

Western Alliance to Expand Student Opportunities



Louis Stokes Alliance for Minority Participation
Biodesigned and Sustainable Bridge to the Doctorate Program
at Arizona State University



Building Bridges to Doctoral Degrees
In Science, Technology, Engineering and Mathematics



Supported in part by the following cooperative agreements from the National Science Foundation # HRD-0114712 & # HRD-0602425



Welcome!

Through funding by the National Science Foundation's Human Resources Division, the Western Alliance to Expand Student Opportunities Louis Stokes Alliance for Minority Participation Bridge to the Doctorate program (WAESO-LSAMPBD) has supported and mentored five cohorts of WAESO-LSAMPBD Biodesigned and Sustainable Bridge to the Doctorate Students.

As international competition increases, it is becoming clear that for our nation to maintain its traditional high standard of living, it must rely on a highly trained science and technology workforce to create new knowledge, new technologies, and new employment opportunities for all Americans. Our Bridge to the Doctorate (BD) Program is designed to bring together faculty mentors and students across mathematics, engineering, physical and biological science disciplines to discover new knowledge as well as create new applications of science that can improve lives.

Our LSAMP has had 5 Bridge to the Doctorate student cohorts for a total of 58 fellowship students: 24 are female and 34 are male. Over 92% have started or plan to pursue a doctoral STEM degree. Several WAESO BD students have already won awards for poster presentations at National Conferences and one of our BD students has won the IEC William L. Everitt Student Award of Excellence. Most importantly, half (29 of 58) of these students already have transitioned into doctoral programs even before completing their WAESO LSAMP BD fellowships. Moreover, all students in cohorts I-V who have transitioned to the doctorate have secured support from the Sloan Foundation, departmental support, or research assistantships. All cohorts have also successfully developed a critical mass of researchers who consistently seek each other out for their individual technical expertise and have shaped their doctoral work as interdisciplinary research.

Innovations in graduate preparation pioneered by our Bridge to the Doctorate program that are being implemented in other graduate programs include: 3+2 B.S./M.S. programs; cross-cutting research seminars where BD students and faculty actively participate in discussions and develop new collaborations; emphasis on international conference participation and collaborations; and creating faculty peer networks that emphasize mentoring.

WAESO-LSAMP is proud to be a part of this national effort to increase the capacity and diversity of the scientific and technological workforce at the doctoral level. Because of the tireless effort of our mentors, we are poised to significantly increase the number of doctoral degrees in science, technology, engineering, and mathematics disciplines awarded to currently underrepresented minorities.

Sincerely,

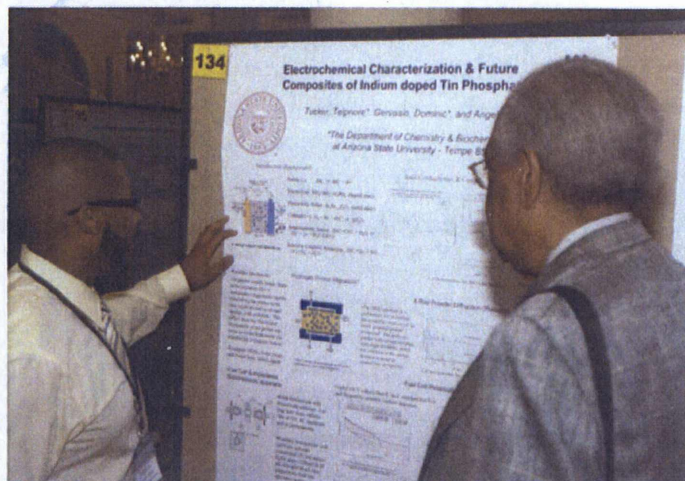
Antonio A. Garcia, Ph.D.
Director of WAESO-LSAMP, Professor of Bioengineering
Associate Director of the Hispanic Research Center
Arizona State University

Western Alliance to Expand Student Opportunities (WAESO) Biodesigned and Sustainable Bridge to the Doctorate

Fellowship recipients participate in a sequence of supervised program activities under the unifying theme of Biodesigned and Sustainable Bridge to the Doctorate. Fellows take part in the Arizona Biodesign Institute and the Mathematical and Theoretical Biology Institute in addition to traditional academic departments. Academic specializations cut across disciplines and permit cutting-edge research in any of the following areas: modeling, analysis, design, and control of complex systems and processes, mathematical biology, computational mathematics, demography, ecology, environmental science, epidemiology, bio-terrorism, networks, photobiology, photochemistry, synthetic chemistry, photosynthetic systems, communications, controls, multi-objective optimization, vaccines from applied crop science, protein and peptide pharmaceuticals, biooptical nanotechnology, single molecule biophysics, applied nanobioscience, neural interface and brain control, rehabilitation neuroscience and rehabilitation engineering, evolutionary functional genomics, and distributed computation.

Program activities are designed to assist students in developing the research and related skills necessary for successful doctoral study while completing a Master of Science degree with thesis. All fellows participate as a cohort in the following program activities: 1. Research Class. 2. Research Seminars. 3. Research Presentations. 4. Professional Conferences. 5. Professional Organizations. 6. Mentoring of Undergraduates. 7. Visits to High Schools. 8. Assessment and Mentoring.

