnerships.

II. PROGRAM DESCRIPTION.

1. Partner University Descriptions and Background of Partnership.

Universidad Nacional de Colombia (UNAL), Manizales. The UNAL Manizales Campus has three faculties: Exact and Natural Sciences, Engineering and Architecture, and Administration. It covers 11 undergraduate programs, 37 graduate programs (12 specializations, 21 masters and 4 PhD. Programs). It also has 46 research groups and it counts with more than 4900 undergraduate and 900 graduate students.

The UNAL Manizales Campus, the third campus in importance from the Colombian UNAL system, is located in the heart of the El Eje Cafetero, also known as the Coffee Triangle or the Coffee Zone. El Eje Cafetero is a region of Colombia where the population mostly belongs to the working class. The main activity of their inhabitants is agriculture and tourism. El Eje Cafetero also features small communities of native Colombians known as “Resguardos Indígenas.” Due to the location of the UNAL Manizales campus, each semester it enrolls mainly economically disadvantaged people as well as ethnic minorities. *Therefore, most of the students of UNAL Manizales do not have the economic resources to travel abroad in order to have an academic and cultural experience that will certainly strengthen their global and intercultural skills.*

Although UNAL is an institution widely recognized abroad, particularly in the United States, our students must be able to afford all the expenses in order to apply and get admission to a foreign university (visa, tickets, tuition, etc.) *For this reason, many of our outstanding students miss the opportunity to study abroad. Our proposed program will allow those students the chance to enter into these areas of study and meet professors that can also advise them in their graduate programs.*

Most of the scientific publications made by UNAL's faculty is in collaboration with partners from Brazil, Argentina, Mexico, USA, Czech Republic, and many other countries around the world. Some of this work embraces graduate theses of the students from our institution. Our proposed program continues in this cooperative vein, especially considering the formal agreement of cooperation with UTRGV, which is now in the final stages. This formal partnership began while Dr. Suazo was serving as a UTRGV International Faculty Fellow from 2019-2020, the main purpose of which was to form lasting partnerships and student exchanges between UTRGV and UNAL Manizales. In November 2019 on a UTRGV-sponsored trip to Colombia, UNAL Manizales invited Dr. Suazo (including stipend for travel and lodging) to give a research talk and recruit potential exchange students; as a result Mr Harrison Arrubla is pursuing his Master's degree in Mathematics at UTRGV. Drs. Lopera, Gallego, Suazo and others have already discussed research projects to pursue together, and their institutions are in the final stages of approving a semester-long exchange program that would allow for students to obtain credit from their host universities toward completing their degrees. Our proposed project will propel that newly formed partnership, focusing on the area of mathematical modeling and applications to the sciences and engineering. Indeed, our project will serve as a key recruitment tool; we hope that students who participate in our project will then be interested in continuing their research and deepening those international partnerships through the longer full-semester exchange program. Further, we hope these students will consider pursuing a Ph.D degree either at UNAL Manizales or UTRGV; UNAL Manizales already has a Ph.D in Mathematics, and UTRGV will start its PhD. in Fall 2021.

The student populations of both institutions – mostly of comprised of underrepresented students – will benefit from the combination of this formal agreement and our proposed program.

University of Texas Rio Grande Valley, Edinburg/Brownsville. UTRGV with 30,000 students is a distributed campus university designed to serve the needs of the entire region. The population of the Rio Grande Valley, which includes Cameron, Hidalgo, Starr, and Willacy Counties is 86%, 90%, 97%, and 86% Hispanic, respectively, according to the 2012 U.S. Census. These demographics are reflected in the students who attend UTRGV as well as the other colleges and schools in the area; UTRGV is a designated Hispanic Serving Institution (HSI). According to the U.S. Census Bureau, between 33.5 and 34.5 % of Cameron and Hidalgo county residents are living in poverty, with 45.5 – 47% of children living in poverty. Of the 366 Metropolitan Statistical Areas, McAllen-Edinburg-Mission and Brownsville-Harlingen ranked first and second on the list of America’s poorest cities. At UTRGV, our student population also includes a significant number of first-generation students – a little over 60% of enrolled students in both Fall 2016 and Fall 2017 – many of whom have likely not considered graduate degrees. For those participants from UTRGV, participating in this research exchange would likely open up their perspectives and empower them with valuable experience and confidence for future careers in STEM, including graduate work and careers in academia.

UTRGV has committed to becoming a B3 institution: Bilingual, bicultural, and biliterate, many of UTRGV students have a strictly regional mentality (some have never left the valley and many have never left the state) and will benefit from experiencing a new culture in which many of their skills and experiences with transfer. They have immense potential to become truly international leaders in STEM.

We also wish to highlight that Dr. Suazo himself is dual Colombian/United States citizen and a proud graduate of UNAL Bogotá; he clearly has highly relevant experience to manage the JUUNTOS program and help student participants navigate institutional, cultural, and linguistic differences.

2. Project Objectives.

In order to achieve our main goal to strengthen STEM research capacity and collaboration in the Americas by creating productive international research groups, namely research collaborations in mathematics between students (undergraduate and graduate) and faculty from Universidad Nacional de Colombia, Manizales campus (UNAL Manizales) and the University of Texas Rio Grande Valley (UTRGV), we have the following objectives:

- a. To increase participation of underrepresented groups in mathematics. UTRGV is the third largest Hispanic Serving Institution in USA and a high proportion of students are first generation college students. UNAL Manizales is a public university serving a region called “Eje Cafetero,” one of the most agricultural regions of the country; **the student populations of both universities are thus underrepresented in mathematics and greater academia both in their home countries and abroad.**
- b. To provide students with opportunities to improve linguistic skills (UNAL students in English and UTRGV students in Spanish) and deepen cultural understanding, thus preparing them to become better international leaders in their fields.
- c. Consolidate and grow a productive international team of faculty, undergraduates, and graduate students in the field of mathematical modeling for STEM areas; we aim to **disseminate the results of the exchange’s collaborative research project(s) in a published academic paper from each institution.**

3. Project Activities and Participants.

In order to achieve these objectives and our overall goal, we envision a three-part approach to our JUUNTOS exchange program, outlined below. **We will recruit 8 student participants, four from UNAL Manizales and four from UTRGV.** We will focus primarily on the **recruitment of high-achieving undergraduate students of mathematics, science and engineering**, although we also aim to have **at least one graduate student participant from each campus** as well; we have found that the graduate-undergraduate mentoring relationship is mutually beneficial, providing the undergraduates with peer mentors and the graduates with a deeper understanding of the mathematics as they tutor the undergraduates as well as an additional leadership learning experience.

3.1 Recruitment of students

Applications will be open to students immediately after we are awarded the grant. Some of the students potentially engaged in the program are graduate students already involved in research activities with professors of the team and already have enough background to pursue research. Also, undergraduate students that attend seminars offered by professors from both universities will be encouraged to participate in the program. Since many students attend those seminars, a selection will be made according to their mathematical and language skills. Professors in charge of each university will measure the skills for each student based on their active participation in the seminars, performance in advanced undergraduate classes necessary to pursue research in the team, and overall GPA. We will also consider presentations by students on the topics covered in these seminars and the score provided by the language center of their home institution.

3.2 Linguistic development

Our linguistic goals are dual: To improve technical and professional oral presentation skills as well as conversational skills in the two target languages (English for UNAL Manizales students and Spanish for UTRGV students). In order to ensure a greater impact on the linguistic development of our students, they will have a language training before their physical exchanges. According to the academic needs and projections of the participants of UNAL Manizales, and in order for them to have the necessary tools in Foreign Language (In this case, academic English), there will be developed a special laboratory in EFL with academic focus, where the participants will be provided with the necessary knowledge (considering their current EFL level) to ensure they have a good performance during the implementation of the project and during the in-person mobility.

This laboratory will be ideally guided by the PSL Team of the Academic Directorate at UNAL Manizales, which is the one specialized in developing high academic knowledge in foreign language in our campus. If the PSL Team is in charge of this special training, the laboratory will be structured, set and developed, regarding the focus, time and needs of the participants (Professors, students and researchers).

In addition, as part of our weekly COIL sessions, students will report their progress through brief informal presentations. On the weeks that UNAL Manizales students report their progress, they will log on 30 minutes early for instruction on and practice for their presentations. UTRGV students will do the same on the weeks that they report their progress. Additionally, the first ten minutes of the session will be spent in a target-language icebreaker/team-building exercise.

During the physical exchanges in the summer, students will continue this linguistic development with intense target-language conversation courses, with a sub-objective of formal presentation skills. Ideally, the host students of each country will also participate in segments of these courses as target-language practice partners.

3.3 Involvement of the U.S partner in the administration of the program

In an effort to make the management of the program streamlined and efficient, UTRGV will administer the program through a sub-award from UNAL Manizales (or directly from 100,000 Strong in the Americas) corresponding to the expenses of UTRGV faculty and students. In this way through the Office of Sponsored Programs UTRGV can manage their funding and coordinating travel. There are University of Texas (UT) system travel warnings/restrictions in place, so UTRGV as part of the UT system will follow all protocols to consider and approve travel prior to that travel taking place for UTRGV students and faculty. Also, all actions will be subject to the same restrictions, terms, and conditions as the those followed by UNAL Manizales, as outlined by 100,000 Strong in the Americas.

JUUNTOS Program Components

a. **Independent study in home institutions, fall and spring semesters.** Students enroll in independent study courses/math project for credit at their home institutions for both the Fall and Spring semesters and carry out research under the mentorship of the program faculty. A further requirement for credit in these independent study courses is active participation in the weekly COILS, see below. Because the main objective of this proposal is to contribute to the strengthening of the research capacity and collaboration in the Americas in the STEM areas, it is necessary that student participants be given ample time, instruction, and guidance in order to develop their knowledge base and pursue a quality research question. *The main topic of investigation will be on partial differential equations and applications to sciences and engineering* (related to models that represent physical phenomenon), specifically, stochastic and deterministic partial differential equations, numerical modeling with an emphasis on the computational aspects and developing and/or applying as deep learning algorithms to solve partial differential equations. These problems have impactful applications in the real world; fluid mechanics, models in plasma physics, nonlinear optics, quantum mechanics, models in neuroscience, heat and mass transfer and electromagnetic theory are all modeled by partial differential equations and all have plenty of real-life applications. Thus, we believe they are a good fit with 100,000 Strong in the Americas' goal of strengthening international collaborations that will ultimately impact economies in the Americas. Participants' research problems will be connected so that they will be able to learn from one another and collaborate when appropriate.

b. **COILS (Collaborative Online International Learning Sessions), fall and spring semesters.** Each Friday during the regular semester all participants will meet virtually to share their research progress. Faculty mentors may also use this time for supplemental instruction, providing students with short, in-depth and intense learning and research experiences in mathematical modeling from dual cultural perspectives, and guest lecturers from both institutions will present on their research topics as well. COILS may also include language and culture activities. The COILS serve not only as a space of academic collaboration but also of interpersonal connection; over the course of two semesters, student participants will build relationships with one another, ultimately helping them build cross-cultural understanding. *The COILS will also be the jumping-off*

point for creating a sustainable, international, interdisciplinary forum for applied and theoretical scientists in both countries to discuss recent developments and results.

c. **UTRGV Student Study Abroad Visit to UNAL Manizales, June 6-17.** The highlight of this visit is the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar (tentatively June 13-15), where all eight students will gain valuable experience in public speaking and presentation of their research. During the visit all students will also attend mathematics seminars, cultural excursions such as Visit to Nevado del Ruiz and the Paisaje Cultural Cafetero tour, and Spanish-language enrichment courses. UNAL Manizales student participants will serve as cultural and linguistic ambassadors for their UTRGV guests. Students from both institutions will have already developed connections through the COILS and so will be able to build on that momentum in their collaborations and personal interactions.

d. **UNAL Manizales Student Study Abroad Visit to UTRGV, July 11-22.** This visit will be run similarly, with students from both institutions taking part in mathematics seminars and presenting their research at a special session with key academic community leaders as invitees. Students will take cultural excursions such as visits to the state capitol in Austin and Quinta Mazatlán World Birding Center in McAllen or attending a professional-league RGV Toros soccer game. UTRGV student participants will take their turn as cultural ambassadors for their UNAL Manizales guests, especially in creating an immersive English-language experience; UNAL Manizales students will be given an intense, two-week English conversation course (organized by UTRGV Faculty Nicole Nicholson) with their UTRGV student counterparts as conversation partners. This second study abroad visit will serve as a celebration and culmination of their months-long research, cross-cultural, and linguistic connections.

We plan to repeat this arc of activities for the 2022-2023 academic year.

The proposed JUUNTOS program will certainly have an impact on the flow of students between our two universities because without the proposed funding, most of these students would not have the ability to study abroad. Because our proposed program consists of short, two-week visit for students of each institution respectively, it is an optimal way to plant seeds of curiosity and interest in longer study-abroad programs. Specifically, we are confident that participation in the JUUNTOS exchange program will have a direct positive impact on the number of students participating in the more formal semester-long exchanges that our universities are currently in the last stages of approving. JUUNTOS will help both institutions create awareness and presence on the campus of the other, motivating students to expand their academic and research experiences through study abroad.

The crucial in-person nature of the international exchanges, consider that the whole team of students and faculty (about 10-12 people) will spend a total of four weeks working together, two at their home institution and two at their host institution. These four weeks of seminar instruction, research collaboration, and presentations (not to mention the cultural exchanges and language courses!) mirror the same kind of intensity of most traditional research experience for undergraduates (REUs) funded by NSF and a pivotal tool for the creation of the future leader researchers at USA, which justifiably take place in-person, not virtually. We want to provide our students the same caliber of experience.

Physical mobility is a very important part of the project since it will allow participants to further develop different competencies and abilities worked throughout the implementation of the project

during the virtual phases; in particular, it will facilitate interactions and strengthen the intercultural dialogue, teamwork, expansion of global networks, mutual understanding and trust. During the international exchange there will be a strong collaboration between the visiting students and local faculty and students. Despite the short length of the stay (for budget reasons), participants will overcome language difficulties, putting into practice their language skills in a real context and facing intercultural barriers. Thus, both institutions are committed to include travels to the other country to guarantee the immersion experience. We are hopeful that we can obtain more funding from other sources in order to increase the length of the student international interchange period.

On the other hand, student's mobility is completely necessary to develop some of the planned activities and achieve all our goals. Thus, students will participate in the STEM face-to-face courses during their stay abroad. Moreover, during their stay in the United States, students will have a graduate school preparation training, focused on the submission of their applications, Graduate Record Examinations GRE and TOEFL exams, among other important information related to the admission process.

Furthermore, the international exchange will increase the mobility flows, that will have a very high impact on the indicators of our university in the National Higher education Information System, as well as in the specific goal of diversifying the countries we are receiving and sending students to. The mobility of teaching staff will allow the interlocution with different institutional representatives in the partner institution, that will play a fundamental part of a long-standing collaboration between our institutions. In addition, they will have the opportunity to visit the campus, laboratories and discover new teaching methodologies that could be implemented in their home institutions.

During their stay abroad, students will deepen cultural understanding. Besides, the project includes some cultural activities, on the one side, American students will discover one of the main natural treasures, the Nevado del Ruiz Volcano, will discover the unique landscape of the coffee region and will try Colombian food. On the other side, Colombian students will visit the SpaceX Texas Launch Site in Boca Chica, a unique and enriching experience for them where team-building and target-language practice will occur naturally. These experiences cannot be replicated online.

In regard to the virtual components of the program, the weekly COIL sessions serve to create the foundation for an international team, not to replace in-person collaboration. In these sessions students and faculty will be working on their collaborative research projects, presenting informal progress reports, receiving seminar-style instruction, and participating in team-building activities. These virtual meetings are designed to create a rich collaborative environment with existing interpersonal connections and a strong sense of teamwork when the students and faculty meet physically during the in-person exchanges at each university. Indeed, this is part of what makes our program innovative; we want the students and faculty from both of our universities to interact closely as a team during these exchanges instead of attending isolated, independent events. Rather than starting from scratch at the beginning of their physical exchange periods, we want them to experience the intense and exciting collaborative academic environment that can only happen in-person. We particularly want them to experience presenting their work in a formal, professional setting so that they can enjoy the fruits and culmination of their labor as a united team. Again, we believe this can only happen in-person.

Our innovative program

Our program is innovative because it does not stop at providing opportunities for cultural exchange during the two weeks UTRGV students visit Colombia and UNAL students visit the U.S. On the contrary, those physical exchange periods are the culmination of a more collaborative goal: To create a productive international research team in the area of mathematical modeling in STEM areas. In mathematics and other sciences, it is fairly common that professors of different countries work in collaborative research projects. Most of these often start with a visit from one professor to a partner in another city or country for several weeks. To carry out this kind of activity is particularly difficult for the students due to financial issues. Since this kind of collaborative work should start during the early stages of the formation of mathematicians and since the youngest and underrepresented students deserve more opportunities, we believe our program to be innovative.

We have carefully designed all aspects of our program to fully support this innovative goal of creating an authentic research team that will be able to hit the ground running when they finally meet physically for the international exchanges. Students (graduate and undergraduate) and faculty will be working on collaborative research projects throughout the academic year; they will meet virtually every Friday (and maintain other research communications as needed) for seminar-style instruction in mathematics, English/Spanish language workshops, to share their research progress, and also to build interpersonal connections as a research team. When they meet physically for the cultural exchanges, they will be able to seamlessly transition to in-person research experiences. The most important of these research experiences are the presentations in professional conferences. We consider these conference presentation opportunities in both languages and cultural settings to provide invaluable experience in building professional and long-lasting international connections.

III. SUSTAINABILITY PLAN

1. **Commitment.** As previously mentioned, UNAL Manizales and UTRGV are already in the final stages of approving a semester-long exchange program between the two institutions. This formalized partnership demonstrates without doubt the two universities' commitment to build and maintain an academic alliance. Innovation Fund support would have a direct and lasting impact on that alliance by greatly enhancing our respective recruitment strategy; students who may not otherwise have even considered a long study abroad exchange will be much more likely to do so after participating in a well-organized, fulfilling, and shorter-term exchange such as the one we are proposing. Together, the two exchange programs will create a campus culture that is aware of and open to study abroad experiences and strengthening between scientific cooperation networks.

2. **Need.** We recall that both UNAL Manizales and UTRGV student populations are generally without strong economic resources. International travel is expensive, and without outside funding, it is beyond the means of most of our students. The Innovation Fund would jumpstart the recruitment cycle and the international campus culture we described above. Once that cycle has begun and we can concretely demonstrate its vitalizing impact on campus culture and academics scientific development, we are confident that we will be able to procure outside funding from community partners in the private sector.

3. **Current support.** To assure the continuation of the exchange program, every year UNAL makes calls for grants directed to its students and faculty. Currently there are several available grants that would be applicable to our proposal, such as “Consolidación de Centros de Excelencia,” “Convocatoria Nacional para el Apoyo a la Movilidad Internacional,” and at least four others. The main purpose of these is to give to the university community economic funding for travel, tools and support of their research. We commit to applying for these grants and believe we would have excellent standing to receive them. Further, the Dirección de Relaciones Exteriores (DRE) (www.dre.unal.edu.co), the office of UNAL in charge of the academic international issues, is highly committed to our project. For its part, UTRGV has committed to \$750 scholarships per student up to 15 students (\$10,000) in shared costs. These scholarships will help defray travel, room, and board expenses.

4. **Innovations for Sustainability.** Once the grant period ends, we are confident that we will be able to find institutional and community partners to continue the JUUNTOS program, especially since it will serve as such an important recruitment tool for the semester-long exchanges currently being formalized. Regardless, several innovative aspects of the program are independently sustainable and also contribute to 100,000 Strong in the Americas’ goals to create opportunities to work in teams and gain technical and linguistic skills.

First, the COILS can continue indefinitely due to its virtual modality. Additionally, because of its inherently informal setting, it could potentially serve as a welcome and gateway for new student participants who may then pursue full participation in the exchange programs. We also envision a natural evolution of the COILS to a second, faculty-oriented forum, a virtual, interdisciplinary space for applied and theoretical scientists in both countries to discuss recent developments and results. We imagine this research faculty forum growing beyond the two institutions to include scientists from other regions of Colombia and the United States as well.

Similarly, because the JUUNTOS program design includes ample time for student and faculty interaction and academic growth, we are hopeful that these student participants will go on to complete undergraduate theses and even enroll in Masters and PhD programs. First, the faculty exchanges can contribute to the growing of Masters, PhD, and Post-Doctoral programs. And second, it would be a natural choice for student participants to include faculty from the program to serve on their respective committees, thus promoting collaborative international advisories and further normalizing both studies abroad programs as well as cross-cultural partnerships.

Next steps

We are currently preparing applications for funding to continue this program for at least two more years.

The sustainability of the program rests mainly in the coming agreement of cooperation between UTRGV and UNAL Manizales, which Dr. Erwin Suazo as international faculty fellow from University of Texas Rio Grande Valley (UTRGV) and Dr. Emer Lopera from Universidad Nacional de Colombia, Manizales campus (UNAL) have been developing since 2019. Indeed, the coincidences in their programs (Ph.D and Master in Mathematics) and other aspects that complement each other motivated them to work together into this arrangement which consists of an agreement of cooperation (general) and a program agreement (specific).

The agreement would allow students from UNAL and UTRGV to attend classes at the partner university and to obtain credits to get their degrees. Specifically, any participating graduate student from UNAL must attend 27 credits at UTRGV, 6 of which could be online, and UTRGV will approve for each student 9 credits from UNAL. Reciprocally, any student of UTRGV admitted to the graduate program at UNAL must attend 30 credits at UNAL, 16 of which correspond to optional courses, 4 to a seminar and 10 to the thesis project. UTRGV and UNAL will also provide opportunities for faculty exchanges. Within four weeks of the end of each semester, each institution will forward to home institution official grade reports of each student in the program.

We expect to begin this agreement within the next academic year and is expected to be effective until 2025; receiving this 100,000 Strong in the Americas would accelerate and solidify the final acceptance of the inter-university agreement and commence a mutually beneficial recruitment mechanism between the formal inter-university agreement and our proposed program.

