

I. PERSONAL INFORMATION

Wilson J. González-Espada
Department of Mathematics and Physics
College of Science, Morehead State University
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II. EDUCATION

Ph.D., Science Education, The University of Georgia, Athens, GA, May 2001

M.A., Science Education, Interamerican University of Puerto Rico, San Germán, PR, May 1997

B.A., Secondary Education-Physics, University of Puerto Rico, Río Piedras, PR, May 1993

III. ACADEMIC POSITIONS

Associate Professor of Physics and Science Education, 2008-present.

College of Science, Morehead State University, Morehead, KY

- SCI 103, Introduction to Physical Science
- SCI 104, Modern Issues and Problems in the Physical Sciences
- SCI 111, Inquiry Physical Science for Elementary Teachers
- SCI 490, Science for the Elementary Teacher
- SCI 491/691, Science for the Middle School Teacher
- PHYS 109, A History of the Universe
- PHYS 201, Elementary Physics I

Associate Professor of Physical Science/Science Education, 2007-2008.

School of Physical and Life Science, Arkansas Tech University, Russellville, AR

Assistant Professor of Physical Science/Science Education, 2001-2007.

School of Physical and Life Science, Arkansas Tech University, Russellville, AR

- PHSC 1013, Introduction to Physical Science, Lecture
- PHSC 1021, Introduction to Physical Science, Lab
- PHYS 1114, Applied Physics Lecture and Lab
- PHYS 2014-2024, Physical Principles I and II
- PHSC 3213, Science in Elementary and Middle School Education
- PHSC 4701, Special Methods in Physical Science Education
- PHYS 4992, Special Problems in Physics: Guided Experiences in Physics Instruction
- PHSC 4883, Multicultural Science and Math Education
- NUR 4992, Differential Healthcare Issues: Hispanics in Arkansas

Instructor of Physics and Mathematics, 1996-1998

Department of Physics and Mathematics, Instituto Tecnológico de Puerto Rico, Ponce, PR

- FISI 1105-1205, Applied Physics I and II
- MATE 1111-1112, Technical Mathematics I and II

Physics and Chemistry Teacher, 1994-1995

Notre Dame High School, Caguas, PR

Geometry and Algebra Teacher, 1993

Notre Dame High School, Caguas, PR

IV. PROFESSIONAL EXPERIENCE

- 2015 **Physics Science Test Item Writer**, Measured Progress, Dover, NH.
- 2014-17 **Grant Program Evaluator**, Cybernetic Girls can be Pinky, Teaching to Increase Diversity and Equity in STEM (TIDES), Project Kaleidoscope, American Association of Colleges and Universities, University of PR Humacao Campus.
- 2012-13 **Pre-College Summer Science Research Coordinator**, Morehead State University/Universidad Metropolitana/NSF partnership (12 student-researchers).
- 2010 **Program Evaluator**, Peer Mentoring and Undergraduate Research, Space Science Program, Morehead State University, Morehead KY.
- 2009 **Program Evaluator**, Undergraduate Fellowship Program, Morehead State University, Morehead, KY.
- 2009-12 **Physics Science Test Item Writer**, Measured Progress, Dover, NH.
- 2008-13 **Fairness issues consultant** (science test passages and items), ACT Inc, Iowa City, IA.
- 2008 **Summer Research Fellow**, Department of Pediatrics, University of Arkansas for Medical Sciences, Little Rock, AR
- 2005 **Summer Research Fellow and REU Co-Mentor**, Center for the Analysis and Prediction of Storms, National Weather Center, Norman, OK
- 2005-08 **Physical Science Laboratory Coordinator**, Department of Physical Science, Arkansas Tech University
- 2004 **Summer Research Fellow**, Center for Applied Research and Evaluation, Arkansas Children's Hospital/University of Arkansas for Medical Sciences, Little Rock, AR
- 2003 **Summer Visiting Scholar**, Center for Fairness in Assessment, Educational Testing Service, Princeton NJ.
- 2002-08 **University Supervisor** of four student teachers in physical science education, Arkansas Tech University, Russellville, AR.
- 2000-01 **University Supervisor** of seven student teachers in science education, The University of Georgia, Athens, GA.
- 1999 **Summer Research Intern**, Hispanic Association of Colleges and Universities USDA Forest Service, Athens, GA.
- 1998-2001 **Research Assistant**, The University of Georgia, Athens, GA.
- 1994 **Summer Research Intern**, University of Wisconsin Medical School, Madison, WI.

V(a). SCHOLARLY ACTIVITIES: REFEREED PUBLICATIONS

- González-Espada, W. J., Díaz-Muñoz, G., Feliú-Mójer, M., Flores-Otero, J., Fortis-Santiago, Y., Guerrero-Medina, G., López-Casillas, M., Colón-Ramos, D., Fernández-Repollet, E. (2015) Assessing a graduate school science recruitment symposium. *Cuadernos de Investigación en la Educación*, 30, 11-36. <http://cie.uprrp.edu/cuaderno/numero-30/>
- Knell, J. L., Wilhoite, A. P., Fugate, J. Z., & González-Espada, W. J. (2015). Using Item Response Theory to improve locally-constructed multiple choice tests: Measuring knowledge gains and curricular effectiveness. *Electronic Journal of Science Education*, 19 (7). Retrieved from <http://ejse.southwestern.edu/issue/view/1213>.
- González-Espada, W. J., Llerandi-Román, P., Fortis-Santiago, Y., Guerrero-Medina, G., Ortiz-Vega, N., Feliú-Mójer, M., Colón-Ramos, D. (2014) *Impact of culturally relevant contextualized activities on elementary and middle school students' perceptions of science: An exploratory study*. *International Journal of Science Education B – Communication and Public Engagement*, 5(2), 182-202.
- Wilhoite, A. P., Knell, J. L., and González-Espada, W. J. (2014). Use of herbal supplements among college students in Eastern Kentucky: Impact factors. *Journal of the Kentucky Academy of Science*, 75 (1-2), 53-68.
- Guerrero-Medina, G., Feliú-Mójer, M., González-Espada, W., Díaz-Muñoz, G., López, M., Díaz-Muñoz, S., Fortis-Santiago, Y., Pérez-Otero, J., Craig, D., and Colón-Ramos, D. A. (2014). *Supporting diversity in science through social networking*. *PLOS Biology*, 11(12), e1001740.
- González-Espada, W. J., Fortis-Santiago, Y., Guerrero-Medina, G., Ortiz-Vega, N. M., Colón-Ramos, D., and Feliú-Mójer, M. (2013). Supplementando el currículo de ciencias con contenido contextual y culturalmente relevante: Lecciones de la implementación del Proyecto Ciencia Boricua. *Cuadernos de Investigación en la Educación*, 28, 109-127.
- González-Espada, W. J. (2012) Falling PC solitaire cards: An open-inquiry approach. *The Physics Teacher*, 50(6), 365-366.
- O'Dell, G. A. and González-Espada, W. J. (2011). Going underground. *The Science Teacher*, 78(9), 39-43.
- González-Espada, W. J. (2011). Perceptions of school science teaching as a career among science majors. *Journal of Science Education/REC*, 12(2), 82-86.
- González-Espada, W. J., Birriel, J., and Birriel, I. (2010). Discrepant events: A challenge to students' intuition. *The Physics Teacher*, 48(8), 508-511.
- González-Espada, W. J., Birriel, J., and Birriel, I. (2010). Our planet from space: Pedagogical implications of the DISH Earth channel. *Astronomy Education Review*, 9(1), 010302, 10.3847/AER2009054.
- Haight, A. D. and González-Espada, W. J. (2009). Science literacy in Appalachia through contextually relevant experiences: The "Reading the River" project. *International Journal of Environmental and Science Education*, 4(3), 215-230.
- González-Espada, W. J. (2009). Preservice teacher education online: Students' opinions from a science methods course. *Journal of the Kentucky Academy of Science*, 70(1), 84-93.
- González-Espada, W. J. (2009). College students' opinions of engaging approaches in a physical science course. *Journal of College Science Teaching*, 38(5), 18-23.

- González-Espada, W. J., Hall-Barrow, J., Hall, R. W., Burke, B. L., and Smith, C. E. (2009) Peds PLACE: Quality continuing medical education in Arkansas. *Journal of the Arkansas Medical Society*, 105 (9), 211-213.
- González-Espada, W. J., Hall-Barrow, J., Hall, R. W., Burke, B. L., and Smith, C. E. (2009) Achieving success connecting academic and practicing clinicians through telemedicine. *Pediatrics*, 123(3), e484-e491.
- González-Espada, Wilson J. (2009). Detecting gender bias through test item analysis. *The Physics Teacher*, 47(3), 175-179.
- González-Espada, Wilson J. (2009). Authoring newspaper science articles: A rewarding experience! *The Clearing House*, 82(3), 131-134.
- González-Espada, W. J. (2008). Physical science lab quizzes: Results from test item analysis. *Journal of Science Education/REC*, 9(2), 81-85.
- González-Espada, W. J. and Stone, M. (2007). Guiding experiences in physics instruction for undergraduates. *The Journal of Physics Teacher Education Online*, 4(3), 3-6.
- González-Espada, W. J. and Bullock, D. W. (2007). Innovative applications of classroom response systems: Investigating students' item response times in relation to final course grade, gender, general point average, and high school ACT scores. *Electronic Journal for the Integration of Technology in Education*, 6, 97-108.
- González-Espada, W. J. (2007). The role of the scientific community in school science education. *Interciencia*, 32(8), 510-515.
- González-Espada, W. J. (2007). Using simple statistics to assure science fair success. *Science Scope*, 30(9), 54-56.
- Zaras, D. S. and González-Espada, W. J. (2006). Evaluation of the impact of the NWC REU Program compared with other undergraduate research experiences *Journal of Geoscience Education*, 54(5), 541-549.
- González-Espada, W. J. and Napoleoni-Milán, R. L. (2006). The impact of the freshman year experience on science students. In J. J. Mintzes and W. H. Leonard (eds.), *Handbook of college science teaching*. Arlington, VA: National Science Teachers Association, pp. 351-358.
- González-Espada, W. J. (2006). The influence of Puerto Rican physics teachers' political beliefs in their pedagogical practices. *Journal of Science Education/REC*, 7(2), 109-113.
- González-Espada, W. J., Ochoa, Eduardo R., Ibarra, Melissa J., and Vargas, Perla A. (2006). Perceptions of differential treatment from the viewpoints of attending physicians, residents, and Hispanic parents in Arkansas. *Hispanic Health Care International*, 4(3), 157-167.
- González-Espada, W. J. (2006). My experience as a visiting faculty at the NWC REU Program. *Journal of Earth System Science Education*, 1, JESSE-05-400-09.
- Torres, S. M. and González-Espada, W. J. (2006). Calculating "g" from acoustic Doppler data. *The Physics Teacher*, 44(8), 536-539.
- González-Espada, W. J., Ibarra, Melissa J., Ochoa, Eduardo R., and Vargas, Perla A. (2006). Multicultural medical encounters: The experience at a pediatric clinic. *Journal of the Arkansas Medical Society*, 102(8), 227-229.
- González-Espada, W. J. (2005). Inmigración y multiculturalismo educativo: El caso de los estudiantes dominicanos en las escuelas puertorriqueñas. *Revista Iberoamericana de Educación*, 36(12), 1-9.

