



Stony Brook
University

Center for
Inclusive Education

2013-2014 ANNUAL REPORT



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FROM: Nina Maung-Gaona, Assistant Dean and Director
Center for Inclusive Education, the Graduate School

RE: CIE Annual Report for AY 2013-2014 (August 2013-August 2014)

DATE: November 11, 2014

The staff of the Center for Inclusive Education is pleased to present the attached Annual Report, which summarizes our major activities over the past calendar year (August 2013-August 2014). A few of the major highlights include:

- Funding of two new grants, the NSF AGEP-T FRAME (September 2013) and the NIH IMSD-MERGE (June 2014), totaling \$2.8 million in extramural funds to promote diversity in scientific training opportunities that are offered at Stony Brook
- Renewal of the REU in Nanotechnology for Health, Energy and the Environment at a value of \$441,021 (March 2014)
- Commitment of \$250,000 in University funds by the President to grow the Turner Fellowship over the next five years
- Implementation of the NSF AGEP-T FRAME Program with the hiring of 3 postdoctoral scholars and the funding of 19 advanced doctoral candidate research grants
- Implementation of the NIH IMSD-MERGE undergraduate summer program supporting 5 undergraduate and 5 graduate scholars in the biological science disciplines
- High attendance rates at our programming events
- Greater emphasis on faculty career development activities

- Addition of two new full-time professional staff managing the AGEP-T FRAME proposal and supporting the administrative functioning of the CIE
- First results of the AGEP-T FRAME research proposal
- Presentations and workshops at four national and statewide conferences on diversity in the Academy and social science research.

We are grateful that the Stony Brook community, the faculty leadership and our many collaborators continue to value the CIE as a resource and a place for opportunities and connections that will advance the mission of diversity, research excellence and workforce development.

Thank you for your steadfast support of the Center for Inclusive Education in the Graduate School. Please let us know if you feel others on campus should receive this report.

In service,

 <p>Nina Maung, Assistant Dean for Diversity and Director, Center for Inclusive Education,</p>	 <p>Kathryne Piazzola, CIE Administrator (Pre/Post Awards, HR, Finance, REU)</p>
 <p>Toni Sperzel, CIE Program Manager (Turner, GEM)</p>	 <p>Karian Wright CIE Program Manager (NIH IRACDA, NSF AGEP)</p>
 <p>Angel Gonzalez, Postdoctoral Associate (NSF Bridge to the Doctorate, NIH IMSD)</p>	 <p>Sheri Clark, Postdoctoral Associate (Scholarly Research in STEM Education)</p>
 <p>Donna Scala Administrative Assistant</p>	<p>*Ann Gardner CIE Program Manager (IRACDA) (left in May 2014 to assume the role of Administrator of the new Bioinformatics Department)</p>

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I. Direct Financial Support to CIE Scholars

The CIE supports Stony Brook undergraduate, graduate and postdoctoral scholars by leveraging both intramural and extramural funding; allowing our program participants to fully engage themselves in academic- and research-related activities during their tenure at our institution. CIE students and postdocs received just over \$2.0 million in total direct assistance this year.

A) Undergraduate Research Stipends:

1. **Research Experience for Undergraduates (REU): Nanotechnology for Health, Energy and the Environment:** The REU in nanotechnology was re-funded for an additional three year cycle. The CIE organized and hosted this residential summer program (PI Gary Halada), providing stipend support to 10 interns from nine different undergraduate institutions plus two Research Experience for Teachers (RET) participants who were science instructors from both Babylon and Mt. Sinai high schools on Long Island. In addition to receiving extensive exposure to mentored research in the lab, the program included an Ethics Symposium, a tour of Brookhaven National Laboratory, classes on Graduate School Preparedness and Research Methods, an e-portfolio component and a final Research Symposium/Poster session. Total direct support to REU/RET participants was \$82,567.09, including housing and meal plan expenses. See project summary page for participant information.
2. **IMSD-MERGE:** June 2014 marked the start of the inaugural summer program portion of the IMSD-MERGE undergraduate effort (PI Peter Gergen, David Ferguson, Nina Maung). Five undergraduate students in the biological and biomedical science majors at Stony Brook were selected to participate in this ongoing funding and support program, commencing with a ten week summer research experience. IMSD-MERGE scholars participated alongside REU scholars in research methods, e-portfolio preparation and professional development summer workshops, as well as the Research Symposium and Poster Session. Total direct support to IMSD-MERGE undergraduate participants was \$33,249.60, including housing and meal plan expenses. See project summary page for participant information.

B) Graduate Stipends:

1. **Graduate Degrees for Minorities in Engineering and Science (GEM) Fellowships:** The National GEM Consortium is a unique and powerful connection to a national network of universities and employers. This partnership promotes the participation of underrepresented groups in post-graduate science and engineering education and the technical workforce. GEM Fellowship support was provided to one master's student during the 2013-2014 academic year with a total of \$16,000 in fellowship support. See project summary page for recipient information.
2. **LSAMP Bridge to the Doctorate:** The NSF-funded Bridge to the Doctorate Program (PI David Ferguson) works to increase the number of underrepresented minority students advancing into STEM doctoral programs. BD supported seven fellows this year with a total of \$541,097.65 in fellowship support. BD Fellows receive financial support in the form of two years of

fellowship funding, full tuition scholarship, fee coverage and health insurance. Fellows are also given specialized academic support through tutoring and workshops. See project summary page for recipient information.

3. **Turner Fellowship Program:** The W. Burghardt Turner Fellowship is a New York state-funded Graduate Fellowship Program for eligible underrepresented students whose immediate academic plans include obtaining graduate or professional degrees in disciplines across all schools of study at Stony Brook. This year, the CIE supported a total of 87 fellows, with a total expenditure of \$849,110. See project summary page for recipient information.

C) Postdoctoral Appointments:

1. **AGEP-T FRAME:** The postdoctoral scholarship component of the NSF-funded AGEP-T FRAME program (PI Dennis Assanis, et. al.) welcomed its first three postdocs to Stony Brook (2) and Brookhaven National Laboratory (1). This two year postdoctoral fellowship opportunity supports fellows conducting research at *either* Stony Brook University or Brookhaven National Lab. At steady state the program will support six postdoctoral scholars. Salary and fringe benefits for the AGEP-T FRAME postdoctoral fellows totaled \$21,852.21. See project summary page for scholar information.
2. **IRACDA NY-CAPS:** This NIH-funded postdoctoral scholars program (PI Jorge Benach) supports exceptional scientists with the desire to become excellent teachers through mentored research and pedagogic training at Stony Brook and mentored teaching assignments at our three partner institutions. During this year, IRACDA NY-CAPS filled its three remaining slots and is now running at its steady state of nine postdoctoral scholars. Salary support and fringe benefits for the NY-CAPS scholars totaled \$378,412.11. See project summary page for scholar information.