We in the Western Alliance to Expand Student Opportunities (WAESO), are thrilled to participate in five LSAMP Bridge to the Doctorate cohorts thus far. All of the bridged LSAMP students share the vision of breaking disciplinary boundaries by working closely with collaborative teams of mathematicians, physicists, biologists, engineers, chemists, and biomedical researchers. In turn, the research team leaders are pleased to be able to recruit talented and energetic LSAMP graduates who have been encouraged and nurtured by our exemplary faculty mentors within our alliance. WAESO applauds the National Science Foundation's efforts in once again supporting bridges to help meet the nation's critical need in the science and technology workforce.



Project Director Dr. Antonio A. García

Dr. Antonio A. García is the Associate Director of the Hispanic Research Center and Professor of Bioengineering in the Ira A. Fulton School of Engineering at Arizona State University where he has focused on designing and characterizing surfaces and colloids for diagnostic devices and biomolecule separation. He obtained a doctorate in Chemical Engineering from the University of California, Berkeley and a baccalaureate in Chemical Engineering from Rutgers University, New Brunswick. His work has been published in a wide variety of chemistry, engineering, and biology journals including *J. of Physical Chemistry*, *I&EC Research*, *The Analyst*, and *J. of Microbiological Methods*. He co-authored the textbook *Bioseparation Process Science* (Blackwell Science). Dr. García is also actively involved in regional, national, and international education and human resource projects aimed at improving math, science, and engineering education as well as meeting the demand for a technological workforce as the nation's demographics changes. He was Associate Editor of the *Journal of Research in Science Teaching* 2003-2005 and is currently project director of a National Science Foundation (NSF) Louis Stokes Alliances for Minority Participation (LSAMP) and NSF LSAMP Bridge to the Doctorate (BD) programs, as well as a co-project director of a NSF Alliances for Graduate Education and the Professoriate (AGEP) program—each of which enhance opportunities for undergraduate and graduate students in science, math and engineering. His educational efforts in collaboration with faculty in the Colleges of Liberal Arts and Engineering were featured on the cover of *Journal of Chemical Education* (September 2000 issue). Recently, his work with colleagues in engineering and sciences on combining surface chemistry and fractal texturing in order to move water drops using magnetic fields was featured in *Science Daily* and *Earth and Sky Radio* (August 2006).



WAESO-LSAMPBD Biodesigned and Sustainable Bridge to the Doctorate Project Co-Coordinator Dr. Ana Moore

Dr. Ana Moore, professor, Department of Chemistry and Biochemistry, Arizona State University, is the only female Hispanic full professor in a top 50 Chemistry department in the U.S. and is an internationally recognized leader in the field of photochemistry. Her Hirsch index is a very impressive 45 which is the level that is suggested as meriting National Academy of Science status, and her work has been cited 7,801 times. She serves as a council member on the International Society of Photobiology, was on the editorial advisory board of Accounts of Chemical Research, and has recently co-chaired a Gordon Conference on Electron-Donor Acceptor Interactions. Dr. Moore studies the function of carotenoids in natural and artificial photosynthetic systems and is involved with the synthesis and characterization of carotenoids and components of artificial supramolecular ensembles that are designed for studying electron and proton transfer. Her research emphasizes synthetic chemistry along with steady-state and transient absorption and fluorescence spectroscopies. The work of Dr. Moore and her colleagues continues to gain international recognition with such advances as the synthesis of a molecule with the largest dipole – an important achievement that helps to advance technologies such as molecular electronics and solar energy. From her initial work as graduate committee chair in Chemistry, she continues to recruit Hispanic students at all levels, but perhaps most notably recruited two female Hispanic students who recently received their Ph.D.s in Chemistry. She currently also participates with Cohort I-V students during our seminar series and to these students specifically has modeled the importance of collaborations in advancing scientific development.



WAESO-LSAMPBD Biodesigned and Sustainable Bridge to the Doctorate Project Co-Coordinator Dr. Carlos Castillo-Chavez

Dr. Carlos Castillo-Chavez is Regents' Professor and Joaquin Bustoz Jr. Professor of Mathematical Biology; Director, Applied Mathematics for the Life and Social Sciences program; Executive Director, Mathematical and Theoretical Biology Institute (MTBI); Executive Director of the Institute for Strengthening Understanding of Mathematics and Science (SUMS); and Executive Director, Mathematics Science Honors Program, at Arizona State University. He is a Fellow of the American Association for the Advancement of Science (AAAS). Dr. Castillo-Chavez is also a 1997 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring recipient and a 1992 NSF Presidential Faculty Fellow (PFF). He received the 2002 SACNAS (Society for the Advancement of Chicanos and Native Americans in Science) Distinguished Scientist Award and the Richard Tapia Award (2003). He also received the 2007 AAAS Mentor Award. He has co-authored over 100 publications and has edited or co-authored 6 books. His edited volume (with Professor Tom Banks) on the use of mathematical models in homeland security was published in SIAM's *Frontiers in Applied Mathematics* (2003).



