

Hector Rosario, Ph.D.

EDUCATION

Columbia University

June 2001/May 2003

New York, NY

- *Ph.D. and M.Phil. in mathematics education*
- Dissertation: *Steganography: Historical Development and Applications at the Undergraduate Level*

Dartmouth College

September 1999/June 2001

Hanover, NH

- Two years of doctoral studies in mathematics

Columbia University, Teachers College

September 1997/May 1999

New York, NY

- *M.A. in mathematics education*

University of Puerto Rico

August 1993/June 1997

Río Piedras, PR

- *B.S. in general science with 48 credits in mathematics and 24 credits in physics*

United States Air Force Academy

June 1992/April 1993

Colorado Springs, CO

- Honorably discharged

SELECTED APPOINTMENTS

Julia Robinson Mathematics Festival – Social and Environmental Entrepreneurs

Calabasas, CA

Director of Outreach and Festivals (March 2020 – Present)

Director of Festivals (June 2018 – March 2020)

- Create, develop, and maintain [Webinars on Request](#) for teachers and their students
- Create, develop, and maintain the [JRMF Webinar Series](#) in English and Spanish
- Create and develop the [JRMF Problem Incubator Series](#)
- Oversee in-person Festivals organized by local hosts around the world
- Coordinate participation at national and international conferences
- Forge international and national partnerships
- Curate educational materials in English and translate them into Spanish
- Lead facilitator training sessions in English and Spanish
- Oversee more than 100 festivals per year across the world
- Oversee website development and content

University of Florida, Department of Mathematics

Gainesville, FL

Courtesy Professor (October 2019 – Present)

- Coordinate outreach activities

University of Puerto Rico, Department of Mathematical Sciences

Mayagüez, PR

Professor (July 2012 – June 2015)

Associate Professor (July 2007 – June 2012)

Assistant Professor (July 2003 – June 2007)

- Taught Precalculus, Single- and Multi-variable Calculus, Calculus for Biology majors, Calculus for Business Administration majors
- Developed and taught Mathematical Logic, History of Mathematics, Mathematical Reasoning, and Seminars on Mathematics Education as part of a teacher training program
- Organized and hosted [Circle on the Road 2013](#), March 8-10, 2013
 - Included a [Julia Robinson Mathematics Festival](#) on March 9, 2013

AWARDS

- [Rosenthal Prize for Innovation and Inspiration in Math Teaching](#) (February 2019)
 - Awarded by the National Museum of Mathematics (MoMath) “to recognize and promote hands-on math teaching in the upper elementary and middle school classrooms.”
 - First runner-up (\$5,000)
- Gwinnett Alliance for Gifted Education [Hughes Award](#) (April 2018)
 - Given to any individual, club, business, corporation, or civic group who made an outstanding contribution to Gwinnett County Public Schools’ gifted program.
- Rookie of the Month, South Gwinnett High School (September 2017)
- National Dean’s List (2001-2002; 1994-1995)
- Eugene W. Hellmich Mathematics Fellowship (2001)
- New England Board of Higher Education Doctoral Scholarship (1999-2001)
- Prop and Wings Insignia, United States Air Force Academy (1993)
- National Defense Service Medal (1992)

OTHER APPOINTMENTS**Bhaktivedanta Academy**

Alachua, FL

Teacher of Mathematics (August 2019 – July 2020)

- Teach Algebra I and Algebra 2

Alachua Learning Academy

Alachua, FL

Teacher of Mathematics (August 2019 – July 2020)

- Teach Pre-Algebra

South Gwinnett High School in Gwinnett County Public Schools

Snellville, GA

Teacher of Mathematics (July 2017 – May 2019)

- Rookie of the Month – Given to a teacher who has been nominated and elected by peers (September 2017)
- Taught AP Calculus AB and Precalculus
- Organized Celebration of Mind for K-12 students in the South Gwinnett cluster
- [Khan Academy Ambassador 2018-2019](#)

University of North Carolina

Chapel Hill, NC

Visiting Lecturer (November 2016 – June 2017)

- Contracted by the William and Ida Friday Center’s [Correctional Education Program](#) with the approval of the Department of Mathematics
- Taught Math 110 (Algebra) at Polk Correctional Institution and Orange Correctional Center
- Taught Math 058 (Math, Art, and the Human Experience) at Johnston Correctional Institution

Mathnasium of Chapel Hill

Chapel Hill, NC

Center Director (January 2016 – December 2016)

- Managed daily operations
- Supervised and trained 13 instructors
- Made hiring decisions
- Created and updated individualized learning plans for more than 100 students
- Coordinated the logistics of the center’s move from Durham to Chapel Hill