D) Other Direct Financial Support:

1. **Conference Travel Awards:** CIE Conference Travel Awards recognize and support the intellectual achievement of our students and enable their participation as professionals in their scholarly fields. \$47,050.62 in total funds were contributed in support of conference participation of scholars across all Center Programs.
 - a. **Turner \$27,358** for scholar participation in 33 national and international conferences.
 - b. **AGEP \$7,196** for scholar participation in 12 national and international conferences.
 - c. **BD \$1,200** for 1 scholar for conference participation
 - d. **IRACDA \$12,497** for scholar participation in 12 national and international conferences.
2. **Research Grants:** The addition of the AGEP-T FRAME program provided new opportunities for CIE scholars to be funded for research endeavors during the year. In addition to the 22 Turner Summer Research Grant Awards to Turner Fellows totaling \$86,472, an additional 16 AGEP-T FRAME research fellowships were issued totaling an additional \$22,754. See project summary pages for grant recipient information.

II. CIE Core Programming: Academic Advancement, Professional Development, Mentorship and Networking Opportunities

Core Programming in the Center for Inclusive Education is defined as those events that are open to all CIE scholars across all funded programs. Throughout the 2013-2014 academic year the CIE hosted more than three dozen core programming events and activities at Stony Brook, through which we engaged with over 400 *unique* graduate students, postdoctoral trainees, alumni and Stony Brook faculty and staff.

A) Monthly Research Cafés:

The CIE continued its Research Café series hosting eight scholarly talks over the year. Research Cafés provide a forum for CIE students to present their research to the Center and the larger University community. This year's Research Cafés saw an average attendance of 14 CIE community members per event and a total attendance of 122, with 91 of those being unique individuals.

1. **Kevin Hauser** (Chemistry) - "Helical Motions of a Human Transcription Factor Drive DNA Binding and Recognition"
2. **Rocio Ng** (Ecology and Evolution) - "Evolution of pigmentation traits in natural populations of the fruit fly species *Drosophila Melanogaster*"
3. **Emilio R. Fernandez** (Technology, Policy and Innovation) - "New York State Mathematics Regents Exams: An Analysis of High Minority and Low-Achieving Public School Districts"
4. **Luisa Torres** (Molecular and Cellular Pharmacology) - "Improving Healing and Recovery After Spinal Cord Injury"
5. **Aishah Scott** (History) - "Tackling the Taboo in the Black Church"
6. **Amir Jaima** (Philosophy) - "Questionable Form: An Inquiry into the Relationship between Philosophy and Literature"
7. **Cindy Charles-Thomas** (Genetics) - "De-bugging the Liver: Interactions between *F. Tularensis* and Hepatocytes"
8. **Ruben Gonzalez-Jimenez** (Hispanic Languages and Literature) - "On the Coloniality of Being in Jacques Vieu Renaud's Poem "Permanencia del llanto""

B) Cultural Heritage Celebrations:

These celebrations are an opportunity for CIE community members to share their personal journeys to inspire our students to value and give service, both while they are here at Stony Brook and in their future careers.

1. **Hispanic Heritage Month:** On October 16, 2013, CIE hosted "The Goal, the Guru and the Guide," a student, alumni and faculty panel in honor of Hispanic Heritage Month. Eight Hispanic CIE scholars along with one faculty member and one CIE alumnus discussed their paths to doctoral study and careers in the academy, reflecting upon the experiences, mentors and "famous names" that inspired them to pursue their studies with the 28 undergraduate and graduate scholars who attended.
2. **Black History Month:** On February 12, 2014, the Center hosted a screening of the Award winning, New York based documentary film "American

Promise," which chronicles the K-12 educational experiences of two African American men as they attend one of the most prominent private schools in New York. While attendance was low at seven viewers, the group engaged in a lively discussion about the issues these two young men faced as minority students at their institution and issues of inclusion and diversity in the private school system.

3. **Women's History Month:** For the first time, the Center held an alumni forum in honor of Women's History Month - "Character, Courage and Commitment: CIE Alumni Journeys". The Center welcomed back Dr. Glenna Trujillo, Department of Pathology, Stony Brook University, and Dr. Theresa Shakespeare, Department of Biology, Fort Valley State University for a panel and Q&A session on women's issues in the Academy. The session was attended by 17 CIE community members.

C) Topic-Based Lunches with Senior Leadership:

The CIE hosted two Topic-Based Lunches with the goal of offering students a glimpse into the professional pathway of our senior University leaders; fostering a sense of school spirit as well as providing valuable insight into potential career paths.

1. Fall Semester: November 19, 2013. **Dr. Dennis Assanis**, Provost. "My Journey: From the Sea to the Ocean." 29 students attended in addition to the Center staff.
2. Spring Semester: March 25, 2014. **Lynn M. Johnson**, Vice President of Human Resources Services. "From Across the Pond - A Journey of Career Opportunity." 25 students attended in addition to the Center staff.

D) CIE Visiting Speaker Series:

The Visiting Speaker Series offers faculty from Stony Brook, as well as external institutions, the opportunity to engage with CIE scholars on various topics to support their intellectual, professional and personal development. This year the Center hosted talks by two visiting speakers, one internal and one external.

1. **Dr. Ken Takeuchi**, Stony Brook University. "Networking: Making the Right Connections for Career Success." Monday, September 30, 2013. Distinguished Teaching Professor in the Department of Chemistry Dr. Ken Takeuchi met over lunch with CIE scholars to discuss the importance of networking to carving your academic career path, offering strategies on how to create the right connections during graduate school to drive your professional life in the direction you wish for it to go.
2. **Dr. S. James Gates Jr.**, University of Maryland. "Developing the Nation through STEM Education." Thursday, December 5, 2013. Dr. Gates, prior to giving his Provost's Distinguished Lecture series talk, met over breakfast with CIE scholars to discuss the future of STEM education and the importance to increasing diversity in the STEM fields.

E) Summer Dissertation Writer's Boot Camp:

This pilot program, hosted in June, July and August, sought to help students preparing dissertations, articles for publication or course writing assignments stay on track as members of a scheduled, structured writing accountability group that met every Friday. In June, an opening session was held with 13 scholars in

attendance. Guest speakers Dr. Maria Rodolis, Dr. Javier Monzón and Dr. Taylor Shoberle presented tips and tricks for maximizing the output of your writing session. For the other sessions hosted during the month of June the average weekly attendance was six scholars per session.

F) Writing to Win Workshop:

Writing to win is a workshop designed to educate Stony Brook students on the application process for the NSF Graduate Research Fellowship and the Ford Pre-doctoral Fellowship. Presentations are given by previous winners of both fellowships, followed by a panel Q&A session with the presenters and faculty who have previously served as evaluators for the fellowship programs. This event took place on September 11, 2013 with 36 students in attendance. Our presenters included PhD candidates Cindy Leiton from Molecular and Cellular Pharmacology and Lori Gallegos de Castillo from Philosophy, along with Stony Brook faculty Dr. Susan Brennan (Psychology) and Dr. Glenn Lopez (Marine and Atmospheric Sciences). Two CIE scholars were selected as NSF-GRFP recipients and three others received honorable mentions in this year's competition.

G) ABD Proseminar Series:

On September 18, 2013, the Center hosted its first workshop as part of our "All But Dissertation Proseminar Series," on finding the right postdoctoral fellowship. This event was open to all members of the Stony Brook community, and attendance was quite high with over 50 graduate students participating in the workshop. Six faculty and senior administrators from postdoctoral fellowship opportunity programs at six different institutions came to speak about the growing importance of the postdoctoral experiences. They offered advice on how to prepare a strong application and make the most of the postdoctoral experience.