- González-Espada, W. J., and Trantham, K. (2005). How is energy like money? Using analogies in physics teaching. *School Science Review*, 86(317), 85-90.
- González-Espada, W. J. (2005). Succeeding in Introduction to Physical Science: Is mathematics background important? *Journal of the Arkansas Academy of Science*, 58, 60-64.
- González-Espada, W. J. (2005). Las limitaciones del metodo científico. *Revista Spin Cero: Cuaderno de Ciencias*, 9, 87-91.
- González-Espada, W. J. (2004). Reinforcing physical science concepts with original comic strips. In M. Druger, E. D. Siebert, and L. W. Crow (Eds.), *Teaching Tips: Innovations in Undergraduate Science Instruction*. Arlington, VA: National Science Teachers Association Press.
- González-Espada, W. J. (2004). Multicultural education: Helping students succeed in science. *Electronic Journal of Literacy through Science*, 3(12).
- Hemmati, M. and González-Espada, W. J. (2003). Thermal behavior inside an igloo: An improved model. *Physics Education*, 38(3), 270-271. A multimedia file with additional details and derivations is at: <http://www.iop.org/EJ/mmedia/0031-9120/38/3/605/>.
- González-Espada, W. J. (2003). Learning and having fun with electric letter soups! *Science Education Review*, 2(3), 79-83.
- González-Espada, W. J. (2003). A last chance for getting it right: Addressing misconceptions in physical science through independent research. *The Physics Teacher*, 41(1), 36-38.
- González-Espada, W. J. (2003). Integrating physical science and the graphic arts with scientifically accurate comic strips: Rationale, description, and implementation. *Revista Electronica de Enseñanza de las Ciencias*, 2(1).
- González-Espada, W. J. (2003). Physics education research in the United States: A summary of its rationale and main findings. *Journal of Science Education/REC*, 4(1), 5-7.
- González-Espada, W. J., Bryan, L.A., and Kang, N. (2001). The intriguing physics inside an igloo. *Physics Education*, 36(4), 290-292.
- Tippins, D. J., González-Espada, W. J., and Haugh, T. A. (1999). A chocolate curriculum. *The Science Teacher*, 66(7), 30-33.

V(b). SCHOLARLY ACTIVITIES: NON-REFEREED PUBLICATIONS

- Méndez, A. and González-Espada, W. J. (2016). *Searching for habitable worlds: An introduction*. San Rafael, CA: Morgan & Claypool Publishers.
- González-Espada, W. J. (2014). Entrevista a Joseph Taylor: Púlsares y radiotelescopios. *Astronomía*, 19(179), 38-43.
- González-Espada, W. J. (2011). Sandy Cheeks, scientist. *SpongeBob SquarePants and philosophy* (Popular Culture and Philosophy Series #60). Chicago, Ill: Open Court Publishing, pp. 181-194.
- González-Espada, W. J., Colón-Ramon, D., and Feliú-Mójer, M. (2011). *Ciencia Boricua: Ensayos y anécdotas del científico puertorrico*. San Juan, PR: Editorial Callejón.
- González-Espada, W. J. (2011). El radiotelescopio de Arecibo desde dentro. *Astronomía*, 26 (140), 26-32.
- González-Espada, W. J. (2010). Peer mentoring at a space science undergraduate research program: Students' voices and lessons learned. *CUR Quarterly on the Web*, 31(2), 1-8.
- González-Espada, W. J. (2010). The case of the "not-so-short" circuit. *The Physics Teacher*, 48(8), 554-555.

- González-Espada, W. J. and Melvin, A. D. (2007). Physics takes Oklahoma by storm. *Interactions across Physics and Education*, 37(3), 46-47.
- Roberts, E. and González-Espada, W. J. (2006). Snap! Catch students' attention with mousetrap vehicles. *Tech Directions*, 65(1), 15-18.
- González-Espada, W. J. and Oliver, J. S. (2002). Context and cultural relevance in Puerto Rican high school physics: A quantitative analysis of influencing factors *Proceedings of the 2002 Annual International Conference of the Association for the Education of Teachers in Science*, USA, 7, 682-702. ERIC Document Reproduction Service No. ED (465 602).

V(c). SCHOLARLY ACTIVITIES: SUBMITTED PUBLICATIONS

- González-Espada, W. J. (2016). Rosa Navarro Haydon: Cimiento de la educación científica escolar en Puerto Rico 1926-1966. Cuadernos de Investigación en Educación.
- González-Espada, W. J. (2016). Race and physics teaching in Uruguay: An unexpected quest. *The Physics Teacher*.

V(d). SCHOLARLY ACTIVITIES: CONTRIBUTIONS TO PROFESSIONAL MEETINGS (* Undergraduate Research Fellow)

- González-Espada, W. J., Pérez, R. and Sarasola, M. (2016). *College students' perceptions of STS concepts: Implications for scientific literacy*. Oral presentation at the III Congreso Latinoamericano de Investigación en la Didáctica de las Ciencias, July 6-8, Laboratorio Tecnológico del Uruguay, Montevideo, Uruguay.
- Fugate, J. Z.* and González-Espada, W. J. (2016). *Mesoscale meteorological data identifies possible effects of climate change in Eastern Kentucky*. Oral presentation at the 11th annual Celebration of Student Scholarship, April 27, Morehead State University, Morehead, KY.
- Knell, J. L.* and González-Espada, W. J. (2016). *Mesoscale meteorological data identifies possible effects of climate change in Western Kentucky*. Oral presentation at the 11th annual Celebration of Student Scholarship, April 27, Morehead State University, Morehead, KY.
- Knell, J. L.* and González-Espada, W. J. (2016). *Undergraduate Research Fellowships: A strategic investment to reduce women underrepresentation in the mathematical sciences*. Poster presented at The Wilma Grote Symposium for the Advancement of Women, April 18, Morehead State University, KY.
- Knell, J. L.* and González-Espada, W. (2016). *Evidence of climate change in Western Kentucky?* Oral presentation at the Annual Meeting of the Mathematical Association of America Kentucky Section (KYMAA), Northern Kentucky University, April 1, Highland Heights, KY.
- Fugate, J. Z.* and González-Espada, W. (2016). *Evidence of climate change in Eastern Kentucky?* Oral presentation at the Annual Meeting of the Mathematical Association of America Kentucky Section (KYMAA), Northern Kentucky University, April 1, Highland Heights, KY.
- Knell, J. L.* and González-Espada, W. (2016). *Evidence of climate change in Western Kentucky?* Oral presentation at the Spring Meeting of the Kentucky Association of Physics Teachers, Centre College, March 12, Danville, KY.

- Fugate, J. Z.* and González-Espada, W. (2016). *Evidence of climate change in Eastern Kentucky?* Oral presentation at the Spring Meeting of the Kentucky Association of Physics Teachers, Centre College, March 12, Danville, KY.
- *Knell, J. L., *Fugate, J. Z., and González-Espada, W. J. (2016). Using mesoscale meteorological data to identify possible local effects of global climate change. Poster presented at the 15th Annual Posters-at-the-Capitol, February 25, Frankfort, KY.
- González-Espada, W. J. (2016). *Cybernetic girls can be pinky: An empowering program to allure biology majors into computational sciences.* Puerto Rico Project Kaleidoscope Regional Network Meeting, University of Puerto Rico, January 29, Humacao, PR.
- *Knell, J. Z., *Fugate, J. Z., and González-Espada, W. J. (2015). *Using mesoscale meteorological data to identify possible local effects of global climate change.* Paper presented at the 101th Annual Meeting of the Kentucky Academy of Science, Northern Kentucky University, November 14, Highland Heights, KY.
- *Fugate, J. Z., *Knell, J. L., and González-Espada, W. J. (2015). *Learning about weather and climate with local Kentucky data.* Workshop presented at the Annual Meeting of the Kentucky Science Teachers Association, Lexington Conference Center, November 7, Lexington, KY.
- *Fugate, J., and González-Espada, W. (2015). *Item Response Theory: Implications for the assessment of pre-service teachers' scientific knowledge.* Oral presentation at the 10th annual Celebration of Student Scholarship, April 22, Morehead State University, Morehead, KY.
- *Knell, J. and González-Espada, W. (2015). *Using Item Response Theory to analyze a physical science content assessment.* Oral presentation at the 10th annual Celebration of Student Scholarship, April 22, Morehead State University, Morehead, KY.
- *Wilhoite, A. and González-Espada, W. (2015). *Inquiry physical science: Curricular comparisons and IRT analysis.* Oral presentation at the 10th annual Celebration of Student Scholarship, April 22, Morehead State University, Morehead, KY.
- *Fugate, J., and González-Espada, W. (2015). *Item Response Theory: Implications for the assessment of pre-service teachers' scientific knowledge.* Oral presentation at the annual meeting of the Kentucky Section of the Mathematical Association of America, March 28, Morehead State University, Morehead, KY.
- *Knell, J. and González-Espada, W. (2015). *Using Item Response Theory to analyze a physical science content assessment.* Oral presentation at the annual meeting of the Kentucky Section of the Mathematical Association of America, March 28, Morehead State University, Morehead, KY.
- *Wilhoite, A. and González-Espada, W. (2015). *Inquiry physical science: Curricular comparisons and IRT analysis.* Oral presentation at the annual meeting of the Kentucky Section of the Mathematical Association of America, March 28, Morehead State University, Morehead, KY.
- González-Espada, W. J. (2015). *How homework submission guidelines affect test scores in an online "Physical Science and Society" course.* Oral presentation at the annual meeting of the Kentucky Association of Physics Teachers (Next Generation Physics Teaching Regional Conference), March 14, Eastern Kentucky University, Richmond, KY.