Dr. Castillo-Chavez' research program lives at the interface of the natural and social sciences and puts emphasis on the role of dynamic social landscapes on disease evolution. In collaboration with various other researchers, joint work is conducted on the role of cross-immunity on the evolution and dynamics of influenza; the impact of behavioral changes, long periods of infectiousness, variable infectivity, co-infections, prostitution, social networks and vaccine efficacy on HIV dynamics; the role of exogenous re-infection, variable progression rates, vaccination, public transportation, close and casual contacts (generalized households) on tuberculosis dynamics and control; the impact of life-history vector dynamics on dengue epidemics; and on the identification of time response scales for epidemics like foot and mouth disease (Uruguay). More recently, Dr. Castillo-Chavez and collaborators have worked on the role of dispersal and disease as enhancing mechanisms of ecological diversity. Most recently, research efforts focus on problems at the interface of homeland security and disease invasions (natural or deliberate) and on models for the spread of social "diseases" like alcoholism and ecstasy. Work on models for the spread of extreme ideologies and their impact on cultural norms is also under way.

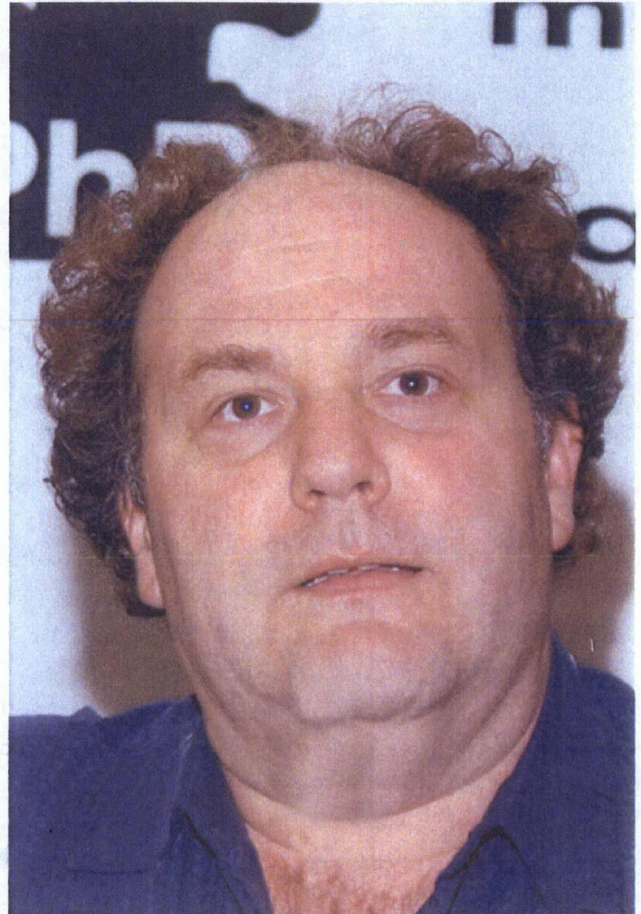
WAESO-LSAMPBD Biodesigned and Sustainable Bridge to the Doctorate Project Co-Coordinator Dr. Jean Andino

Dr. Jean Andino is Associate Chair for Graduate Affairs and Associate Professor, Department of Chemical Engineering; as well as Associate Professor, Department of Civil and Environmental Engineering, at Arizona State University. She has received numerous prestigious national awards, including the National Science Foundation CAREER Award, 3 NASA Space Act awards, the 2004 John J. McCreary Outstanding Faculty Award, and was selected and participated in the 2003 Latin American Lecture Series sponsored by the American Association for the Advancement of Science. Dr. Andino's research focuses broadly on environmental sustainability issues, as related to air pollution and works with other faculty within the urbanization research thrust of the Global Institute of Sustainability. Specifically, her group engages in fundamental studies of the chemical kinetics and mechanisms pertinent to air pollutant formation and control. Dr. Andino has published numerous peer-reviewed journal articles in the field of air pollution and atmospheric chemistry, has 2 patent applications currently under review by the US Patent and Trademark Office (one technology has already been licensed by a private company), and is a registered professional engineer. Dr. Andino led two successful Department of Education Graduate Assistance in Areas of National Need (GAANN grants) to recruit, retain and graduate traditionally underrepresented students within environmental engineering. She helped generate a cultural change at her previous institution that resulted in an increase in the graduation of women with PhDs in environmental engineering. As past Chair of the Joint Board-Council on Minority Affairs (CMA) of the American Chemical Society (ACS), Dr Andino worked closely with ACS staff to direct the ACS Scholars program for undergraduate students.



WAESO-LSAMPBD Biodesigned and Sustainable Bridge to the Doctorate Project Co-Coordinator Dr. Ferran Garcia-Pichel

Dr. Ferran Garcia-Pichel is an Associate Professor in the School of Life Sciences at Arizona State University. He won a Fulbright Scholarship to study at the University of Oregon where his graduate work on natural sunscreens from bacteria earned him the Harold T. Bold Award (American Phycological Society). As a postdoctoral researcher, he became one of the founding researchers at the Max Planck Institute for Marine Microbiology and began his career in Geomicrobiology. His research at ASU has focused on the biology of microbial sunscreens, and in the interactions of microbes with minerals. It was recognized as groundbreaking by the 2002 Henry W. Menn Memorial Award from the Skin Cancer Society as a new field of study and has already appeared in a General Microbiology textbook as a research highlight. Dr. Garcia-Pichel's research is centered on improving our knowledge on bacterial diversity using a combination of traditional and molecular techniques to discover and unravel physiological and behavioral adaptations that allow microorganisms to thrive under extreme conditions such as exposure to UV radiation, high concentrations of salt or prolonged desiccation, with an eye on possible applications to biotechnology. In 2004 upon promotion to Associate Professor with tenure, he was chosen as one of 5 university-wide Exemplary Scholars by the university president. He sets an excellent example for our Bridges to the Doctorate students by participating in our regular seminar series as a speaker and as a stimulating discussion leader.