H) Keeping it Real:

The Center continued this series of informal discussions, facilitated by CIE staff Dr. Angel Gonzalez, in which graduate students talk about many of the issues that, although not directly related to academics, nevertheless impact their day-to-day lives. Coping with these types of challenges, along with being a successful academic, can be difficult to manage. Talking with fellow graduate students fosters social support and provides insight into different ways to deal with these issues. Total unique attendance at Keeping it Real events was 13 scholars. The topics included:

1. **Take Your Leisure Seriously:** Finding Balance in Graduate School
2. **More Than Just A Place To Keep Your Stuff:** Creating the Best Living Situation For You
3. **Drawing on the Past as You Journey into the Future:** Cultural Identity in Graduate School
4. **Graduate School Policies and Procedures:** What You Should Know Now and Not Later
5. **A Sound Mind in a Healthy Body:** Staying Fit to Stay Sane in Grad School

I) Community of Student Mentors Program:

The Community of Student Mentors Program (CSM) is a key component of the Center programming for graduate scholars, having been established by the

Center more than ten years ago and continuously running since its inception. The program, which is open to all CIE graduate scholars in both STEM and non-STEM disciplines, experienced significant growth this year in both participation and programming. CSM matches advanced CIE students with first- or second-year students as peer mentors, assisting with successfully transitioning to the rigors of graduate school life. Mentors are provided with a meal card to be used for monthly meetings over lunch and/or coffee with their mentee. These meals are an opportunity for mentees to discuss with their peer mentors their progress and experiences in graduate study - their triumphs, struggles, successes and concerns. Following each meeting, both mentors and mentees are required to complete a meeting log sheet summarizing from both participant perspectives the meeting- what was discussed, what if any challenges or concerns arose, and what actions/steps were considered and planned for overcoming any obstacles or challenges. The meeting log sheet is then reviewed by the CSM program coordinator. 20 mentor/mentee matches were made with a total of 40 students participating in the program as either mentors or mentees.

CSM Mentors	Graduate Program
Michael Higgins	Biochemistry and Structural Biology
Kevin Hauser	Chemistry
Jeannette Marine	Chemistry
Carla Neckles	Chemistry
Rocio Ng	Ecology and Evolution
Jesse John	Geosciences
Allison Nesbitt	Interdepartmental Doctoral Program in Anthropological Sciences
Jennifer Deleon	Molecular and Cell Biology
Isaac Mensah	Molecular and Cellular Pharmacology
Emmanuel Asare	Molecular Genetics and Microbiology
Mel Pilar Espaillat	Molecular Genetics and Microbiology
Jennifer Martinez	Neurobiology
Lyl Tomlinson	Neurobiology
Patricia Enmore	Neurobiology and behavior
Lori Gallegos	Philosophy
Oumarou Njoya	Physics
Ineffta Reid	Physiology and Biophysics
Yamil Velez	Political Science
Al Herrera	Psychology (Social/Health)
Chris Martinez	School of Marine and Atmospheric Sciences
Sasha Rodriguez	Sociology
Jasmine Valentin	SOMAS

CSM Mentees	Graduate Program
Jinelle Wint	Biochemistry

Moises Guardado	Biochemistry and Cell Biology
Steve Tsotras	Biochemistry and Cell Biology
Usmanu Salisu	Chemistry
Sophia Basaldua	Comparative Literature
Santiago Cassalet	Ecology and Evolution
Adaire Heady	Geophysics
Melissa Sims	Geosciences
Jesse John	Geosciences
Carrie Mongle	Interdepartmental Doctoral Program in Anthropological Sciences
Amber Bonds	Molecular and Cellular Pharmacology
Vinnie Alford	Molecular and Cellular Pharmacology
Christian Ruiz	Molecular Genetics and Microbiology
Ariel Negrón	Neurobiology
Cam Monestime	Neurobiology and Behavior
Ashleigh Lussenden	Neurobiology and Behavior
Emma Velez	Philosophy
Ariana Valdez	Physics
Felicia Jackson	Psychology (Clinical)
Danielle Jenkins	Psychology (Integrative Neuroscience)
Coreyn Goddard	School of Marine and Atmospheric Sciences
Vanessa Lynn	Sociology

CSM mentors are provided a thorough orientation, outlining not only the program guidelines but also covering the history of mentoring, the best ways to prepare for your first interactions with your mentor or mentee, ways to frame questions that foster conversation and ways to create an environment of trust. Establishing comfortable boundaries and guidelines for respecting and maintaining confidentiality are also covered. Following the orientation, mentors and mentees are invited to attend a kickoff event each semester where they can get to know not only their own CSM partner, but also the larger CSM participant community. This year's kickoff event was a bowling party held on September 28, 2013; 17 participants attended.

J) Graduate Recognition Ceremonies:

At the end of each semester the CIE celebrates the graduation of those scholars who successfully completed their dissertations and degree requirements in the semester prior. Celebrations were hosted on December 18, 2013 and May 21, 2014 at the Hilton Garden Inn with over 80 attendees at each celebration.

K) CIE Socials:

Socials are a traditional core programming activity of the CIE. With the addition of the Keeping it Real series and the many lunchtime professional and academic development workshops added this year, the Center opted to reduce the

number of socials to four - one taking place every other month beginning with the Welcome Barbecue in late August. CIE socials included a "Good News" announcement section where participants were encouraged to share in advance, or that day any news they wished to celebrate - from the winning of fellowships, to the selection to present research at conferences, to personal celebrations such as birthdays, weddings, etc. More than 80 students attended this year's socials with a total unique attendance at socials of 47 scholars.

L) New York City Independent Schools Faculty Diversity Search Information Session:

In January, for the second year in a row, the CIE hosted a recruitment and information session by Faculty Diversity Search (FDS), a program within the New York Interschool Association. Founded in 1994 as a nonprofit organization, the mission of FDS is to increase the diversity of teachers and administrators in the NYC independent schools system. Each year, FDS works with 25 to 30 different NYC schools and places faculty in a variety of positions. Since its inception, approximately 250 teachers have found and accepted positions through the FDS program. The information session, held on January 29, 2014 was attended by three CIE scholars and two CIE alumni. Interest was expressed by three additional CIE scholars and alumni who were unable to attend. Out of these eight interested participants, we are pleased to share that four were placed in full-time career positions within the NYC independent schools system and began teaching this fall; a placement rate of 50%.

M) Summer Lunches with Continuing Students:

Summer Lunches offer students an opportunity to meet with the CIE director and program managers to more deeply get to know about our advanced scholars' experiences and the ways in which the CIE can better support them during their degree pursuit. This summer 15 CIE scholars participated in the three summer lunches held throughout June and July. The conversations had greatly informed the programmatic planning for the upcoming academic year.

N) Tutoring Support:

The Center continued to offer tutoring support in Biochemistry and Molecular and Cellular Biology. Three students participated in weekly tutoring sessions throughout the year.