- *Knell, J. L., *Fugate, J. Z., and González-Espada, W. J. (2015). *Applying IRT guidelines to improve diagnostic measurement of physical science content knowledge among pre-service K-5 majors: a longitudinal approach*. Oral presentation at the annual meeting of the Kentucky Association of Physics Teachers (Next Generation Physics Teaching Regional Conference), March 14, Eastern Kentucky University, Richmond, KY.
- *Wilhoite, A. P. and González-Espada, W. J. (2015). *Inquiry physical science: Curricular comparisons and IRT analysis*. Oral presentation at the annual meeting of the Kentucky Association of Physics Teachers (Next Generation Physics Teaching Regional Conference), March 14, Eastern Kentucky University, Richmond, KY.
- González-Espada, W. J., Casillas, L., Vega, E., Fernandez, D., Temblay, R., Ríos, I., and Rivera, J. (2014). *Implementing a program to attract and retain female Hispanic students into computer science careers*. Paper presented at the 100th Annual Meeting of the Kentucky Academy of Science, Lexington Conference Center, November 15, Lexington, KY.
- *Wilhoite, A. P., *Knell, J. L., *Fugate, J. Z., and González-Espada, W. J. (2014). *Using Item Response Theory to improve diagnostic assessments of pre-service teachers*. Paper presented at the 100th Annual Meeting of the Kentucky Academy of Science, Lexington Conference Center, November 15, Lexington, KY.
- González-Espada, W. J. (2014). *Scale-based visualizations of the atom*. Workshops presented at the Annual Meeting of the Kentucky Science Teachers Association, Lexington Conference Center, November 7 and 8, Lexington, KY (2 sessions).
- *Fugate, J. Z., *Wilhoite, A. P., *Knell, J. L. and González-Espada, W. J. (2014). *Do your tests pass the test?* Workshop presented at the Annual Meeting of the Kentucky Science Teachers Association, Lexington Conference Center, November 7, Lexington, KY.
- *Knell, Janie L. and González-Espada, W. J. (2014). *Analysis of factors that influence the use of dietary supplements among college students in Eastern Kentucky*. Poster presented at the Celebration of Student Scholarship, April 23, Morehead, KY.
- *Wilhoite, Andrea P. and González-Espada, W. J. (2014). *Use of CAM therapies among college students in Eastern Kentucky: Is there a relation with attitudes toward science?* Poster presented at the Celebration of Student Scholarship, April 23, Morehead, KY.
- *Wilhoite, Andrea P. and González-Espada, W. J. (2014). *Use of CAM therapies among college students in Eastern Kentucky: Is there a relation with attitudes toward science?* Poster presented at the Southern Regional Honors Council Conference, March 27-29, Savannah, GA. Georgia.
- *Knell, Janie L. and González-Espada, W. J. (2014). *Analysis of factors that influence the use of dietary supplements among college students in Eastern Kentucky*. Oral presentation at the annual meeting of the Kentucky Section of the Mathematical Association of America, March 29, Murray, KY.
- Gonzalez-Espada, W. J. (2014). *Five years of informal physical science education: A call to action*. Paper presented at the Spring meeting of the Kentucky Association of Physics Teachers, Bellarmine University, March 15, Louisville, KY.
- *Wilhoite, Andrea P. and González-Espada, W. J. (2014). *Use of CAM therapies among college students in Eastern Kentucky: Is there a relation with attitudes toward science?* Poster presented at the 13th Annual Posters-at-the-Capitol, February 27, Frankfort, KY.

- *Knell, J. L., *Wilhoite, A. P. and Gonzalez-Espada, W. J. (2013). *Use of CAM therapies among college students in Eastern Kentucky: A pilot study*. Paper presented at the 99th Annual Meeting of the Kentucky Academy of Science, November 9, Morehead, KY.
- Francis, S. M. and Gonzalez-Espada, W. J. (2013). *Teaching NGSS ETS1-A using a hands-on approach: Designing and building a mousetrap glider*. Paper presented at the 99th Annual Meeting of the Kentucky Academy of Science, November 9, Morehead, KY.
- Gonzalez-Espada, W. J. and Carrasquillo, R. E. (2013). *Jumping the gun: Teaching NGSS ETS1-A and ETS2-B by analyzing historical lessons and contemporary technologies*. Paper presented at the 99th Annual Meeting of the Kentucky Academy of Science, November 9, Morehead, KY.
- González-Espada, W. J. (2013). *The KY Mesonet: A data-rich resource to teach weather-related NGSS*. Workshop presented at the Annual Conference of the Kentucky Science Teachers Association, November 2, Lexington, KY.
- *Wilhoite, A. P., *Knell, J. L., and González-Espada, W. J. (2013). *Dietary supplements: Activities to enhance critical thinking*. Workshop presented at the Annual Conference of the Kentucky Science Teachers Association, November 1, Lexington, KY.
- González-Espada, W. J. (2013). *Teaching science creatively with internet memes*. Paper presented at the Annual Kentucky Innovations Conference, University of Kentucky, May 17, Lexington, KY.
- Guerrero-Medina, G., Díaz-Muñoz, G., Díaz-Muñoz, S., Feliú-Mójer, M., Flores-Otero, J., Fortis-Santiago, Y., González-Espada, W. and López-Casillas, M. (2013). *An online membership organization to promote and enhance science education in Puerto Rico*. Paper presented at the 86th NARST Annual International Conference, April 6-9, Río Grande, PR.
- Feliú-Mójer, M., Guerrero-Medina, G., Colón-Ramos, D., López-Casillas, M., Flores-Otero, J., González-Espada, W., Fortis-Santiago, Y., Díaz-Muñoz, G., and Díaz-Muñoz, S. (2013). *CienciaPR: Science education through media and informal settings*. Paper presented at the 86th NARST Annual International Conference, April 6-9, Río Grande, PR.
- Llerandi-Román, P., Colón-Ramos, D., Feliú-Mójer, M., and González-Espada, W. (2013). *Ciencia Boricua: A culturally relevant science book*. Paper presented at the 86th NARST Annual International Conference, April 6-9, Río Grande, PR.
- Fortis-Santiago, Y., Feliú-Mójer, M., Colón-Ramos, D., and González-Espada, W. (2013). *Impact of "Ciencia Boricua" on science teachers' professional development*. Paper presented at the 86th NARST Annual International Conference, April 6-9, Río Grande, PR.
- González-Espada, W., Fortis-Santiago, Y., Guerrero-Medina, G., Ortiz-Vega, N., Colón-Ramos, D., and Feliú-Mójer, M. (2013). *Impact of ¡Ciencia Boricua! on elementary and middle school students's perception of science*. Paper presented at the 86th NARST Annual International Conference, April 6-9, Río Grande, PR.
- González-Espada, W., Fortis-Santiago, Y., Guerrero-Medina, G., Ortiz-Vega, N., Colón-Ramos, D., and Feliú-Mójer, M. (2013). *Impact of ¡Ciencia Boricua! on elementary and middle school students's perception of science*. Paper presented at the XI Researcher's Conference, April 5, Turabo University, Gurabo, PR.
- González-Espada, W. (2013). *Recursos para la contextualización de las ciencias en Puerto Rico*. Oral presentation at the 1st Conversatorio CienciaPR sobre educación STEM en Puerto Rico: Participantes, barreras y oportunidades, April 4, Río Grande, PR.

- González-Espada, W. J. (2013). *Teaching about atoms, nuclei, and isotopes using Bozagga balls*. Paper presented at the Spring 2013 meeting of the Kentucky Association of Physics Teachers, Elizabethtown Community and Technical College, March 16, Elizabethtown, KY.
- Feliú-Mójer, M., González-Espada, W., Fortis-Santiago, Y., Guerrero-Medina, G., and Colón-Ramos, D. (2013). *Ciencia Puerto Rico: Leveraging the scientific community to advance science education and public understanding of science*. Poster presented at the Annual Meeting of the American Association for the Advancement of Science (AAAS), February 14-18, Boston, MA.
- Fortis-Santiago, Y., Colón-Ramos, D., Feliú-Mójer, M., Guerrero-Medina, G., Ortiz-Vega, N., and González-Espada, W. (2012). *Contextualizing scientific education in Puerto Rico*. Poster presented at the 13th RCMI (Research Centers in Minority Institutions) International Symposium on Health Disparities, December 10-13, Puerto Rico Convention Center, San Juan, PR.
- Guerrero-Medina, G., Feliú-Mójer, M., Díaz, G., Díaz-Muñoz, S., Flores-Otero, J., Fortis-Santiago, Y., González-Espada, W., López, M., Colón-Ramos, D. (2012). *Increasing the profile of minority science through online networks*. Poster presented at the 13th RCMI (Research Centers in Minority Institutions) International Symposium on Health Disparities, December 10-13, Puerto Rico Convention Center, San Juan, PR.
- González-Espada, W. J. (2012). *Interstate partnerships for pre-college summer science research: The case of Kentucky and Puerto Rico*. Paper presented at the Annual Meeting of the Kentucky Academy of Sciences, October 20, Eastern Kentucky University, Richmond, KY.
- González-Espada, W. J., Fortis-Santiago, Y., Guerrero-Medina, G., Ortiz-Vega, N., Colón-Ramos, D., and Feliú-Mójer, M. (2012). *Transitioning from “science” to “my science”: Contextualizing science for Puerto Rican school students*. Paper presented at the Annual Meeting of the Kentucky Academy of Sciences, October 19-20, Eastern Kentucky University, Richmond, KY.
- Fortis-Santiago, Y., Feliú-Mójer, M. I., Colón-Hastings, F., and González-Espada, W. J. (2012). *Engaging underrepresented communities with science using social networking platforms*. Professional development workshop presented at the National SACNAS (Society for the Advancement of Chicano and Native Americans in the Sciences) Conference, October 11, Washington State Convention Center, Seattle, WA.
- Feliú-Mójer, M. I., González-Espada, W., Fortis-Santiago, Y. and Colón-Ramos, D. (2012). *Comunicando la Ciencia Boricua: el impacto mediático y educativo de Ciencia Puerto Rico*. Paper presented at the 3er Encuentro de Investigación, Gestión y Creación, Asociación Puertorriqueña de Programas Académicos de Comunicación (APPAC), September 13, Sagrado Corazón University, San Juan, PR.
- Guerrero-Medina, G., Feliú-Mójer, M., Díaz-Muñoz, G. Díaz-Muñoz, S., Flores-Otero, J., Fortis-Santiago, Y., González-Espada, W. J., López-Casillas, M. and Colón-Ramos, D. (2012). *Ciencia Puerto Rico: A model for how online diasporas and communities can work together to advance science*. Poster presented at the Gordon Research Conference on Science and Technology Policy (Science and Technology Policy in Global Context), August 5-10, Waterville Valley Resort, Waterville Valley, NH.