IV. INSTITUTIONAL CAPACITY, CHALLENGES, AND OPPORTUNITIES FOR GROWTH

- 1. Institutional Capacity.** UNAL Manizales has an Office of International Relations with a Coordinator, an assistant and one or two interns that support the office. Mobility flows vary from one year to another; in 2015 we had 85 students in outgoing mobility, followed by 105 in 2016, 70 in 2017, 78 in 2018 and 45 in 2019; concerning inbound mobility, we had 44 students in 2015, 48 in 2016, 35 in 2017, 49 in 2018 and 39 in 2019; we can see that there is not a balance between incoming and outgoing mobilities.

The International Relations Office is very committed to this project, as well as the Direction of International Affairs (Dirección de Relaciones Exteriores, DRE). This is the office in charge of setting up the international strategy and policies at an institutional level. Each semester this office opens a call for students interested in study abroad experiences, both national and international, in order to provide them financial support and facilitate their stay abroad. There is another call made by the same office that also supports students in study abroad programs with a complementary amount for international health insurance.

UTRGV has an office of International Programs and Partnerships that is staffed with a director, two program specialists, and an accounts manager. Each year before the pandemic, UTRGV would send about 220 students abroad. In the summer terms, each year about 200 students participate in faculty-led programs in various countries around the world. In addition, 20 students participate in semester exchange programs.

The University of Texas Rio Grande Valley (UTRGV) is one of 14 institutions comprising the University of Texas System. UTRGV was created by the Texas Legislature in 2013 in a historic move that brought together the resources and assets of UT Brownsville and UT Pan American and, for the first time, made it possible for residents of the Rio Grande Valley (RGV) to benefit from the Permanent University Fund - a public endowment contributing support to the University of Texas System and the Texas A&M University System. Spanning the entire RGV, with a presence in each of the major metropolitan areas of Brownsville, Edinburg, Harlingen, and McAllen, UTRGV is also home to a School of Medicine. UTRGV serves as a gateway to the Americas and advance a mission that includes nurturing students to become confident innovators and leaders, promoting regional economic development, and improving the health and quality of life along the Texas-Mexico border. UTRGV enrolled its first class in the fall of 2015, and the School of Medicine opened in 2016. With an enrollment of 30,000 students by Spring 2021,

UTRGV is the third the largest Hispanic- serving institutions in the country, with 89% of our students being of Hispanic descent. In 2015 UT Pan American, one of UTRGV's legacy institutions, was ranked by The Hispanic Outlook in Higher Education at number three in the nation for awarding mathematics and statistics bachelor's degrees to Hispanics.

UTRGV is now 1 of 9 Texas four-year public institutions with an enrollment of over 30,000, joining Texas A&M, UT Austin, Houston, UT Arlington, Texas State, North Texas, Texas Tech, and UT San Antonio. U.S. News & World Report ranked UTRGV 1st among public universities in the nation for the least student debt upon graduation, see <https://link.utrgv.edu/2020annualreport/#lp-pom-block-517>

The data showed that UTRGV students who graduated in 2017 incurred an average debt of \$10,054, compared to that year's national average of \$30,000. Overall, among public and private universities, UTRGV ranks fourth behind Harvard (\$6,100), Princeton (\$7,500), and Duke (\$9,200). In February 2020, UTRGV received the largest single donation in the history of higher education in South Texas. The \$38 million gift from the Valley Baptist Legacy Foundation will establish a unique medical hub for scientific discovery focused on improving health in the Rio Grande Valley. With the assistance of this gift, UTRGV should move into the top 200 American Universities in both philanthropic giving and total research expenditures. In January 2020, UTRGV was one of just 119 colleges and universities in the United States to receive this year's Carnegie Community Engagement Classification. This was UTRGV's first time receiving the designation, which honors an institution's commitment to community engagement and its collaborations with local, regional, state, national, and global partners. In November 2020, UTRGV broke ground on the new UTRGV Institute for Neuroscience, a \$30 million, world-class clinical and research site within the School of Medicine. The building is funded by the Permanent University Fund, with the interdisciplinary work that will be conducted there to be funded in part by a \$15 million gift from the Valley Baptist Legacy Foundation, announced in February 2017.

2. **Challenges to Study Abroad.** UNAL has a large number of agreements, more than 2989 in over 65 countries around the world. In the case of Manizales Campus, the main destinations of the outbound mobility are Mexico, France, Italy, Germany and Argentina, quite similar to its inbound mobility from Mexico, France, Argentina, Chile and Brazil. It is important to mention that the exchanges to and from non-Latin-American countries mainly involve double-degree programs being offered. Nevertheless, outbound mobility continues being represented by a marginal percentage of participants; normally one of the main causes of this is the lack of funding from students' families.

One of the deficiencies that should be addressed was made clear by the latest study of the EF English Proficiency Index; Colombia is on the top five of the Latin-American countries with the worst English Level. Although we as a higher education institution have implemented programs of English as a second language, we are aware of the importance of continuing to work in this respect at an institutional level. We need to strengthen the bilingual strategy institutionally, but also at a national level. We are hopeful that the situation will improve soon, as the National Ministry of Education established in 2019 the importance of including the internationalization of curriculum and of learning a second language as a required strategy that all institutions should include in their road-maps.

3. **Opportunities for Growth.** Internationalization at UNAL has three main objectives at institutional level: i) academic mobility (national and international), ii) international cooperation, iii) strategic partnerships. But at Manizales Campus, we have added two more objectives, as follows: iv) bilingualism and multilingualism and v)

internationalization at home. For us, internationalization should be considered as one of the strategic drivers, aligned with our core functions of teaching, research and social responsibility and added to an institutional commitment between internal departments, including academic and central units, in order to guarantee a Comprehensive Internationalization approach for all our members.

Although UNAL Manizales has clearly developed an internationalization strategy with these goals in mind, it needs to continue improving its strategy in order to generate a comprehensive internationalization that responds to the requirements of external partners and that can also be at the forefront of internationalization in Colombia.

Through this project, faculty and students of both institutions will gain a unique opportunity to cooperate and research with international counterparts, improving their language skills, developing self-reliance, creating professional relations and strengthening their global competencies. As was mentioned above, international mobility in our campus represents less than 0.23% of the total of students enrolled, due to lack of financial resources. As a higher education institution with students from different socio-economic backgrounds, we face these kinds of challenges constantly. We have started to overcome these challenges through the implementation of different strategies, like participating in international cooperation competitions like this one, strengthening our relations with international institutions and offering our students some additional grants to support their mobility.

V. MONITORING AND EVALUATION PLAN

Overall Objective: To strengthen STEM research capacity and collaboration in the Americas by creating productive international research groups, namely research collaborations in mathematics between students (undergraduate and graduate) and faculty from Universidad Nacional de Colombia, Manizales campus (UNAL Manizales) and the University of Texas Rio Grande Valley (UTRGV).			
General Goal #1: To increase participation of underrepresented groups in mathematics, statistics and computer science.			
Specific Objectives	Performance Indicators (Output/Outcomes)	Data Collection Source/Tools	Target Goal (How much? How many?)
To recruit promising students in mathematics from underrepresented groups in STEM to participate in research groups.	Program flyers and invitations will be sent to appropriate listserves as well as mathematics faculty at both campuses for distribution to promising individual students. Timeline: September 2021.	Student applications, program coordinators.	Eight students will be recruited, four from each campus, including at least one graduate student per campus.
To establish a collaborative weekly seminar in mathematical modeling for STEM areas through PDEs, called COILS (Collaborative Online International Learning Sessions).	Through COILS, students will be able to describe the problem-solving process (comprehension), and they will solve research problems through the	Program coordinators.	All 8 students will participate weekly; at least one student will present their research status weekly.

	application of scientific methods (application). Students will work effectively as a member of a team. They will apply the principles of math and science to a technical problem.		
	Timeline: Weekly.		
To provide students an opportunity to present their work to the greater academic community.	Students will practice and receive coaching for their presentations; students will register for and present at the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar.	Seminar organizers/Program Faculty	All student participants will present their research at the at the II Semestral International Congress of Analysis and Partial Differential Equations: UNAL-UTRGV Joint Seminar.
	Timeline: June 13-15.		
General Goal #2: To provide students with opportunities to improve linguistic skills (UNAL students in English and UTRGV students in Spanish) and deepen cultural understanding, thus preparing them to become better international leaders in their fields.			
Specific Objectives	Performance Indicators (Output/Outcomes)	Data Collection Source/Tools	Target Goal (How much? How many?)
Students will participate in 2-week long intensive courses in English (at UTRGV) and Spanish (UNAL Manizales). In each case, program participants from the host country students will serve as target language conversation partners.	Students will report an increase in their confidence in their target-language skills. Timeline: June 6-17 at UNAL Manizales and July 11-22 at UTRGV.	Entrance and exit interviews and language inventories; language coordinator Nicole Nicholson, UTRGV Faculty.	All students.
Students will improve their multicultural skills by interacting with their host-country program participant counterparts through cultural and social events and excursions.	Students will report an increase in their understanding of the host country culture and values. Timeline: June 6-17 at UNAL Manizales and July 11-22 at UTRGV.)	Entrance and exit interviews; faculty coordinators and language coordinator.	All students.
General Goal #3: Consolidate and grow a productive international team of faculty, undergraduates, and graduate students in the field of mathematical modeling for STEM areas.			
Specific Objectives	Performance Indicators (Output/Outcomes)	Data Collection Source/Tools	Target Goal (How much? How many?)

Publish results of the research projects in a peer-reviewed journal article.	Students and faculty will actively engage in the collaborative writing, formatting, revising, and editing process. Timeline: After the conclusion of the program.	Publishing in a journal.	At least one peer-reviewed journal article.
Promote collaborative international advisories for producing graduate theses and dissertations for students from both institutions.	At least one advisor from UTRGV on a UNAL Manizales graduate committee and vice versa for at least one student per institution. Timeline: Ongoing and after the conclusion of the program.	Faculty and students.	At least one advisor from UTRGV on a UNAL Manizales graduate committee and vice versa for at least one student per institution.
Contribute to the development of the Masters, Ph. D and Post-doctoral programs of the participating institutions through short and long research visits.	Attendance of graduate students at research talks by visiting faculty (UTRGV at UNAL Manizales and vice versa) during physical visits and virtual meetings; at least two guest lectures/visits from research faculty beyond program coordinators at each institution. Timeline: Throughout the program and ongoing.	Faculty/Seminar attendance records.	At least one graduate student in attendance per talk. At least two guest lectures/visits from research faculty.

BUDGET NARRATIVE

Personnel

This project is supported by the faculty and staff members, and its cost is covered by the institutions to which they belong.

As was mentioned in the proposal, each participant has clear tasks depending on his/her role in the project. The personnel will devote two hours per week in order to follow up and guarantee the success of the project implementation. Moreover, the faculty members will support and monitor the research activities that the students will develop during the project. On the other hand, the administrative staff will be in charge of the administrative matters, monitor the activities developed in her/his institution, and report to the funding institutions. Values varies depending on the salary of the staff members.

Program cost

Travel

The program costs include international airfare in economic class, round trip Matecaña Airport (Pereira)-McAllen Texas- Matecaña Airport (Pereira) and McAllen Texas Airport- Matecaña Airport (Pereira)-McAllen Texas Airport. The local transportation to and from Pereira will be covered as a cost-shared by UNAL Manizales.

Accommodation

Accommodations for Colombian students will be provided by the Housing at the UTRGV Residence Halls and American students will stay in a hostel near to UNAL Manizales. Faculty will stay in a nearby hotel.

Maintenance

The word "Maintenance" refers to food (per diem). Thus, there will be three meals provided per day that will be taken at the university cafeteria.

Course

The budget also includes the implementation of the courses and follow ups; through the institutional platform; the production of the audiovisual materials and printed materials, among others. It is important to mention that the involved institutions count on a zoom license to facilitate on-line sessions, this means that this item will be the cost-share of the participating institutions, as well as the online and onsite courses in the United States and in Colombia.

This category also includes an intensive English course at UTRGV that will be led by Pr. Nicole Nicholson, language coordinator at UTRGV. Prior to the mobility to the United States of America, Colombian students and faculty will participate in an English Lab that will provide them with the necessary knowledge and will support the strengthening of their language skills, this item will be funded by UNAL Manizales through its Second Language Program.

Project memories

We plan to have a jointly publication describing the project results and goals achieved. In addition, we will record some testimonies of our students that will be disseminated through our institutional

websites and social networks, the idea is to share their experience and motivate other students to have an international mobility. This item will be cost-share of the participating institutions

Events

Cultural events: The program also includes some cultural activities to enrich the experience of the students. At least one excursion will take place in each country (SpaceX South Texas Tracking Station, Boca Chica in Houston and The Ruiz Volcano in Manizales, for example). Requested funds will allow to carry out the planned visits in the United States and in Colombia, they will cover transportation and snacks.

Joint seminar logistics: The organization and implementation of the seminar will be funded by the participating institution.

Closing event: In order to share the experience and results of the project, we will organize a closing event in which, we will count on the participation of other higher education institutions in Colombia, local authorities and stakeholders. This will be funded by the participating institutions.

Other costs: The program includes visa costs, SEVIS (required immigration documentation), and health insurance for students and one professor from UNAL Manizales, as well as the costs of domestic flights Manizales-Bogotá-Manizales, accommodations and meals for participants that need to obtain visas in Bogotá.

Finally, the budget table indicates the contribution each institution provides to the project implementation. In addition to the personnel contribution, each institution will organize a language course preparation. UNAL Manizales the Academic Direction will offer a three-month English Lab specifically tailored to these students and faculty. Mirroring this, UTRGV will implement a two-week English course for Colombian students.

Description of Expenses	Value	Quantity	Requested Funds	Cost Share
Personnel				
<i>Project Director at UNALM</i>	\$ 1.127,00	(2 hours/week for 12 months)	-	\$ 1.127
<i>Leading Professor at UNALM</i>	\$ 1.190,00	(2 hours/week for 12 months)	-	\$ 1.190
<i>Project Coordinator at UNALM</i>	\$ 800,00	(2 hours/week for 12 months)	-	\$ 800
<i>Project Director at UTRGV</i>	\$ 3.500,00	(2 hours/week for 12 months)	-	\$ 3.500
Sub-total Personnel			-	\$ 6.617

Program Costs				
UTRGV Faculty International Travel	\$ 1100/person	2 people	\$ 2.200	\$ -
UNALM Faculty International Travel	\$ 1200/person	2 people	\$ 1.200	\$ 1.200
UTRGV Students International Travel	\$ 1100/person	4 people	\$ 1.400	\$ 3.000
UNALM Student International Travel	\$ 1200/person	4 people	\$ 4.800	\$ -
UTRGV Student and Faculty Local Travel (Pereira-Manizales-Pereira)	\$100 /person	6 people	\$ 600	\$ -
UNALM Student and Faculty Local Travel (Manizales-Pereira-Manizales)	\$100 /person	6 people	\$ 300	\$ -
UTRGV Faculty Maintenance (2 weeks)	\$ 50/ day/ person	2 people	\$ 1.500	\$ -
UNALM Faculty Maintenance(2 weeks)	\$100/day /person	2 people	\$ -	\$ 3.000
UTRGV Student Maintenance (2 Weeks)	\$ 20/day/ 1 people	4 people	\$ 1.200	\$ -
UNALM Student Maintenance (2Weeks)	\$ 25/day/ 1 people	4 people	\$ 1.500	\$ -
UTRGV Faculty Accommodation (2 weeks)	\$37/day/ 1 people	2 people	\$ 1.110	\$ -
UNALM Faculty Accommodation (2 weeks)	\$100/day/ 1 people	2 people	\$ -	\$ 3.000
UTRGV Students Accommodation (Manizales)	\$ 25/night X 15	4 people	\$ 1.500	\$ -
UNALM Students accommodations (In Campus at UTRGV)	\$600	4 people	\$ 2.400	\$ -
Digital platform for online sessions (Friday Exchange, Follow up)	\$ 3.000	20 hrs	\$ -	\$ 3.000
UNAL-UTRGV Joint Seminar logistics (materials, snacks, equipment,etc.)	\$ 1.000	1 seminar		\$ 1.000
Project memories	\$ 1.500	1 joint-publication	\$ -	\$ 1.500
Closing Event/ UTRGV Faculty Accommodation and stipend	500/person	1 person	\$ -	\$ 500
Closing Event/ UTRGV Faculty travel	\$ 750/person	1 person	\$ -	\$ 750
Closing Event	1000	1 event		\$ 2.000
Lab English as a second language for UNAL students and Faculty	72 hours (1st semester 2022)	1 lab		\$ 1.015
English course at UTRGV	2 weeks	1 course	\$ 1.600	\$ -
Sub-total Program Costs			\$ 21.310	\$ 19.965

Other				
Student's Health Insurance (Colombian students)	\$ 230 /person	4 people	\$ 920	\$ -
Student's Health Insurance (US Students)	\$ 230 /person	4 people	\$ 920	\$ -
Visas	\$ 160 /person	5 people(4 students-1 proffesor)	\$ 800	\$ -
SEVIS	\$ 220 /Person	4 people	\$ 1.100	\$ -
Local transportation Visa process UNALM Students (Manizales-Bogota-Manizales)	\$ 150/person	5 people	\$ 750	\$ -
Accommodation-Visa process UNALM Students (Bogota)	\$ 30/person x 1	5 people	\$ 150	\$ 60
Farewell BBQ in Texas Rio Grande Valley		15 people	\$ 140	\$ -

Sub-total Other Costs			\$ 4.780	\$ 60
Additional Resources/Support (from outside sources)				
Sub-total Additional Resources				-
Indirect Costs				-
Total, All Costs			\$ 26.090	\$ 26.642
Total Combined (100K Grant + Cost-Share)				
Exchange rate (date)	\$ 3.598,00	USD/COP		
UTRGV			\$ 9.510	
UNAL			\$ 16.580	
Total Requested Funds			\$ 26.090	

Alan B. Earhart, Ph.D.
Director of International Programs and Partnerships
Responsible Officer J1 BrideUSA Program
University of Texas Rio Grande Valley
February 11, 2021

Dear Partners of the Americas:

I am writing to express my full support for the proposal for the U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships submitted by Universidad Nacional de Colombia Manizales with the University of Texas Rio Grande Valley.

My office has four full-time, professional international educators. It can provide sufficient support and advice for UTRGV's commitment to ensure an effective and sustainable program now and in the future for the proposal: **"Creating diverse scientific communities in the Americas JUUNTOS: Joining UNALM and UTRGV in the Development of STEM Collaboration."**

Thank you for your kind consideration in this matter.

Sincerely,



Alan Earhart, Ph.D.
Tel. 956-665-3572
Email: alan.earhart@utrgv.edu

March 13, 2021

100,000 Strong in the Americas
Innovation Fund Grant Committee

Dear Innovation Fund Grant Committee,

Please accept this letter as evidence of strong support from the School of Mathematical and Statistical Sciences at UTRGV for co-PI Dr. Erwin Suazo's grant proposal. This proposal will build collaborations between faculty and students at each participating institution. The resulting research will be of significant benefit to all involved. The research connections cultivated by the grant provide students and researchers access to multidisciplinary experts working on issues of national and international importance.

Dr. Suazo has a workload of 60% teaching, 30% research, and 10% service. If awarded the Innovation Fund grant, Dr. Suazo's 10% service requirement would be fulfilled entirely by his grant-related duties, relieving him from further service obligations within the department.

Dr. Suazo has successfully run REUs in the past similar to the proposed program. I am confident that if given the opportunity he will apply his considerable experience and enthusiasm to help the program meet and even exceed its objectives. We look forward to supporting him in this endeavor.

Please contact me with any questions you may have.

Sincerely,



Dr. Timothy Huber
Associate Professor & Director
School of Mathematical and Statistical Sciences

School of Mathematical & Statistical Sciences

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utrgv.edu

Manizales, March 10th of 2021

100.000 Strong in the Americas Initiative
Partners of the Americas Foundation
Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Ex-
terior, Mariano Ospina Pérez (ICETEX)
US Department of State

Ref. Support letter for the grant application under the U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships

Dear Panel Members,

As the Vice-Rector of the Universidad Nacional de Colombia, Manizales Campus, I hereby declare that I enthusiastically endorse the current proposal "Creating diverse scientific communities in the Americas JUUNTOS: Joining UNALM and UTRGV in the Development of STEM Collaboration" in partnership with the University of Texas Rio Grande Valley.

This proposal is highly relevant for us as a Colombian Higher Education engaged with the priority thematic areas of our country. We will endeavor and mobilize all our efforts to have an active participation in this initiative.

Sincerely,



CAMILO YOUNES VELOSA
VICE-RECTOR
UNIVERSIDAD NACIONAL DE COLOMBIA
MANIZALES CAMPUS

CONTACT INFORMATION	Departamento de Matemáticas y Estadística, Universidad Nacional de Colombia, sede Manizales (UNAL), Campus la Nubia, Bloque W - 222J, Manizales Caldas edloperar@unal.edu.co
RESEARCH INTEREST	Analysis and Partial Differential Equations. Specifically, last years I have focused my attention on the study of the existence of solutions for Boundary Value Problems that involve the p -Laplacian operator.
ACADEMIC POSITION	- <i>Assistant Professor</i> Departamento de Matemáticas (Department of Mathematics), Universidad Nacional de Colombia, at Manizales. Since August 2016.
EDUCATION	Universidad Nacional de Colombia. Medellín, Colombia. Ph.D., <i>Mathematics</i> , September 2015 <ul style="list-style-type: none"> • Thesis: <i>Results about elliptic problems in symmetrical or non symmetrical domains.</i> • Advisors: Sigifredo de J. Herrón Osorio Universidad Nacional de Colombia. Medellín, Colombia. M.S., <i>Mathematics</i> , July 2009 <ul style="list-style-type: none"> • Thesis: <i>The Cauchy problem for the K-dV equation in low regularity spaces.</i> • Advisor: Jorge Mejía Laverde Universidad Nacional de Colombia, UNAL, Medellín, Colombia. B.S., <i>Mathematics</i> , Jun 2006
WORK EXPERIENCE	- <i>Full Time Professor</i> Universidad de Antioquia, Department of Mathematics Medellín, Colombia. February 2015 – July 2016. - <i>Theaching Assistant</i> (As Ph.D., student) Universidad Nacional de Colombia. Medellín, Colombia. January 2010-July 2014 - <i>Part Time Professor</i> Instituto Tecnológico Metropolitano, Faculty of Basic Sciences Medellín, Colombia. February 2009 –December 2010. - <i>Theaching Assistant</i> (As M.S., student) Universidad Nacional de Colombia. Medellín, Colombia. January 2007-July 2009
JOURNAL PUBLICATIONS	3 Herrón, S. ; Lopera, E. Signed radial solutions for a weighted p -superlinear problem. Electronic Journal of Differential Equations, Vol. 2014(2014), No.24, pp. 1-13. 2 Herrón, S. ; Lopera, E. Non existence of positive radial solutions for semipositone weighted p -Laplacian problems. Electronic Journal of Differential Equations, Vol. 2015(2015), No.130, pp. 1-9. 1 Castro, A. ; Guedes deFigueiredo, D. ; Lopera, E. Existence of positive solutions for a semipositone p -Laplacian problem. Proceedings of the Royal Society of Edinburgh.