III. Grant Submissions, Grant Support and External Collaborations

During the 2013-2014 academic year, the Center was the awardee of two new externally funded proposals and the renewal of one existing project.

A) Grant Submissions:

1. NSF LSAMP-BD Renewal
2. Helmsley Trust
3. NIH IMSD-MERGE
4. NSF REU in Nanotechnology

B) New Awards:

1. **NSF AGEP-T FRAME:** The Alliance for Graduate Education and the Professoriate-Transformation, Frontiers in Research and Academic Models of Excellence program was funded by the National Science Foundation in September (PI Dennis Assanis, David Ferguson, Charles Taber, Bonita London, Kenneth White, Nina Maung). This \$1.4 million grant, in collaboration with Brookhaven National Laboratories, will provide research advancement, academic, and professional development opportunities, as well as opportunities for career placement with Brookhaven Science Associates' member institutions, for advanced doctoral candidates in the STEM disciplines. AGEP-T FRAME will fund three postdoctoral scholars per year at Stony Brook and Brookhaven National Laboratories.
<http://sb.cc.stonybrook.edu/news/general/131028STEMcareeradvancement.php>
2. **NIH IMSD-MERGE:** The National Institutes of Health Initiative for Maximizing Student Development, Maximizing Excellence for Research and Graduate Education program was funded in June (PI Peter Gergen, David Ferguson, Nina Maung). Also funded at \$1.4 million, the program will support the summer and academic year research activities of five undergraduate and five graduate scholars per year, as well as bring to the Stony Brook campus new academic and professional development opportunities for underrepresented scholars.
<http://sb.cc.stonybrook.edu/news/general/140829inclusiveedu.php?margin=3>
3. **NSF REU in Nanotechnology for Health, Energy and the Environment:** (Renewal Application) The NSF REU in Nanotechnology for Health, Energy and the Environment was notified of its award of refunding in March 2014 (PI Gary Halada). The proposal was renewed for an additional three years for \$441,021.00. This second iteration of the REU in Nanotechnology will fund eight undergraduate summer interns, as well as two high school teachers each year for research internship experiences in the laboratories of Stony Brook University faculty.

C) CIE Assistance to Departments on Proposals:

The CIE is regularly asked to provide letters of support (LOS) for grants, participate in site visits and help to write relevant sections of proposals and plans.

1. **NSF Research Traineeship (NRT) proposal:** Assistance with writing and program planning, data collection and evaluation activities for "Data Enabled Research and Education in Advanced Multidisciplinary Science" (PI: Robert Harrison, IACS, et. al.)
2. **NSF "Determining Structure-Property Correlations in Ultrathin Core-shell Nanowires for the Methanol Oxidation Reaction":** Assistance with the development of the recruitment strategy (PI: Stanislaus Wong, Chemistry)
3. **Minority Access to Research Careers (MARC) program:** Letter of support for Dr. Jennie Williams, Department of Preventive Medicine
4. **Advanced Certificate Program in Molecular Biology:** Letter of Support to Dr. Gloria Viboud, Department of Clinical Laboratory Sciences
5. **Stony Brook REU Site in Chemistry:** Letter of Support to assist in recruitment and programming support

6. **NSF Research Traineeship (NRT) proposal:** Letter of support and consultation on "Moving Targets: Quantitative Analysis of Dynamical Structures" (PI: Surita Bhatia, Chemistry, et. al.)
7. **Engineering Structural Inhomogeneities in Metallic Glasses to Enable Tunable Shear Delocalization Mechanisms:** Letter of support for NSF CAREER award application of Dr. Jason Trelewicz, Department of Materials Science and Engineering
8. **Multiscale topology optimization for drag reduction in microfluidics:** Letter of Support for NSF Grant Application of Drs. Carlos Colosqui, Shikui Chen, Thomas Cubaud and David Hwang, Department of Mechanical Engineering
9. **Empire State Stem Cell Board, Stony Brook University Stem Cell Training Program:** Letter of Support for Drs. Howard Sirotkin (Neurobiology and Behavior) and Holly Colognato (Pharmacological Sciences)
10. **CHEMIST: Center for Hierarchically Engineered Mesostructures for Irradiation Stability and Tolerance:** Letter of support for Dr. Jason Trelewicz, Department of Materials Science and Engineering, application to US Department of Energy's Energy Frontier Research Center (EFRC)
11. **BUILD at Fort Valley State University:** Letter of Support for collaboration in planning programming
12. **"Broadening Pathways, Stony Brook BEST program":** Letter of support for Dr. Nancy Goroff, Associate Dean, the Graduate School, application to NIH
13. **Letter of support for Dr. Lina Obeid:** Dean of Research, School of Medicine application to the Burroughs Wellcome Fund Training Grant
14. **Letters of Recommendation:** Prepared for five CIE scholars to support their applications to 10 fellowship, postdoctoral and career opportunities

IV. Diversity Focused Graduate Recruitment

The CIE coordinates underrepresented minority recruitment in STEM to benefit the various programs supported out of the Center. This year, the Center participated in nine recruitment events:

NIH Graduate Recruitment Fair	July 17	Bethesda, MD
AIR STEM Conference	September 26-27	Washington, DC
SACNAS Annual Conference	October 3-6	San Antonio, TX
SUNY STEM Conference	October 10-11	Albany, NY
GEM GRAD Lab	12-Oct-	Columbia University
SREB	Oct 31 - Nov 2	Arlington, VA
ABRCMS Annual Conference	November 13-16	Nashville, TN
ERN Conference In STEM	February 20-22	Washington, DC
Hunter College Recruitment Fair	March 14	New York, NY

Three faculty, three graduate students and eight Stony Brook University Administrators participated as recruitment representatives at these conferences and events. Recruitment efforts yielded the collection of intake forms and contact information from 218 prospective students. The information was shared electronically using a Google spreadsheet with the Graduate Program Directors and Coordinators for use in their recruitment efforts.

In addition to these national conference efforts the Center hosted a visit in August from the California State University Fullerton Campus' McNair Scholars program participants. Seven McNair Scholars joined us for a campus visit day that included a campus tour, a "Getting into Graduate School" faculty panel hosted by the Dean of the Graduate School, and a graduate school information session with current CIE scholars where students were encouraged to ask whatever questions they may have about what graduate school is like.

With support from the Graduate School the Center was also able to offer competitive recruitment travel grants to support departments in the conversion of admitted doctoral candidates to enrolled students at Stony Brook. The travel grants supported the visits of seven prospective doctoral students, one of whom enrolled at Stony Brook for the fall semester.

V. Presentations, Panels and Workshops

The Center continued to establish its place as a voice in the national conversation about diversity in higher education. CIE staff participated in panels and presented workshops at seven national and regional conferences during the year.