- Díaz-Muñoz, S. L., Colón-Ramos, D. A., Díaz-Muñoz, G., Feliú-Mójer, M., Flores-Otero, J., Fortis-Santiago, Y., González-Espada, W. J., Guerrero-Medina, G., López, M., Valentín-Vargas, A. (2012). *Harnessing social networks to increase diversity among behavior researchers*. Paper presented at the 49th Annual Meeting of the Animal Behavior Society, June 11, The University of New Mexico, NM.
- González-Espada, W. J. (2012). *Computer Simulations for Online Science Learning: Alternative or Panacea?* Paper presented at the Annual Kentucky Innovations Conference, Northern Kentucky University, May 17, Erlanger, KY.
- González-Espada, W. J. (2012). *Misconceptions about the dynamics of an upward toss*. Paper presented at the Spring 2012 meeting of the Kentucky Association of Physics Teachers, West Kentucky University, March 17, Bowling Green, KY.
- González-Espada, W. J. (2011). *Teaching wave concepts with free online simulations*. Workshop presented at the 2011 Kentucky Science Teachers Association Conference and Professional Development meeting, November 4-5, Lexington, Kentucky (2 sessions).
- González-Espada, W. J. (2011). *Shifting attitudes toward science after experiencing an inquiry physical science class*. Poster presented at the Mid-Atlantic Association of Science Teacher Educators, Carter Caves State Park, September 30, Olive Hill, KY.
- Birriel, I. and González-Espada, W. J. (2011). *Assessing college students' perception of end-of-semester oral and written reports in introductory physics*. Paper presented at the Spring 2011 meeting of the Kentucky Association of Physics Teachers, East Kentucky University, March 19, Richmond, KY.
- González-Espada, W. J. (2010). *Assessing peer mentoring: The case of MSU and its Space Science program*. Paper presented at the annual meeting of the Kentucky Academy of Science, Western Kentucky University, November 13, Bowling Green, KY.
- Birriel, I. and González-Espada, W. J. (2010). *Student poster presentations as a final capstone experience for non-physics majors: Making a connection to the "real world"*. Paper presented at the annual meeting of the Kentucky Academy of Science, Western Kentucky University, November 13, Bowling Green, KY.
- González-Espada, W. J. (2010). *Hypothesis testing and playing cards: Eleusis*. Workshop presented at the 2010 Kentucky Science Teachers Association Conference and Professional Development meeting, November 6, Lexington, Kentucky (2 sessions).
- González-Espada, W. J. (2010). *Using PhET computer simulations to teach electricity concepts*. Workshop presented at the 2010 Kentucky Science Teachers Association Conference and Professional Development meeting, November 6, Lexington, Kentucky (2 sessions).
- González-Espada, W. J. and Vega, I. E. (2010). *What is the best way to use podcasts in science?* Paper presented at the Spring 2010 meeting of the Kentucky Association of Physics Teachers, Center College, March 13, Danville, KY.
- González-Espada, W. J. (2010). *Teaching moon phases and seasons with satellite video*. Workshop presented at the 2010 Kentucky Science Teachers Association Mid-Winter Breakthrough and Professional Development meeting, February 20, Morehead, KY.
- González-Espada, W. J. (2009). *Undergraduate Fellowship Program at Morehead State University: Impact assessment*. Paper presented at the annual meeting of the Kentucky Academy of Science, Northern Kentucky University, November 14, Highland Heights, KY.

- González-Espada, W. J. (2009). *What science majors want in a career? Can school science teaching offer it?* Paper presented at the annual meeting of the Kentucky Academy of Science, Northern Kentucky University, November 14, Highland Heights, KY.
- González-Espada, W. J. (2009). *The Sun-Earth-Moon system: A view from space*. Workshop presented at the 2009 Kentucky Science Teachers Association Conference and Professional Development meeting, November 7, Lexington, Kentucky.
- Craig, D., Colón-Ramos, D., Feliú Mójér, M., González-Espada, W. J., Guerrero, G., and López, M. (2009). *CienciaPR: El desarrollo de una comunidad virtual para las ciencias y Puerto Rico*. Poster presented at the conference “Mentes Puertorriqueñas en Acción - Compromiso social: de la teoría a la práctica”, Centro de Desarrollo BPPR, October 10, San Juan, PR.
- González-Espada, W. J. (2009). *Enhancing student participation: Clickers vs. flash cards*. Workshop presented at the annual Kentucky Conference on the Scholarship of Teaching and Learning, Marriott Griffin Gate, May 21, Lexington, KY.
- González-Espada, W. J., Birriel, J. J., and Birriel, I. (2009). *Discrepant events: A challenge to students' intuition*. Paper presented at the annual meeting of the Kentucky Association of Physics Teachers, Bellarmine University, March 7, Louisville, KY.
- González-Espada, W. J. (2008). *Reinforcing KY Program of Studies (Core Concepts) with free computer simulations!* Workshop presented at the 2008 Kentucky Science Teachers Association Conference and Professional Development meeting, November 8, Lexington, Kentucky.
- González-Espada, W. J. (2008). *Science methods courses: Appropriate for internet instruction*. Paper presented at the 94th annual meeting of the Kentucky Academy of Science, University of Kentucky, November 1, Lexington, Kentucky.
- Hall-Barrow, J., González-Espada, W. J., Rhoads, S., Ivey, T., Smith, B., and Crumley, C. (2008). *New directions in telemedicine and e-learning: The Obstetrical Nurse Exchange (ONE) team*. Paper presented at the 3rd Annual Pediatric Telehealth Colloquium, September 14, Tampa, Florida.
- González-Espada W.J., Hall-Barrow, J., Hall, R.W., Burke, B.L., and Smith, C.E. (2008). *Evaluating the success of a telemedicine Pediatric Physician and Collaborative Learning Program (Peds PLACE)*. Poster presented at the 3rd Annual Pediatric Telehealth Colloquium, September 14, Tampa, Florida.
- González-Espada W.J., Hall-Barrow, J., Hall, R.W., Burke, B.L., and Smith, C.E. (2008). *Evaluating the success of a telemedicine pediatric Physician and Collaborative Learning Program (Peds PLACE)*. Poster presented at the Teaching with Technology Symposium, University of Arkansas for Medical Sciences, July 24, Little Rock, AR.
- González-Espada, W.J., Hall-Barrow, J., Burke, B.L., and Hall, R.W. (2008). *Continuing professional development and translational research: Peds PLACE*. Poster presented at the University of South Dakota's Centennial Symposium on Emerging Strategies for Bridging Basic and Clinical Sciences, Sanford School of Medicine, June 13-15, Vermillion, SD.
- González-Espada, W. J. (2008). *College students' opinions of engaging approaches in a physical science course*. Paper presented at the 92st meeting of the Arkansas Academy of Science, April 11-12, Henderson State University, Arkadelphia, AR.

- Kondrick, L. and González-Espada, W. J. (2007). *Perceptions of science teaching as a career among students in a physical science orientation class*. Paper presented at the annual meeting of the Mid-South Educational Research Association, November 8, Hot Springs, AR.
- González-Espada, Wilson J (2007). *Pseudoscientific notions and conceptual change*. Workshop presented at the annual Arkansas Curriculum Conference, State Convention Center, Little Rock, AR.
- González-Espada, Wilson J (2007). *Exploring the latest physical science computer simulations*. Workshop presented at the annual Arkansas Curriculum Conference, State Convention Center, Little Rock, AR.
- González-Espada, Wilson J. (2007). *Gender bias in physical science tests: Detection through item analysis*. Paper presented at the annual meeting of the Arkansas, Oklahoma, and Kansas section of the American Association of Physics Teachers, October 20, University of Central Arkansas, Conway, AR.
- *Stone, M. and González-Espada, W. J. (2007). *Guided experiences in physics instruction: rationale and implementation*. Paper presented at the 91st meeting of the Arkansas Academy of Science, April 13-14, Arkansas Tech University, Russellville, AR.
- Kondrick, L. C. and González-Espada, W. J. (2007). *Teaching-specific and general factors influencing college students' perceptions of science teaching as a career*. Paper presented at the 91st meeting of the Arkansas Academy of Science, April 13-14, Arkansas Tech University, Russellville, AR.
- González-Espada, Wilson J. (2006). *Using simple statistics to assure science fair success*. Paper presented at the annual Arkansas Conference on Teaching, November 3, Little Rock, AR.
- González-Espada, Wilson J. (2006). *Physical science lab quizzes: Results from test item analysis*. Paper presented at the annual meeting of the Arkansas, Oklahoma, and Kansas section of the American Association of Physics Teachers, October 28, Emporia State University, KS.
- González-Espada, Wilson J. and Bullock, D. W. (2006). *Innovative applications of classroom response systems: Investigating students' item response time*. Paper presented at the 90th meeting of the Arkansas Academy of Science, April 7-8, Lyon College, Batesville, AR.
- González-Espada, Wilson J. (2006). *The essential role of professional scientists in K-12 science education*. Paper presented at the 81st meeting of the American Association for the Advancement of Science (Southwest and Rocky Mountain Section), April 5-8, Tulsa University, Tulsa, OK.
- González-Espada, Wilson J. and Zaras, D. (2006). *Evaluation of the impact of the NWC REU Program compared with other undergraduate research experiences*. Poster presented at the 2006 15th Symposium on Education, January 28, American Meteorological Society Meeting, Atlanta, GA.
- Heinselman, P., Zaras, D., Fredrickson, S., and González-Espada, W. J. (2006). *Relative humidity: What do students know about it?* Paper presented at the 2006 15th Symposium on Education, American Meteorological Society Meeting, Atlanta, GA.
- Grant. B., Miller, B., and González-Espada, W. J. (2006). *Evaluating learning and performance in the Warning Decision Training Branch's DLOC and AWOC*. Paper presented at the 2006 15th Symposium on Education, January 31, American Meteorological Society Meeting, Atlanta, GA.