North Carolina School of Science and Mathematics

Durham, NC

Instructor of Mathematics (August 2015 – June 2016)

- Taught AP Calculus AB, Finite Applied Math, and Math 1
- Created online platform [Math 1 Resources](#) with guiding questions and videos
- Created [problem-solving](#) video series for NCSSM’s YouTube channel

Universidad Pedagógica Nacional Francisco Morazán

Tegucigalpa, HONDURAS

Visiting Professor to the Graduate Program in Mathematics Education (December 2007)

- Offered guidance for new graduate program in mathematics education
- Taught a graduate course on problem solving for in-service teachers

Columbia University

Adjunct Instructor at the School of General Studies (January – May 2003)

- Taught College Algebra

Adjunct Instructor at Teachers College (March 2003)

- Led and taught a study tour of 13 graduate students to Puerto Rico

The City College of the City University of New York

New York, NY

Instructor (September 2001 – May 2002)

- Trained teachers of the second cohort of New York Teaching Fellows
- Taught graduate courses on methodologies and textbook writing in the School of Education
- Taught Vector Calculus with Linear Algebra in the Department of Mathematics

Department of Education of the City of New York, Martin Luther King, Jr. High School

New York, NY

Teacher of Mathematics (September 1997 – August 1999)

- Taught Integrated Math 1 and 2 in English and Spanish
- Taught Introductory Law in Spanish

SELECTED PUBLICATIONS

BOOKS

- [*Mathematical Outreach: Explorations in Social Justice around the Globe*](#). (2019). Hector Rosario (Ed.). World Scientific Publishing, Singapore
- [*Math Makes Sense! A Constructivist Approach to the Teaching and Learning of Mathematics*](#). (2016). Ana H. Quintero and Héctor Rosario. Imperial College Press, London
- [*Mathematics and Its Teaching in the Southern Americas*](#) – with an introduction by Ubiratan D'Ambrosio. (2015). Héctor Rosario, Patrick Scott, & Bruce Vogeli (Eds.). World Scientific Publishing, Singapore

BOOK CHAPTERS

- Rosario, H. (2018). Kurt Gödel's Mathematical and Scientific Perspective of the Divine: A Rational Theology. In [*Mathematics & Reality*](#). Kolkata, India: The Bhaktivedanta Institute (reprint)
- Rosario, H. (2015). Egalitarian Circles: From Gifted Programs to the General Classroom. In *In Honor of Professor Bruce Ramon Vogeli: Scholarship & Leadership in Mathematics Education*. Bedford, MA: COMAP
- Rosario, H., McGee, D., López, J., Quintero, A. H., & Hernández, O. (2015). Puerto Rico: The Forging of a National Identity in Mathematics Education. In *Mathematics and Its Teaching in the Southern Americas*. Singapore, Singapore: World Scientific Publishing
- Rosario, H. (2007). Kurt Gödel. In *Perennial Psychology: A Manual on OIDA Therapy*. Miami, FL: The Vrindavan Institute for Vaishnava Culture and Studies

ARTICLES

- Pedagogical Notes on Problem Solving, [National Association for Gifted Children - Creativity Network Newsletter](#), Fall 2017
- *Making Maths Make Sense*, Issue 6, Volume 3, [Creative Teaching & Learning](#), July 2016 (with Ana H. Quintero)
- *Epistemology of the Exact Science(s): Mathematical Knowledge vis-à-vis Spiritual Knowledge*, [Dialogue & Alliance](#), Inter Religious Federation for World Peace, Vol. 22, No. 1, Spring/Summer 2008
- *A Critique of Monetary Educational Incentives for Elementary and Middle School Students in New York City Public Schools*, with Jonathan Farley, [Teachers College Record](#): The Voice of Scholarship in Education, May 15, 2008
- *Kurt Gödel's Mathematical and Scientific Perspective of the Divine: A Rational Theology*, [The Digest](#), Volume 7 Issue 2, Metanexus Institute, February 2007
- [Simmons' Subliminal Channel](#), [The College Mathematics Journal](#), 35:3, May 2004

NEWSPAPER ARTICLES ABOUT MY WORK

- [*The Math Circle is Back*](#) in Chapel Hill News, H. Rosario, November 9, 2016
- [*What the World Can Learn from Latin America*](#) in the Huffington Post, C.W. Rubin, October 12, 2014
- [*What Do Finland and Puerto Rico Have in Common?*](#) in the Huffington Post, C.W. Rubin, November 14, 2014
- [*Mujeres Boricuas al Frente en Ciencias y Matemáticas*](#) in El Nuevo Día, José A. Delgado, December 2, 2014