COHORT I

**Anthony Billups**

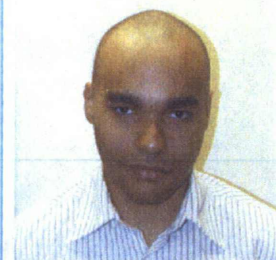
B.S. Mathematics Northeastern University (2004)

M.A. Mathematics Arizona State University (2006)

Reynaldo Castro

B.S. Computer Science Metropolitan University of San Juan (2003)

Pursuing Ph.D. Applied Mathematics in Life and Social Sciences Arizona State University

**Daniel García-Mont**

B.S. Electronics Engineering Technology University of Puerto Rico at Bayamón (2003)

Pursuing M.S. Graphic Information Technology Arizona State University

Brenda Rascón

B.A. Anthropology Arizona State University (2004)

M.S. Biology Arizona State University (2007)

**Dania Pino**

B.A. Cell Biology Arizona State University (2003)

Pursuing M.S. Microbiology Arizona State University

Ariel Jones Arndt

B.S. Biology University of New Mexico (2004)
Pursuing Ph.D. Microbiology Arizona State University



This program enabled me to pursue a graduate education in the field of Microbiology at Arizona State University. The generous stipend and support the program gave me allowed me to focus on my studies full time. I also enjoyed the monthly meetings that the program had because they allowed me to network with fellow professors and students. After being in the Bridge to the Doctorate program for about a year, I decided I wanted to pursue my Ph.D. in Microbiology at the same university. I liked the research I was doing, the environment and the opportunities I would have in the future with a Ph.D. degree. The program really allowed me to gain experience in graduate school and helped me to make an informed decision about continuing in school. I am forever grateful for the NSF Bride to the Doctorate Program for giving me the opportunity to receive this fellowship.



Stephanie Rogers Touchman

B.S. Biology University of Arizona (1998)
M.S. Computational Biosciences Arizona State University (2005)
Pursuing Ph.D. Science Education Arizona State University

Jovan Trujillo

B.S. Chemical Engineering University of Arizona (2004)
Pursuing Ph.D. Chemical Engineering Arizona State University



**Tiana White**

B.S. Microbiology Arizona State University
(2004)

M.S. Molecular and Cellular Biology Arizona
State University (2006)

**Griselle Torres-García**

B.S. Mathematics University of Puerto Rico at
Mayagüez (2003)

Pursuing Ph.D. Applied Mathematics in Life and
Social Sciences Arizona State University

The Bridge to the Doctorate Fellowship helped me in many ways; primarily by paying for my tuition and school related expenses, but it also gave me the opportunity of spending more time preparing for the classes, qualifier exams and written comprehensive. Through this fellowship I participated in many talks and conferences that enhanced my knowledge in different areas. It was nice going to these talks and conferences and finding people like me as speakers and listeners. It gives you the feeling that you can do it and you are not alone. They have been with me all the way since I started graduate studies and I hope one day I can come back as a speaker to let other students in the Bridge to the Doctorate Fellowship know that they can do it and they are getting the best help that can be provided to underrepresented minorities.

COHORT II



Daniel Aguiar

B.S.E. Electrical Engineering Arizona State University (2005)
M.S. Electrical Engineering Arizona State University (2006)
Pursuing Ph.D. Electrical Engineering Purdue University

Daniel Cartagena

B.S. Electrical Engineering Arizona State University (1997)
M.S. Electrical Engineering Arizona State University (2000)
Pursuing Ph.D. Electrical Engineering Arizona State University



Miguel García

B.S.E. Electrical Engineering Arizona State University (2005)
M.S. Electrical Engineering Arizona State University (2007)

Kevin Flores

B.S. Creative Studies-Mathematics University of California at Santa Barbara (2005)
Pursuing Ph.D. Applied Mathematics in Life and Social Sciences Arizona State University



The NSF LSAMP fellowship has allowed me to go to graduate school and explore many options for a career. With the help of MGE@MSA I have been able to attend conferences and meet people in my field of interest. I am very thankful that they have provided me the opportunity to be creative and take risks with my research that I would not have been able to attempt otherwise.