- González-Espada, Wilson J. and Zaras, D. (2005). *Administration, best practices, and evaluation of the National Weather Center REU Program*. Poster presented at the 2005 meeting of the American Geographical Union, San Francisco, CA.
- González-Espada, Wilson J. (2005). *Research Experiences for Undergraduates: A good idea for pre-service teachers?* Paper presented at the 2005 annual conference of the Southeastern Association for Science Teacher Education, October 14-15, The University of Georgia, Athens, GA.
- González-Espada, Wilson J. (2005). *Developing a survey to detect relative humidity misconceptions*. Paper presented at the annual meeting of the Arkansas, Oklahoma, and Kansas section of the American Association of Physics Teachers, October 7-8, Oklahoma City Community College, Oklahoma City, OK.
- González-Espada, Wilson J. and Roberts. E. (2005). *Mousetrap vehicles: An open-ended investigation*. Two-hour workshop presented at the 2005 Arkansas Conference on Teaching, November 5, Little Rock, AR.
- González-Espada, Wilson J. and Roberts. E. (2005). *Using mousetrap vehicles to foster student learning in physics*. Paper presented at the 89th Annual Meeting of the Arkansas Academy of Sciences, April 8-9, 2005, Hendrix College, Conway, AR.
- González-Espada, Wilson J. and Bullock, D. W. (2004). *Speededness and classroom response systems: A pilot study*. Paper presented at the Annual American Association of Physics Teachers Arkansas, Oklahoma, and Kansas (AAPT-AOK) Meeting, University of Arkansas at Little Rock, Little Rock, AR.
- González-Espada, Wilson J. (2004). *Succeeding in Introduction to Physical Science: Is mathematics background important?* Paper presented at the 2004 annual conference of the Arkansas Academy of Science (AAS), Little Rock, Arkansas.
- González-Espada, Wilson J. (2004). *Scientific method: Limitations and alternatives*. Paper presented at the 2004 Arkansas Conference on Teaching, Little Rock, AR.
- González-Espada, Wilson J. (2003). *Multicultural education: Helping Hispanic students succeed in physical science*. Paper presented at the 2003 Arkansas Conference on Teaching, Little Rock, AR.
- González-Espada, Wilson J. (2003). *Integrating math, science, and history through density explorations*. Paper presented at the 2003 Arkansas Conference on Teaching, Little Rock, AR.
- González-Espada, Wilson J. (2003). *Success in physical science: The role of mathematics knowledge*. Paper presented at the 2003 Annual American Association of Physics Teachers Arkansas, Oklahoma, and Kansas (AAPT-AOK) Meeting, Kansas State University. Manhattan, KS.
- González-Espada, Wilson J. and Robertson, J. (2003). *The Doppler Effect for a constantly accelerating sound source receding from a stationary observer: Determining the acceleration of gravity based on acoustic*. Paper presented at the 2003 annual conference of the Arkansas Academy of Science (AAS), Fayetteville, Arkansas.
- González-Espada, Wilson J. (2003). *Status options as pedagogical influence: Ideological beliefs and culturally relevant physics teaching in Puerto Rico*. Paper presented for the 2003 VII Congreso Puertorriqueño de Investigación en la Educación, Centro de Investigaciones Educativas, Universidad de Puerto Rico, Rio Piedras, PR.

- González-Espada, Wilson J. (2002). *Learning science through art: The use of comic strips in synthesizing scientific information*. Paper presented at the 2002 Arkansas Conference on Teaching, Little Rock, AR.
- González-Espada, Wilson J. and Trantham, K. (2002). *How is energy like money: Analysis and opposing viewpoints of using qualitative analogical reasoning in physics instruction*. Paper presented at the 2002 Annual American Association of Physics Teachers Arkansas, Oklahoma, and Kansas (AAPT-AOK) Meeting, East Central University, Ada, OK.
- González-Espada, Wilson J. (2002). *Making Puerto Rican high school physics contextual and culturally relevant: A statistical analysis of influencing factors*. Paper presented at the 2002 International Conference of the Association of Educators and Teachers of Science (AETS), Charlotte, NC.
- González-Espada, Wilson J. (2001). *The Nature of physics: Opposing viewpoints and implications for classroom practice*. Paper presented at the 2001 Annual American Association of Physics Teachers Arkansas, Oklahoma, and Kansas (AAPT-AOK) Meeting, University of Arkansas, Fayetteville, AR.
- González-Espada, Wilson J. (2001). *La influencia del libro de texto en los aspectos contextuales y culturales de la enseñanza de física en las escuelas de Puerto Rico*. Paper presented at the 2001 VI Congreso Puertorriqueño de Investigación en la Educación, Centro de Investigaciones Educativas, Universidad de Puerto Rico, Rio Piedras, PR.
- González-Espada, Wilson J. (2000). *High school physics teaching in Puerto Rico: Cultural and contextual issues*. Paper presented at the 2000 Annual Conference of the Southeastern Association of Educators and Teachers of Science (SAETS), Auburn, AL.
- González-Espada, Wilson J. (2000). *Informal ways to improve our physics education knowledge*. Paper presented at the 2000 Annual Conference of the Georgia Science Teacher Association (GSTA), Macon, GA.
- González-Espada, Wilson J. (2000). *Physics education research: Implications for college science teaching*. Paper presented at the 2000 Annual Conference of the International Alliance of Teacher Scholars (IATS), Athens, GA.
- González-Espada, Wilson J. (1999). *Teaching scientific processes with The Natural Inquirer*. Paper presented at the 1999 Annual Conference of the Southeastern Association of Educators and Teachers of Science (SAETS), Athens, GA.

V(e). SCHOLARLY ACTIVITIES: INVITED TALKS

- *The Ciencia Puerto Rico model of science communication*. Lecture for scientists. Instituto de Investigaciones Biológicas Clemente Estable, Ministerio de Educación y Cultura, Montevideo, June 7 (~15 participants).
- *Innovative approaches on science teaching*. Workshop for middle and high school teachers, and pre-service educators. Museum of Natural History Dr. Carlos Torres de la Llosa, Montevideo, June 2 (~20 participants).
- *Learning science with scientific memes*. Workshop for high school students. Liceo Progreso, Progreso, Canelones, June 1 (~30 participants).
- *Learning science with scientific memes*. Workshop for middle school students. Escuela Técnica Cerro Pelado, Maldonado, Maldonado, May 27 (~30 participants).

- *The Ciencia Puerto Rico model of science communication*. Lecture for the general public, scientist and journalists. Museum of Natural History Dr. Carlos Torres de la Llosa, Montevideo, May 24 (~10 participants).
- *Innovative approaches on science teaching*. Workshop for elementary and middle school teachers. Catholic University of Uruguay, Main Campus, May 4, 7, 11 and 14, 2016 (~100 participants).
- *Innovative approaches on science teaching*. Workshop for middle and high school teachers, and pre-service secondary educators. Catholic University of Uruguay, Salto Campus, April 15, 2016 (~50 participants).
- *Innovative approaches on science teaching*. Workshop for middle and high school teachers, and pre-service secondary educators. Catholic University of Uruguay, Main Campus (Bauzá Hall), April 11, 2016 (~80 participants).
- *Applying science processes to the concept of form/function in two different habitats*. 3rd Latin American Science Camp, Minas, Uruguay. Sponsored by the Department of Scientific Culture, Education Directorate, Ministry of Education and Culture, March 5, 2016 (28 high school students).
- *Innovative approaches on science teaching*. Workshop for middle and high school teachers, and pre-service secondary educators. Catholic University of Uruguay, Punta del Este Campus, February 19, 2016 (~20 participants).
- *Innovative approaches on science teaching*. Workshop for elementary teachers, and pre-service elementary educators. Catholic University of Uruguay, Punta del Este Campus, February 19, 2016 (~20 participants).
- *Higher Education in Puerto Rico: An Overview*. Talk for Mr. Clint Hendrix's section, Governor's Scholars Program, June 25, 2013 (25 students).
- *Solving Problems using Engineering Concepts: Egg Deceleration*. Talk/workshop for the Governor's Minority Student College Preparation Program, Morehead, June 12, 2013 (60 students).
- *The Senses: Bridges to Nature*. Activity for Morehead State University's Math, Physics and Technical Education (MPATE) Day, Morehead, November 14, 2012 (96 students).
- *Using a Vernier Caliper to Complete Two Density Challenges*. Talk/workshop for the Rowan County Gifted and Talented Program, Morehead, November 2, 2012 (20 students).
- *Communicating Scientific Knowledge through Virtual Communities: The Role of Ciencia Puerto Rico*. American Association for the Advancement of Science Caribbean Region, September 22, UPR Medical Science Campus, 2012 (50 participants).
- *Science Learning using Teleconference Technologies*. Teleconference at the Escuela Especializada en Ciencias, Matemáticas, Tecnología y Lenguajes de Carolina, PR, June 2011 (13 participants).
- *Want to Study Space Sciences? Come to MSU!* Teleconference at the Escuela Especializada en Ciencias, Matemáticas, Tecnología y Lenguajes de Carolina, PR, April 2011 (6 participants).
- *Geology of Puerto Rico*. Teleconference at the Escuela Especializada en Ciencias, Matemáticas, Tecnología y Lenguajes de Carolina, PR, March 2011 (14 participants).
- *Astrobiology*. Teleconference at the Escuela Especializada en Ciencias, Matemáticas, Tecnología y Lenguajes de Carolina, PR, February 2011 (15 participants).