THESIS DIRECTION
AND SUPERVISION

Master Students

Camila López Morales
Universidad Nacional de Colombia Sede Manizales, 2021- Current.

Undergraduate students

Diego Alexander Rodriguez Hernandez
Thesis: **The Fourier Transform on the Lebesgue Spaces**
Universidad Nacional de Colombia, sede Manizales, 2018

AWARDS AND
HONORS

Grant: Estudiante sobresaliente de postgrado.
• Universidad Nacional de Colombia 2010–2014

PRESENTATIONS
AND SCIENTIFIC
CONFERENCE
ATTENDED

Talks:

- **XXI Congreso Colombiano de Matemáticas.**
Universidad Nacional de Colombia. Bogotá, Colombia. Jun, 2017.
Talk: *No existencia de Soluciones positivas para un sistema semi-positone con peso en una bola.*
- **IV Taller internacional de análisis no lineal y ecuaciones diferenciales parciales.**
Universidad Nacional de Colombia. Manizales, Colombia. July, 2017.
Talk: *Non existence of positive solutions for a semipositone weighted system in a ball.*
- **III taller de análisis no lineal y ecuaciones diferenciales parciales.**
Universidad Sergio Arboleda. Bogotá, Colombia. July, 2015.
Talk: *Existence of positive solutions for a semipositone p -Laplacian problem.*
- **XIX Congreso Colombiano de Matemáticas.**
Universidad del Norte. Barranquilla, Colombia. Julio de 2013.
Talk: *Signed Radial Solutions for a Weighted p -Superlinear Problem.*

REFERENCES

Sigifredo Herrón

Universidad Nacional de Colombia
Department of Mathematics
Medellín, Colombia.

Phone: (057) 3052300414
E-mail: sherron@unal.edu.co

Alfonso Castro

Harvey Mudd College
Department of Mathematics
Claremont, CA 91711, USA

Phone: 1(909) 4521615
E-mail: castro@g.hmc.edu

Dr. Erwin Suazo

The University of Texas Rio Grande Valley
School of Mathematical and Statistical Science
Email: erwin.suazo@utrgv.edu

Education

PhD, Arizona State University, 2009.
Major: Mathematics

MS, Arizona State University, 2004.
Major: Mathematics

Employment History

Academic - Administrative Assignments

Principal Investigator, Closed and approximate solutions to equations on wave propagation phenomena. Agency: Simons Foundation. Collaboration Grant for Mathematicians., University of Texas, Rio Grande Valley. (September 1, 2015 - August 31, 2019).

Principal Investigator, Faculty and Undergraduate Research Student Teams (FURST). Agency: NSF DMS #1620196 (January 1, 2017-December 31, 2018), University of Texas, Rio Grande Valley. (January 1, 2017 - December 31, 2018).

Principal Investigator, (Co-PI Dr. Z. Qiao) Wave structures for nonlinear partial differential equations and their applications in physics. College of Sciences Research Enhancement Seed Grants Program., University of Texas, Rio Grande Valley. (June 1, 2016 - November 30, 2017).

Principal Investigator, Dynamics of Evolution Equations Modeling Wave Phenomena Summer REU. Agency: Mathematical American Association (MAA)., University of Puerto Rico, Mayaguez. (January 15, 2015 - July 15, 2015).

Academic - Post-Secondary

Associate Professor, The University of Texas, Rio Grande Valley. (September 1, 2019 - Present).

Assistant Professor, School of Mathematics and Statistical Sciences, University of Texas, Rio Grande Valley. (September 1, 2015 - August 31, 2019).

Assistant Professor (Catedratico Asociado in tenure track), University of Puerto Rico. (August 15, 2014 - July 15, 2015).

Postdoctoral Research Scholar, Arizona State University. (June 15, 2013 - May 30, 2014).

Assistant Professor (Catedratico Auxiliar in tenure track), University of Puerto Rico, Mayaguez. (January 15, 2010 - May 30, 2013).

Awards and Honors

International Faculty Fellow (2019-2020), The University of Texas, Rio Grande Valley. (2019).

Academic visit: •Summer School, Cadiz. (June 2017).

Travel grant (Housing and Lodging), Institut des Hautes Etudes Scientifiques (IHES), Bures-sur-Yvette, France, \$1500 (Approx). (2016).

•Academic Visit to IHES institute, Orsay, France (July 16- July 26, 2016)., IHES Institute. (July 16, 2016).

Competitive research release, College of Arts and Sciences, UPRM; Research release of 3 credits during Spring 2015, Fall 2014, Spring 2013, Fall 2012, Spring 2012. (2015).

Early career travel award, SIAM Conference on Analysis of Partial Differential Equations, Scottsdale, Arizona, Total amount: \$650. (2015).

Creator and President of UMaRch Puerto Rico 2015, Creator and President of UMaRch Puerto Rico 2015: Undergraduate Mathematics Research Conference, funded by NSF grant DMS-0846477. <http://www.uprm.edu/umarch2015>. (March 2015).

Award for Excellence in Research, Department of Mathematical Sciences, UPRM, December 2014; one award per year based on publications, grants, and successful graduation of masters students. (December 2014).

Selected as a mentor, Selected as a mentor for the interdisciplinary NSF-funded REU "Research Experiences for Undergraduates in Reconfigurable and Multifunctional Soft Materials at UPRM" (Dr. U. Cordova-Figueroa, PI). <http://softmatter.uprm.edu/people/erwin-suazo/>. (2014).

Travel Grant, IPAM, UCLA; to attend the Mathematical Analysis of Turbulence Workshop, \$750. (2014).

Undergraduate research mentor, SACNAS; Undergraduate research mentor of Roberto Perez, who was awarded first place in poster presentations in applied mathematics at SACNAS 2014. (2014).

Travel Grant, NSF to attend the Harmonic Analysis & Partial Differential Equations: Recent Developments & Future Directions, A conference in honor of C.E. Kenig; \$1,000. (September 2014).

Competitive, merit-based salary and title promotion, Dept. of Mathematical Sciences, UPRM; Competitive, merit-based salary and title promotion "Catedratico Auxiliar" to "Catedratico Asociado" status ahead of tenure schedule. (July 2014).

•Academic visit to Uniatlantico, Barranquilla, Colombia (July 11- 18, 2014, Uniatlantico. (July 11, 2014).

Travel grant DMS-1440664, NSF; to attend the International Conference on Partial Differential Equations (May 28 - June 1, 2014, Novacella, Italy). \$700. (May 2014).

Academic visit, Max Planck Institute of Optics: Lab on Bose Einstein Condensates, Munich, Germany. (May 27, 2014).

Travel Grant, University of Arizona; to present a poster on Workshop on Mathematical Methods and Models in Laser Filamentation (University of Montreal, Canada). \$1,200. (March 2014).

Travel Grant, AMS-Simons for the 2013 Mathematical Congress of the Americas in Guanajuato, Mexico (August 2013). \$1,700. (August 2013).

Ibero-America Young Professors and Researchers Programme, Santander Universidades (Spring 2012), \$7,500. (2012).

Travel Grant, AMS-Simons Travel Grant (research-related travel grant, a total of 60 awards in USA) (2012-2014). \$4,000. (2012).

Travel Grant, Brown University; \$650. (November 2012).

- Academic Visit to Uninorte, Barranquilla, Colombia (Nov 11 - 25, 2012)., Uninorte, Barranquilla, Colombia. (November 11, 2012).

- Academic Visit to Universitat de Barcelona, Barcelona, Spain (March 18 - April 10, May 20 - June 6 and July 20 - August 8, 2012)., Universitat de Barcelona. (March 18, 2012).

Citation of two papers by the book: Mathematical Models in Population Biology and Epidemiology by Brauer and Castillo-Chavez (Springer), 2011. (2011).

Travel Awards, U. Minnesota, University of Texas Pan American and U. Wyoming; Total \$2,800. (2010).

- Academic Visit to Institut Henri Poincaré, Paris, France (June 22 - July 6, 2009)., Institute Henri Poincare, Paris. (June 22, 2009).

Travel Awards, CLAY Institute (Zürich, Switzerland) and U. Autonoma Madrid (El Escorial, Spain); total \$3,000. (2008).

Travel Grants, Arizona State University from 2003 to 2008; Total \$4,000. (2008).

Development Activities Attended

Workshop, "Independent Applying the QM Rubric," The University of Texas, Rio Grande Valley, Edinburg, TX, United States. (January 10, 2020 - Present).

Conference Attendance, "Second Annual Meeting SIAM TX-LA Section," Southern Methodist University, Dallas, Texas, United States. (November 1, 2019 - November 3, 2019).

"Flipped Classroom," Center for teaching excellence. (January 30, 2018).

"B3 Workshop: Knowing Your Students," The Center for Teaching Excellence. (December 13, 2017).

Conference Attendance, "Access Equity in Online Learning: Strategies for Fully Including Deaf & Hard of Hearing Students," Excellence in Online Learning Conference 2017. (March 10, 2017).

Conference Attendance, "How to Create Online/Flipped 'Screen Capture' Video for Free," Excellence in Online Learning Conference 2017. (March 10, 2017).

Conference Attendance, "Panel Discussion: Convergence of Minds in Accessibility," Excellence in Online Learning Conference 2017. (March 10, 2017).

Conference Attendance, "What Makes This the Year of Access in Online Learning?," Excellence in Online Learning Conference 2017. (March 10, 2017).

New Faculty Support Program, "Enhancing Your Teaching Effectiveness." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Faculty Portfolio Tool Training." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Getting Funded - Opportunities & Strategies." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Getting the Mentoring You Need." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Grant Writing - Workshop A." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Managing Your Time - Teaching, Research, and Service." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Online Learning Tools & Strategies." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Preparing for Your 1st-year Review- Expectations & Dossier Preparation." (September 1, 2015 - August 30, 2016).

New Faculty Support Program, "Supporting Faculty & Student Success." (September 1, 2015 - August 30, 2016).

Summer School, "Nonlinear Waves 2016: Summer School, IHES, Bures-sur-Yvette, France (18-29 July 2016), 2016.," IHES, Bures-sur-Yvette, France. (July 18, 2016 - July 29, 2016).

Workshop, "V Latin American Congress of Mathematicians (CLAM)," Barranquilla, Colombia. (July 11, 2016 - July 15, 2016).

Workshop, "New challenges in PDE: Deterministic dynamics and randomness in high and infinite dimensional systems, Workshop in Mathematical Sciences Research Institute (MSRI), Berkeley," MSRI, Berkeley, CA, USA. (October 2015).

Workshop, "Introductory Workshop: Randomness and long time dynamics in nonlinear evolution differential equations, Workshop in Mathematical Sciences Research Institute (MSRI), Berkeley, August 2015.," MSRI, Berkeley, CA, USA. (August 2015).

New Faculty Academic Orientation, "Online Learning & Teaching Technology." (August 18, 2015).

Workshop, "Workshop: Practical Approaches to Engaged Teaching and Learning." (August 18, 2015).

New Faculty Academic Orientation, "Academic & Institutional Resources and Support Services." (August 17, 2015).

New Faculty Academic Orientation, "Campus Safety." (August 17, 2015).

New Faculty Academic Orientation, "Faculty and Course Information Systems." (August 17, 2015).

New Faculty Academic Orientation, "Getting to know your area and your students," UTRGV. (August 17, 2015).

New Faculty Academic Orientation, "Getting to Know Your Institution: UTRGV in Context." (August 17, 2015).

New Faculty Academic Orientation, "Information Technology." (August 17, 2015).

Workshop, "DC Summer workshop on PDEs, George Washington University, July 2015," George Washington University. (July 2015).

Conference Attendance, "Joint Mathematics Meeting 2015, San Antonio, January 2015," AMS, MAA, San Antonio, Texas, USA. (January 2015).

Conference Attendance, "Blackwell-Tapia Conference (Minority and Undergraduate-Graduate Research) (November 2012, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University,," ICERM, Brown University, Providence, RI, USA. (November 2012).

Conference Attendance, "2012 Symposium on Collaborative Initiative (October 2012, UPRM, Mayagüez, PR, USA).," UPRM, Mayaguez, Puerto Rico, USA/Puerto Rico. (October 2012).

Workshop, "Taller Academia de Investigación: Tools for monitoring and identifying research funds (September 2012, CEP, UPRM, Mayagüez, PR, USA).," CEP, UPRM, Mayaguez, Puerto Rico, Puerto Rico/USA. (September 2012).

Workshop, Universitat Politècnica de Catalunya (UPC), Barcelona, Spain. (July 17, 2012 - July 18, 2012).

Summer School, "Summer School On Conservation Laws and Applications, Rocky Mountain Mathematics Consortium (June 22-July 2, 2012, University of Wyoming, Laramie, WY)," Rocky Mountain Mathematics Consortium, Laramie, WY, USA. (June 22, 2012 - July 2, 2012).

Workshop, "Workshop on Interactions Between Dynamical Systems and Partial Differential Equations (JISD 2012) (May 28-June 1, 2012, Universitat Politècnica de Catalunya (UPC), Barcelona, Spain).," Universitat Politècnica de Catalunya (UPC), Barcelona, Spain. (May 28, 2012 - June 1, 2012).

Workshop, "Workshop in Non-linear Waves and Dispersion (June 22-June 26, 2009, Institut Henri Poincaré, Centre Emile Borel, Paris)," Institut Henri Poincaré, Centre Emile Borel, Paris, France. (June 22, 2009 - June 26, 2009).

Summer School, "Clay Mathematics Institute Summer School, Evolution Equations (June 23-July 18, 2008, Eidgenössische Technische Hochschule, Zürich, Switzerland)," Clay Mathematics Institute; Eidgenössische Technische Hochschule, Zurich, Switzerland. (June 23, 2008 - July 18, 2008).

Workshop, "Great Plains Operator Theory Symposium (May 2007, Lincoln, NE)," Lincoln, Nebraska, USA. (May 2007).

Workshop, "Great Plains Operator Theory Symposium (May 2006, Iowa City, IA)," Iowa City, Iowa, USA. (May 2006).

Summer School, "Summer School on Geometric and Topological Methods for Quantum Field Theory (June 19-July 15, 2005, Villa De Leiva, Colombia)," Villa de Leiva, Colombia. (June 19, 2005 - July 15, 2005).

Conference Attendance, "Joint AMS (2004, Phoenix, AZ).," AMS, Phoenix, AZ, USA. (January 2004).

TEACHING

Teaching Experience

The University of Texas Rio Grande Valley

MATH 1314, College Algebra, 1 course.
MATH 1342, Elementary Statistical Methods, 1 course.
MATH 2412, Precalculus, 1 course.
MATH 2413, Calculus I, 5 courses.
MATH 2414, Calculus II, 8 courses.
MATH 3341, Diff Equations, 13 courses.
MATH 3345, Linear Optimization, 2 courses.
MATH 3350, Intro to Math Proof, 1 course.
MATH 4344, Boundary Value Problems, 1 course.
MATH 4346, Integral Transforms, 1 course.
MATH 4390, Math Project, 3 courses.
MATH 6327, Math Modeling with Technology, 3 courses.
MATH 6353, Analysis II, 4 courses.
MATH 6361, Partial Differential Equations, 3 courses.
MATH 7300, Thesis I, 1 course.
MATH 7301, Thesis II, 2 courses.

Non-UTRGV Courses Taught

Arizona State University
 , Calculus for Engineers (Fall 2008, Fall 2007).
Arizona State University
 , Calculus for Business II (Spring 2007, Fall 2006).
Arizona State University
 , College Algebra (Summer 2007).
Arizona State University
 , Calculus for Business I (Spring 2006, Fall 2005).
Arizona State University
 , Finite Mathematics (Grader) (Summer 2006).
Arizona State University
 , College Algebra (Spring 2005, Fall 2004).
Arizona State University
 , Advanced Calculus and Finite Mathematics (Grader) (Spring 2003).
Arizona State University
 , Mathematical Structures (Grader) (Spring 2003).
University of Puerto Rico, Mayaguez
 MATE 3000, Finite Mathematics (Fall 2010).
University of Puerto Rico, Mayaguez
 MATE 3005, Precalculus I and II (Spring 2010).
University of Puerto Rico, Mayaguez
 MATE 3021, Calculus for Biologists (Spring 2012).

University of Puerto Rico, Mayaguez
 MATE 3171, Precalculus I (Spring 2011, Fall 2010, Spring 2010).
 University of Puerto Rico, Mayaguez
 MATE 3172, Precalculus II (Spring 2011).
 University of Puerto Rico, Mayaguez
 MATE 4009, Ordinary Differential Equations (Spring 2013).
 University of Puerto Rico, Mayaguez
 MATE 4020, Partial Differential Equations and Fourier Series (Fall 2014, Spring 2013).
 University of Puerto Rico, Mayaguez
 MATE 4950, Undergraduate (Research) Seminar (Fall 2014, Spring 2013).
 University of Puerto Rico, Mayaguez
 MATE 4990, Undergraduate Research (Fall 2012).
 University of Puerto Rico, Mayaguez
 MATE 6677, Introduction of Partial Differential Equations (Fall 2014, Fall 2011).
 University of Puerto Rico, Mayaguez
 MATE 6678, Special Topics of Partial Differential Equations (Fall 2012).
 University of Puerto Rico, Mayaguez
 MATE 6695, Special Topics on Analysis: Fourier Analysis (Spring 2012).
 University of Puerto Rico, Mayaguez
 MATE 6991, Graduate Seminar (Fall 2012).
 University of Puerto Rico, Mayaguez
 MATE 6992, Graduate (Research) Seminar (Spring 2013).
 University of Puerto Rico, Mayaguez
 MATE 6999, Thesis (Fall 2014, Spring 2013).

Directed Student Learning

Master's Thesis Committee Chair, School of Mathematical and Statistical Science, MATH 7300,
 (January 10, 2020 - May 10, 2020)
 Juan Huerta

Undergraduate Supervised Research, School of Mathematical and Statistical Science, (October
 1, 2019 - October 30, 2019)
 Allan Martinez

Undergraduate Supervised Research, School of Mathematical and Statistical Science, (October
 1, 2019 - October 30, 2019)
 Miguel Mascorro

Undergraduate Supervised Research, "On Schroedinger equation with superoscillatory initial
 data and Burgers equation with variable coefficients," (January 30, 2018 - December 6, 2018)
 Elijah Hight, Jose Palacio

Undergraduate Supervised Research, "Stochastic Burgers Equations and Extensions," School
 of Mathematical and Statistical Science, (July 2, 2018 - August 26, 2018)
 Stephanie Flores, Elijah Hight, Everardo Olivares, Jose Palacio

Graduate Supervised Research, "(Southern Methodist University) On explicit solutions for
 Burgers equation with variable coefficients," School of Mathematical and Statistical Science,
 (January 30, 2016 - July 15, 2018)
 Enrique Pereira

Undergraduate Supervised Research, "Some mathematical methods in optics," School of
 Mathematical and Statistical Science, (January 30, 2018 - May 10, 2018)
 Aaron Moreno

Undergraduate Supervised Research, "On a new symmetry for Burgers equation," School of Mathematical and Statistical Science, (January 30, 2018 - May 10, 2018)
Maricela Lozano

Master's Thesis Committee Chair, "(UTRGV) Coupled telegraph and SIR model of information and diseases," School of Mathematical and Statistical Science, (May 15, 2017)
Jose Galarza

Undergraduate Supervised Research, "(UTRGV) Solutions for a Burgers Equation with Variable Coefficients through Riccati Equation," School of Mathematical and Statistical Science, (January 30, 2017 - May 10, 2017)
Marco Romero

Undergraduate Supervised Research, "(University of Puerto Rico, Mayaguez) On Solutions for Linear and Nonlinear Schrödinger Equations with Variable Coefficients: A Computational Approach," (August 15, 2015 - May 15, 2016)
Natalie Luna, Gabriel Amador, Gerardo Mercado, Kiara Colon

Undergraduate Supervised Research, "(University of Puerto Rico Mayaguez)," School of Mathematical and Statistical Science, (January 15, 2015 - May 15, 2015)
Emmie Roman

Undergraduate Supervised Research, "(University of Puerto Rico Mayaguez)," (January 15, 2015 - May 15, 2015)
Francisco de Jesus Pagan

Master's Thesis Committee Chair, "(University of Puerto Rico, Mayaguez) Explicit solutions for reaction-diffusion equations with variable coefficients," School of Mathematical and Statistical Science, (December 15, 2014)
Jessica Trespalacios

Master's Thesis Committee Chair, "(University of Puerto Rico, Mayaguez) On Solutions for nonlinear Schrodinger equation with variable coefficients: Existence and Dynamics," School of Mathematical and Statistical Science, (December 15, 2014)
Jose Escorcia

Undergraduate Supervised Research, "(University of Puerto Rico Mayaguez)," School of Mathematical and Statistical Science, (January 15, 2013 - December 15, 2014)
Roberto Perez

Master's Thesis Committee Member, "(University of Puerto Rico, Mayaguez) Factorización incompleta $IC(\ell, \tau, m)$ por bloques para matrices generadas por métodos "Local Discontinuous Galerkin".," School of Mathematical and Statistical Science, (January 15, 2012 - December 15, 2014)
Carlos Theran

Undergraduate Supervised Research, "(University of Puerto Rico, Mayaguez)," School of Mathematical and Statistical Science, (January 15, 2013 - May 15, 2013)
David Nino

Undergraduate Supervised Research, "(University of Puerto Rico Mayaguez)," School of Mathematical and Statistical Science, (August 15, 2012 - May 15, 2013)
Sebastiani Aguirre

RESEARCH

Published Intellectual Contributions

Book, Chapter in Textbook-New

Acosta-Humanez, P. B., Suazo, E. (2015). Liouvillian Propagators and Degenerate Parametric Amplification with Time-Dependent Pump Amplitude and Phase. In Tost, GO; Vasilieva, O (Ed.), *ANALYSIS, MODELLING, OPTIMIZATION, AND NUMERICAL TECHNIQUES* (vol. 121, pp. 295-307). Springer Proceedings in Mathematics & Statistics. 10.1007/978-3-319-12583-1_21

Conference Proceeding

Suazo, E., Suslov, S. (2018). *An Integral Form of the Nonlinear Schrodinger Equation with Variable Coefficients* (vol. Vol. 2018-August, pp. 1214-1220). Progress In Electromagnetics Research Symposium, PIERS-Toyama 2018 - Proceedings.