A) 2013 SUNY STEM Conference: Broadening Participation in STEM- October 10-12, 2013:

1. **Oral Presentation:** Turner Strength in Self, the Community, and the Academy: Outcomes of Twenty-Five Years of the Graduate Diversity Fellowship Program at Stony Brook University
Conference Location: Albany, NY
Status of Publication: N/A
Year: 2013
Authors: Nina Maung, Toni Sperzel and Sheri L. Clark
2. **Poster Presentation:** Promoting STEM Success: An Examination of Self-Efficacy and STEM Identity
Conference Location: Albany, NY
Status of Publication: N/A
Year: 2013
Authors: Sheri L. Clark and Bonita E. London

B) 6th Annual Conference of Understanding Interventions That Broaden Participation in Research Careers:

1. **Oral Presentation:** Examining Self-Efficacy and STEM Identity of Underrepresented Minority Graduate Students in STEM
Conference Location: Baltimore, MD
Status of Publication: In Progress
Year: 2014
Authors: Sheri L. Clark and Bonita E. London

C) Association of Program Administrators of CSTEP and STEP, Inc. Annual Meeting and Conference:

1. **Oral Presentation:** Turner Strength in Self, the Community, and the Academy: Outcomes of Twenty-Five Years of the Graduate Diversity Fellowship Program at Stony Brook University
Location: Albany, NY
Status of Publication: Abstract published in conference proceedings.
Year: 2014
Authors: Toni Sperzel and Sheri L. Clark
2. **Workshop:** The Integration of Research and Programmatic Practices: Using Psychological Theories to Promote Programmatic Interventions and Advancement of Science
Status of Publication: Abstract published in conference proceedings.
Year: 2014
Authors: Bonita London and Sheri L. Clark

D) 10th Biennial Conference of The Society for the Psychological Study of Social Issues (SPSSI):

1. **Oral Presentation:** Efficacy and Identity: Promoting Engagement among Underrepresented STEM Graduate Students
Conference Location: Portland, OR
Status of Publication: Abstract published in conference proceedings.
Year: 2014
Authors: Sheri L. Clark and Bonita E. London

E) NY Metro area GEM GRAD Lab:

1. **Oral Presentation:** How to Fund Graduate School
Panelist Toni Sperzel
Presentation Location: New York, NY (Columbia University)
Year: 2013

F) INCREASE Annual Conference:

1. **Oral Presentation:** Opportunities for Collaboration with the NSF AGEP-T FRAME program
Presenters: Nina Maung-Gaona and Karian Wright
Conference Location: Upton, NY
Year: 2014

G) Brookhaven National Laboratory Summer Interns Presentation:

1. **Oral Presentation:** The PhD a Path to Success
Presenters: Nina Maung-Gaona and Toni Sperzel
Presentation Location: Upton, NY
Year: 2014

VI. Program Specific Updates

A) National Science Foundation Alliance for Graduate Education and the Professoriate-Transformation: Frontiers in Research and Academic Models of Excellence (AGEP-T FRAME):

In September 2013, the Center for Inclusive Education was awarded the AGEP-T FRAME Grant from the National Science Foundation (PI Dennis Assanis, David Ferguson, Charles Taber, Bonita London, Kenneth White, Nina Maung). Over the next three years, this \$1.4 million award will train 30 graduate students and 12 postdoctoral fellows by providing comprehensive professional preparation that will permit FRAME Fellows to compete for and succeed in faculty positions at top research-intensive institutions. AGEP-T FRAME replaces the previously NSF-funded SUNY AGEP program and takes a specific focus on supporting advanced graduate students in the completion of their degrees, advancement of their research and placement into competitive postdoctoral and research positions. Eligible scholars must be underrepresented US Citizens pursuing doctoral or postdoctoral study/research in the STEM disciplines.

In the 2013-2014 Academic year, FRAME welcomed three postdoctoral scholars and 19 graduate fellows to the program:

1. **Postdoctoral Scholars**

- **Dr. Maria Rodolis** began an AGEP-T funded postdoctoral research in January 2014 under the leadership of Dr. Nicole Sampson, Professor and Chair of the Department of Chemistry, where she will be investigating various processes involved in mammalian fertilization.
- **Dr. Cindy Leiton** began her AGEP-T funded postdoctoral research in June 2014 under the leadership of Dr. Thomas Floyd, Interim Division Chief of Cardiac Anesthesia in Stony Brook's School of Medicine. Her research is now focused on understanding how the brain copes with oxygen deprivation and which cells may be targeted to circumvent such an event which can occur upon stroke, traumatic brain injury and other types of trauma.
- **Dr. Paulo Castillo** began his AGEP-T funded postdoctoral research in August 2014 under the leadership of Dr. Arthur Sedlacek, III, an Atmospheric Chemist within the Environmental and Climate Sciences Department, on Aerosol Chemistry and Microphysics at BNL. His research is focused on the optimization, calibration and testing of the novel instrument photothermal interferometer (PTI) to directly measure aerosol absorption based on the thermal dissipation of the spectrally absorbed energy through interferometry.

2. **Graduate Fellows:** Graduate Fellows are selected via the application for and awarding of seed grants and conference travel awards to support their development as scholars and researchers.
- **Seed Grants:** AGEP-T graduate student fellows were given the opportunity to compete for up to \$3,000 in funding for traditional seed grants, technical skill development and activities related to developing new research networks and collaborations. In this program year a total of 11 awards were issued totaling \$22,753.80 and new research networks were developed with Savannah River National Laboratory at Savannah River Site, near Jackson, South Carolina and Harvard University in Cambridge, Massachusetts.

AGEP Research Grant Recipients	Degree Program	Research Grant Title
Azeez Aranmolate	PhD in Molecular and Cellular Biology	The role of the Dystrophin Glycoprotein Complex in CNS myelination
Emmanuel Asare	PhD in Molecular Genetics and Microbiology	Identification of host cellular proteins that facilitate with poliovirus 2CATPase in morphogenesis.
Patricia Enmore	PhD in Neuroscience	The role of cerebellar interpositus neurons in trigeminal blink reflex modification in normal and 6-OHDA lesioned rats
R. Emilio Fernandez	PhD in Technology, Policy, and Innovation	The New York State Mathematics Regents Exams: An Analysis from High Minority and Low-Achieving Public School Districts
Pedro Fernandez	PhD in the Interdepartmental Program in Anthropological Sciences	The functional morphology and quantification of metatarsophalangeal joint shape and congruence in anthropoids
Diana Guimet	PhD in Genetics	The Adenovirus L4-22K protein has distinct functions in post transcriptional regulation of gene expression and encapsidation of the viral genome
James Herrera	PhD in the Interdepartmental Program in Anthropological Sciences	Dwarf lemur speciation in Madagascar (Genus Cheirogaleus): the roles of ecology and sex
Jesse John	PhD in Geosciences	The nature of actinide sorption on monosodium titanate (MST): PDF investigations of a functional nano-mineral for remediating High-level Nuclear Waste
Cindy Leiton	PhD in Molecular and Cellular Pharmacology	Metalloproteinase mediated processing of β -dystroglycan regulates oligodendrocyte progenitor cell proliferation
Crystal Lewis	PhD in Chemistry	Multifunctional nanoparticles for cancer imaging and drug delivery
Daphne Meza	PhD in Biomedical Engineering	Professional Grant Development Workshop, SUNY Global Center
Allison Nesbitt	PhD in the Interdepartmental Program in Anthropological Sciences	Covariation within the chimpanzee cranium
Celest Okoli	PhD in Material Science and Engineering	Doped Carbon Nanotubes as Electrode Materials for Energy Conversion and Storage

		Systems
Jason Quinones	PhD in Molecular and Cellular Pharmacology	Scientists Teaching Science, New York Academy of Sciences Online Course
Lyl Tomlinson	PhD in Neuroscience	The Effect of Aerobic Exercise on Oligodendrocyte Precursor Development
Jinelle Wint	PhD in Biochemistry and Cell Biology	Scientists Teaching Science, New York Academy of Sciences Online Course

- **Conference Travel Awards:** AGEP-T Fellows were given the opportunity to compete for up to \$1,200 in funding to expand their research networks by attending and participating in scientific conferences. Awards were granted to 11 AGEP-T graduate student fellows for a total of \$8,925.