- *Becoming a Hispanic Scientist*. Teleconference at the Escuela Especializada en Ciencias, Matemáticas, Tecnología y Lenguajes de Carolina, PR, January 2011 (14 participants).
- *Understanding Ethical Decision-Making*. Guest speaker at the Emerging Leaders Symposium, Morehead, KY February 2010 (36 students).
- *The Tentative Nature of Science*. Guest speaker to the physical science focus area, Governor's Scholars Program, Morehead, KY, July 2009 (18 students).
- *Research-based Practices in Tele-Training: Peds PLACE and Beyond*. Guest speaker at the 3rd Annual Pediatric Telehealth Colloquium, September 2008, Tampa, Florida.
- *Physical Science Education: A Rewarding Career*. Guest speaker in the course PHSC 1001, Orientation to Physical Science, Arkansas Tech University, Fall 2007 (40 students).
- *Physical Science Education: A Rewarding Career*. Guest speaker in the course PHSC 1001, Orientation to Physical Science, Arkansas Tech University, Fall 2006 (40 students).
- *Basic Skills in Multicultural Science Education*. Guest speaker in the course PHSC 3213, Science in Elementary School, Arkansas Tech University, Russellville, AR, 2006 (20 students).
- *Physics Education Research: A Primer for Physics Majors*. Guest speaker in the course PHYS 3011, Physics Colloquium, Arkansas Tech University, Russellville, AR, 2006 (5 students).
- *The Role of Professional Scientists in K-12 Education*. Guest speaker at the Summer 2005 NWC REU Program, Center for the Analysis and Prediction of Storms, National Weather Center, Norman, OK.
- *Physicians and Hispanic Patients' Perceptions of the Medical Encounter*. Guest speaker at the Spring 2005 General Pediatric Clinic Research Seminar, Arkansas Children's Hospital, Little Rock, AR.
- *Basic Skills in Multicultural Science Education*. Guest speaker in the course PHSC 3213, Science in Elementary School, Arkansas Tech University, Russellville, AR, 2004 (15 students).
- *Oops! The OTHER Scientific Method*. Guest speaker at the 38th Arkansas Junior Science and Humanities Symposium, Arkansas Tech University, Russellville, AR, 2004. (5 sessions).
- *Looks Like Science, Sounds Like Science, Feels Like Science... Is it Really Science?* Guest speaker at the 36th Arkansas Junior Science and Humanities Symposium, Arkansas Tech University, Russellville, AR, 2002.(5 sessions).
- *Cultura y Contexto en la Enseñanza de Física en la Escuela Secundaria Puertorriqueña*. Guest speaker at the CETP Project seminar series, University of Puerto Rico at Cayey, PR, 2001.
- *The Natural Inquirer: Tropical Forests*. Presentation of the special issue of The Natural Inquirer at the United States Department of Agriculture, Forest Service, Washington, DC, 1999.

V(f). SCHOLARLY ACTIVITIES: CURRICULA REVIEWS

2016

- Climas costeros de nuestras islas. Instructional module, Caribbean Coastal Ocean Observing System, Integrated Ocean Observing System). Sea Grant PR/NOAA.

2009

- A view from the top: Looking at Earth from space – An educator’s guide for grades 9-12. NASA/Center for Educational Technologies, Wheeling, WV.

2007

- Weightless wonder: Reduced gravity flight - NASA/Center for Educational Technologies, Wheeling, WV.
- Lunar surface instrumentation - NASA/Center for Educational Technologies, Wheeling, WV.
- Lunar landing - NASA/Center for Educational Technologies, Wheeling, WV.

V(g). SCHOLARLY ACTIVITIES: CONSULTING

2012+

- Science education consultant, EcoExploratorio de Puerto Rico (Science museum).

2008+

- Item fairness reviewer, School Programs, ACT Inc., Iowa City, IA.

V(g). SCHOLARLY ACTIVITIES: NEWSPAPER ARTICLES

Note: Occasionally, some of these science news articles have also been published in other media outlets, such as Periodico Claridad, Universia and E-ciencia. Below I list only the three main media outlets that publish my outreach and dissemination work.

2016. *Diálogo Digital*, San Juan, PR. (9 so far)

- June 2, La mariquita y sus peligrosos "hermanos de crianza" [*The yellow-shouldered blackbird and their dangerous "foster siblings"*].
- May 2, Conociendo la genética del solenodonte [*Studying the solenodon's genetics*].
- April 11, Las nanopartículas y su efecto en las plantas [*Nanoparticles and their effect on plants*].
- April 8, Lo complejo de marcar erizos [*The complex task of tagging sea urchins*].
- February 29, Largartijo común de Puerto Rico en innovador modelo biológico [*Puerto Rican lizard part of an innovative biological model*].
- January 19, Las películas comestibles y su importancia en la industria de alimentos [*Edible films and their importance in the food industry*].
- January 18, Equipo de UPR Humacao cría coquíes en cautiverio [*UPR Humacao team raises coquíes in captivity*].
- January 15, Histórica publicación sobre cayo Santiago [*Historic Cayo Santiago publication*].

- January 14, Genoma del guepardo explica su vulnerabilidad [*Cheetah genome explains its vulnerability*].

2016. *El Nuevo Dia*, San Juan, PR. (6 so far)

- June 13, Hermanos de crianza [*Foster siblings*].
- May 5, Estudian al solenodonte, un fósil viviente [*Studying the solenodon, a living fossil*].
- April 11, Estudian las nanopartículas [*Nanoparticles studied*].
- February 29, Boricua propone modelo biológico [*Boricua proposes biological model*].
- January 25, Crían coquíes en cautiverio [*Raising coquies in captivity*].
- January 20, Conoce las películas comestibles [*Knowing about edible films*].

2016. *Nuevo Periodico*, Caguas, PR. (1 so far)

- April 21, Boricuas investigan las nanopartículas y su efecto en plantas [*Puerto Rican scientists research nanoparticles and their effect on plants*].

2015. *Diálogo Digital*, San Juan, PR. (18)

- December 8, Estudiando la anemia con terapias genéticas [*Studying anemia using genetic therapies*].
- November 30, Pieza perdida del rompecabezas genético [*A missing piece in the human genetic puzzle*].
- October 23, Hasta el cemento tiene su ciencia [*Even concrete has its science*].
- October 21, Tras la pista del guabá [*Searching for scorpion spiders*].
- October 12, Proyecto 1000 Genomas en su punto culminante [*1000 Genome Project*].
- September 3, Comunicación a distancia entre lagartijos [*Long distance communication in lizards*].
- July 30, Científicos boricuas develan el uso más antiguo de plantas en el Caribe [*Puerto Rican scientists find the most ancient use of plants in the Caribbean*].
- July 6, Científicos puertorriqueños buscan mejorar el acceso a la educación graduada [*Puerto Rican scientists try to improve access to graduate school*].
- July 3, Miden niveles de plomo en niños y niñas boricuas [*Scientists measure lead levels among Puerto Rican children*].
- May 14, Investigadores descifran el misterio de las boas boricuas [*Scientists solve the mystery of the Puerto Rican boa*].
- May 4, Científico boricua descubre fósil de nueva especie de ballena [*Puerto Rican scientist discovers new fossil whale species*].
- April 1, Monos reconocen a sus parientes paternos nunca antes conocidos [*Monkeys recognize unknown family members*].
- March 30, Lentísima la recuperación de los corales bombardeados [*Very slow the recovery of bombarded corals*].
- February 27, Cuando se pierde el ritmo del sueño [*When you lose your sleep's rhythm*].
- February 25, Hasta los monos se benefician con las vacunas [*Even monkeys benefit from vaccines*].
- January 23, Científicos monitorean la recuperación de los erizos [*Scientists monitor sea urchin population recovery*].

- January 22, Científicos boricuas investigan materiales para purificar el agua [*Puerto Rican scientists research water-purifying materials*].
- January 19, Científicos estudian cómo proteger nuestros corales [*Scientists study how to protect our corals*].

2015. *El Nuevo Dia*, San Juan, PR. (20)

- December 5, Clave genética en Rusia [*The Russian genetic clue*].
- October 26, Tras la pista del guabá [*Searching for scorpion spiders*].
- October 25, Hasta el cemento tiene su ciencia [*Even concrete has its science*].
- October 11, En su punto culminante Proyecto 1000 Genomas [*1000 Genome Project*].
- September 5, Con la gaita prendida [*Lizards show translucent displays*].
- July 31, Tras la pista de la dieta precolombina [*Clues in the pre-Columbus diet in America*].
- July 7, Criterios imperfectos [*Imperfect criteria*].
- July 4, El plomo y los niños en PR [*Lead and children in PR*].
- May 15, Víctimas de malas decisiones [*Monkeys in PR: Victims of bad decisions*].
- May 14, El dilema de las boas similares [*The dilemma of look-alike boas*].
- May 4, Hallan cachalote extinto [*Scientist find extinct whale fossil*].
- April 7, Monos con trasunto de... [*Monkeys identify by sight unknown family members*].
- April 3, La desdicha del arrecife de coral [*The misfortune of coral reefs*].
- March 10, Hasta los monos se vacunan [*Even monkeys get vaccinated*].
- March 8, Científicos estudian cómo proteger los corales [*Scientists study how to protect corals*].
- March 6, Boricuas crean material para purificar el agua [*Boricuas create a material to purify water*].
- March 4, ¿Se esconde en Culebra un lagartijo gigante? [*A giant lizard hiding in Culebra?*].
- March 1, Clave los erizos en el ecosistema costero [*Sea urchins are key in the coastal ecosystem*].
- February 27, Cuando los monos pierden el ritmo [*When monkeys lose the rhythm*].
- January 22, Al auxilio de los corales [*To the rescue of corals*].

2015. *Nuevo Periodico*, Caguas, PR. (5)

- December 10, Estudiando la anemia con terapias genéticas [*Student anemia using genetic therapies*].
- August 6, Científicos boricuas develan uso más antiguo de plantas en el Caribe [*Puerto Rican scientists find the most ancient use of plants in the Caribbean*].
- July 2, Miden niveles de plomo en niños boricuas [*Measuring pediatric lead levels*].
- March 5, Hasta los monos se benefician con las vacunas [*Even monkeys benefit from vaccines*].
- January 22, Científicos boricuas investigan materiales para purificar el agua [*Puerto Rican scientists research water-purifying materials*].

2014. *Diálogo Digital*, San Juan, PR. (20)

- August 19, Las notas musicales de los coquíes [*The coquíes', musical notes*].