CONFERENCE PAPERS

- *Celebration of Mind*, Georgia Association for Gifted Children 38th Annual Convention, UGA Hotel and Conference Center, Athens, Georgia, March 5, 2018
- Keynote Lecture: *Emulating Hilbert and Schrödinger: Three Problems for the 21st Century*, [8th All India Students' Conference on Science and the Spiritual Quest](#), Varanasi, INDIA, February 1, 2014
- Keynote Lecture: *Círculos Matemáticos*, Primer Coloquio sobre Matemática Educativa y Aplicaciones "Maestro Remigio Valdés Gámez," Universidad Autónoma de Coahuila, Saltillo, MEXICO, January 27, 2014
- *Puerto Rico Math Circle: Explorations in Gifted Education*, International Symposium on the Education of Mathematically Talented Students, Future Road Teachers College, Shanghai, CHINA, July 17, 2013
- *From Math Circles to Math Classrooms: An Egalitarian Approach*, SIDIM XXVIII, Universidad Metropolitana, San Juan, PUERTO RICO, March 1, 2013
- Keynote Lecture: *Epistemology of the Exact Science(s): Mathematical Knowledge vis-à-vis Spiritual Knowledge*, [4th All India Students' Conference on Science and the Spiritual Quest](#), Tiruchirappalli, Tamil Nadu, INDIA, December 27-29, 2008
- [*Mathematical Minds in Action: Identifying and Nurturing Talent*](#), 11th International Conference on Mathematical Education (ICME 11), Monterrey, MEXICO, July 6-13, 2008
- [*Puzzles and Proofs: From Informal to Formal Arguments*](#), 11th International Conference on Mathematical Education (ICME 11), Monterrey, MEXICO, July 6-13, 2008
- *Vaishnava Ontological Argument*, [3rd All India Students' Conference on Science and the Spiritual Quest](#), Tirupati, INDIA, December 22-23, 2007
- *Toward a New Ontological Argument: The Existence of the Soul vis-à-vis The Existence of God*, Conference on the Convergence of Science and Spirituality, Iliff School of Theology, Denver, Colorado, USA, September 29, 2007
- *Kurt Gödel's Mathematical Perspective of the Divine: A Rational Theology*, [2nd All India Students' Conference on Science and the Spiritual Quest](#), Puri, INDIA, December 9-10, 2006

OUTREACH and SERVICE TO THE PROFESSION

- UF Math Circle, *Co-Founder* (January 2020–May 2020)
- Alachua Math Circle, *Founder*, (October 2019–May 2020)
- [Gathering for Gardner](#) (G4G14), *Youth Initiative Coordinator* (October 2019–April 2020)
- [Orlando Math Circle](#), *Advisory Board Member* (May 2019–Present)
- [Mathapalooza!](#) at the Atlanta Science Festival, *Co-organizer* (March 9, 2019)
- [Mensa International](#)'s Gifted Youth Committee, Member (October 2018–September 2020)
 - *Co-Organizer*, [IBD 2019 Youth Festival](#), Kuala Lumpur, MALAYSIA, October 12-13, 2019
- [Mensa in Georgia](#), *Gifted Youth Coordinator* (December 2017–June 2019)
 - Monthly meetings for 10-30 children
- [Julia Robinson Mathematics Festival](#)
 - *Ambassador for Atlanta* (April 2018 – May 2019)
 - *Organizer*, hosted by the Department of Mathematics and Computer Science at Emory University (April 10, 2018)

- *Co-Organizer*, hosted by the Department of Mathematics at the University of North Carolina at Chapel Hill (April 29, 2017; May 21, 2016)
- *Organizer*, hosted by the Department of Mathematical Sciences at the University of Puerto Rico, Mayagüez Campus (March 9, 2013)
- [Innovative Mathematical Outreach in Alternative Settings](#), *Co-Organizer*
 - Contributed Papers Session at the Joint Mathematics Meetings 2018 in San Diego (January 11, 2018)
- [Celebration of Mind](#), *Organizer*
 - Lawrenceville Branch of the Gwinnett County Public Library (October 21, 2017)
 - South Gwinnett High School (December 12, 2017)
- [Triangle Math Teachers' Circle](#), *Founding Director*
 - Hosted by the Department of Mathematics at North Carolina State University and funded by the American Institute of Mathematics (October 2016 – May 2017)
 - \$5,000 grant
- [Chapel Hill Math Circle](#), *Co-Founding Director*
 - Hosted by the Department of Mathematics at the University of North Carolina at Chapel Hill (January 2016 – May 2017)
- Southern Mississippi Preparatory Academy, *Chair of Board of Directors* and *K-3 Mathematics Teacher*
 - 2013-2014
- [Puerto Rico Math Circle](#), *Founding Director*
 - 2012-2013
- [Circle on the Road 2013](#), *Organizer*
 - Hosted by the Department of Mathematical Sciences at the University of Puerto Rico, Mayagüez Campus (March 8-10, 2013)
 - ~\$65,000 grant (NSA, NSF, MSRI)