Journal Article, Academic Journal

Flores, S.* , Hight, E.* , Olivares-Vargas, E.* , Oraby, T., Palacio, J.* , Suazo, E., Yoon, J. (2020). Exact and numerical solution of stochastic Burgers equations with variable coefficients. *Discrete and Continuous Dynamical Systems, Series S.*, 13(10).

Pena, G.** , Rodrigo, H., Roychowdhury, M., Sifuentes, J., Suazo, E. (in press). Quantization for Uniform Distributions On Hexagonal, Semicircular and Elliptical Curves. *Journal of Optimization Theory and Applications*.

Hight, E.* , Oraby, T., Palacio, J.* , Suazo, E. (2020). On persistence of superoscillations for the Schrödinger equation with time-dependent quadratic Hamiltonians. *Mathematical Methods in the Applied Sciences*, 43(4), 1660-1674. 1201 W University Dr

Suazo, E., Suslov, S. K., Kryuchkov, S. I. (2019). Time-Dependent Photon Statistics in Variable Media. *Mathematical Methods in the Applied Sciences*, 42, 5040–5051.. doi.org/10.1002/mma.5285

Suazo, E., Pereira, E.** , Trespalacios, J.** (2018). Riccati–Ermakov systems and explicit solutions for variable coefficient reaction–diffusion equations. *Applied Mathematics and Computation*, 329, 278-296. <https://www.sciencedirect.com/science/article/pii/S0096300318300705>

Escorcia, J.** , Suazo, E. (2017). Blow-up results and soliton solutions for a generalized variable coefficient nonlinear Schrödinger equation. *Applied Mathematics and Computation*(301), 155-176.

Suazo, E., Amador, G.* , Colon, K.* , Luna, N.* , Mercado, G.* , Pereira, E.** (2016). On Solutions for Linear and Nonlinear Schrödinger Equations with Variable Coefficients: A Computational Approach. *Symmetry*, 8(6).

Suazo, E., Koutschan, C., Suslov, S. K. (2015). Fundamental laser modes in paraxial optics: from computer algebra and simulations to experimental observation. *Applied Physics B*.(2015), 1-22. link.springer.com/journal/340

- Suazo, E., Acosta-Humanez, P. B., Kryuchkov, S. I., Suslov, S. K. (2015). Degenerate parametric amplification of squeezed photons: Explicit solutions, statistics, means and variances. *Journal of Nonlinear Optical Physics & Materials.*, 24(02), 1550021..
- Suazo, E., Suslov, S. K., Vega-Guzman, J. (2014). The Riccati system and a diffusion-type equation. *Mathematics*, 2(2), 91-118.
- Acosta-Humanez, P., Suazo, E. (2013). Liouvillian propagators, Riccati equation and differential Galois theory. *JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL*, 46(45). 10.1088/1751-8113/46/45/455203
- Mahalov, A., Suazo, E., Suslov, S. K. (2013). Spiral laser beams in inhomogeneous media. *OPTICS LETTERS*, 38(15), 2763-2766. 10.1364/OL.38.002763
- Suazo, E., Suslov, S. K. (2012). SOLITON-LIKE SOLUTIONS FOR THE NONLINEAR SCHRÖDINGER EQUATION WITH VARIABLE QUADRATIC HAMILTONIANS. *JOURNAL OF RUSSIAN LASER RESEARCH*, 33(1), 63-83.
- Suazo, E., Suslov, S. K., Vega-Guzman, J. M. (2011). The Riccati differential equation and a diffusion-type equation. *NEW YORK JOURNAL OF MATHEMATICS*, 17A, 225-244.
- Cordero-Soto, R., Suazo, E., Suslov, S. K. (2010). Quantum integrals of motion for variable quadratic Hamiltonians. *ANNALS OF PHYSICS*, 325(9), 1884-1912. 10.1016/j.aop.2010.02.020
- Suazo, E. (2009). Models of damped oscillators in quantum mechanics. *Journal of Physical Mathematics*, 1, 27-42.
- Cordero-Soto, R., Lopez, R. M., Suazo, E., Suslov, S. K. (2008). Propagator of a charged particle with a spin in uniform magnetic and perpendicular electric fields. *LETTERS IN MATHEMATICAL PHYSICS*, 84(2-3), 159-178. 10.1007/s11005-008-0239-6
- Suazo, E. (2004). Condiciones de hemicontinuidad para c-correspondencias. 25(2), 139–148.

Presentations Given

- Martinez, A.*, Martinez, M.*, Adjibi, K.*, Sandoval, R.*, Oraby, T., Suazo, E., Yoon, J., (November 2019). *Stochastic Modified KdV Equation with Variable Coefficients*, 2nd Annual Meeting of SIAM Texas-Louisiana Section SIAM in Dallas, TX.
- Suazo, E., Suslov, S., Kryuchkov, S. I., (November 25, 2019). *Time-Dependent Photon Statistics in Variable Media*, Universidad Nacional de Colombia, Manizales.
- Suazo, E., Oraby, T., Palacio, J.*, Hight, E.***, (November 20, 2019). *On Explicit Solutions for Stochastic Partial Differential Equations*, Universidad Tecnológica y Pedagógica de Tunja, Colombia.
- Suazo, E., Oraby, T., Palacio, J.*, Hight, E.***, (November 1, 2019). *On Superoscillations for the Schrödinger equation with time-dependent quadratic Hamiltonian*, SIAM Texas-Louisiana Annual Meeting Southern Methodist University in Dallas.
- Palacio, J.*, Flores, S.*, Hight, E.*, Vargas, E.*, Oraby, T., Suazo, E., Yoon, J., (October 2019). *Exact and Numerical Solutions of Stochastic Burgers Equations with Variable Coefficients*, SACNAS in Honolulu, Hawaii.

- Oraby, T., Flores, S.*, Palacio, J.*, Hight, E.*, Vargas, E.*, Suazo, E., Yoon, J., (October 5, 2018). *Numerical Solution of Stochastic Burgers Equation with Variable Coefficients*, Undergraduate Conference - 2018 SIAM TX-LA annual sectional meeting Louisiana State University in Baton Rouge, LA.
- Flores, S.*, Oraby, T., Palacio, J.*, Hight, E.*, Vargas, E.*, Suazo, E., Yoon, J., (October 5, 2018). *Numerical Solution of Stochastic Burgers Equation with Variable Coefficients*, Undergraduate Conference - 2018 SIAM TX-LA annual sectional meeting Louisiana State University in Baton Rouge, LA.
- Oraby, T., Palacio, J.*, Hight, E.*, Suazo, E., (October 5, 2018). *Persistence of Superoscillations for the Schrodinger Equation with Time-Dependent Quadratic Hamiltonians*, Undergraduate Conference - 2018 SIAM TX-LA annual sectional meeting Louisiana State University in Baton Rouge, LA.
- Palacio, J.*, Hight, E.*, Oraby, T., Suazo, E., (October 5, 2018). *Persistence of Superoscillations for the Schrodinger Equation with Time-Dependent Quadratic Hamiltonians*, Undergraduate Conference - 2018 SIAM TX-LA annual sectional meeting Louisiana State University in Baton Rouge, LA.
- Suazo, E. R., (July 10, 2018). *On closed solutions for inhomogeneous linear and nonlinear Schrodinger equations and " applications to optics*, Colloquium California State University, Fresno in Fresno, California.
- Suazo, E., (March 31, 2018). *On explicit solutions for variable coefficient reaction diffusion equations*, Coastal Bend Mathematics & Statistics Conference Texas A&M Corpus Christi in Corpus Christi, Texas, USA.
- Suazo, E., (March 24, 2018). *On Riccati-Ermakov systems and explicit solutions for variable coefficient reaction diffusion equations*, Texas Differential Equations The University of Texas, San Antonio in San Antonio, Texas.
- Suazo, E., (January 16, 2018). *Lie systems and applications to reaction-diffusion equations*, Joint International Seminar Benemérita Universidad Autónoma de Puebla, Mexico and UTRGV.
- Suazo, E., (July 18, 2017). *"Blow-up results and soliton solutions for a generalized variable coefficient nonlinear Schrödinger equation"*, IV International workshop of nonlinear analysis and partial differential equations in Manizales, Colombia.
- Galarza, J. d. J.**., Oraby, T., Suazo, E. F., (March 31, 2017). *Coupled Telegraph and SIR model of information and diseases*, First COS symposium COS at UTRGV in Edinburg, TX.
- Suazo, E., (March 30, 2017). *"Soliton solutions for a generalized variable coefficient nonlinear Schrödinger equation"*, The Tenth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory in Athens, GA, USA.
- Suazo, E., (March 4, 2017). *"On Ermakov-Pinney Equation and Soliton Solutions for Partial Differential Equations"*, Texas Differential Equations Conference in College Station, TX, USA.
- Suazo, E., (May 16, 2016). *"Fundamental laser modes in paraxial optics through Riccati-Ermakov systems"*, NSF/CBMS Regional Research Conference on Discrete Painlevé Equations NSF in University of Texas RGV.
- Suazo, E., (April 9, 2016). *"Similarity Transformation Method, Riccati-Ermakov Systems and Explicit Solutions for Variable-Coefficient Linear and Nonlinear Schrödinger Equations"*, The Texas 2016 Differential Equations Conference Texas State University, San Marcos.

- Suazo, E., (March 22, 2016). *"Blow-Up Results for a Generalized Variable Coefficient Nonlinear Schroedinger Equation"*, PDE and Image Analysis Seminar University of Texas, RGV in University of Texas, RGV.
- Suazo, E., (December 7, 2015). *"Generalized Variable-Coefficient Nonlinear Schroedinger Equation: Explicit Solutions and Finite-Time Blow-Up"*, 2015 SIAM Conference on Analysis of Partial Differential Equations, in Scottsdale, Arizona.
- Suazo, E., (November 14, 2015). *"Closed solutions for inhomogeneous linear and nonlinear Schroedinger equation"*, Visiting scholars workshop on differential equations and dynamical systems with applications in physics and biology Andes University in Bogota, Colombia.
- Suazo, E., (October 13, 2015). *"Closed solutions for the degenerate parametric oscillator and inhomogeneous nonlinear Schroedinger equation"*, Mathematical physics seminar University of Texas, RGV in Edinburg, TX, USA.
- Suazo, E., (October 6, 2015). *"Emerging undergraduate research opportunities on non-autonomous linear and nonlinear Schroedinger equation."*, Soliton seminar University of Texas, RGV in Edinburg, TX, USA.
- Suazo, E., (April 4, 2015). *"Degenerate parametric amplification of squeezed photons: explicit solutions, statistics, means and variances."*, The Ninth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory in Athens, GA, USA.
- Suazo, E., (March 23, 2015). *"Degenerate parametric amplification of squeezed photons: explicit solutions, statistics, means and variances."*, Conference on Partial Difference Equations in Munich, Germany.
- Suazo, E., (January 10, 2015).). *"Riccati-Ermakov systems and closed solutions for the degenerate parametric oscillator."*, Joint Mathematics Meetings in San Antonio, TX, USA.
- Suazo, E., (May 28, 2014). *"Closed solutions for the degenerate parametric oscillator and inhomogeneous paraxial wave equation."*, Conference on Partial Difference Equations in Novacella, Italy.
- Suazo, E., (March 2014). *"Solutions for Paraxial Wave Equations."*, Workshop on Mathematical Methods and Models in Laser Filamentation University of Montreal in Montreal, Canada.
- Suazo, E., (November 2013). *"Transformations between evolution equations and its applications to biology and physics."*, Encuentro de Matemática Interdisciplinaria Universidad de Los Andes (UniAndes) in Bogota, Colombia.
- Suazo, E., (March 2013). *"The Riccati system and a diffusion-type equation."*, The Eighth IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory in Athens, GA, USA.
- Suazo, E., (November 2012). *"On transformations for evolution equations."*, Colloquium Universidad del Norte Universidad del Norte in Barranquilla, Colombia.
- Suazo, E., (November 2012). *"On soliton solutions for the nonlinear Schrödinger equation."*, Dynamical Days South America in Cartagena, Colombia.
- Suazo, E., (November 9, 2012). *"On soliton solutions for nonlinear Schrödinger equation."*, Blackwell-Tapia Conference, ICERM ICERM, Brown University in Providence, RI, USA.

- Suazo, E., (May 2012). *"Transformations on the study of evolution equations."*, Barcelona UB-UPC Dynamical Systems Seminar in Barcelona, Spain.
- Suazo, E., (March 2012). *"Soliton-like solutions for the nonlinear Schrödinger equation with variable quadratic Hamiltonians."*, AMS Sectional Meeting in Washington, D.C., USA.
- Suazo, E., (March 2012). *"On solutions for linear and nonlinear Schrödinger equations with variable quadratic Hamiltonians."*, Barcelona UB-UPC Dynamical Systems Seminar in Barcelona, Spain.
- Suazo, E., (December 2011). *"Separation of variables and evolution equations."*, Colloquium of the Department of Mathematical Sciences Universidad de Puerto Rico, Mayaguez in Mayaguez, Puerto Rico.
- Suazo, E., (November 2011). *"Soliton-like solutions for the nonlinear Schrödinger equation with variable quadratic Hamiltonians."*, SIAM Conference on Analysis of Partial Differential Equations in San Diego, CA, USA.
- Suazo, E., (April 4, 2011). *"Soliton-like solutions for the nonlinear Schrödinger equation with variable quadratic Hamiltonians."*, The Seventh IMACS International Conference on Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory in Athens, GA, USA.
- Suazo, E., (March 12, 2011). *"Method of separation of variables for the Schrödinger equation with time-dependent quadratic Hamiltonians."*, 2011 Spring Southeastern Section Meeting in Statesboro, GA, USA.
- Suazo, E., (June 2010). *"Explicit solutions for dispersive equations."*, Rocky Mountain Mathematics Consortium, Summer School on Conservation Laws and Applications in Laramie, WY, USA.
- Suazo, E., (June 10, 2010). *"Fundamental solutions for evolution equations."*, Symmetry Plus Integrability: The First International Conference on Integrable Systems and Nonlinear Waves on the Gulf of Mexico in South Padre Island, TX, USA.
- Suazo, E., (March 22, 2010). *"Fundamental solutions for evolution equations."*, Recent Advances in Function Related Operator Theory (RAFROT) in Rincon, Puerto Rico.
- Suazo, E., (February 26, 2010). *"An approach to construct explicit solutions for the Schrödinger equation with time-dependent Hamiltonians."*, SIDIM 2010 in Mayaguez, Puerto Rico.
- Suazo, E., (April 2009). *"Uniqueness of an explicit solution for a differential equation with variable coefficients."*, Analysis/PDE Seminar, Arizona State University Arizona State University in Tempe, AZ, USA.
- Suazo, E., (September 2008). *"Well-posedness for nonlinear Schrödinger equation with variable coefficients and L^2 initial data."*, Analysis/PDE seminar, Arizona State University Arizona State University in Tempe, AZ, USA.
- Suazo, E., (September 18, 2008). *"Evolution operator for the one-dimensional Schrödinger equation with a time-dependent Hamiltonian."*, Nonlinear Phenomena in Mathematical Physics, Fields Institute Fields Institute in Toronto, Canada.

Suazo, E., (June 2008). *Evolution operator for the one-dimensional Schrödinger equation with a time-dependent Hamiltonian.*”, 8th International Conference on Harmonic Analysis and Partial Differential Equations in El Escorial, Madrid, Spain.

Suazo, E., (June 1, 2008). *"Explicit construction of the fundamental solutions to the one-dimensional Schrödinger equation."*, Second Canada-France Congress in Montreal, Canada.

Contracts, Grants and Sponsored Research

Funded Grant

Oraby, T., Suazo, E., Yoon, J., "2019 Summer MAA NREUP-research experience for undergraduate," Sponsored by The Mathematical American Assosiation, Foundation, \$29,276.00. (May 1, 2019 - August 31, 2019).

Suazo, E. (PI), "Collaboration Grant for Mathematicians #316295 : Closed and approximate solutions to equations on wave propagation phenomena.," Sponsored by Simons Foundation, Foundation, \$28,543.00. (September 1, 2015 - August 31, 2019).

Suazo, E., "Faculty and Undergraduate Research Student Teams (FURST). NSF DMS #1620196," Sponsored by National Science Foundation (NSF), Federal, \$22,000.00. (January 1, 2017 - December 31, 2018).

Oraby, T., Suazo, E., Yoon, J., "2018 Summer MAA NREUP-research experience for undergraduate," Sponsored by The Mathematical American Assosiation, Foundation, \$29,276.00. (May 1, 2018 - August 30, 2018).

Suazo, E. (PI), "College of Sciences Research Enhancement Seed Grants Program: Wave structures for nonlinear partial differential equations and their applications in physics.," Sponsored by College of Sciences, UTRGV, The University of Texas Rio Grande Valley, \$12,280.00. (June 1, 2016 - November 30, 2017).

Suazo, E. (PI), "Dynamics of Evolution Equations Modeling Wave Phenomena Summer REU.," Sponsored by MAA NREUP MAA activity NSF (grant DMS-1359016) and NSA (grant H98230-15-1- 0020)., Federal, \$27,495.00. (January 1, 2015 - August 13, 2015).

Intellectual Contributions under Submission

Conference Proceedings

Suazo, E., Oraby, T., Palacio, J.* *CMMSE on explicit and numerical solutions for stochastic PDEs: Fisher and Burgers equations*. Computational and Mathematical Methods/Wiley. 1201 W University Dr

Research Currently in Progress

"Analysis of integrable peakon systems" (On-Going).

Study peakon and cuspon solutions for higher dimensional integrable systems and Cauchy problem Stability issue, and dynamical systems with Lie symmetries etc.

"Closed and approximate solutions to equations on wave propagation phenomena".

"High dimensional peakons" (On-Going).

Study peakon and cuspon solutions for higher dimensional integrable systems. Integrable models for fluid dynamics, Peakon/Peakon, Peakon/Kink interactions, PDE analysis, etc

"Wave structures for nonlinear partial differential equations and their applications in physics."

SERVICE

Department Service

Committee Member, Tenure Promotion Committee (Subcommittee coordinator). (September 1, 2019 - Present).

Committee Co-Chair, Integrable System Seminar. (September 1, 2016 - August 31, 2018).

Committee Co-Chair, Three year lecturer search committee. (January 15, 2018 - July 30, 2018).

Committee Member, Dual Language Certificate program in Mathematics. (March 15, 2018 - May 15, 2018).

Committee Member, Master's Project for Edith Garcia "Solitons for Nonlinear Partial Differential Equations". (January 12, 2018 - May 5, 2018).

Committee Member, Master's Thesis Committee for Adriana Quiroz "Mathematical modeling of MERS-CoV nosocomial epidemic ", School of Mathematical and Statistical Science. (January 15, 2017 - May 15, 2017).

Committee Member, Department Chair Search Committee. (September 1, 2016 - May 15, 2017).

Master's Thesis Committee member. Daniel Medina, "Disease modeling using fractional differential equations and estimation ", School of Mathematical and Statistical Science. (January 15, 2016 - May 15, 2017).

Committee Co-Chair, SMSS SPRING RESEARCH WORKSHOP: RECENT DEVELOPMENTS IN INTEGRABLE SYSTEMS AND SOLITONS. (March 6, 2017 - March 8, 2017).

Committee Co-Chair, 2016 Fall Visiting Scholars, Faculty, and Students Workshops on Mathematics and their Applications in related fields. (November 19, 2016).

Committee Member, Service in the search committee for the faculty tenure-track position in Applied Mathematics. (September 15, 2015 - July 15, 2016).

Committee Member, Service in the search committee for the faculty tenure-track position in Computational Mathematics with Statistics. (September 15, 2015 - July 15, 2016).

Professional Service

Reviewer, Journal Article, Symmetry. (January 8, 2018 - Present).

Reviewer, Journal Article, Annalen der Physik. (December 12, 2017 - Present).

Reviewer, Journal Article, Journal of Mathematical Physics. (August 15, 2017 - Present).

Reviewer, Journal Article, Communications in Nonlinear Science and Numerical Simulation. (September 1, 2016 - Present).

Reviewer, Journal Article, Mathematics. (January 2014 - Present).

Reviewer, Journal Article, Reviewer for Mathematical Reviews, American Mathematical Society, (January 15, 2011 - Present).

Reviewer, Journal Article, Proceedings of American Mathematical Society. (January 2011 - Present).

Journal of Computational and Applied Mathematics. (August 2013 - May 2015).

Committee

Universidad de Cadiz, External Ph.D dissertation reviewer, Cadiz. (October 1, 2017 - December 15, 2017).

Other

Reviewer for Scholarships applications 2017 Tapia Conference. (November 2016 - May 2017).