COHORT II

**Chad Gonzáles**

B.S. Mathematics/Chemistry Colorado State University at Pueblo (2004)

M.A. Mathematics Arizona State University (2007)

Umar Lyles

B.S.E. Electrical Engineering Arizona State University (2004)

M.S. Electrical Engineering Arizona State University (2006)

**Angela Ortíz**

B.S. Applied Math and Computer Science Metropolitan University at Cupey (2003)

M.A. Mathematics Arizona State University (2006)

Pursuing Ph.D. Applied Mathematics in Life and Social Sciences Arizona State University

Richard Ormeno

B.S.E. Electrical Engineering Arizona State University (2005)

M.S. Electrical Engineering Arizona State University (2007)

**David Segura**

B.S. Mathematics Arizona State University (2003)

M.S. Statistics Arizona State University (2006)

Alicia Urdapilleta

B.A. Mathematics Mills College (2003)

M.A. Mathematics Arizona State University (2007)



Arlene Evangelista

B.S. Mathematics Arizona State University (2001)

M.N.S. Natural Science Arizona State University (2006)

Pursuing Ph.D. Mathematics Arizona State University

I received the Bridge to the Doctorate fellowship early in my career, and it greatly influenced my life. Having the fellowship allowed me to concentrate on my studies, without worrying about having other time consuming responsibilities such as grading or teaching. The fellowship gave me the opportunity to focus on my math qualifiers, which I passed at PhD level. With the fellowship I also had the chance to go to conferences and present my previous work and network with other scientists. Most importantly, the nice thing about the fellowship is that it gives the extra time needed to do some scientific research in whatever our interests are, either in the regular semesters or the summers.

COHORT II

David Murillo

B.S. Mechanical Engineering Cornell University (2001)
Pursuing Ph.D. Applied Mathematics in Life and Social
Sciences Arizona State University

To me, three of the biggest challenges facing minority scholars are lack of information, lack of role models/mentors, and having a support group. The Bridges to the Doctorate program helped me address all three of those challenges. I was fortunate to have a mentor and a support group with Dr. Carlos Castillo-Chavez outside of the Bridges program, but when I was accepted to that program it enhanced and reinforced what Dr. Castillo was able to provide for us. Our regular meetings fostered a sense of community with each other and allowed us time to ask candid questions to professors who had faced the same struggles we were undergoing. We had the opportunity to visit Washington, D. C. and talk with policy makers and government officials that instilled in us a sense of importance in who we were and what we were doing. In essence, it gave us self-confidence which, as anyone who has pursued a Ph. D. will tell you, is often in short supply.

The financial support of the Bridges program was also extremely helpful. It allowed me to postpone having to teach and concentrate on my exams and my research. Because of this, I was able to complete my exams and transition from the masters program to the doctorate program at my institution. The support I got from the Bridges program did not end when the financial support did. I still keep in contact with the staff and members of my cohort. It has provided a lasting foundation that I am sure will continue far after I complete my goal of receiving a doctoral degree.



COHORT III



Asela Acosta
B.A. Mathematics Texas A&M International University (2005)
M.N.S. Natural Science (Mathematics) Arizona State University (2008)

Jose L. Almora
B.S. Mathematics University of North Carolina at Chapel Hill (2005)
M.A. Mathematics Arizona State University (2007)



Kamal Barley
B.S. Mathematical Science City University of New York Medgar Evers College (2005)
Pursuing M.A. Mathematics Arizona State University



Daniel M. Romero
B.S. Mathematics Arizona State University (2005)
M.A. Mathematics Arizona State University (2007)
Pursuing Ph.D. Mathematics Cornell University



Mark A. Carty
B.A. Mathematics City University of New York City College of New York (2005)
Pursuing Ph.D. Mathematics Arizona State University

COHORT III

**Brenda Flores**

B.S. Biology and Society Arizona State University (2005)

M.S. Biology Arizona State University (2008)

Edgardo L. Ramírez Reinat

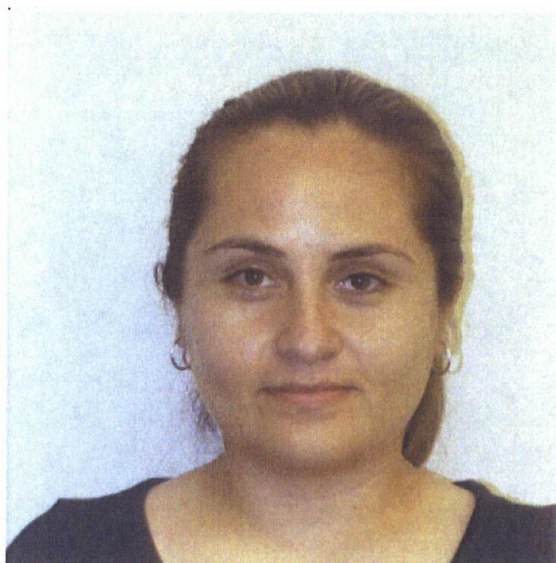
B.S. Microbiology University of Puerto Rico at Humacao (2003)

Pursuing Ph.D. Microbiology Arizona State University

**Roxanne C. Ríos**

B.S. Plant Biology Arizona State University (2005)

Pursuing M.S. Plant Biology Arizona State University

**Blanca E. Caballero**

B.S. Biology, Premed Arizona State University (2005)

Pursuing Ph.D. Biology Arizona State University

Being a graduate student is very difficult, particularly for a woman and a parent in the sciences. The Bridge to the Doctorate Fellowship helped me significantly in providing the funding that allowed me to focus on my course work and research early on, which I felt increased my chances of success in the later stages of my program. In addition, the unique opportunity to interact with other minority researchers from various parts of the world provides an excellent stage for networking. Through this program, I was able to secure funding to attend conferences and obtain valuable materials related to my research. Lastly, the program was instrumental in providing a sense of community that served as another source of vital support for me as a graduate student.