AGEP Conference Travel Recipients	Degree Program	Conference Attended
Azeez Aranmolate	PhD in Molecular and Cellular Biology	Myelin: Biology, Physiology and Pathology of Myelinating Glia
Benedette Adewale	PhD in Chemistry	Gulf of Mexico Oil Spill and Ecosystem Science Conference 2014
Carrie Mongle	PhD in the Interdepartmental Doctoral Program in Anthropological Sciences	Human Evolutionary Workshop XII: 50 years of Homo Habilis
Celest U Okoli	PhD in Material Science and Engineering	Advanced Energy Conference 2014
Cindy V Leiton	PhD in Molecular and Cellular Pharmacology	Gordon Research Conference on Myelin
Crystal Lewis	PhD in Chemistry	American Chemistry Society
Emmanuel Asare	PhD in Molecular Genetics and Microbiology	Europic 18th International Picornavirus meeting
James Herrera	PhD in the Interdepartmental Doctoral Program in Anthropological Sciences	Evolution 2014
Jinelle Wint	PhD in Biochemistry	55th Annual Drosophila Research Conference
Kevin Hauser	PhD in Chemistry	Biophysical Society National Meeting
Santiago Cassalet	PhD in Ecology and Evolution	83rd Annual Meeting of the American Association of Physical Anthropology
Steve Tsotras	PhD in Biochemistry and Cell Biology	11th International Conference on Zebrafish Development and Genetics

3. The addition of AGEP-T FRAME also brought with it the joining of Karian Wright, Program Manager, and Dr. Sheri Clark, Postdoctoral Associate, to the Center for Inclusive Education staff. The project is a collaborative effort between Stony Brook University and Brookhaven National Laboratory. The AGEP-T FRAME team went straight to work executing programmatic activities including the following notable efforts:
 - **Faculty Career Weeks:** These series of discipline-specific events were designed to promote interaction with assistant faculty, some of whom were SBU alumni, while providing postdoctoral FRAME Fellows and doctoral students with valuable information pertaining to the faculty search, hiring and negotiations process. This also included an in-depth look at preparing a research statement, teaching statement, curriculum vitae and cover letter.
 - **Dissertation Writing Workshop and Boot Camp - “Keep Calm and Write On”** *Dissertation Writing Workshop and Boot Camp:* An interactive workshop provided students with practical tips and much needed motivation to complete their dissertation. The workshop served as the kick-off to the Writing Boot Camp, which provided the opportunity for doctoral students to engage in structured dissertation writing time. Weekly three-hour sessions were held over the summer in the Center for Inclusive Education at SBU and AGEP-T postdoctoral trainees provided mentorship and guidance as requested.
 - **Conflict Resolution Workshop:** A three-hour workshop, facilitated by Mary Eisenstein, a mediator and communication training expert, provided training in conflict resolution and effective communication. The session was highly interactive and included a number of assessments to guide the participants toward a greater understanding of their own communication styles.

AGEP-T FRAME will, over the next three years, coordinate a suite of professional and academic development workshops. You can read the official AGEP-T FRAME press release at:

<http://sb.cc.stonybrook.edu/news/general/131028STEMcareeradvancement.php?marquee1#sthash.IWcYK7B5.kqaDJ60H.dpuf>

4. NSF Research Study

The AGEP-T FRAME research project seeks to test the processes underlying two key psychosocial factors and their impact on STEM engagement and success of graduate students and postdoctoral fellows. The two psychosocial factors investigated in this research supplement are: (1) the level and stability of STEM specific self-efficacy and (2) STEM identity. Utilizing repeated measures and longitudinal surveys the research aims to explore the factors that contribute to how URM (on the basis of race/ethnicity and gender) graduate students and postdoctoral fellows develop and maintain a high and stable STEM self-efficacy (i.e., confidence in their ability to be successful at tasks associated with their STEM domain) and STEM identity (i.e., investment and belonging in their STEM domain). These two constructs have been consistently associated with STEM persistence, belonging and success in the educational and psychological literatures. This study seeks to expand this literature by investigating the role of Self-efficacy and

Identity in the graduate and postdoc STEM experiences, and identifying factors that contribute to the development of efficacy and identity for these groups. Data from non-URM STEM students is used as a comparison.

Between July/August 2013 through September 2013, the research team researched, identified, compiled, edited, and pilot tested over 70 measures for inclusion in the baseline survey to be distributed to the graduate student and postdoctoral fellow sample. Measures were either adopted for use in the study, adapted from existing psychometrically valid measures from the education and psychology literatures, or created as new products for the study. Recruitment emails were sent to graduate students in STEM disciplines only by the Graduate School Dean, the Director of the Center for Inclusive Education and the Research Project PI. Participants were directed to an online baseline survey. Next, a repeated measures data collection timepoint occurred at the end of the fall 2013 semester. The research team created a second survey that included repeated measures administered in the baseline questionnaire as well as new questionnaires that were meant to reflect short-term outcomes of STEM engagement. Participants who completed the baseline survey were invited to complete the second timepoint survey at the end of the fall 2013 semester.

During the spring 2014 semester, the first set of the AGEP-T FRAME workshops was offered. The research team created a brief self-report survey that was administered to all workshop participants. Additionally during the spring 2014 semester, the first of the postdoctoral fellows' self-report surveys were administered. Working in collaboration with the University Office of Postdoctoral Affairs and the Center for Inclusive Education at Stony Brook University and the Human Resources and Occupational Medicine division of Brookhaven National Laboratory, postdoctoral fellows at the University who met the inclusion criteria were sent invitation emails to complete the research survey. A comparison group of non-AGEP-T postdoctoral fellows were included in the recruitment. Finally, at the end of the spring 2014 semester, timepoint 3 of the repeated measures survey was administered to the graduate student participants via the online websurvey. The research team again repeated the key variables in the timepoint 3 survey and added additional psychosocial constructs to the survey.

Objectives met between July/August 2013 – July 2014

1. Creation of new STEM specific Self-Efficacy and STEM Identity measures and conducting validation analyses.
2. Baseline, follow-up, and workshop participation data collection from STEM graduate and postdoctoral fellow samples.
3. Ongoing analysis of collected data to detect patterns in our key variables.
4. Dissemination of our model of integrating empirical research with intervention practices at local and national conferences.