* indicates undergraduate student

** indicates graduate student

CONTACT INFORMATION	<p>Departamento de Matemáticas y Estadística, Universidade Nacional de Colombia sede Manizales (UNAL), Campus la Nubia, Bloque W - 210C, Manizales Caldas fagallegor@unal.edu.co https://www.researchgate.net/profile/Fernando_Gallego Website: https://sites.google.com/view/fernandogallegorestrepo/home</p>
RESEARCH INTEREST	<p>Analysis and Partial Differential Equations. The main focus of my research is the study of the well-posedness, controllability and stabilization of dispersive and hyperbolic systems.</p>
ACADEMIC POSITION	<ul style="list-style-type: none"> - <i>Assistant Professor</i> Mathematics and Statistic Department, National University of Colombia, UNAL, Manizales. Since August 2017 - <i>Post-doctoral researcher</i> at Laboratoire Jacques-Louis Lions, UPMC and Centre de Robotique (CAOR), Mines Paristech, Paris, France. Project: Control and stabilization of the dispersive differential partial equations of type KdV. February - July 2017. <ul style="list-style-type: none"> • Advisors: Lionel Rosier, Ph.D (Mines ParisTech)
EDUCATION	<p>Universidade Federal do Rio de Janeiro, UFRJ. Rio de Janeiro, RJ, Brazil.</p> <p>Ph.D., <i>Mathematics</i>, February 2017</p> <ul style="list-style-type: none"> • Thesis: <i>Control and Stabilization of the Gear-Grimshaw System and the Generalized KdV-Burgers Equation.</i> • Advisors: Ademir F. Pazoto, Ph.D <p>Instituto Nacional de Matemática Pura e Aplicada, IMPA. Rio de Janeiro, RJ, Brazil.</p> <p>M.S., <i>Mathematics</i>, Aug 2012</p> <ul style="list-style-type: none"> • Advisor: Alfredo Iusem, Ph.D <p>Universidad Nacional de Colombia, UNAL, Manizales, Caldas, Colombia.</p> <p>B.S., <i>Mathematics</i>, Jun 2010</p> <ul style="list-style-type: none"> • Thesis Topic: <i>Optimization in Hilbert Spaces.</i> • Advisor: Juan Carlos Riano Rojas, Ph.D
COUNCILS, COMMISSIONS AND PERMANENT COMMISSION OF TEACHING STAFF	<p>Coordinator of the Master Program in Science - Applied Mathematics and the Undergraduate Program in Mathematics Universidad Nacional de Colombia Sede Manizales March 2019 - Current</p> <p>Collegiate Membership of the Graduate Programs Facultad de Ciencias Exactas y Naturales Universidad Nacional de Colombia Sede Manizales March 2019 - Current</p>

- 11 **R.A. Capistrano-Filho, M. Cavalcante and F.A. Gallego**
Forcing operator on star graph applied in the cubic fourth order Schrödinger equation.
ArXiv:1909.06812.
- 10 **F.A. Gallego and H.F Sare.**
On the Stability of the Cauchy Problem of Timoshenko Thermoelastic Systems with Past History: Cattaneo and Fourier Law.
ArXiv:1808.084991.
- 9 **R.A. Capistrano-Filho, M. Cavalcante and F.A. Gallego**
Lower Regularity Solutions of the Biharmonic Schrodinger Equation in a Quarter Plane.
Pacific Journal of Mathematics. (2020), Vol 309,n No 1, 35 - 70.
8. **R.A. Capistrano-Filho, F.A. Gallego and A.F Pazoto.**
On the well posedness and large-time behavior of higher order Boussinesq system.
Nonlinearity, (2019), Vol 32, Issue 5, Pages 1852 - 1881.
7. **F.A. Gallego and A.F. Pazoto.**
On the well-posedness and asymptotic behavior of the generalized KdV-Burgers equation.
Proceeding of the Royal Society of Edinburgh Section A: Mathematics, (2019), Vol 149, Issue 1, Pages 219 - 260.
6. **R.A. Capistrano-Filho and F.A. Gallego.**
Asymptotic Behavior of Boussinesq System of KdV-KdV Type.
Journal of Differential Equation (2018). Vol 265, Issue 6, Pages 2341-2374.
5. **F.A. Gallego.**
Controllability aspects of the Korteweg-de Vries Burgers equation on unbounded domains.
Journal of Mathematical Analysis and Applications, (2018), Vol 461, Issue 1, Pages 947-970.
4. **Fernando A. Gallego and Jaime E. Munoz Rivera.**
Decay Rates of the Solutions to the Thermoelastic Bresse System of Types I and III.
Electronic Journal of Differential Equations, Vol. 2017 (2017), No. 73, pp. 1-26.
3. **R.A. Capistrano-Filho, F.A. Gallego and A.F. Pazoto.**
Boundary controllability of the nonlinear coupled system of two Korteweg–de Vries equations with critical size restrictions on the spatial domain.’
Mathematics of Control, Signals, and Systems 29:6, 2017.
2. **R.A. Capistrano-Filho, F.A. Gallego and A.F. Pazoto.**
Neumann Boundary Controllability of the Gear–Grimshaw System With Critical Size Restrictions on the Spatial Domain.
Zeitschrift fuer Angewandte Mathematik und Physik ZAMP, 67 (5), 67:109, 2016.
1. **F.A. Gallego, J.J. Quintero and J.C. Riano.**
Convergence of the steepest descent method with line searches and uniformly convex objective in reflexive Banach space.
Mathematical Communications, 20 (2), 161–173, 2015.

PAPERS IN
PREPARATION

1. **R.A. Capistrano-Filho, E. Cerpa and F.A. Gallego**
“Rapid Stabilization of the Boussinesq System of KdV-Type.”
2. **R.A. Capistrano-Filho, M. Cavalcante and F.A. Gallego**
“Control of the Biharmonic Schrödinger Equation in a Star Graph.”
3. **F.A. Gallego, A.F. Pazoto and I. Rivas.**
“Boundary Controllability of the Gear-Grimshaw System.”
4. **F.A. Gallego and A. Montes.**
“On the Controllability of the Generalized Symmetric Regularized Long Wave System.”

THESIS DIRECTION
AND SUPERVISION

Posdoctoral Supervision

Luis Eduardo Osorio Acevedo
Universidad Nacional de Colombia Sede Manizales, 2020 - Current

Master Students

Manuela Chacon (Co-Direction)
Universidad Nacional de Colombia Sede Manizales, 2021- Current.

Juan Ricardo Muñoz (Co-Direction)
Universidade Federal de Pernambuco, Brazil, 2020 - Current.

Undergraduate Students

Daniel Fernando Cardona
Universidad Nacional de Colombia Sede Manizales, 2021.

Juan Sebastian Ángel Echeverry
Universidad Nacional de Colombia Sede Manizales, 2021.

Juan Ricardo Muñoz
Universidad Nacional de Colombia Sede Manizales, 2020.

EVALUATION
COMMITTEES

PhD Thesis

Milena Monique de Santana Gome, PhD in Mathematics, Thesis: Boa colocação e controlabilidade da equação de Kawahara em espaços de Sobolev com peso
Universidade Federal de Pernambuco, Brazil - August 2020. Advisor: Roberto Capistrano Filho

Master Degree

Crisitan Felipe Jimenez Varón, Master Degree in Science - Applied Mathematics, Thesis: Dinámica no suave en un modelo de mercado del café de Colombia
Universidad Nacional de Colombia Sede Manizales - July 2018. Advisor: Gerard Olivar Tost

Yeny Smid Martinez, Master Degree in Science - Mathematics, Thesis: Sobre la Existencia y Unicidad de una Ecuación de Schrödinger con Derivada en el Término no Lineal.
Universidad del Valle, Colombia - May 2019. Advisor: Juan Carlos Muñoz

AWARDS AND HONORS

- Junior Researcher — COLCIENCIAS (El Departamento Administrativo de Ciencia, Tecnología e Innovación)
- Convocatoria 833, Colciencias. 2019–2020
- Student Grant — Universidade Federal do Rio de Janeiro, UFRJ, Rio de Janeiro.
- Doctoral CAPES Fellowship: PEG-PG International Program 2013–2017
- Student Grant — Instituto Nacional de Matemática Pura e Aplicada, IMPA, Rio de Janeiro.
- Master CNPq Fellowship 2010–2012
- Student Awards — Universidad Nacional de Colombia, Manizales.
- Graduation with honors, first of the class 2010
 - Class honors, second semester 2006
 - Class honors, first semester 2006

PRESENTATIONS AND SCIENTIFIC CONFERENCE ATTENDED

Talks:

- **I Workshop de Pesquisadores Jovens em Análise e EDP**, Universidade Federal Fluminense, Brazil. March, 2021.
Talk: *Rapid Stabilization of Boussinesq System of KdV-Type.*
- **Workshop de Verão em Ecuaciones Diferenciales Parciales e Sistemas Dinamicos**, Recife, Brazil. January, 2020.
Talk: *Wellposedness and controllability aspects of the cubic fourth order Schrodinger equation on a star graph.*
- **Workshop de Verão em Ecuaciones Diferenciales Parciales e Sistemas Dinamicos**, Recife, Brazil. January, 2020.
Talk: *Wellposedness and controllability aspects of the cubic fourth order Schrodinger equation on a star graph.*
- **XIII Congress in Functional Analysis and Evolution Equations, GAFEVOL**, Barranquilla, Colombia. November, 2019.
Talk: *The cubic fourth order Schrödinger equation on a star graph.*
- **Congreso Colombiano de Matemáticas**, Popayán, Colombia. July, 2019.
Talk: *Lower regularity solutions of the biharmonic Schrodinger equation in a quarter plane.*
- **Workshop on Inverse and control problems for physical systems**, ICoPS, Valparaiso, Chile. Dic 2018.
Talk: *Large time behavior of the coupled systems of two Korteweg-de Vries equations.*
- **International Mathematical Congress, ICM2018**, Rio de Janeiro, Brazil. Aug 2018.
Talk: *Asymptotic behavior of the lower and higher order Boussinesq System of KdV-Type.*
- **Encuentro de las Sociedades de Matemáticas de Colombia y México**, Universidad del Norte, Barranquilla, Colombia. May 2018.
Talk: *Stabilizability of the Some Class of Boussinesq System of KdV-Type.*
- **International Conference of Applied Mathematics and Informatics ICAMI**, San Andres, Colombia, Nov 2017.
Talk: *Asymptotic behavior of the generalized KdV-Burgers equation.*
- **Seminario de Ecuaciones Dispersivas y Controlabilidad**, Universidad del Valle, Cali, Colombia, Sep 2017.
Talk: *Global well-posedness and exponential stability for the generalized KdV-Burgers equation.*
- **IV International Workshop in Nonlinear Analysis and Partial Differential Equations**, Universidad Nacional de Colombia, Manizales, Jul 2017.
Talk: *On the well-posedness and asymptotic behavior of the generalized KdV-Burgers*

equation.

- **VIII Encuentro Regional de Matemáticas**, ERM 2016, Universidad de Antioquia, Medellín - Colombia, Dic 2016.
Talk: *On the Boundary Controllability of the Gear-Grimshaw System.*
- **Coloquio Junior**, Recife, UFPE, Brazil, May 2015
Talk: *Stability and Controllability of Some Dispersive Models.*
- **XX Congreso Colombiano de Matemáticas**, Manizales, UNAL, Colombia, Jul Oct 2015
Talk: *Energy Decay Rate of the Thermoelastic Bresse System in the Whole Space.*

Posters:

- V Congreso Latinoamericano de Matemáticos, Barranquilla, UNINORTE, Colombia, Jul 2016.
Poster: *Neumann Boundary Controllability of the Gear Grimshaw System with Critical Size Restrictions.*
- Nonlinear PDE's@IMPA, Rio de Janeiro, IMPA, Brazil, Jun 2016.
Poster: *On the Controllability of the Gear Grimshaw System with Critical Size Restrictions.*
- Second Workshop on Nonlinear Dispersive Equations, Campinas, Unicamp, Brazil, Oct 2015.
Poster: *Global well-posedness and exponential stability for the generalized KdV-Burgers equation.*
- International Conference on Current Trends in Analysis and PDEs, Rio de Janeiro, IMPA, Brazil, Aug 2015
Poster: *Global well-posedness and exponential stability for the generalized KdV-Burgers equation.*
- XIV Workshop on Partial Differential Equations, Petrópolis, LNCC, Brazil, Sep 2015
Poster: *Energy Decay Rate of the Thermoelastic Bresse System in the Whole Space.*
- XX Congreso Colombiano de Matemáticas, Manizales, UNAL, Colombia, Jul Oct 2015
Poster: *Convergence of the steepest descent method with line searches and uniformly convex objective in reflexive Banach space.*

Scientific Conference and Schools.

- X Americas conference on Differential Equations and Nonlinear Analysis, Buenos Aires, UBA, Argentina, Feb 2015
School: *New trends and applications of Differential Equations and Dynamical Systems.*
- XIII Workshop on Partial Differential Equations, Petrópolis, LNCC, Brazil, Sep 2014
- Nonlinear PDE's@IMPA, Rio de Janeiro, IMPA, Brazil, Jul 2012
- AGRA: Arithmetic, Groups and Analysis, Santiago de Chile, USACH, Chile, Apr 2012
School: *International School AGRA I: Arithmetic Groups and Analysis.*

REFERENCES

Lionel Rosier

Ecole des Mines de Paris
MINES ParisTech
Paris, France

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E-mail: lionel.rosier@mines-paristech.fr

Ademir F. Pazoto

Universidade Federal do Rio de Janeiro, UFRJ
Mathematics Institute
Rio de Janeiro, Brazil.

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Jaime E. Munoz Rivera

Laboratorio Nacional de Computacao Científica,
LNCC-MCT
Petropolis, RJ, Brazil

Phone: +5524 22336014
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Roberto de Almeida Capistrano Filho

Universidade Federal de Pernambuco, UFPE
Department of Mathematics
Recife, Brazil.

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E-mail: capistranofilho@dmf.ufpe.br

Emanuel Carneiro

The Abdus Salam International Centre for Theoretical Physics
ICTP, Strada Costiera, 11, I - 34151
Trieste, Italy

E-mail: carneiro@ictp.it

Nicole R. Nicholson

The University of Texas Rio Grande Valley
Department of Writing and Language Studies
(956) 665-7895
Email: nicole.nicholson@utrgv.edu

Education

Master of Teaching English as a Second Language, Arizona State University, 2006.
Major: ESL

BA, University of Wyoming, 2003.
Major: English

BA, University of Wyoming, 2003.
Major: Secondary Education/English

BA, University of Wyoming, 2003.
Major: Spanish

Employment History

Academic - Post-Secondary

Lecturer for ENGL 1301/1302/0301, 3-year contract, University of Texas, Rio Grande Valley.
(August 15, 2017 - Present).

Lecturer for ENGL 1301/1302/0301, 1-year contract, University of Texas, Rio Grande Valley.
(August 31, 2015 - May 15, 2017).

Online Adjunct Instructor, ENG, Tiffin University. (March 15, 2012 - December 15, 2015).

Adjunct Instructor, English, University of Puerto Rico, Mayaguez. (January 15, 2015 - May 15, 2015).

Licensures and Certifications

Multilingual Pedagogy Professional Development Certificate of Completion, Center for Teaching Excellence. (June 26, 2017 - Present).

Independent Applying of the QM Rubric (APPQMR); Quality Matters Certificate of Completion, Quality Matters. (March 28, 2016 - Present).

Development Activities Attended

Workshop, "AZUL Session 3: #chi-rhetorics: Disrupting Narratives to Create Engagement," Writing Program, Dept. of Writing and Language Studies, UTRGV, Edinburg, TX, United States. (June 5, 2020).

Departmental Professional Development Presentation, "OVAVP and Counseling & Psychological Services Professional Development," Writing and Language Studies, UTRGV, Edinburg, TX. (February 21, 2019).

Workshop, "Scholarship of Teaching and Learning Workshop," Center for Teaching Excellence, Edinburg, TX. (November 1, 2018).

Workshop, "New Faculty Support Program Session III: Managing Your Time -- Teaching, Research, and Service," UTRGV Office of the Vice Provost for Faculty Affairs and Diversity, Edinburg, TX, USA. (October 31, 2017).

New Faculty Mentorship, "New Faculty Mentorship Program," UTRGV Office of the Vice Provost for Faculty Affairs and Diversity; New Faculty Support Program; Mentor Support Program, Edinburg, TX, USA. (October 15, 2017 - May 15, 2017).

Workshop, "New Faculty Support Program Workshop I: Enhancing Your Teaching Effectiveness," UTRGV Office of the Vice Provost for Faculty Affairs and Diversity, Edinburg, TX, USA. (October 13, 2017).

Workshop, "Strategies for Effective Group Work to Build Communities of Learners," Center for Teaching Excellence, Edinburg, TX, USA. (September 27, 2017).

Resource Fair, "New Faculty Support Program Session I: Supporting Faculty and Student Success," UTRGV Office of the Vice Provost for Faculty Affairs and Diversity, Edinburg, TX, USA. (September 5, 2017).

Workshop, "New Faculty Support Program: Orientation," UTRGV Office of the Vice Provost for Faculty Affairs and Diversity, Edinburg, TX, USA. (August 16, 2017).

Workshop, "Interactive and Reflective Grant Writing and Manuscript Development Workshop," Center for Teaching Excellence, Edinburg, TX, USA. (July 11, 2017).

Workshop, "Sin Paredes: A Community Building Workshop," Center for Teaching Excellence, Edinburg, TX, USA. (July 7, 2017).

Mentoring program, "Writing Program New Faculty Mentoring Program 2016-2017," UTRGV Writing Program, Edinburg, TX, USA. (September 15, 2016 - May 15, 2017).

Workshop, "Roundhouse 2017," UTRGV Writing Program, Brownsville, TX, USA. (May 4, 2017).

Workshop, "Spring 2017 Multilingual Pedagogy Professional Development Series: Providing Feedback and Reflecting on Writing Assignments," Center for Teaching Excellence, Edinburg, TX, USA. (April 25, 2017).

Workshop, "Spring 2017 Multilingual Pedagogy Professional Development Series: Designing Transdisciplinary Collaborative Writing Assignments," Center for Teaching Excellence, Edinburg, TX, USA. (March 28, 2017).

Workshop, "Spring 2017 Multilingual Pedagogy Professional Development Series: Designing Linguistically Inclusive Writing Assignments," Center for Teaching Excellence, Edinburg, TX, USA. (February 28, 2017).

Workshop, "Fall 2016 Multilingual Pedagogy PD: Feedback and Reflection on Translingual Assignment Redesign," Dept. of Writing and Language Studies, Edinburg, TX, USA. (December 8, 2016).

Workshop, "Fall 2016 Multilingual Pedagogy PD: Responding to and Assessing Multilingual Students' Projects," Dept. of Writing and Language Studies, Edinburg, TX, USA. (November 17, 2016).

Workshop, "Fall 2016 Multilingual Pedagogy PD: Designing Translingual Projects," Dept. of Writing and Language Studies, Edinburg, TX, USA. (October 20, 2016).

Workshop, "Writing Program BlueSky 2016," UTRGV Writing Program, Edinburg, TX, USA. (August 24, 2016).

Workshop, "Successfully Delivering a Summer Course," Center for Teaching Excellence, Edinburg, TX, USA. (May 17, 2016).

Workshop, "Roundhouse 2016," UTRGV Writing Program, Brownsville, TX, USA. (May 5, 2016 - May 6, 2016).

Workshop, "Applying the QM Rubric," UTRGV Center for Online Learning and Teaching, Edinburg, TX, USA. (April 29, 2016).

Workshop, "Writing Program BlueSky 2015: Outcomes Alignment Workshop," UTRGV Writing Program, Edinburg, AZ, USA. (October 16, 2015 - October 23, 2015).

TEACHING

Teaching Experience

The University of Texas Rio Grande Valley

ENGL 1301, Rhetoric & Composition I, 19 courses.

ENGL 1302, Rhetoric & Composition II, 26 courses.

ENGL 301, Reading/Writing Studio, 9 courses.

RESEARCH

Published Intellectual Contributions

Book Section

Sanchez, Y., Nicholson, N., Hebbard, M. (2017). Things We Should Know about Hispanic-Serving Institutions and Their Students: "Familismo" Teaching, a Pedagogical Model for Promoting Student Motivation and College Success. *Writing about Writing: A College Reading for the University of Texas Rio Grande Valley* (3rd ed., pp. 916-932). Boston, MA: Bedford St. Martins.

Book, Chapter in Scholarly Book-New

Sanchez, Y., Nicholson, N., Hebbard, M. (2019). "Familismo Teaching: A Pedagogy for Promoting Student Motivation and College Success". In Baca, Isabel; Hinojosa, Yndalecio I; Wolff-Murphy, Susan (Ed.), *Teaching Writing with Bordered Writers: Lessons Learned at Hispanic Serving Institutions*. (pp. 105-124). SUNY:.