Danielle E. Robbins

B.S. Applied Mathematics University of Maryland at Baltimore County (2005)
Pursuing M.A. Mathematics Arizona State University (2007)

Jerrald Willis

B.S. Electrical Engineering Wright State University (2004)
Pursuing M.S. Electrical Engineering Arizona State University



Terannie Vázquez

B.S. Chemistry Metropolitan University at Cupey (2003)
M.S. Chemistry Arizona State University (2007)
Pursuing Ph.D. Chemistry Arizona State University



The bridge to the doctorate fellowship has meant many things to me. It has provided many opportunities and growth as a graduate student. I have been blessed to obtain different fellowships over the past few years. The bridge to doctorate degree fellowship has been especially important to me as it allowed me to grow as a scientist but also as a person. This fellowship had provided me with the opportunity to continue to pursue my goal in obtaining a doctoral degree without having to worry about monetary difficulties.

This opportunity has given me the opportunity to work, meet and share my knowledge with other scientists through research, symposiums, conferences and the workshop. The bridge has opened many doors for me, especially as it will allow me to finish my doctoral degree. I am most indebted with the aid, support, and guidance I have had being part of this program; for that, I am most grateful.

COHORT IV



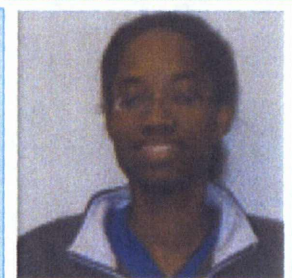
Carlos Castillo-Garsow
B.S. Biometry and Statistics Cornell University
(2003)
Pursuing Ph.D. Mathematics Arizona State
University

Odalys Colón-Rentas
B.S. Mathematics University of Puerto Rico at Cayey (2006)
Pursuing M.S. Statistics Arizona State University



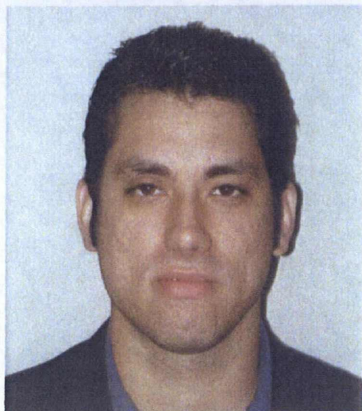
Helene Nehrebecki
B.A. Mathematics Sonoma State University
(2003)
M.A. Mathematics Arizona State University
(2006)

Lissette LaPlace
B.S. Mathematics University of the Virgin
Islands (2006)
Pursued M.A. Mathematics Arizona State
University



Loan M. Nguyen
B.S. Mathematics Arizona State University
(2007)
Pursuing M.A. Mathematics Arizona State
University





Ricardo Cordero

B.A. Mathematics Metropolitan University at San Juan (2006)
Pursuing Ph.D. Applied Mathematics in Life and Social Sciences Arizona State University

The path to achieving a PhD in any science field can be a hard task, especially since funding your tuition and having enough money to eat can get in the way of academia and its required devotion. Fortunately, I have had the privilege of receiving the Bridge to the Doctorate Fellowship, an award that covers your tuition and provides a generous monthly stipend. This has been essential in my success as a graduate student since not having to work as a student worker or grader, gives me the chance to better focus on my studies and spend more time on my research.

Furthermore, the Bridge to the Doctorate Fellowship has also funded my air travel to the Clay Mathematics Institute's School of Evolution Equations held in Zurich, Switzerland in the summer of 08. I am ever grateful for this, since the associated expenses of a trip to Zurich can be overwhelming.

The Bridge to the Doctorate Fellowship is the ideal path for any graduate student committed to getting a PhD.

Miguel A. Sánchez

B.S. Mathematics Arizona State University (2007)
Transferred directly from M.A. Mathematics Arizona State University to Ph.D. Mathematics University of Arizona



Carlos Torre

B.S. Mechanical and Aerospace Engineering Cornell University (2002)
Pursuing Ph.D. Applied Mathematics in Life and Social Sciences Arizona State University