B. National Science Foundation Louis Stokes Alliance for Minority Participation: Bridge to the Doctorate (LSAMP-BD):

2013-2014 marked the culminating year of the 2010 LSAMP-BD program at Stony Brook University (PI David Ferguson). Since 2010, the BD program has brought in each year 12 Bridge to the Doctorate Fellows for two-year fellowship support in their master's or PhD program at Stony Brook; at a value of \$30,000 per year plus tuition and fees. The goal of fellowship is to provide support help graduate students successfully complete their master's coursework and transition into doctoral programs.

During the 2013-2014 academic year the LSAMP-BD program funded 13 graduate fellows, with seven of them being new incoming graduate students and six continuing from 2012-2013. The program graduated five BD Fellows from their master's degree programs in 2014, all of whom began in PhD programs at SBU in the fall of 2014. The transition of these four students demonstrates the importance of programs that free up students to devote more time to their research and ultimately become more competitive for a PhD program. With these four students being admitted into PhD programs, we have a total of nine out of 12 students of the 2012 BD cohort in PhD programs.

1. **Daphne Meza** - Continuing in BME PhD program; Successfully passed her QE
2. **Melissa Sims** - Received Geosciences MS May 2014; Entered Geosciences PhD program 2014
3. **Moises Guardado** - Received BCB MS Aug 2014; Entered Genetics PhD program 2014
4. **Nii Mensah** - Continuing in Pharm PhD program
5. **Steve Tsotras** - Entered Genetics PhD program 2014

BD Fellows are encouraged to pursue rigorous research programs to ensure that they are able to enter competitive doctoral programs, and ultimately gain competitive positions in the academic, scientific, and technology workforce. By presenting at national conferences, students are able to showcase their research to wider audience, as well as expanding their professional networks.

1. **Moises Guardado** - Oral Presentation at the 2014 Emerging Researchers National Conference in STEM, February 20-22, 2014;
2. **Steve Tsotras** - Poster Presentation at the 11th International Conference on Zebrafish Development and Genetics, June 24-28, 2014;
3. **Jinelle Wint** - Poster Presentation at the 55th Annual Drosophila Research Conference, March 26-30, 2014

A reapplication for funding of the Stony Brook LSAMP-BD program was submitted in November 2013, but was unfortunately not selected for funding. As this is a program shared by the SUNY LSAMP institutions, it is now SUNY ALBANY's opportunity to apply for funding. The Center will be submitting an application at the next possible announcement of the RFP.

2013-2014 Incoming NSF-BD Fellows	Degree Program	Previous Institution
Vincent Alford	PhD in Molecular and Cellular Pharmacology	University of Florida
Stephan Jean	MS in Mechanical Engineering	Stony Brook University
Camillia Monestime	PhD in Neuroscience	CUNY Brooklyn College
Christian Ruiz	PhD in Genetics	CUNY City College
Steve Tsotras	MS in Biochemistry and Cell Biology	Cornell University
Ariana Valdez	MA in Physics and Astronomy	California State University Los Angeles
Jinelle Wint	MS in Biochemistry and Cell Biology	University of Miami

C. The National GEM Consortium:

The National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. is a unique and powerful connection to a national network of universities and employers. This partnership promotes the participation of underrepresented groups in post-graduate science and engineering education and the technical workforce. The mission of GEM is to enhance the value of the nation's human capital by increasing the participation of underrepresented groups (African Americans, American Indians and Hispanic Americans) at the master's and doctoral levels in engineering and science. GEM's principal activity is the provision of graduate fellowships at the MS and PhD levels, coupled with paid summer internships. GEM also offers programming on the importance of graduate school and tools for access and successful matriculation.

1. **Fellowship Funding:** GEM Masters Fellows receive a stipend, which may be supplemented by the GEM Member University. The funding for the MS Award is for up to four semesters or up to six quarters. The funding for the PhD programs is up to the 5th year of the PhD program. One year is funded through the GEM National Office, via sponsorship from a GEM Employer and the GEM University. During the remaining years of the PhD program GEM Fellows are funded at the same level of other funded doctorate students in the department. GEM Fellows may be expected to accept a teaching or research assistantship. GEM Universities may place additional requirements on GEM Fellows, such as requiring that GEM Fellows obtain in-state residency. GEM Fellows must check with individual GEM Member University representatives to determine if additional requirements exist at that university. Applicants must be a US citizen or US permanent resident at time of application.
2. **GEM Fellows:** Stony Brook University supported one GEM Fellowship during the 2013-2014 year, Patrick Bynum. Patrick completed his MS degree Technology and Society in the spring of 2014 and is currently employed at Brookhaven National Laboratory.
3. **Applicants:** The GEM Fellowship requires applicants to also indicate three member institutions to which they will apply. For the fall of 2013, Stony Brook University had 11 GEM Fellowship applicants apply to master's and doctoral

degree programs at Stony Brook, six of whom were admitted to degree programs at Stony Brook. Of these six, one was selected as an industry sponsored GEM Fellow and an additional two were offered full funding support from Stony Brook University

4. **Programming:** In addition to the fellowship, GEM conducts programs to promote the participation and successful graduation of underrepresented minorities at the graduate level in science and engineering. GEM's signature undergraduate program, called GRAD Lab (Getting Ready for Advanced Degree Laboratory), is a day-long informational session about getting into and funding graduate school, currently supported by The Motorola Foundation and The Intel Foundation. On October 12, 2013, Stony Brook University cohosted the New York Metro Area GRAD Lab at Columbia University. The Center for Inclusive Education recruited during the graduate school information fair at the event, and also brought 17 undergraduate students to the GEM GRAD Lab to participate in the workshop events.

In addition to their student programming, GEM also holds an annual meeting each August wherein institution delegates meet to plan the future efforts. In August 2013, the meeting was attended by Toni Sperzel, the Program Manager.

D. National Institutes of Health Initiative for Maximizing Student Development: Maximizing Excellence in Research for Graduate Education (IMSD-MERGE):

The Center for Inclusive Education was notified in May 2014 of the National Institutes of Health's decision to fund the IMSD-MERGE program at Stony Brook (PI Peter Gergen, David Ferguson, Nina Maung). This \$1.4 million grant project was a 2013 resubmission of the IMSD-MERGE proposal submitted in 2012. Over the next five years IMSD-MERGE will provide direct financial support to 50 scholars in the biomedical sciences: 25 undergraduates and 25 doctoral fellows. In addition to this direct research support, IMSD-MERGE will provide more broadly accessible academic enrichment services, constructive mentoring experiences and rigorous professional development to SBU's academic community.