Presentations Given

- Nicholson, N., Sanchez, Y., Hebbard, M., Christoffersen, K., (June 19, 2020). *Community + Engagement*, AZUL Dept. of Writing and Language Studies in UTRGV.
- Christoffersen, K., Nicholson, N., (March 19, 2020). *Increasing Student Engagement Through Technology*, Center for Teaching Excellence in UTRGV.
- Nicholson, N., (January 30, 2019). *How to Use a Research Log*, CompoCon @LIB Writing Programs in UTRGV.
- Nicholson, N., (December 6, 2018). *Reading Strategies: How to Encourage Your Students to Read*, Center for Teaching Excellence in UTRGV.
- Christoffersen, K., Nicholson, N., (November 4, 2018). *Cross-cultural Pragmatics and "Saving Face" in Peer Review*, National Conference on Peer Writing & Tutoring National Conference on Peer Writing & Tutoring in South Padre Island, TX.
- Sanchez, Y., Nicholson, N., (November 1, 2018). *Even Geniuses Work Hard: How to Tackle a Rigorous Course*, RHETx First Year Writing Program in UTRGV.
- Sanchez, Y., Nicholson, N., Hebbard, M., (April 26, 2018). *Initial Considerations for Building Meaningful Service Partnerships: Preparing You for Successful Service Partnerships*, NEXUS UTRGV College of Liberal Arts in Brownsville, TX.
- Monty, R., Christoffersen, K., Frost, J., Nicholson, N., (March 2, 2018). *Writing of/in/about the Online/Hybrid Classroom*, 2018 Excellence in Online Learning Conference Center for Online Learning and Teaching Technology in Brownsville, TX.
- Mills, S., Nicholson, N., (March 2, 2018). *Making Life Easier for Faculty and Students through Innovative Use of Teaching and Technology*, Excellence in Online Learning Conference 2018: Sparking Innovation in Online and Hybrid Learning UTRGV Center for Online Learning and Teaching Technology in Brownsville, TX.
- Sanchez, Y., Nicholson, N., (February 16, 2018). *What Do Students Need From You? An Assessment of a Rigorous Class With a Strong Support System*, 2018 UTRGV Teaching Excellence Symposium UTRGV Center for Teaching Excellence in Edinburg, TX.
- Nicholson, N., (February 1, 2018). *How to Use a Research Log*, CompoCon @LIB 2018 Writing Programs, Dept. of Writing and Language Studies, UTRGV in Edinburg, TX.
- Nicholson, N., (October 25, 2017). *"Active Reading Strategies in the Classroom"*, "Strategies to Get More Students to Read Assigned Materials." UTRGV Center for Teaching Excellence in CTE Center, Edinburg Campus, UTRGV.
- Nicholson, N., (October 12, 2017). *Critical Reading: Reading College-Level Work Like Pro*, Strategies for Academic Success UTRGV First Year Experience Program in UTRGV BSABH 2.106, Brownsville, TX.
- Nicholson, N., (October 10, 2017). *Critical Reading: Reading College-Level Work Like Pro*, Strategies for Academic Success UTRGV First Year Experience Program in UTRGV ESTAC 2.130, Edinburg, TX.
- Nicholson, N., (February 2, 2017). *"Using a Research Log: How to keep track of what you're looking for without driving yourself crazy"*, CompoCon: Library Day 2017 Department of Writing and Language Studies in University Library, UTRGV.

Nicholson, N., (February 1, 2017). *"Using a Research Log: How to keep track of what you're looking for without driving yourself crazy"*, CompoCon: Library Day 2017 Department of Writing and Language Studies in University Library, UTRGV.

Nicholson, N., (November 2, 2016). *"What Reading Could Be: The Freedom to Engage"*, RHETx 2016 Department of Writing and Language Studies in University Ballroom, UTRGV.

Research Currently in Progress

"Things You Should Know About Hispanic Serving Institutions: A Guide for the Curious of the Desperate First Year Writing Instructor" (On-Going).
The study aims to evaluate Familismo pedagogy by comparing it and contrasting it with other methods of teaching.

SERVICE

Department Service

Attendee, Meeting, eComp (Online ENGL 1302). (September 1, 2016 - Present).

Mentor of MA student in ESL Practicum, Mentor of MA student in ESL Practicum. (February 7, 2020 - March 8, 2020).

Presenter/Workshop Leader, Academic Reading Strategies Session III: Reading Rhetorically. (September 25, 2019).

Presenter/Workshop Leader, Academic Reading Strategies Session II: Connecting to the Reading. (September 18, 2019).

Presenter/Workshop Leader, Academic Reading Strategies Session I: Text-Based Strategies. (September 11, 2019).

Faculty Mentor, CompoCon @FDBK ENGL 1302 Research Project Conference. (March 4, 2019).

Faculty Mentor, ENGL 6324 Pedagogy in Rhetoric, Composition, and Literacy Observation & Interview. (February 12, 2019 - February 19, 2019).

Participant, RGVoces: What is Academic Reading? (February 18, 2019).

Faculty Mentor, Mentoring of MA student in ESL. (September 15, 2018 - December 3, 2018).

Allowed observation of class; interviewee, ENGL 6370 Intro to ESL Student Observation & Interview. (October 9, 2018).

Guest lecturer, ENGL 3300 Introduction to English Studies. (March 26, 2018).

Provided one-on-one feedback for ENGL 1301/2 research projects, CompoCon @FDBK. (March 7, 2018).

Presenter, Session IIIC: "Rhetorical Reading Strategies" (Brownsville campus). (September 29, 2017).

Workshop coordinator, Inqspot ENGL 1301 Academic Reading Workshop coordination, 2017. (September 12, 2017 - September 29, 2017).

Presenter, Session IIIB: "Rhetorical Reading Strategies" (Edinburg campus). (September 28, 2017).

Presenter, Session IIIA: "Rhetorical Reading Strategies" (Edinburg campus). (September 26, 2017).

Presenter, Session IIC: "Moving Off the Page: Making the Reading Your Own" (Brownsville campus). (September 22, 2017).

Presenter, Session IIB: "Moving Off the Page: Making the Reading Your Own" (Edinburg campus). (September 21, 2017).

Presenter, Session IIA: "Moving Off the Page: Making the Reading Your Own" (Edinburg campus). (September 19, 2017).

Presenter, Session IC: "Text-Based Reading Strategies" (Brownsville campus). (September 15, 2017).

Presenter, Session IB: "Text-Based Reading Strategies" (Edinburg campus). (September 14, 2017).

Presenter, Session IA: "Text-Based Reading Strategies" (Edinburg campus). (September 12, 2017).

Expert at roundtable/one-on-one discussion, CompoCon Feedback + Inquiry. (March 22, 2017 - March 23, 2017).

Workshop coordinator, Inqspot ENGL 1301 Academic Reading Workshop coordination, 2016. (September 13, 2016 - September 30, 2016).

Presenter, Session IIIB: "Rhetorical Reading Strategies" (Edinburg campus). (September 29, 2016).

Presenter, Session IIIA: "Rhetorical Reading Strategies" (Edinburg campus). (September 27, 2016).

Presenter, Session IIB: "Moving Off the Page: Making the Reading Your Own". (September 22, 2016).

Presenter, Session IIA: "Moving Off the Page: Making the Reading Your Own" (Edinburg campus). (September 20, 2016).

Presenter, Session IB: "Text-Based Reading Strategies" (Edinburg campus). (September 15, 2016).

Presenter, Session IA: "Text-Based Reading Strategies" (Edinburg campus). (September 13, 2016).

Attendee, Meeting, GED Writing Test Preparation Materials. (April 15, 2016 - June 30, 2016).

Expert at roundtable/one-on-one discussion, CompoCon Feedback + Inquiry. (March 23, 2016).

Attendee, Meeting, Council of Basic Writing Award for Innovation application writing team.
(February 16, 2016 - February 25, 2016).

University Service

Coordinator and Facilitator, Inqspot Book Club, September 2019 - April 2020. (September 26, 2019 - April 23, 2020).

Faculty Advisor, Student Book Club. (September 1, 2019 - March 15, 2020).

Read-In facilitator and emcee, Hispanic Heritage Month Read-In. (October 9, 2019).

Discussion guide, HerStory Read-In for Women's History Month. (April 4, 2019).

Coordinator and Facilitator, Inqspot Book Club, September 2018 - April 2019. (September 1, 2018 - March 26, 2019).

Faculty Mentor, Mentoring for Engaged Scholar Application. (October 15, 2018 - November 2, 2018).

Read-In facilitator and emcee, Hispanic Heritage Month Read-In. (October 15, 2018).

Organizer, The Great Book Swap of '18, Inqspot. (April 24, 2018).

Guest Speaker, UTRGV Learning Center SSI Active Reading Strategy Workshops. (February 27, 2018 - April 2, 2018).

Guest Speaker, First Year Experience Podcast, Four Letter Words: READ. (March 29, 2018).

Coordinator and Facilitator, Inqspot Book Club. (September 1, 2017 - March 27, 2018).

Guest Speaker, Center for Teaching Excellence Spring 2017 Multilingual Pedagogy Series: Providing Feedback and Reflecting on Writing Assignments. (April 28, 2017).

Coordinator and Facilitator, Inqspot Book Club: 'Hidden Figures' by Margot Lee Shetterly. (April 6, 2017).

Coordinator and Facilitator, Inqspot Book Club: 'The Girl on the Train' by Paula Hawkins. (March 2, 2017).

Program Coordinator, Inqspot Reading Coaching. (January 15, 2016 - December 1, 2016).

Faculty expert at roundtable discussion, "How to Evaluate Course Outcomes". (November 11, 2016).

Faculty expert at roundtable discussion, "Problem Solving and Dialogue – Let's Talk About Your Courses". (January 29, 2016).

Writing consultant, Writing Consultant for Student in the Rehabilitation Studies PhD program. (October 1, 2015 - December 15, 2015).

Public Service

Translator, La Posada Providencia, Edinburg, TX. (June 6, 2020).

Adult ESL Instructor, Adult ESL Instruction, San Carlos Endowment Center, Edinburg, TX.
(September 13, 2019 - February 14, 2020).

Adult ESL Instruction, Adult ESL Instruction, San Carlos Endowment Center, Edinburg, TX.
(January 15, 2019 - May 3, 2019).

ESL Instructor, Adult ESL Instructor for Citizenship Preparation, San Carlos Community Center,
San Carlos, TX. (February 2, 2018 - March 20, 2018).

Co-presenter/attendee, San Carlos Community Center Board meeting (representative of Book
Buzz and Inqspot Reading Institute), Edinburg, TX. (June 13, 2017).

Judge, UIL Writing, De La Vina Elementary School, Edinburg, TX. (December 12, 2015).

* indicates undergraduate student

** indicates graduate student

HEIDY JOHANA QUINTERO

Phone Number: (+57) 318 588 08 49

E-mail: joha-712@hotmail.com

Overview

M.A. in European and International Studies, *Institut National Universitaire Champollion* (France); B.A. in Modern Languages, *Universidad de Caldas* (Colombia). Interested in the Internationalization of Higher Education and Project Management with a solid background in French teaching/learning strategies, international cooperation, development of international strategies and alliances. 10 years of working experience (mostly in the Education field). Excellent organizer, detailed oriented with exceptional people skills.

Core qualifications:

- Project Management
- Intercultural capabilities
- International Cooperation experience
- Public Relations and International Affairs
- Higher Education

Professional Experience

Coordinator International Relations Office- Universidad Nacional de Colombia at Manizales Campus, (Manizales, Colombia) 2021

Assignments and responsibilities:

- Provide advice and assistance to students about mobility process
- Monitor the Internationalization Strategy
- Ensure International Cooperation and Partnerships.
- Support the academic units with the implementation of international agreements and partnerships
- Contribute to the national and international visibility of the institution
- Coordinate and organized academic and cultural events to promote the culture of internationalization

International Relations Contractor- Universidad Nacional de Colombia at Manizales Campus, (Manizales, Colombia) 2020-Present

Assignments and responsibilities:

- Organizing academic and cultural events with international allies
- Supporting national and international mobility of students and faculty members
- Cooperating with bureaucratic institutions and departmental units
- Following up course registrations of students
- Having face to face interactions with students and other members of the academic community
- Creating digital communications and managing the International Relations Office's Facebook page.
- Making follow-ups of the different actions related to the internationalization strategy
- Being responsible of Resources in English/French, meeting translation needs of the unit, supporting each specialist in the unit in terms of language needs

- Advising the community in terms of international opportunities related to international calls for projects, scholarships, fellowships and so on.

Coordinator of International Cooperation, Fundación Universitaria del Área Andina, (Bogota Colombia) 2019-2020

Assignments and responsibilities:

- Public Relations
- Coordinating the international offer and other activities related to summer school
- Promoting and maintaining the visibility and the interaction with the public and private institutions of strategic interests, with the aim of increasing the international activities of cooperation, programs and projects.
- Preparing project proposals related to internationalization of higher education, mobility or capacity building
- Managing and following up various projects

International Cooperation Adviser, Universidad del Rosario (Bogota, Colombia) 2017-2019

Assignments and responsibilities:

- Public Relations and International Affairs.
- Organizing international visits from universities, liaison for government institutions and diplomatic missions interested in cooperation with Universidad del Rosario.
- Serve as liaison between Universidad del Rosario's researchers and the scientific community abroad.
- Adviser on the application of procedures to international grants and programs such as Fulbright; DAAD, AUF and Erasmus calls.
- Spokesperson for the International Affairs Office at different events related to the internationalization of higher education.
- Preparing project proposals related to internationalization of higher education, mobility or capacity building
- Managing and following up various projects

Assistant (Internship), Business France Colombia- French Embassy in Colombia 2016

Assignments and responsibilities:

- Supported the Commissioners with the implementation of different activities promoting French Companies in Colombia
- Organized a trade mission and represented French Companies in a national fair (construction & infrastructure sector)
- Maintained and updated contact lists
- Organized and scheduled meetings and appointments related to upcoming trade missions
- Prepared short news in French for web publications
- Translated documents from and to French and from and to Spanish
- Provided general support for international visitors
- Made various mini-market studies in both agro-food and infrastructure sectors

France Au Pair Program Advisor, Global Exchange International (Colombia) 2016

Assignments and responsibilities:

- Processed applications and files
- Advised interested candidates
- Maintained good relationships with international partners

Language Trainer, Academia de Idiomas Smart (Colombia)

2014-2016

Assignments and responsibilities:

- Taught basic, intermediate and advanced language classes
- Led in French language conversation clubs and workshops for the student's improvement and training of their language skills as well as their understanding on several topics

Spanish Language Assistant, Lycée Simone Veil (France)

2013-2014

Assignments and responsibilities:

- Led and participated in several educational and cultural activities at Lycée Simone Veil
- Promoted Colombian culture and Spanish language in France.
- Helped students to improve conversational Spanish skills.
- Was co-responsible for 4 groups of young students as a tutor, monitor and teaching assistant.
- Taught intermediate and advanced language Spanish classes.

Professor, University CUN (Corporación Unificada de Educación Superior-Colombia)

2013

Assignments and responsibilities:

- Taught basic and intermediate language classes
- Subjects taught: French as a Foreign Language applied to an International Business Program
- Strengthened multicultural skills and guided students to acquire a global vision.

Language Trainer, Instituto YES (Colombia)

2010-2013

Assignments and responsibilities:

- Taught basic, intermediate and advanced language classes
- Led in French language conversation clubs and workshops for the student's improvement and training of their language skills as well as their understanding on several topics.

Education

Master in European and International Studies

2017-2018

Institut National Universitaire Champollion (Université Fédérale de Toulouse-France)
France

Master's thesis: Institutions académiques et internationalisations nationales, le cas des universités en Colombie et au Mexique

Supervisor: Dr. Caroline Barrera

Degree Modern Languages

2002-2010

Additional Training-Conferences Attended

Erasmus+ programme for education, training, youth and sport workshop, CEU Cardenal Herrera University (Spain)	2018
Preparing project proposals for European funding seminar, Universidad del Rosario (Colombia)	2017
Preparation and management of projects for international cooperation in America Latina, The Caribbean and Europe- Erasmus+ Programme and Marie Curie actions workshop, European Commission (Colombia)	2017
Preparing project proposals for European funding seminar, Universidad del Rosario (Colombia)	2017
9 th Latin American and Caribbean Conference for the Internationalization of Higher Education, Colombian network for the internationalization of higher education (Colombia)	2017
International south-south cooperation day, Presidential Agency for International Cooperation (Colombia)	2017
Course in project management - IT PMO methodology aligned to PMI and Microsoft Project, Universidad del Rosario (Colombia)	2017
VIII Regional Seminar, towards raising awareness in language teaching, “ <i>l’importance de parler une langue étrangère dans le territoire national</i> ” (participation as a Keynote Speaker), Universidad de Caldas (Colombia)	2009
Human horizons, limits and landscapes of education Symposium, Alejandro Gutierrez Carabineros school (Colombia)	2008

Language Skills

Spanish: native language

French: fluent (speaking, reading, writing)

English: intermediate/advanced (reading and speaking), advanced (reading);

Bogotá D.C., March 12th, 2021

100.000 Strong in the Americas Initiative

Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior

Mariano Ospina Pérez – ICETEX

Ref: Support letter for the grant application under the Competition: The U.S.-Colombia Grant Competition for 21st Century Higher Education Partnerships

Dear Evaluation Committee Members,

In my position of Executive Secretary of The Colombian Network for the Internationalization of Higher Education RCI, I would like to express our institutional support to Universidad Nacional de Colombia, Manizales Campus and to its proposal “Creating diverse scientific communities in the Americas **JUUNTOS**: Joining UNALM and UTRGV in the Development of STEM Collaboration” developed along with the University of Texas Rio Grande Valley.

RCI is very committed to the strengthening of the internationalization processes of our members and it is aware of the importance of this proposal to foster academic cooperation between higher education institutions in the United States and Colombia and to promote the academic mobility of faculty and students. From our side, we will fully support this initiative with the dissemination of its different results and activities with our member institutions.

Best regards,



María Alejandra Ferreira Arenas

Executive Secretary

The Colombian Network for the Higher Education Internationalization

turbulent in higher education's history. Like many other institutions, UTRGV had no choice but to dramatically alter its operations - almost immediately - because of the COVID-19 pandemic.

However, thanks to the hard work and perseverance of our students, faculty, and staff, the 2019-2020 academic year will also go down as one the most successful in UTRGV's history. The university experienced record-breaking enrollment and retention figures, bolstered its reputation as one of the top value schools nationwide by earning top rankings and continued to expand educational opportunities, access to health care, and impactful research benefiting the entire Rio Grande Valley.

We have a great deal to be proud of during this period. We achieved much as an institution during the 2019-2020 incredible position that UTRGV now finds its toward a future with seemingly endless poss

President Guy Bailey

We are

THE FUTURE OF TEXAS



ENROLLMENT

Did you know: UTRGV's fall enrollment has increased for four straight years, with 2020's enrollment surpassing 30,000 for the first time in school history. UTRGV is now 1 of 9 Texas four-year public institutions with an enrollment of over 30,000, joining Texas A&M, UT Austin, Houston, UT Arlington, Texas State, North Texas, Texas Tech, and UT San Antonio.



SUMMER
ENROLLMENT

17,582

(+27.8%)

Record High



FALL
ENROLLMENT

32,618

(+11.5%)

Record High



ENTERING FRESHMEN
FALL ENROLLMENT

5,350

(+11.5%)

Record High



GRADUATE STUDENTS
FALL ENROLLMENT

5,122

(+38.3%)

Record High

Enrollment Through The Years



GRADUATION & RETENTION RATES

Did you know: UTRGV continues to encourage students to take 15 hours per semester by capping in-state tuition and fees at 12 hours per semester. Under the program, a freshman who starts Fall 2020 and takes 15 hours per semester (excluding summer school) is more likely to graduate in four years and save more than \$7,000 compared to a student taking 12 hours.

NEWS RELEASE: UTRGV celebrates Class of 2020 with one-of-a-kind commencement ceremony



1st-Year RETENTION RATE

81%
(+4.2%)
Record High



4-YEAR GRADUATION RATE

29%
(+4.3%)
Record High

15-hours Overview

40%

of all undergraduates
in Fall 2020 enrolled
in 15 or more hours
(record high)

47.5%

of entering freshmen
in Fall 2020 enrolled
in 15 or more
(record high)

STUDENT SUPPORT



announced an expansion of its Tuition Advantage program, which now covers the cost of tuition and mandatory fees for eligible students with a family income of \$95,000 or less. This \$20,000 increase from the original plan will help students who have been affected by the unprecedented economic uncertainty caused by the COVID-19 pandemic.

NEWS RELEASE: UTRGV increases Tuition Advantage to \$95,000 to help ease time of economic hardship

Summer Relief Package

Starting in Summer 2020, UTRGV invested university funds and offered new and current undergraduate and graduate students an incentive package to help them earn a degree while social distancing at home. The incentives for eligible students included up to \$1,000 in tuition relief, among other things.



Guaranteed Tuition

UTRGV's tuition is guaranteed for all students for four years, meaning costs will not increase during this time period.

13,000

Total number of students whose tuition was fully covered Fall 2020 by financial aid and/or Tuition Advantage Grant.



Fall Relief Package

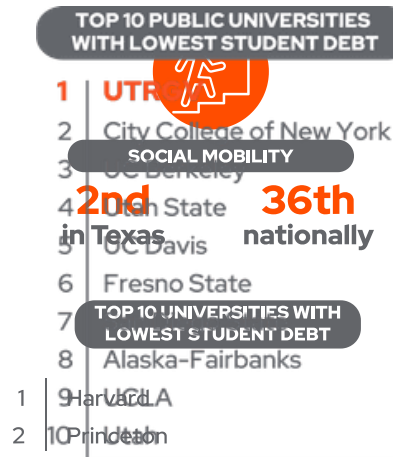
UTRGV provided students with even more financial support in Fall 2020 by giving all eligible students a total of \$1,000 in CARES cash grants.

Students could use the grants for personal or education-related expenses during the pandemic.

RANKINGS

Did you know: U.S. News & World Report ranked UTRGV 1st among public universities in the nation for the least student debt upon graduation. The data showed that UTRGV students who graduated in 2017 incurred an average debt of \$10,054, compared to that year's national average of \$30,000. Overall, among public and private universities, UTRGV ranks fourth behind Harvard (\$6,100), Princeton (\$7,500), and Duke (\$9,200).

NEWS RELEASE: UTRGV ranks first among nation's public institutions for least student



TOP NATIONAL UNIVERSITY & 3rd BEST IN TEXAS

12.	Texas A&M (College Station)
77.	UT Austin
86.	UTRGV
95.	Rice
103.	UT Arlington
112.	UTEP
115.	Sam Houston State
136.	UTSA



EDUCATIONAL OPPORTUNITIES

Did you know: UTRGV, in partnership with the City of Harlingen and the Harlingen Consolidated Independent School District, broke ground in September 2020 on a new UTRGV Early College High School. The campus will be a 64,000-square-foot, state-of-the-art facility on 6.3 acres gifted by the City of Harlingen. The early college high school, expected to open Fall 2021, will offer students a direct path to a bachelor's degree with a focus on academic core, engineering, computer science, or education.