COHORT IV

**Telpriore G. Tucker**

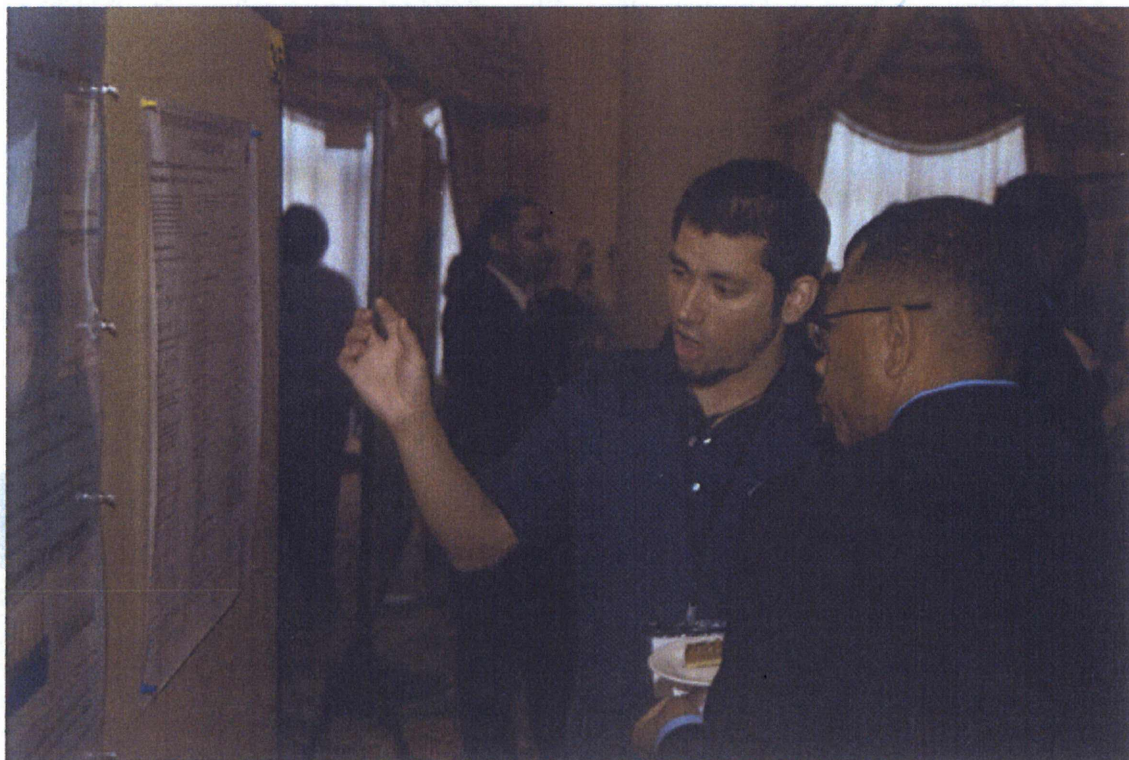
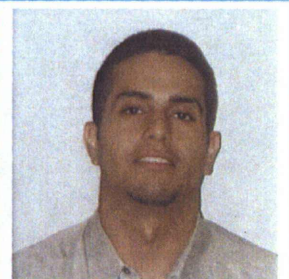
B.S. Chemistry Tennessee State University
(2006)

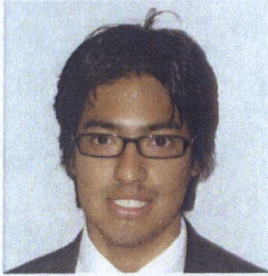
Pursuing Ph.D. Chemistry Arizona State
University

José M. Vega-Guzmán

B.A. Secondary Education-Mathematics University of Puerto
Rico at Cayey (2005)

Pursuing Ph.D. Applied Mathematics in Life and Social
Sciences Arizona State University



**Daniel Ríos-Doria**

B.S. Mathematics City University of New York
College of Staten Island (2006)

M.S. Mathematics Arizona State University
(2008)

Pursuing Ph.D. Applied Mathematics in Life and
Social Sciences Arizona State University

**Raquel López**

B.S. Mathematics University of the Pacific (2005)

M.A. Mathematics Arizona State University (2008)

Pursuing Ph.D. Applied Mathematics in Life and Social Sciences
Arizona State University

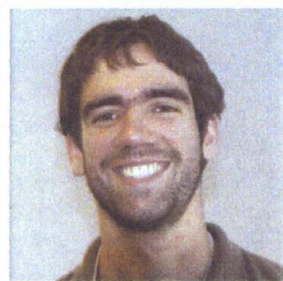
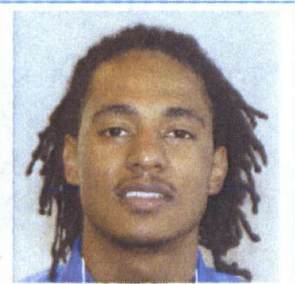
Being a recipient of the Bridge to the Doctorate Fellowship, has by far been the best opportunity I have had in my life, in terms of having financial support to reach my educational goals. This fellowship really has opened the doors to me, because without this opportunity I would not be where I stand now, that is, I would have never had the chance to go to graduate school. More than that, this fellowship has helped me out tremendously, in a sense, by allowing me to focus on classes, and start doing mathematical research sooner. Also I was able to attend professional conferences to present my current research, which in the future, build up a very strong resume. For example, through this fellowship, I have been able to go to workshops and conferences in other countries, such as Vancouver, Montreal (in Canada), and Morocco in Africa, among others. I have to say that I am very proud to have been chosen, or given the chance to become part of this fellowship, and I speak very highly of this. Without the Bridge to the Doctorate fellowship, I would not be writing this testimonial today.

COHORT V



Carl E. Ballard II
B.S. Mathematics Alabama State University
(2007)
Pursuing M.A. Mathematics Arizona State
University