- August 18, Aumentan las muertes por la “anestesia de caballo” [*Deaths increase due to “horse anesthetic”*].
- August 12, Para largo el calor en Puerto Rico [*Long-term heat wave for Puerto Rico*].
- August 7, Investigadores boricuas publican estudio sobre problemas comunes de la vista [*Puerto Rican researchers publish a study about common vision problems*].
- July 31, UPR Humacao busca aumentar el número de hispanas en carreras STEM [*UPR Humacao aims at increasing the number of female Hispanic students in STEM careers*].
- July 15, Las virtudes de la aféresis terapéutica [*The virtues of therapeutic apheresis*].
- July 14, El oro, más que un simple metal [*Gold, more than a simple metal*].
- July 9, Investigan artrópodos invasores en frutas y vegetales [*Scientists research invasive arthropods in fruits and vegetables*].
- June 18, Sobresalen puertorriqueños en revista norteamericana de física [*Puerto Ricans highlighted in North American physics journal*].
- June 17, Las medicinas discriminan genéticamente [*Medications discriminate genetically*].
- June 9, Descubren nuevas especies de organismos en el Yunque [*New species of organisms discovered in El Yunque*].
- June 3, La mangosta, remedio peor que la enfermedad [*Mongoose, the remedy is worse than the illness*].
- May 13, Un siglo de aguaceros [*A century of rain*].
- April 18, Esfuerzo interagencial para estudiar las palomas turcas [*Inter-agency efforts to study scaly-naped pigeons*].
- April 17, La ciencia, ¿en inglés, español o bilingüe? [*Science: In English, Spanish or both?*].
- April 16, ¿Cómo evitar gastar dinero en suplementos nutricionales que no funcionan? [*How to avoid spending money in useless dietary supplements*].
- March 25, Descubren rastros de droga psicotrópica en reliquia taína [*Psychotropic drug remains found in Taino artifacts*].
- January 28, Científico descubre fósil de antiguo roedor en Puerto Rico [*Scientist discovers extinct rodent fossil from Puerto Rico*].
- January 14, Científicos descubren cuatro especies de líquenes boricuas [*Scientists discover four new lichen species*].
- January 9, Las “otras” quenepas [*The “other” Spanish limes*].

2014. *El Nuevo Día*, San Juan, PR. (18)

- October 5, Verdadero hombre renacentista [*Narciso Rabell: A true Renaissance man*].
- September 10, Invasores difíciles de detectar [*Hard-to-detect invaders*].
- September 7, El lenguaje científico [*Scientific language*].
- September 5, Adulterante fatal [*Deadly adulterant*].
- September 1, Metal cada vez más atractivo [*Gold, a very attractive metal*].
- August 29, Errores refractivos [*Refractive errors*].
- August 26, Remedio peor que la enfermedad [*A remedy that is worse than the illness*].
- August 24, Las “otras” quenepas [*The “other” quenepas*].
- July 18, Aféresis, técnica que salva vidas [*Apheresis: A technique that saves lives*].
- June 18, Medicinas discriminan genéticamente [*Medications discriminate genetically*].

- June 17, Nuevos líquenes hallados en la Isla [*New lichens discovered in the Island*].
- June 11, Destacan contribuciones boricuas a la ciencia [*Boricua contributions to science highlighted*].
- May 20, Un siglo de aguaceros [*A century of rain*].
- April 21, La cojoba y los taínos [*Cojoba and the Tainos*].
- April 17, Una especie que precisa protección [*A species that needs protecting*].
- January 28, Hallan fósil de un antiguo roedor [*Extinct rodent fossil found*].
- January 14, Nuevos detalles de la genética Boricua [*New details on Boricua genetics*].
- January 9, Colonizadores boricuas [*Boricua colonizers*].

2014. *Nuevo Periódico*, Caguas, PR. (5)

- August 7, Problemas de la vista comunes [*Common vision problems*].
- July 17, Conoce sobre la aféresis terapéutica [*Know about therapeutic apheresis*].
- May 22, Científicos de aquí: Yoira Díaz Sanabria [*Our scientists: Yoira Díaz Sanabria*].
- April 10, Dos golpes recientes a la pseudociencia [*Two strikes against pseudoscience*].
- January 23, Ciencia: Las “otras” quenepas [*The “other” Spanish limes*].

2013. *Diálogo Digital*, San Juan, PR. (9)

- December 16, Los fantásticos viajes marinos de la salamanquita boricua [*The fantastic sea voyages of a Boricua gecko*].
- December 13, Evaluando guineos y plátanos resistentes a la sigatoka [*Evaluating sigatoka-resistant bananas and plantains*].
- September 26, Cuando la tecnología se ‘esmanda’ [*When technology moves too quickly*].
- September 18, Nuevos materiales para almacenar dióxido de carbono [*New materials to store carbon dioxide*].
- September 17, Murciélagos viequenses [*Vieques bats*].
- August 26, Investigación de avanzada sobre las drogas y el cerebro [*Innovative research about the effect of drugs on the brain*].
- June 19, El efecto de los hongos en la salud y el hogar [*The effect of mold on health and households*].
- March 11, Los lagartijos boricuas se acostumbran al frío de la Florida [*Boricua Anolis get used to Florida winters*].
- February 22, ¿El fin de los mangles? [*The end of mangroves?*].

2013. *El Nuevo Día*, San Juan, PR. (15)

- December 12, Tras una solución contra la sigatoka [*In search of a solution for sigatoka*].
- November 26, Las señales de los púlsares [*Pulsar signals*].
- November 25, Recuerdos de un Nobel hecho en Arecibo [*Memories of a Nobel Prize made in Arecibo*].
- November 24, El milenar viaje de una especie [*The millennial voyage of a species*].
- October 7, El efecto de las drogas en el cerebro [*The effect of drugs on the brain*].
- September 25, Cuando la tecnología se “esmanda” [*When technology moves too quickly*].
- September 23, Un Nobel hecho en Puerto Rico [*A Nobel Prize made in Puerto Rico*].
- August 20, ¿Cómo combaten las infecciones los corales?* [*How corals fight infections?*]
- August 11, ¿Cómo combaten las infecciones los corales? [*How corals fight infections?*]

- August 6, Crean un safari virtual boricua en internet [*Scientists create a virtual safari in the Internet*].
- June 10, El desafío de los hongos en el hogar [*The challenge of mold in homes*].
- June 7, Vitales los murciélagos [*Essential bats*].
- March 5, Los dilemas éticos de la ciencia moderna [*Ethical dilemmas of modern science*].
- February 17, Se apaga el Canal Tierra [*The Dish-Earth Channel signs off*].
- February 11, Las iguanas y sus menus favoritos [*Iguana's favorite foods*].

2013. *Nuevo Periódico*, Caguas, PR. (6)

- September 19, Cuando la tecnología se ‘esmanda’ [*When technology moves too quickly*].
- September 12, A 20 años de un Premio Nobel hecho en Puerto Rico [*20 years of a Nobel Prize made in Puerto Rico*].
- September 5, Investigación sobre las drogas y el cerebro [*Research on the effect of drugs on the brain*].
- March 21, Dilemas éticos de la ciencia moderna [*Ethical dilemmas of modern science*].
- March 7, Mejores bombillas en 5 años [*Better lightbulbs in 5 years*].
- February 14, Las iguanas y los mangles [*The effect of iguanas on mangroves*].

2012. *Diálogo Digital*, San Juan, PR. (11)

- November 27, Revelan nuevos datos sobre la presión y la deformación volcánica [*New data on pressure and volcanic deformation revealed*].
- August 21, Aguas usadas: Más allá de un ecosistema desagradable [*Sewage water: Beyond a disgusting ecosystem*].
- June 25, Lagartijos sobrecalentados [*Overheated lizards*].
- May 8, Nuevo record de precision para medir el tiempo [*New precise time-keeping record*].
- April 9, Dientes sucios revelan dieta precolombina [*Dirty teeth revealed pre-Columbian diet*].
- March 23, Estudian la recuperación de los bosques de tabonuco [*Scientists study the recovery of candlewood forests*].
- March 20, Las cotorras piden consejo [*Parrots ask for advice*].
- March 5, Planetas “suelos como gabete” [*Rogue planets*].
- February 22, Importante hallazgo sobre comunicación no-verbal entre primates [*Important discovery about non-verbal primate communication*].
- February 3, La ficción te cuesta dinero [*Friction costs you money*].
- January 17, Recomiendan paneles solares para vertederos municipales [*Solar panels recommended for old landfills*].

2012. *El Nuevo Día*, San Juan, PR. (14)

- December 2, La presión y los volcanes [*Volcanoes and pressure*].
- November 29, Nuestra isla se convertirá en dos [*Our island will split into two*].
- November 12, Nueva mirada a las “invasiones” [*A new look at invasive species*].
- August 16, Nuevo records de precision [*New precision-related record*].
- August 12, Cuando los lagartijos se sobrecalientan [*When lizards overheat*].
- August 9, ¿Inofensivas las iguanas? [*Are iguanas harmless?*]

- May 30, La evolución del manatí [*The evolution of sea cows*].
- April 5, Sí, la fricción cuesta dinero [*Yes, friction costs money*].
- March 23, Boricuas descubren molusco [*Boricua scientist discover new mollusk species*].
- March 2, “Volando bajito” pero muy seguro [*Flying low but safe*].
- February 17, El idioma de sus rasgos faciales [*The language of facial expressions*].
- January 19, Peligrosa variedad del “Aedes” [*Dangerous variety of Aedes mosquitoes*].
- January 18, Mirada boricua al cosmos [*A Boricua looks at the cosmos*].
- January 5, La hidratación, vital para el ejercicio [*Hidration is vital during exercise*].

2012. *Nuevo Periódico*, Caguas, PR. (11)

- November 8, Nuevos paradigmas en la ecología de invasiones [*New paradigms in invasion ecosystems*].
- September 6, Ecosistemas desagradables [*Nasty ecosystems*].
- August 30, ¿Son los vehículos híbridos apropiados para el trópico? [*Are hybrid vehicles appropriate for tropical countries?*]
- August 2, Las iguanas y la fauna de Puerto Rico [*Iguanas and Puerto Rican fauna*].
- June 5, Lagartijos sobrecalentados [*Overheated lizards*].
- May 10, Nuevo record de precision para medir el tiempo [*New precision record to measure time*].
- March 1, La fricción y tu carro [*Friction and your car*].
- February 9, Marcelo Febo y la neuroquímica del amor materno [*Marcelo Febo and the neurochemistry of motherly love*].
- January 19, El cambio climático y la Reserva Natural de Humacao [*Climate change and the Humacao Natural Reserve*].
- January 12, Peligroso y oculto el Aedes mediovittatus [*Aedes mediovittatus: A hidden danger*].
- January 5, El cerebro y la zona de empatía [*The brain’s empathy zone*].