NEWS RELEASE: UTRGV, City of Harlingen, HCISD broke ground on

New degrees added since 2015

Bachelor's: 8 Master's: 12 Doctoral: 1 Professional: 1

2016-17

- MA Disaster Studies
- MS Ocean, Coastal, and Earth Sciences
- MS Agricultural, Environment, and Sustainability Sciences
- MD Medicine

2017-18

- MEd Political Science
- Ph.D. Clinical Psychology

2018-19

- BS Hospitality and Tourism Management
- MS Civil Engineering
- BS Statistics
- BS Sustainable Agriculture and Food Systems
- BS Nutritional Sciences
- BS Addiction Studies
- M.Ed. Teacher Leadership

2019-20

- BS American Sign Language Interpretation
- MS Business Analytics
- MS Biochemistry and Molecular Biology
- MS Bioethics

2020-21

- BS Cybersecurity
- MS Applied Statistics and Data Science
- MS Global Commerce

2021-22

- BS Integrated Health Sciences
- MS Dietetics

New Degrees Currently Under Review

- Ph.D. in Cellular, Molecular, and Biomedical Science
- Ph.D. in Human Genetics
- Ph.D. in Mathematics and Statistics with Interdisciplinary Applications
- Ph.D. in Physics
- BAT Respiratory Therapy

- Doctor of Nursing Practice
- Doctor of Podiatric Medicine
- Doctor of Physical Therapy
- MS Pharmaceutical Sciences
- MS Medical Sciences
- MS Biomedical Engineering

HEALTH & MEDICAL

Did you know: The UTRGV School of Medicine, through UT Health RGV, continues to play a major role in the state and regional response to the COVID-19 pandemic. In March 2020, the school launched the first of what would eventually be four drive-thru COVID-19 testing sites across the Rio Grande Valley. By April, the SOM developed an in-house diagnostic lab specifically for COVID-19 testing. By the end of October, more than 65,000 samples had been processed, including over 25,000 from the drive-thru testing sites.

NEWS RELEASE:
UTRGV increases
COVID-19 testing
capacity

NEWS RELEASE: UT
Health RGV to provide
COVID-19 antibody
testing



Total number of
medical
students:

236



Total number of
medical
residents:

220



UT Health RGV-
operated sites:

20



Regional coverage:

UT Health RGV has sites in
Brownsville, Edinburg,
Harlingen, Laguna Vista, La
Victoria, McAllen, Mercedes,
San Carlos, and Weslaco.

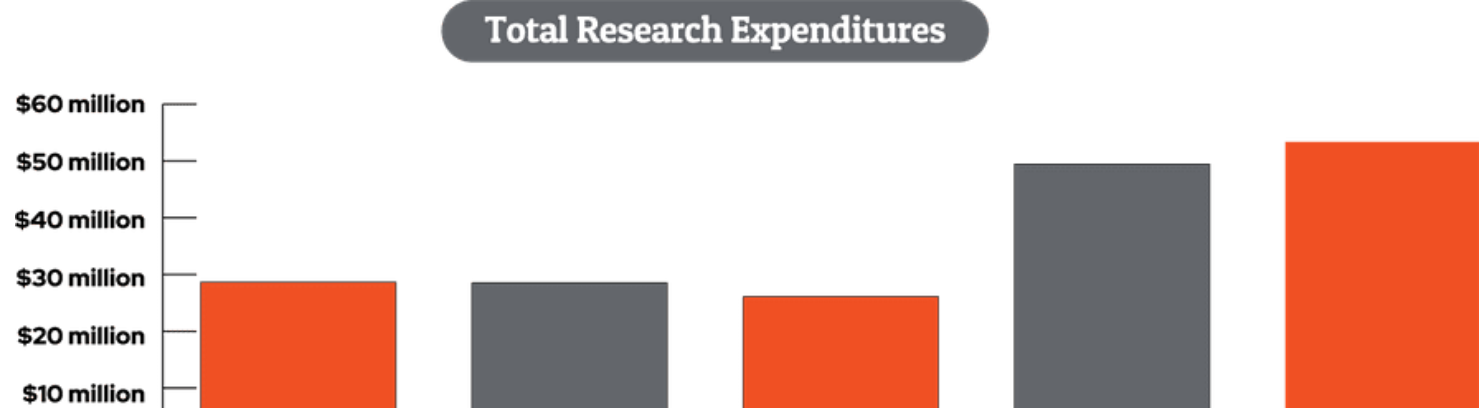
RESEARCH

Did you know: In October 2020, UTRGV received a \$1.9 million grant from the U.S.

Department of Agriculture to
Document Ref: IMFNE-KMQK8-QC9WQ-SCBPN

help determine how on-farm conservation can be applied to reduce environmental impact and study the social and economic implications for area farmers. The project is a collaborative effort between UTRGV, Texas State University, the National Center for Appropriate Technology and

NEWS RELEASE: Saving the Soil: UTRGV awarded grant for regional cover crop research



PATHWAY TO AN EMERGING RESEARCH UNIVERSITY

Criteria:

Offer a comprehensive range of excellent undergraduate and graduate programs.



UTRGV:

Criteria:

Award at least 30 Ph.D. degrees annually.



UTRGV:

Criteria:

Generate at least \$37 million in restricted research expenditures.



UTRGV:

Bachelor's: 63
Master's: 58
Doctoral: 5

13

\$19.8 million

FUNDRAISING

Did you know: In February 2020, UTRGV received the largest single donation in the history of higher education in South Texas. The \$38 million gift from the Valley Baptist Legacy Foundation will establish a unique medical hub for scientific discovery focused on improving health in the Rio Grande Valley. With the assistance of this gift, UTRGV should move into the top 200 American Universities in both philanthropic giving and total research expenditures.

NEWS RELEASE: UTRGV announces \$38 million gift from Valley Baptist Legacy Foundation



Private Fundraising
(Record High)

\$50,000,497



Total Private Fundraising Since
2015
(as of Aug. 31, 2020)

\$127,976,300



Total Endowment
(as of Aug. 31, 2020)

\$103,771,763

COMMUNITY ENGAGEMENT

Did you know: In January 2020, UTRGV was one of just 119 colleges and universities in the United States to receive this year's Carnegie Community Engagement Classification. This was UTRGV's first time receiving the designation, which honors an institution's commitment to community engagement and its collaborations with local, regional, state, national, and global partners.



Vaqueros Vote

UTRGV once again encouraged students, faculty, and staff to vote in the 2020 general election by providing timely information and serving as a polling place. More than **11,800** people utilized our facilities to cast their ballot!



Page 92 of 119
Get Out the Count



Vaqueros United

Unveiled in September, Vaqueros United was established to engage the university in meaningful conversations on racism and social justice while promoting peace, equality, human rights, and social justice. The initiative, led by the UTRGV Department of Intercollegiate Athletics and Student-Athletics Advisory Committee, starts with a pledge that all students, faculty, and staff are encouraged to sign.



Rally the Valley

UTRGV organized a variety of campus and virtual events throughout the year to help encourage students, faculty and staff to fill out the 2020 Census.

What began as a tagline for the Department of Intercollegiate Athletics, turned into a university-wide rallying cry during the COVID-19 pandemic. How do Vaqueros react when uncertainty sets in? We rise to the challenge. We find the strength to keep giving our all. We rally together – even at a distance.

ECONOMIC IMPACT

Did you know: In November 2020, UTRGV broke ground on the new UTRGV Institute for Neuroscience, a \$30 million, world-class clinical and research site within the School of Medicine. The building is funded by the Permanent University Fund, with the interdisciplinary work that will be conducted there to be funded in part by a \$15 million gift from the Valley Baptist Legacy Foundation, announced in February 2017.

NEWS RELEASE: UTRGV breaks ground on Institute for Neuroscience in Harlingen

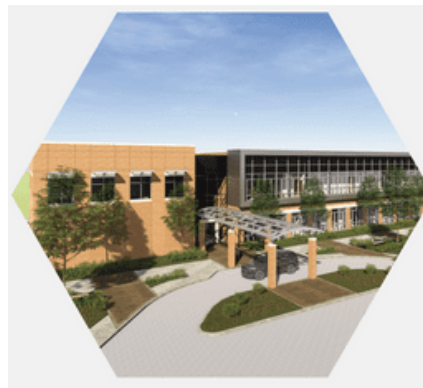
Total economic impact:

\$1.3 billion

Spending associated with UTRGV generates:

- 12,850 jobs
- \$624 million in labor income
- \$37 million in state and local tax
- \$81 million in federal tax
- \$675 million in value added

As of July 2018



Institutional Information**Legal Name of Higher Education Institution**

Universidad Nacional de Colombia - Sede Manizales

Full Address of Institution

Carrera 45 # 26-85

Edificio Uriel Gutiérrez

Bogotá D.C. Colombia

Linked Application

Universidad Nacional de Colombia - Sede Manizales|Creating Diverse Scientific Communities in the ...

Project Director**Title/Prefix**

Mr.

First Name

Emer de Jesús

Last Name

Lopera Arias

Job Title

Profesor Asistente

Office/DepartmentW-222J/Departamento de
Matemáticas**PD Email**

edloperar@unal.edu.co

Work Phone

Secondary Project Contact**Title/Prefix**

Mr.

First Name

Fernando Andrés

Last Name

Gallego Restrepo

Job Title

Profesor Asistente

Office/Department

W-210C/Departamento de Matemáticas

Secondary Email

fagallegor@unal.edu.co

Work Phone

Contractual Contact

This is the person responsible for reviewing the Award Agreement and obtaining the proper signatures. Partners of the Americas will reach out directly to this person to begin the contracting process.

Title/Prefix

Mr.

First Name

Carlos Eduardo

Last Name

Acuña Feijoo

Job Title

Profesional de apoyo - Cooperación académica

Office/Department

Dirección de Relaciones Exteriores

Contractual Email

dre_nal@unal.edu.co

Work Phone

(+57 1) 316 5650

Financial Contact

This is the person responsible for completing and submitting the financial documents for this award, and verifying that the award funds have been received.

Title/Prefix

Dr.

First Name

Carlos Daniel

Last Name

Acosta Medina

Job Title

Decano

Financial Email

cdacostam@unal.edu.co

Office/Department

Bloque D, piso 5/Decanatura

Work Phone

(+57) 6 8879300 extensión 50140

Additional Contacts

(if applicable)

Title/Prefix

First Name

Last Name

UNAL

Manizales

Job Title

Oficina de Relaciones Interinstitucionales

Office/Department

**CC this email in correspondence

Other Email

ori_man@unal.edu.co

Work Phone

[Internal] Notes/Comments

- Authorized Signatory: Dr. Molly Montoya Castaño, Rector

ANNEX C

PARTNERS OF THE AMERICAS (POA) STANDARD PROVISIONS

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PARTNERS OF THE AMERICAS (POA) STANDARD PROVISIONS

Unless otherwise stated in the agreement, these provisions supersede.

I. ANTICORRUPTION PROVISIONS

Applicable to all

- A. The RECIPIENT shall conduct all activities related to this engagement in a fair, honest and transparent manner.
- B. RECIPIENT represents and certifies that RECIPIENT rejects corruption in all of its forms, including Bribery, making a Facilitation Payment or any Prohibited Act.
- C. RECIPIENT represents and certifies that RECIPIENT is aware that Bribery is a crime under a host of anticorruption statutes, including the Bribery Act, the Criminal Code Act, the FCPA and similar statutes, and therefore, strictly prohibited, regardless of jurisdiction or circumstance.
- D. RECIPIENT shall not directly or indirectly commit or attempt to commit any Prohibited Act, including Bribery or making a Facilitation Payment.
- E. RECIPIENT represents and certifies that RECIPIENT shall comply with Partners Code of Conduct or with its own Code of Conduct, and that this code does not conflict with PARTNERS Code of Conduct.
- F. Neither the RECIPIENT nor any of its Subsidiaries or, to the Knowledge of the RECIPIENT, any director or officer of the foregoing, acting in their capacity as such, has
 - 1. made or offered any unlawful payment, or offered or promised to make any unlawful payment, or provided or offered or promised to provide anything of value (whether in the form of property or services or in any other form), to any foreign or domestic official or employee of any Governmental Entity (which, for the purposes of this section, also includes any political party or candidate), or to any finder, agent, representative or other party acting for, on behalf of, or under the auspices of any official or employee of any Governmental Entity (each, a “Government Official”) for purposes of unlawfully (i) influencing any act or decision of any Government Official in his or her official capacity, (ii) inducing any Government Official to do or omit to do any act in violation of his or her lawful duty, (iii) securing any improper advantage; or (iv) inducing any Government Official to influence or affect any act or decision of any Governmental Entity, in each case for the purpose of obtaining or retaining business or directing business to any person;
 - 2. used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity or

3. taken any other action or made any omission that would or would reasonably be expected to result in a violation of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder, or any other law of the United States, or of any other jurisdiction where the RECIPIENT conducts business governing corrupt practices, commercial bribery, money laundering, pay-to-play, anti-bribery or anticorruption or that otherwise prohibits payments to any government or public officials or employees.

G. RECIPIENT shall include these, or substantially similar, anticorruption provisions in all subcontracts or other agreements RECIPIENT makes in connection with this engagement.

[END OF PROVISION]

II. COMMUNICATION WITH PARTNERS, DONORS, CLIENTS

Applicable to all

The RECIPIENT will not propose or advocate to any official or employee of counterpart organization, or any donor agency any activity or course of action with direct impact on PARTNERS unless agreed to in advance by the PARTNERS in writing. Any work with PARTNERS for which the RECIPIENT is eligible will be organized via PARTNERS with the approval of the RECIPIENT. RECIPIENT will not communicate directly with a donor about his or her work on PARTNERS without the written consent of PARTNER'S program lead.

[END OF PROVISION]

III. DISPUTE RESOLUTION

Applicable to all

The Parties shall first attempt to resolve any dispute arising under this Agreement by informal discussions between the Parties, subject to good cause exceptions, including, but not limited to, disputes determined by either Party to require immediate relief (i.e., circumstances which may result in a misappropriation of federal funds). Any dispute that has failed to be resolved by informal discussions between the Parties within a reasonable period of time after the commencement of such discussions (not to exceed thirty (30) days), may be resolved through any and all means available under applicable law.

[END OF PROVISION]

IV. DISCLOSURES

Applicable to all

The RECIPIENT shall not disclose any matters of a confidential nature to which it may be or become privy as a result of this Agreement. Upon the expiration or termination of this Agreement, the RECIPIENT shall surrender to PARTNERS all confidential material relating to PARTNERS in his or her possession, of whatever origin and including, without limitation, duplicates, facsimiles, models, prototypes and notes relating thereto. The RECIPIENT's obligation to keep information confidential will not apply if disclosure is required by state or federal law or regulations. The RECIPIENT shall promptly notify PARTNERS regarding inquiries relating to confidential and proprietary information from the public (whether from an individual, a government agency or official, the media or other sources) so that PARTNERS may seek whatever remedy is available under applicable law. This Article shall survive any termination or expiration of this Agreement.

The RECIPIENT agrees to sign and return to PARTNERS the following documents, or certifies that RECIPIENT shall comply with its own internal policies, and that these do not conflict with Partners documents and policies:

- A. [Statement of Confidentiality of Corporate Affairs](#)
- B. [Partners of the Americas Code of Conduct](#)
- C. [Non-Discrimination Policy](#)
- D. [Harassment Policy](#)

[END OF PROVISION]

V. MANDATORY DISCLOSURE.

Applicable to all grantees

Sub-grantee must disclose, in a timely manner, in writing to the Federal awarding agency, OIG and to the prime recipient (pass-through entity) all violations of Federal criminal law involving fraud, bribery, or illegal gratuities potentially affecting the Federal award. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.338 "Remedies for Noncompliance", including suspension or debarment.

[END OF PROVISION]

VI. INDEPENDENT CONTRACTOR – NO JOINT VENTURE

Applicable to recipient agreements only

Nothing herein shall be deemed to create a joint venture, agency or partnership between PARTNERS and the RECIPIENT, and neither party shall have the power to obligate or bind PARTNERS in any manner whatsoever, except as specifically provided herein. The RECIPIENT is an independent contractor and is not an employee, partner, or co-venture of, or in any other service relationship with, PARTNERS. The manner in which the RECIPIENT'S services are rendered shall be within the RECIPIENT'S sole control and discretion.

[END OF PROVISION]

VII. INDEMNITY

Applicable to all unless otherwise specified in the agreement

To the fullest extent permitted by law, the RECIPIENT shall indemnify and hold harmless PARTNERS and its officers, directors, employees, agents, and legal representatives, from and against any and all claims, demands, liabilities, expenses (including reasonable attorney's fees and disbursements, court costs, judgments, settlements and fines), whether of omission or commission, that may be committed or suffered in connection with the performance of this Agreement by the RECIPIENT or the RECIPIENT's general business operations. This paragraph shall survive the termination or expiration of this Agreement.

[END OF PROVISION]

VIII. NAME AND BRANDING – PARTNERS OF THE AMERICAS

Applicable to all

PARTNERS and the RECIPIENT shall use the PARTNERS name or marks only for activities authorized by PARTNERS in writing. All other uses will be deemed infringements of PARTNERS trademark including but not limited to all program related branding policies within PARTNERS.

[END OF PROVISION]

IX. OWNERSHIP OF WORK

Applicable to all unless otherwise specified in the agreement

PARTNERS shall, solely and exclusively, own all rights in and to any work created by the RECIPIENT in connection with this Agreement, including all data, documents, information, copyrights, patents, trademarks, trade secrets or other proprietary rights in and to the work. By entering into this Agreement, the RECIPIENT hereby expressly transfers all such rights to PARTNERS. Any work created by the RECIPIENT hereunder shall be a work for hire as

defined in United States Trademark Law. RECIPIENT will respect the confidentiality of materials provided to him/her throughout the course of this project and will return all property of PARTNERS upon completion of the program and take on all necessary actions to protect the interests of PARTNER's proprietary information.

[END OF PROVISION]

X. ALLOWABLE COSTS

Applicable to cost reimbursement contracts/agreements only

The recipient will be reimbursed for costs incurred in carrying out the purposes of this award in accordance with the terms of this award. It is the recipient's responsibility to ensure that costs incurred are (1) reasonable: costs which are generally recognized as ordinary and necessary and would be incurred by a prudent person in the conduct of normal business; (2) allocable: incurred specifically for this award; and (3) allowable: conform to any limitations in this award. Partners reserves the right to make a final determination on the allowability of costs.

[END OF PROVISION]

XI. UNALLOWABLE COSTS

Applicable to grantees

Means general or centralized expenses of Sub-grantee that are not allowable administrative costs to be financed by this Agreement. Applicable contracts/agreements only

- A. Alcoholic Beverages. Costs of alcoholic beverages
- B. Bad Debt. Bad debt, including losses (whether actual or estimated), due to uncollectible customer's accounts and other claims, related collection costs, and related legal costs, arising from other business of the Sub-grantee.
- C. Commissions and Contingency Fees. Commissions, percentages, brokerage, or contingency fees to persons or groups retained to solicit contracts unless the person or group is a bona fide commercial or selling agent maintained by Sub-grantee for the purpose of securing business.
- D. Compensation.
 - 1. Compensation which constitutes a distribution of profits, or

2. Bonuses and incentive compensation paid in stock outside of the Sub-grantee's normal compensation policy.
- E. Contribution (to other entities). Contributions and donations by Sub-grantee to others.
- F. Contingencies. Contributions to a contingency reserve or any similar provision made for events the occurrence of which cannot be foretold with certainty as to time, intensity, or with an assurance of their happening, are unallowable. The term “contingency reserve” excludes self-insurance reserves, pension funds, and reserves for normal severance pay.
- G. Cost of Asset Valuations Resulting from Business Combinations. When the purchase method of accounting for a business combination is used, allowable amortization, cost of money, and depreciation shall be limited to the total of the amounts that would have been allowed had the combination not taken place.
- H. Dividend Payments. This is a distribution of profit and is not allowed as a project expense.
- I. Fines and Penalties. Cost of fines and penalties resulting from violations of, or failure of the Sub-grantee to comply with, U.S. or host country laws and regulations.
- J. Goodwill. An unidentifiable intangible asset that originates under the purchase method of accounting for a business combination when the price paid by the acquiring company exceeds the sum of the identifiable individual assets acquired less liabilities assumed, based upon their fair values. The excess is commonly referred to as goodwill. Goodwill may arise from the acquisition of a company as a whole or a portion thereof. Any costs for amortization, expensing, write-off, or write-down of goodwill are unallowable.
- K. Interest and Other Financial Costs. Interest on borrowing (however represented), bond discounts, cost of financing and refinancing operations, legal and professional fees paid in connection with the preparation of a prospectus, costs of preparation and issuance of stock rights, and related financial charges, except for interest assessed by U.S. state or local taxing authorities other than those described in item H above.
- L. Lobbying Costs. Costs associated with the following activities with respect to the U.S. Government (USG) and any political subdivisions thereof, are unallowable:

1. Attempts to influence the outcomes of any election, referendum, initiative, or similar procedure, through in kind or cash contributions, endorsements, publicity, or similar activities;
2. Establishing, administering, contributing to, or paying the expenses of a political party, campaign, political action committee, or other organization established for the purpose of influencing the outcomes of elections;
3. Any attempt to influence (i) the introduction of legislation, or (ii) the enactment or modification of any pending legislation through communication with any member or employee of a legislature (including efforts to influence officials to engage in similar lobbying activity), or with any government official or employee in connection with a decision to sign or veto enrolled legislation;
4. Any attempt to influence (i) the introduction of legislation, or (ii) the enactment or modification of any pending legislation by preparing, distributing or using publicity or propaganda, or by urging members of the general public or any segment thereof to contribute to or participate in any mass demonstration, march, rally fund raising drive, lobbying campaign or letter writing or telephone campaign;
5. Legislative liaison activities, including attendance at legislative sessions or committee hearings, gathering information regarding legislation, and analyzing the effect of legislation, when such activities are carried on in support of or in knowing preparation for an effort to engage in unallowable activities; or
6. Attempts to improperly influence, either directly or indirectly, an employee or officer of the Executive branch of the Federal Government to give consideration to or act regarding a regulatory or contract matter.