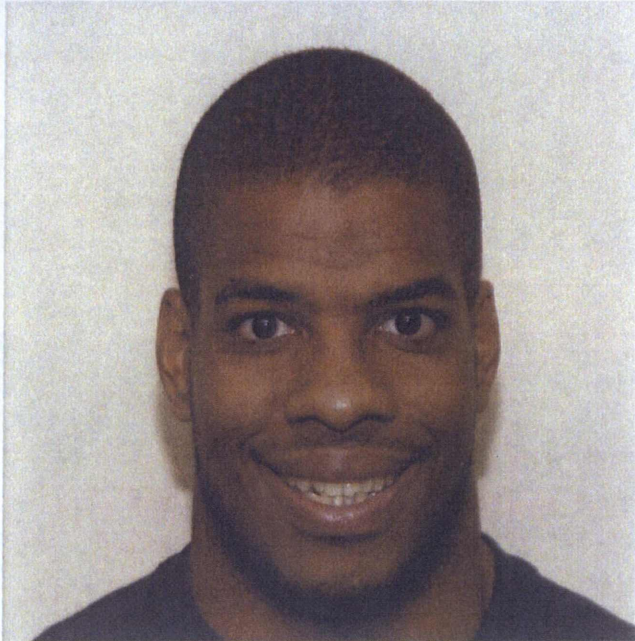
Walter Chambliss
B.S. Mathematics Alabama State University (2007)
Pursuing M.A. Mathematics Arizona State University



Emmanuel Morales
B.S. Applied Mathematics Metropolitan
University at San Juan (2007)
Pursuing M.A. Mathematics Arizona State
University

Angelo González
B.S. Bioengineering Arizona State University
(2006)
Pursuing M.S. Bioengineering Arizona State
University





Timothy Clore

B.S. Biomedical Sciences Western Michigan University (2006)

Pursuing Ph.D. Biochemistry Arizona State University

The Bridge to the Doctorate fellowship has meaning far beyond the financial support that it offers. The fellowship has offered knowledge, experience, and interactions. Together with the financial support, the program has transformed me as an individual.

One of the greatest experiences I have gained from the program is the Washington D.C. annual JAM Meeting. There I was able to listen to many speakers who offered their own experiences and advice. Throughout the conference I was able to better prepare myself for working towards the doctorate degree.

In addition to listening to people, I was able to interact with a few of the speakers in one-on-one conversations. This

allowed me to ask questions more specific and geared towards myself which cannot be done in a large conference. Meeting with some of the speakers was a great help in gaining knowledge on how to get through the vigorous effort of attaining a doctorate degree.

In conclusion, the fellowship has greatly helped me from the financial standpoint and even more from an experience standpoint. The meetings, workshops, and conferences have been the greatest help. It is through these experiences that will greatly help me along on my path to the doctorate degree.



Liliana Rincón

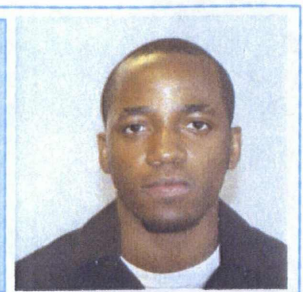
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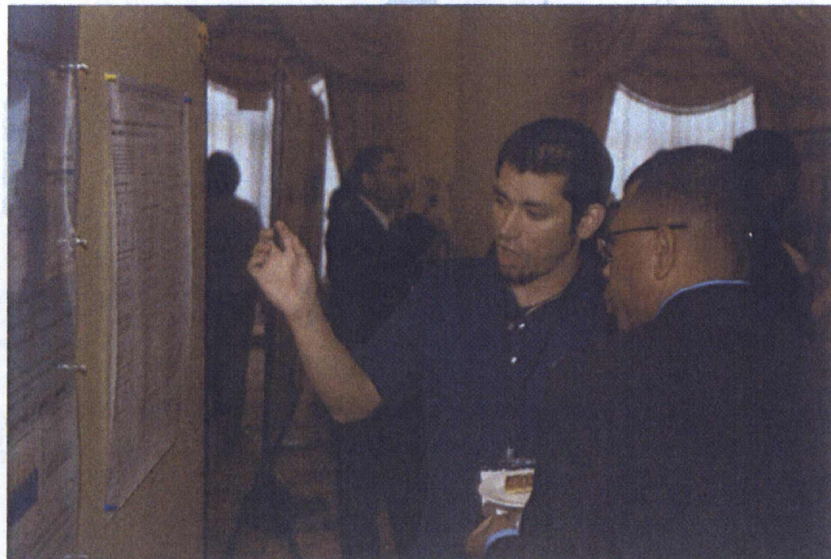
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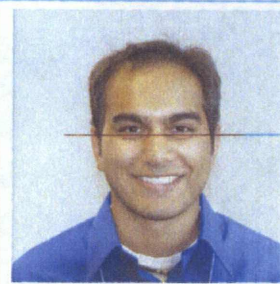
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When I was granted the Bridge to the Doctorate Fellowship, I was not only given the financial freedom to focus completely on my studies, I was given the chance to meet leading scientists, receive invaluable mentorship from a group of dedicated and enthusiastic educators, and learn about the new and exciting career fields applicable to my degree. Perhaps the most influential aspect of my fellowship thus far was having the privilege to attend the National Science Foundation's Joint Annual Meeting of 2008 (JAM2008) in Washington D.C. The talks given at JAM 2008 were both empowering and humbling. It was amazing to see how individuals from diverse backgrounds who started from modest beginnings were

able to accomplish incredible feats in research with just a few nudges in the right direction from their mentors. Firstly, these talks made me realize that I not only owe it to myself to do the best job possible with what I have been given, but that I owe it to all of those who have guided me along the way. However, perhaps most importantly, by attending this conference and our regular cohort meetings at ASU, I have truly realized how important it is to encourage women and minorities in the STEM disciplines. Everyone is capable of greatness if given the opportunity and if armed with the right mentors





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