SELECTED PRESENTATIONS and WORKSHOPS

- *Ontological and Cosmological Arguments in the Realm of Mathematical* (Zoom meeting), Center for Foundations of Science and Consciousness, [Bhaktivedanta Institute Bhubaneswar](#), September 26, 2020
- [Mathematical Outreach](#) (Zoom meeting on YouTube), [Talk Math with Your Friends](#), University of South Alabama, July 30, 2020
- *JRMF Maze Mats*, Orlando Math Teachers' Circle, Rollins College, February 1, 2020
- *Frogs and Toads and JRMF*, Orlando Math Teachers' Circle, Rollins College, August 17, 2019
- *Fold and Cut Challenge*, [MOVES 2019](#), CUNY Graduate Center, August 6, 2019
- *Problem Solving and JRMF*, Mathus Academy, August 12, 2018
- *Squares Galore*, Intown Atlanta Math Teachers' Circle, Emory University, June 5, 2018
- *Conjecture and Proof: Nurturing Creativity in the K-12 Classroom*, Triangle Math Teachers' Circle, North Carolina State University, February 10, 2018
- *Problem-Solving the Math Circle Way*, workshop for graduate students and faculty, Florida State University, December 14, 2016
- *Frogs and Toads*, workshop for elementary and middle school students from the Tallahassee Math Circle, Calvary Orthodox Presbyterian Church, December 13, 2016
- *Mathematics and Its Teaching in the Muslim World*, Panelist, Teachers College – Columbia University, October 10, 2016
- *Do You Think Like a Mathematician?*, Hispanic Educational Summit, North Carolina State University, March 11, 2016
- *Mathematics and Its Teaching in the Southern Americas*, book presentation, University of Puerto Rico, Río Piedras Campus, April 15, 2015
- *Mathematics and Its Teaching in the Southern Americas*, book presentation, University of Puerto Rico, Carolina Campus, November 7, 2014

- *Mathematics and Its Teaching in the Southern Americas*, book presentation, University of Puerto Rico, Mayagüez Campus, November 4, 2014
- *The Decades Ahead*, Columbus Day Symposium: Mathematics Education in Latin America, Teachers College - Columbia University, New York, October 13, 2014
- *Math Circles Workshops*, Primer Coloquio sobre Matemática Educativa y Aplicaciones “Maestro Remigio Valdés Gámez,” Universidad Autónoma de Coahuila, Saltillo, MEXICO, January 27-28, 2014
- *Mathematics and Spirituality*, Center for Interdisciplinary Mathematical Sciences, Benares Hindu University, Varanasi, INDIA, February 4, 2014
- *Mathematical Puzzles: An Egalitarian Approach*, City College, City University of New York, May 22, 2012
- *Mathematical Puzzles: Liberating Remedial Instruction*, John Jay College of Criminal Justice, City University of New York, March 13, 2012
- *The History of Mathematics as a Didactic Tool*, UPR at Mayagüez, October 18, 2003
- *Special Secondary Schools: An International Panorama*, UPR at Mayagüez, September 25, 2003
- *Beautiful Minds Need Able Beholders – Preparing Middle School Teachers to Identify and Nurture Mathematical Talent*, City College, City University of New York, February 12, 2002

PROFESSIONAL AFFILIATIONS

- Gwinnett Alliance for Gifted Education
 - [Board Member: High School Representative \(2017-2019\)](#)
- Kappa Delta Pi, International Honor Society in Education
- Inter-American Committee of Mathematics Education (CIAEM)
 - Representative for Puerto Rico (2013-2017)
- Mathematical Association of America
 - Member of the Centennial History Subcommittee of the Centennial Planning Committee, chaired by Victor Katz (2010-2015)
- National Association for Gifted Children
- National Association of Math Circles
 - Advisory Committee Member (2012-2015)
- National Council of Teachers of Mathematics
- Red de Educación Matemática de América Central y el Caribe (REDUMATE)
 - International Advisory Board Member and Representative for Puerto Rico (2013-2017)

REFEREEING

- *Revista Educación Matemática* (2014-2018)
- *Mathematics Teacher*, NCTM (2008-2015)
- *XIV CIAEM 2015* (2014-2015)
- Consejo de Educación de Puerto Rico (2012)

LANGUAGES

- Speak, read, and write **Spanish** and **English** with native fluency.