The following activities are exempted from the above restrictions on allowability of lobbying costs:

- a) Providing a technical and factual presentation of information on a topic directly related to the performance of the Agreement through hearing testimony, statements or letters to a legislature, or subdivision, member, or cognizant staff member thereof, in response to a documented request (including a Congressional Record notice requesting testimony or statements for the record at a regularly scheduled hearing) made by the recipient member,

legislative body or subdivision, or a cognizant staff member thereof; provided such information is readily obtainable and can be readily put in deliverable form; and further provided that costs under this section for transportation, lodging or meals are unallowable unless incurred for the purpose of offering testimony at a regularly scheduled legislative hearing pursuant to a written request for such presentation made by the Chairman or Ranking Minority Member of the Committee or Subcommittee conducting such hearing.

- b) Any lobbying made unallowable by item 3 above of this subsection to influence state or local legislation in order to directly reduce Agreement cost, or to avoid material impairment of the Sub-grantee's authority to perform the contract.
- c) Any activity specifically authorized by USG statute to be undertaken with funds from the Agreement.

M. Losses on Disposition of Plant, Equipment, or Other Capital Assets. Losses of any nature arising from the sale or exchange of plant, equipment, or other capital assets, including sale or exchange of either short- or long-term investments.

N. Losses on Other Contracts. An excess of costs over income under any other contract (including the Sub-grantee's contributed portion under cost-sharing contracts).

O. Organization Costs. Expenditures in connection with planning or executing the organization or reorganization in the corporate structure of a business, including mergers and acquisitions, or raising capital. Such expenditures include, but are not limited to, incorporation fees and cost of attorneys, accountants, brokers, promoters and organizers, management consultants, and counselors, whether or not employees of the Sub-grantee.

P. Retainer Fees. Retainer fees not supported by evidence that specific bona fide services were furnished.

Q. Taxes.

1. Income and excess profit taxes paid by Sub-grantee to any sovereign governmental body.
2. Partners will not finance other identifiable taxes, fees, levies or impositions under the laws of the host country placed against a Sub-grantee (or any of its employees). However VAT taxes are allowable in the case that Sub-grantee is not tax exempt.

R. Travel Costs. First class air fare when less-than-first-class service is available and can meet the needs of the project, as detailed in the Agreement.

[END OF PROVISION]

XII. ACCOUNTING AND RECORDS

Applicable to all

The recipient must maintain financial records, supporting documents, statistical records and all other records, to support performance of, and charges to, this award. Such records must comply with accounting principles generally accepted in the U.S., the cooperating country, or by the International Accounting Standards Board (a subsidiary of the International Financial Reporting Standards Foundation). Accounting records and supporting documentation must, at a minimum, be adequate to show all costs incurred under this award; receipt and use of goods and services acquired under this award; the costs of the program supplied from other sources; and the overall progress of the program. Unless otherwise notified by Partners, the recipient records and subrecipient records that pertain to this award must be retained for a period of three years from the date of submission of the final expenditure report.

[END OF PROVISION]

XIII. RETENTION AND ACCESS REQUIREMENTS FOR RECORDS

Applicable to all

Partners authorized officials, the Donor, or any of their duly authorized representatives have the right of timely and unrestricted access to any books, documents, papers, or other records that are pertinent to the award, in order to make audits, examinations, excerpts, transcripts, and copies of such documents. This right also includes timely and reasonable access to personnel for the purpose of interview and discussion related to such documents. The rights of access in this paragraph are not limited to the required retention period, but must last as long as records are retained.

[END OF PROVISION]

XIV. SUBAWARDS AND CONTRACTS

Applicable to all

Subawardees and contractors have no relationship with the Donor under the terms of this award.

Notwithstanding any other term of this award, subawardees and contractors have no right to submit claims directly to the Donor and the Donor assumes no liability for any third party claims against the recipient.

[END OF PROVISION]

XV. AWARD TERMINATION AND SUSPENSION

Applicable to all

- A. The Donor or Partners may terminate this award at any time, in whole or in part, upon written notice to the other party. The termination notice must contain the reason(s) for the termination; the effective date; and, in the case of a partial termination, the portion to be terminated. If the termination is based on non-compliance, note that this termination decision may be considered in selection for future awards.
- B. In the event the recipient or any of its employees, subrecipients, or contractors are found to have been convicted of a narcotics offense or to have been engaged in drug trafficking as defined below, Partners reserves the right to terminate this award, in whole or in part, or take any other appropriate measures including, without limitation, refund or recall of any award amount. Additionally, the recipient must make a good-faith effort to maintain a drug-free workplace and Partners reserves the right to terminate or suspend this award if the recipient materially fails to do so.
- C. Termination and Suspension Procedures. Upon receipt of a termination or suspension notice from Partners as specified above, the recipient must take immediate action to minimize all expenditures and, in the event of termination, cancel all obligations financed by this award to the greatest extent possible. The recipient is not entitled to costs incurred after the effective date of termination unless prior approval is provided by Partners.
- D. Within 30 calendar days after the effective date of such termination, the recipient must repay Partners all unexpended Donor funds from this award as of the effective date of termination, which are not otherwise obligated by a non-cancelable legally binding transaction applicable to this award.
- E. The recipient must, to the greatest extent possible, include a provision in all subawards, including subawards and contracts, affording the recipient the right to terminate the

subaward in the event Partners or the Donor terminates this award, including the refund requirement in paragraph d.

[END OF PROVISION]

XVI. PARTNERS RULES FOR PROCUREMENT OF GOODS AND SERVICES

Applicable only when contract/agreement includes Procurement of Goods and Services

Recipient shall follow its policies on procurement of Goods and Services under this award. These must be in compliance with USG procurement procedures. RECIPIENT must provide a copy of their procurement policy upon request.

If RECIPIENT does not have procurement procedures in compliance with USG, follow the below:

Partners expects competition in all procurements of goods and services to the maximum extent practical. For transactions valued at \$10,000 USD or above, the Organization expects competition in the procurements of goods and services to the maximum extent practical. The Organization requires that an appropriate competitive process be utilized and fully documented (e.g., market research for commodities/off-the shelf items; three quotes for lower expected values; full and open competition/tender for higher expected values, etc.). At a minimum, for a proper procurement transaction at \$10,000 or above, Partners requires:

1. Specifications, scope of work or technical requirements for the goods or services to be purchased.
2. A defined criterion for selecting a good or service provider (e.g., price, capacity to deliver on time, quality of output, past performance where applicable, etc.).
3. Approval from the donor to make the purchase when required.
4. Solicitations of three (3) quotes or request for proposals from a pool of qualified providers or candidates.
 - a. In the absence of three submitted quotes or proposals, then a clear documented memo for justification demonstrating that efforts were taken to obtain three quotes or proposals must be prepared and submitted as part of the procurement documentation.

5. A memo that clearly documents the approved bid/proposal and analysis that documents the “procurement story” behind how the preferred supplier was selected and how the evaluation criteria were utilized.

Ineligible Suppliers are any firms or individuals that do not comply with the requirements in “Debarment and Suspension” and “Preventing Terrorist Financing” must not be used to provide any commodities or services funded under this award.

[END OF PROVISION]

XVII. RECIPIENT AND EMPLOYEE CONDUCT

Applicable to all sub-awards

The recipient must have written policies and procedures in place to prevent personal conflicts of interest and to prevent its officers, employees, or agents from using their positions for personal gain or presenting the appearance of a personal conflict of interest. A personal conflict of interest is a situation in which an officer, employee, or agent of the recipient has a financial interest, personal activity or relationship that could impair the employee’s ability to act impartially when performing under the award. The recipient’s written policy must be provided upon request.

The recipient or any member of an employee’s immediate family cannot receive a sub-award, or have a financial or other interest in the entity selected for a sub-award without disclosing the conflict and following the recipient’s written policies and procedures for mitigating the conflict. In addition, the officers, employees, and agents of the recipient must neither solicit nor accept gratuities, favors, or anything of monetary value from sub-recipients or prospective sub-recipients. Any outside business dealings of the recipient’s employees must be legal and not conflict in any manner with this award. Outside business dealings include, but are not limited to, any investments, loans, employment, or business ownership by the recipient’s employees, other than work to be performed under this award.

In the event the conduct of any recipient employee is not in accordance with this provision or this award, the recipient must coordinate with Partners to resolve the situation with regard to such employee including, if necessary, termination of the employee.

[END OF PROVISION]

XVIII. DEBARMENT AND SUSPENSION

Applicable to all

The recipient must not transact or conduct business under this award with any individual or entity that has an active exclusion on the System for Award Management (SAM) (www.sam.gov). The list contains those individuals and entities that the U.S. Government has suspended or debarred based on misconduct or a determination by the U.S. Government that the person or entity cannot be trusted to safeguard funds. If the recipient has any questions about listings in the system, these must be directed to Partners.

Partners may disallow costs, annul or terminate the transaction, debar or suspend the recipient, or take other remedies as appropriate, if the recipient violates this provision. Although doing so is not automatic, Partners may terminate this award if a recipient or any of its principals meet any of the conditions listed below. If such a situation arises, Partners will consider the totality of circumstances—including the recipient's response to the situation and any additional information submitted—when Partners determines its response.

The recipient must notify Partners immediately upon learning that it or any of its principals, at any time prior to or during the duration of this award:

- (1) Are presently excluded or disqualified from doing business with the U.S.;
- (2) Have been convicted or found liable within the preceding three years for committing any offense indicating a lack of business integrity or business honesty such as fraud, embezzlement, theft, forgery, bribery or lying;
- (3) Are presently indicted for or otherwise criminally or civilly charged by any governmental entity for any of the offenses; or
- (4) Have had one or more agreements terminated for cause or default within the preceding three years.

Principal means—

- (1) An officer, director, owner, partner, principal investigator, or other person within a participant with management or supervisory responsibilities related to a covered transaction; or
- (2) A recipient or other person, whether or not employed by the participant or paid with Donor funds, who—
 - (i) Is in a position to handle funds;
 - (ii) Is in a position to influence or control the use of those funds;

or,

- (iii) Occupies a technical or professional position capable of substantially influencing the development or outcome of an activity required to perform the covered transaction.

[END OF PROVISION]

XIX. PREVENTING TERRORISM FINANCING

Applicable to all

The recipient must not engage in transactions with, or provide resources or support to, individuals and organizations associated with terrorism including those individuals or entities that appear on the Specially Designated Nationals and Blocked Persons List maintained by the U.S. Treasury (online at: <http://www.treasury.gov/resource-center/sanctions/SDN-List/Pages/default.aspx>) or the United Nations Security designation list (online at: http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml).

[END OF PROVISION]

XX. TRAFFICKING IN PERSONS

Applicable to all unless otherwise further defined below

The recipient, subawardee, or contractor, at any tier, or their employees, labor recruiters, brokers or other agents, must not engage in:

- A. Trafficking in persons (as defined in the Protocol to Prevent, Suppress, and Punish Trafficking in Persons, especially Women and Children, supplementing the UN Convention against Transnational Organized Crime) during the period of this award;
- B. Procurement of a commercial sex act during the period of this award;
- C. Use of forced labor in the performance of this award;
- D. Acts that directly support or advance trafficking in persons, including the following acts:
 - 1. Destroying, concealing, confiscating, or otherwise denying an employee access to that employee's identity or immigration documents;
 - 2. Failing to provide return transportation or pay for return transportation costs to an employee from a country outside the United States to the country from which the

employee was recruited upon the end of employment if requested by the employee, unless:

- a. the employee is a victim of human trafficking seeking victim services or legal redress in the country of employment or a witness in a human trafficking enforcement action;
- E. Soliciting a person for the purpose of employment, or offering employment, by means of materially false or fraudulent pretenses, representations, or promises regarding that employment;
- F. Charging employees recruitment fees; or
- G. Providing or arranging housing that fails to meet the host country housing and safety standards.

In the event of a violation of this provision, Partners is authorized to terminate this award, without penalty, and is also authorized to pursue any other remedial actions as necessary.

Definitions

A. For purposes of this award term:

- 1. “Employee” means either:
 - a. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
 - b. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
- B. “Forced labor” means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

[END OF PROVISION]

XXI. AWARDS TO FAITH BASED AND COMMUNITY ORGANIZATIONS

Applicable to all sub-awardees

Accordingly, in providing services supported in whole or in part by this agreement or in its outreach activities related to such services, the entity may not discriminate against current or prospective program beneficiaries on the basis of religion, a religious belief, a refusal to hold a religious belief, or a refusal to attend or participate in a religious practice. If the entity makes sub-awards under this agreement, faith-based organizations should be eligible to participate on the same basis as other organizations, and should not be discriminated against on the basis of their religious character or affiliation.

The entity must ensure that its personnel take into account in their work the considerations reflected in the International Religious Freedom Act concerning country-specific conditions, the right to freedom of religion, methods of religious persecution practiced in foreign countries, and applicable distinctions within a country between the nature of and treatment of various religious practices and believer.

[END OF PROVISION]

XXII. NONDISCRIMINATION

Applicable to all

No one shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination on the basis of race, color, national origin, age, disability, or sex under any program or activity funded by this award.

Additionally, Partners is committed to achieving and maintaining a diverse and representative workforce and a workplace free of discrimination. Partners prohibits discrimination, including harassment, in its own workplace on the basis of race, color, religion, sex (including pregnancy and gender identity), national origin, disability, age, veteran's status, sexual orientation, genetic information, marital status, parental status, political affiliation, and any other conduct that does not adversely affect the performance of the employee. In addition, Partners strongly encourages its grantees and their subrecipients and vendors (at all tiers), performing both in the U.S. and overseas, to develop and enforce comprehensive nondiscrimination policies for their workplaces that include protection for all their employees on these expanded bases, subject to applicable law.

Furthermore Partners requires that the recipient not discriminate against any beneficiaries in implementation of this award, such as, but not limited to, by withholding, adversely impacting, or denying equitable access to the benefits provided through this award on the basis of any factor not expressly stated in the award. This includes, for example, race, color, religion, sex (including gender identity, sexual orientation, and pregnancy), national origin,

disability, age, genetic information, marital status, parental status, political affiliation, or veteran's status. Nothing in this provision is intended to limit the ability of the recipient to target activities toward the assistance needs of certain populations as defined in the award.

[END OF PROVISION]

XXIII. PILOT PROGRAM FOR ENHANCEMENT OF GRANTEE EMPLOYEE WHISTLEBLOWER PROTECTIONS

Applicable to all

Partners states that an employee of a Grantee may not be discharged, demoted, or otherwise discriminated against as a reprisal for "whistleblowing." In addition, whistleblower protections cannot be waived by any agreement, policy, form, or condition of employment.

Whistleblowing is defined as making a disclosure "that the employee reasonably believes" is evidence of any of the following:

- Gross mismanagement of a funds;
- A gross waste of funds;
- An abuse of authority relating to a contract or grant;
- A substantial and specific danger to public health or safety; or
- A violation of law, rule, or regulation related to a contract or grant

Any concerns should be directed to Partners or the appropriate legal authority.

[END OF PROVISION]

XXIV. CONFIDENTIALITY AGREEMENTS OR STATEMENT

Applicable to all

Confidential information, as used in this Provision, means:

- Information or data of a personal nature about an individual that, if released, would constitute a clearly unwarranted invasion of personal privacy.

In addition to the types of confidential information described above, information which might require special consideration with regard to the timing of its disclosure may derive from studies or research, during which public disclosure of preliminary invalidated findings could create erroneous conclusions, which might threaten public health or safety if acted upon.

“Internal confidentiality agreement or statement” means a confidentiality agreement or any other written statement that the recipient requires any of its employees or subrecipients to sign regarding nondisclosure of recipient information, except that it does not include confidentiality agreements arising out of civil litigation or confidentiality agreements that recipient employees or subrecipients sign.

The recipient must not require its employees, subrecipients, or contractors to sign or comply with internal confidentiality agreements or statements that prohibit or otherwise restrict employees, subrecipients, or contractors from lawfully reporting waste, fraud, or abuse related to the performance of an award to Partners.

The recipient must notify current employees and subrecipients that prohibitions and restrictions of any preexisting internal confidentiality agreements or, to the extent that such prohibitions and restrictions are inconsistent with the prohibitions of this provision, are no longer in effect.

[END OF PROVISION]

XXV. CHILD SAFEGUARDING

Applicable if contract/agreement may engage children

Because the activities to be funded under this award may involve children, or personnel engaged in the implementation of the award may come into contact with children, these activities could raise the risk of child abuse, exploitation, or neglect within Donor programs. The organization agrees to abide by the following child safeguarding core principles:

- A. Ensure compliance with host country and local child welfare and protection legislation or international standards, whichever gives greater protection, and with U.S. law where applicable;
- B. Prohibit all personnel from engaging in child abuse, exploitation, or neglect;
- C. Consider child safeguarding in project planning and implementation to determine potential risks to children that are associated with project activities and operations;
- D. Apply measures to reduce the risk of child abuse, exploitation, or neglect, including, but not limited to, limiting unsupervised interactions with children; prohibiting exposure to pornography; and complying with applicable laws, regulations, or customs regarding the photographing, filming, or other image- generating activities of children;

- E. Promote child-safe screening procedures for personnel, particularly personnel whose work brings them in direct contact with children; and
- F. Have a procedure for ensuring that personnel and others recognize child abuse, exploitation, or neglect; mandating that personnel and others report allegations; investigating and managing allegations; and taking appropriate action in response to such allegations, including, but not limited to, dismissal of personnel.

The following definitions apply for purposes of this provision:

- A. Child: A child or children are defined as persons who have not attained 18 years of age.
- B. Child abuse, exploitation, or neglect: Constitutes any form of physical abuse; emotional ill-treatment; sexual abuse; neglect or insufficient supervision; trafficking; or commercial, transactional, labor, or other exploitation resulting in actual or potential harm to the child's health, well-being, survival, development, or dignity. It includes, but is not limited to: any act or failure to act which results in death, serious physical or emotional harm to a child, or an act or failure to act which presents an imminent risk of serious harm to a child.
- C. Physical abuse: Constitutes acts or failures to act resulting in injury (not necessarily visible), unnecessary or unjustified pain or suffering without causing injury, harm or risk of harm to a child's health or welfare, or death. Such acts may include, but are not limited to: punching, beating, kicking, biting, shaking, throwing, stabbing, choking, or hitting (regardless of object used), or burning. These acts are considered abuse regardless of whether they were intended to hurt the child.
- D. Sexual Abuse: Constitutes fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials.
- E. Emotional abuse or ill treatment: Constitutes injury to the psychological capacity or emotional stability of the child caused by acts, threats of acts, or coercive tactics. Emotional abuse may include, but is not limited to: humiliation, control, isolation, withholding of information, or any other deliberate activity that makes the child feel diminished or embarrassed.

F. Exploitation: Constitutes the abuse of a child where some form of remuneration is involved or whereby the perpetrators benefit in some manner. Exploitation represents a form of coercion and violence that is detrimental to the child's physical or mental health, development, education, or well-being.

G. Neglect: Constitutes failure to provide for a child's basic needs.

[END OF PROVISION]

XXVI. PROHIBITION ON ABORTION RELATED ACTIVITIES

Applicable to all

The Recipient agrees that none of the funds provided by this award shall be used to issue grant funds to lobby for or against abortion. The recipient agrees that none of the funds provided by this award shall be used to pay for the performance of abortion as a method of family planning or to motivate or coerce any person to practice abortions.

[END OF PROVISION]

XXVII. PROHIBITION OF ASSISTANCE TO DRUG TRAFFICKERS

Applicable to all

Partners reserves the right to terminate assistance to, or take other appropriate measures with respect to, any participant who is found to have been convicted of a narcotics offense or to have been engaged in drug trafficking.

[END OF PROVISION]

XXVIII. PROHIBITION ON THE USE OF ANTI-TRAFFICKING FUNDS TO PROMOTE, SUPPORT, OR ADVOCATE FOR THE LEGALIZATION OR PRACTICE OF PROSTITUTION

Applicable to all

“Severe forms of trafficking in persons” means

- A. sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; or

- B. the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

None of the funds made available under this award may be used to promote, support, or advocate the legalization or practice of prostitution. However, this prohibition does not preclude assistance designed to ameliorate the suffering of, or health risks to, victims while they are being trafficked or after they are out of the situation that resulted in such victims being trafficked.

[END OF PROVISION]

XXIX. COMPLIANCE WITH REGULATIONS.

Applicable for all USG funding

The Sub-grantee shall comply with all laws, rules, procedures and regulations concerning U.S. Government grants and Prime Awards as they may apply to this Agreement, including but not limited to, [2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards](#) (also known as Unified Guidance on Grants and Agreements); 2 CFR Part 200 Subpart E - Cost Principles; and applicable to USG standard provision with the corresponding federal agency.

[END OF PROVISION]

XXX. REMEDIES FOR NONCOMPLIANCE.

If a Sub-grantee fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award (see 2 CFR 200 Uniform Guidelines:

<https://www.gpo.gov/fdsys/granule/CFR-2014-title2-vol1/CFR-2014-title2-vol1-part200/content-detail.html>), the Federal awarding agency or pass-through entity may impose additional conditions, as described in 2 CFR 200.207: https://www.ecfr.gov/cgi-bin/text-idx?node=se2.1.200_1207&rgn=div8 Specific conditions. If the Federal awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances:

- A. Temporarily withhold cash payments pending correction of the deficiency by the Sub-grantee or more severe enforcement action by the Federal awarding agency or pass-through entity.
- B. Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.

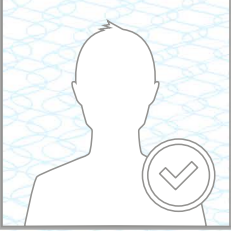

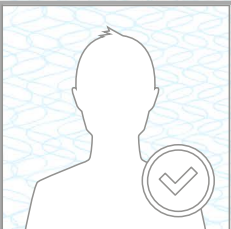

- C. Wholly or partly suspend or terminate the Sub-grantee award.
- D. Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).
- E. Withhold further Sub-grantee awards for the project or program.
- F. Take other remedies that may be legally available.

[END OF PROVISION]

Signature Certificate

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