2011. *Diálogo Digital*, San Juan, PR. (18)

- December 21, UPR Arcibo presenta catálogo de planetas habitables [*UPR Arcibo presents catalog of habitable exoplanets*].
- December 21, A usar la zona de empatía [*Using your empathy zone*].
- December 8, Peligroso y oculto el Aedes Mediovittatus [*Aedes mediovittatus: A hidden danger*].
- November 9, El cambio climático y la Reserva Natural de Humacao [*Climate change and the Humacao Natural Reserve*].
- September 22, El asma y los remedios de la abuela [*Asthma and homemade remedies*].
- July 11, Más evidencia contra los brazaletes “milagrosos” [*More evidence against “miracle” bracelets*].
- June 29, Conoce la apoptosis o el “suicidio celular” [*Knowing about cell suicide*].
- June 7, Arquitectura inspirada en la fisiología humana [*Architecture inspired by human physiology*].
- June 3, Científicos Boricuas nos transportan en el pasado [*Boricua scientists’ travel to the past*].
- May 8, Espiando a Mercurio [*Spying Mercury*].

- April 19, La pseudociencia y los suplementos para perder peso [*Pseudoscience and weight-loss supplements*].
- April 8, Obstáculos económicos y físicos al biodiesel de algas [*Physical and economic obstacles for algae biodiesel*].
- March 24, La ciencia de la mancha de plátano [*The science of the plantain's stain*].
- February 21, Atrévete a estudiar física [*Be brave and study physics*].
- February 21, Las gasolineras como posible foco de contaminación [*Gas stations as pollutants*].
- February 4, En peligro las tortugas [*Endangered turtles*].
- January 20, Precaución con las pastillas contra el insomnio [*Caution with sleeping pills*].
- January 18, El cigarillo y sus efectos genéticos inmediatos [*Cigarette's immediate effects*].

2011. *El Nuevo Día*, San Juan, PR. (10)

- November 13, El cambio climático y la Reserva Natural de Humacao [*Climate change and the Humacao Natural Reserve*].
- November 8, Los genes hox y el embrión [*Hox genes and the embryo*].
- October 18, Romance de boricua con el ámbar [*A Boricua's romance with amber*].
- August 23, El clima según las estalagmitas [*The climate according to stalagmites*].
- August 8, Adiós a los “tubos” [*Goodbye to the tubes*].
- August 8, Ratones inmunes [*Immune rats*].
- July 25, ¿Es real el poder de los brazaletes? [*Is the power of bracelets real?*].
- April 20, Obstáculos al biodiesel de algas [*Obstacles to algae biodiesel*].
- April 15, La mancha del plátano [*The plantain's stain*].
- March 25, Electricidad sin cobre [*Electricity without copper*].

2011. *Nuevo Periódico*, Caguas, PR. (14)

- December 29, UPR Arcibo presenta catálogo de planetas habitables [*UPR Arcibo presents catalog of habitable exoplanets*].
- November 17, Vocación de corazón: por la salud de nuestra gente [*A scientist's vocation for people's health*].
- November 3, Las tortugas en peligro [*Endangered turtles*].
- October 20, Probando la veracidad del ámbar [*Testing amber's veracity*].
- October 13, Científicos de aquí: Janice Alers García [*Janice Alers García: Local scientist*].
- September 22, El efecto del calor en el acero de construcción [*The effect of heat on construction steel*].
- September 15, El asma y los “remedios de la abuela” [*Asthma and “grandma's remedies”*].
- September 15, La pseudociencia y los suplementos para perder peso, parte 2 [*Pseudoscience and weight-loss products, part 2*].
- September 8, Prediciendo mancha solares “de oído” [*Using sound waves to predict sunspots*].
- August 25, La pseudociencia y los suplementos para perder peso, parte 1 [*Pseudoscience and weight-loss products, part 1*].

- August 25, El record climático de las estalagmitas [*A stalagmites' climate record*].
- August 18, Más evidencia contra los “brazaletes milagrosos” [*More evidence against “miracle” bracelets*].
- August 11, Un laboratorio clínico en la palma de la mano [*A clinical lab in the palm of your hand*].
- August 4, La importancia de los anestésicos [*The importance of anesthetics*].

2010, *El Nuevo Día*, San Juan, PR. (13)

- October 18, Orgullo nuestro ante el mundo [*Arecibo Radio-observatory: Boricua pride*].
- October 11, Estudios ionosféricos cruciales [*Arecibo Radio-observatory: Crucial ionospheric studies*].
- October 4, Centinela Boricua del universe [*Arecibo Radio-observatory: Boricua sentinel*].
- September 27, Cronista y cartógrafo especial [*Arecibo Radio-observatory: Cartographer and space chronicler*].
- September 20, Un vistazo a través del tiempo [*Arecibo Radio-observatory: Looking through time*].
- September 13, Ventana Boricua al universe [*Arecibo Radio-observatory: A window into the universe*].
- May 10, Bacterias y antibióticos [*Bacteria and antibiotics*].
- May 3, Vinculados la geología y la salud [*A relationship between geology and health*].
- April 26, La megaciudad que nos devora [*The megacities devour us*].
- April 19, El clima: pasado y futuro [*Climate: Past and present*].
- April 12, Riesgos ambientales [*Environmental risks*].
- April 5, Prioridad ambiental [*Environmental priorities*].
- March 29, Reclamos ambientales [*Environmental claims*].

2010. *Diálogo Digital*, San Juan, PR.(10)

- June 15, El dilema de la luz amarilla [*The dilemma of the yellow stoplight*].
- May 19, Descubrimiento para la anestesia reduce el miedo a los dentistas [*New anesthetic reduces fear of dentists*].
- April 21, A revisar las teorías de formación planetaria [*Revised theories of planetary formation*].
- April 16, ¿Qué es la ciencia comunitaria? [*What is community science?*]
- April 13, Descubren enfermedades infecciosas en el espacio [*Infectious diseases discovered in space*].
- April 6, Componentes electrónicos plásticos para paneles solares [*Plastic components for solar panels*].
- March 31, ¿Cómo los murciélagos se orientan al volar? [*How do bats orient themselves when flying?*].
- March 23, Efectos de los plásticos en la salud humana y el medioambiente [*The effect of plastics on human health and the environment*].
- March 19, Picosatélites: chiquitos y útiles investigadores científicos [*Picosatellites: small but useful scientific researchers*].

- January 14, Descubren sustancia química que atrae a los mosquitos [*New mosquito-attracting chemical discovered*].

2009, *Diálogo Digital*, San Juan, PR. (13)

- December 16, El efecto del olfato en la memoria [*The effect of smell on memory*].
- December 10, Dale vacaciones al jabón [*Soap on vacations*].
- December 7, La mujer puertorriqueña y la endometriosis [*Endometriosis and the Puertorrican women*].
- December 2, ¡Vaya primo, bienvenido a la familia humana! [*Hello primate cousin, welcome to the human family*].
- December 1, ¿Estarán pasando “gato por liebre” con el sushi? [*Is sushi really sushi?*].
- November 16, ¿Qué tipo de resucitación cardiopulmonary es más efectiva? [*What type of CPR is the most effective?*].
- November 3, Origen del oxígeno atmosférico en la Tierra [*The origin of atmospheric oxygen*].
- September 30, Vacunas sin pinchazos [*Vaccines without needles*].
- September 21, La actividad humana hunde a los deltas [*Human activity sinks river deltas*].
- September 14, Integran la ingeniería al currículo escolar [*Integrating engineering to the school science curriculum*].
- September 8, Emisiones orgánicas en plantas ornamentales [*Organic emissions from ornamental plants*].
- September 8, ¿De dónde viene el pescado que comemos? [*Where do the fish we eat come from?*].
- September 2, Vehículos enchufables a prueba [*Testing plug-in vehicles*].

2008, *El Nuevo Día*, San Juan, PR. (8)

- April 25, Desperdicios en órbita [*Orbiting space trash*].
- February 19, ¡No te pierdas el eclipse! [*Do not miss the eclipse!*]
- February 14, Conoce a los nuevos “bajitos” [*Meet the new dwarf (planets)*].
- February 8, Dan pánico pero no comen gente [*Bats: Scary but nice*].
- February 3, Retos de una costosa reparación [*Challenges of a costly space repair*].
- February 2, Claves de éxito para científicos escolares [*The keys to success for school scientists*].
- January 15, Críticas al método científico [*Criticisms of the scientific method*].
- January 12, El engaño de la experiencia [*Experiences can fool you*].

2007, *El Nuevo Día*, San Juan, PR. (14)

- December 14, ¡Rayos y centellas! [*Thunder and lightning!*].
- November 16, El “reculeo” del Marte [*Mars’ backpedaling*].
- November 12, Cambia el mapa [de Puerto Rico] en 100 años [*Changes to the coastal map of Puerto Rico in 100 years*].
- October 11, Escasez que afectará a todos [*Shortages that will affect us all*].
- September 6, Razones por las que la lombriz es tan feliz [*Why earthworms are happy*].
- September 4, Duermes con él todas las noches [*You sleep with them every night*].

- August 31, Analogía evolutiva del language y las especies [*Evolutionary analogies between languages and biological species*].
- July 3, Explicaciones creíbles [*Credible explanations*].
- June 22, El mundo dentro de 100 años [*Our world in 100 years*]
- June 18, Experimentos a lo bruto [*Brutal experiments*].
- May 28, Café prieto, puya y ... ¿tóxico? [*Is dark coffee toxic?*].
- April 2, Plutón va al sicólogo [*Pluto goes to the psychologist*].
- March 24, Vital ser un paciente informado [*An informed patient*].
- March 20, Blanco de gripe aviar las aves domésticas [*Bird flu affects domestic species*].