IMSD-MERGE welcomed its first cohort of 10 scholars this summer: Five Stony Brook University undergraduate students who participated in a ten-week summer research experience, and five entering graduate scholars. The undergraduate IMSD-MERGE Scholars' research was supervised by Stony Brook and Brookhaven National Laboratory, and the scholars presented their research posters at the joint Summer Symposium and closing ceremonies alongside the REU in Nanotechnology participants. Our graduate scholars participated in a two-week long graduate boot camp just prior to the start of classes to bolster their preparation for their first year graduate courses in the biological sciences. You can read Stony Brook University's press release announcing the winning of the IMSD-MERGE program at:

<http://sb.cc.stonybrook.edu/news/general/140829inclusiveedu.php>

Summer 2014 Incoming IMSD Undergraduates	Undergraduate Major	Research Advisor
Alexandria DellaPenna	Biology	Dr. Howard Sirotkin, Neurobiology and Behavior
Obiora Egbo	Biochemistry	Dr. Michael Frohman, Pharmacology
Sarah Georges	Biology	Dr. Wei Yin, Biomedical Engineering
Maryam Ige	Biomedical Engineering	Dr. J. Peter Gergen, Biochemistry and Cell Biology
Denise Laspina	Biology	Dr. Alexei Soares, BNL

E. National Science Foundation Research Experiences for Undergraduates in Nanotechnology for Health, Energy and the Environment (REU):

The multidisciplinary REU site (PI Gary Halada) at Stony Brook University has a focus on the application of nanotechnology and nanomaterial to societal needs in health, energy and the environment. The program provides a summer research experience for academically talented undergraduates interested in the nanotechnology field. We are proud to announce that the NSF REU Program was re-funded in spring 2014 for three more years. New for the 2014 program, we joined together with the NIH IMSD-MERGE, Explorations in STEM and the SUNY Brain Summer Scholars Program for many joint activities including 'Presenting Yourself in an Academic Setting', 'Distilling Your Message', as well as Faculty Research Lunches and a class on Research Methods. The summer programs ended on a high note with the STEM Summer Symposium on August 1, 2014 in which all students presented their research posters in a conference style setting. This year's REU program supported 10 participant from nine universities. The program was able to fund these 10 scholars through the supporting of one intern by the College of Engineering and a second funded by Suffolk County Community College. The program will continue to bring in 10 participants each summer through 2016. In addition to supporting ten undergraduate summer interns, the REU in Nanotechnology also funded two high school teachers for the Research Experience for Teachers (RET) component of the program.

Summer 2014 REU Participants	Undergraduate Institution	Summer Research Advisor
Steven Hall	CUNY Hunter College	Dr. Gary Halada, Materials Science and Engineering
Rudy Haluza	Penn State	Dr. Jason Trelewicz, Materials Science and Engineering
Leigha Jarett	SUNY Binghamton	Dr. Yizhi Meng, Biomedical Engineering
Natalie Jean-Philippe	Suffolk County Community College	Dr. Gary Halada, Materials Science and Engineering
Samantha Jones	CUNY City College	Dr. Molly Frame, Biomedical Engineering
Steven Kahn	University at Buffalo	Dr. Tadanori Koga, Materials Science and Engineering

Raghav Malik	Stony Brook University	Dr. Yizhi Meng, Biomedical Engineering
Justin Morena	University of Pennsylvania	Dr. Peter Tonge, Chemistry
Ann O'Brien	SUNY New Paltz	Dr. Gary Halada, Materials Science and Engineering
Zachary Wong	SUNY Buffalo	Dr. Taejin Kim, Materials Science and Engineering

F. State University of New York funded Dr. W. Burghardt Turner Fellowship:

The Dr. W. Burghardt Turner Fellowship is a Graduate Fellowship Program (Director Nina Maung) for eligible underrepresented students pursuing graduate or professional degrees at Stony Brook University in a variety of disciplines including the biological sciences, physical sciences, social sciences, medicine, humanities, engineering and the arts. Candidates for the Turner Fellowship Program must be a citizen or permanent resident of the United States who will contribute to the diversity of the student body, have overcome disadvantage or other impediment to success in higher education, and have the potential to serve as future leaders in their professions, their communities and the broader society. At its core, the Turner Fellowship Program provides supplementary financial support for the duration of a fellow's anticipated graduate study at Stony Brook, and a community of diverse scholars connected across departments to support student success. The fellowship carries the name of Dr. W. Burghardt "Burg" Turner, emeritus Professor of History at Stony Brook University. Turner Fellows receive a total award value of \$50,000 in supplemental support distributed over the five year period of doctoral study. These supplemental funds are combined with a minimum ½ TA, GA or RA from their academic department each year for the duration of their Turner Fellowship. In addition to the fellowship funds, Turner Fellows are also eligible for conference travel support and summer research grant funding.

At his 2013 University Commencement Address President Samuel L. Stanley announced the commitment of \$250,000 in University funds over the next five years to grow the Turner program. This is the first specific commitment of institutional funds made to the program, which is funded by the SUNY Office of Diversity, Equity and Inclusion. The money will allow the Turner Fellowship Program to grow by an additional five fellows each year for the next five years.

1. **Incoming Fellows Fall 2013**

For the fall 2013 cohort the Turner Fellowship Program received 49 nominations, awarded 36 fellowships and welcomed 19 new fellows to campus in August. The incoming cohort brought our total group of funded fellows for the 2013-2014 academic year to 79 funded fellows.

2013-2014 Incoming Turner Fellows:	Degree Program	Previous Institution
Fernando Araiza Gonzalez	PhD in Physics and Astronomy	Arizona State University Tempe
Sophia Basaldua	PhD in Cultural Analysis and Theory	Clemson University
Amber Bonds	PhD in Molecular and Cellular	University of New Haven

	Pharmacology	
Jean Olivier Brutus	MS in Biomedical Engineering	Stony Brook University
Aleshka Carrion-Matta	PhD in Marine and Atmospheric Sciences	Utah State University Logan
(Scholar Name Suppressed)	Program in Anthropological Sciences	CUNY Hunter College
Alexander Davis	D.MA in Music Performance	SUNY College at Fredonia
Laviel Fernandez	MD	Johns Hopkins University
Jacinth Greywoode	PhD in Music Composition	Princeton University
Kirolos Ibrahim	MD	Stony Brook University
Briana Locicero	MD	Stony Brook University
Ashleigh Lussenden	PhD in Neuroscience	University of Denver
Micah Mumper	PhD in Psychology	Macalester College
Phillip Nelson	PhD in Philosophy	Pennsylvania State
Ryan Richards	PhD in Physics and Astronomy	SUNY Center Albany
Nicole Savage	PhD in English	University of Cincinnati
Emma Velez	PhD in Philosophy	Oklahoma City University
Andrew Zamora	MA in Anthropology	Florida International University

2. Nominations Cycle Spring 2014

The Turner Fellowship Program had an outstanding spring nominations cycle, receiving 79 nominations for the fall of 2014. The Turner Fellowship Program was able to extend 45 fellowship offers and yielded 25 new incoming fellows who will join us at Stony Brook in the fall 2014 semester.

3. Graduating Fellows August 2013-Spring 2014

2014 was an exceptional year for graduates from the Turner Fellowship Program, graduating 13 fellows over the summer 2013, fall 2013, and spring 2014 academic semesters (2 Master's Fellows, 1 Medical School Fellow and 10 doctoral degree recipients).

G. National Institutes of Health Institutional Research and Career Development Awards: New York Consortium for the Advancement of Postdoctoral Scholars (IRACDA NY-CAPS):

May 2014 marked the beginning of the third year of funding for the IRACDA NY-CAPS postdoctoral scholars program at Stony Brook (PI Jorge Benach, David Ferguson, Nina Maung), during which the program welcomed its next cohort of postdoctoral scholars establishing the program's postdoc community at nine scholars. This will be at its steady state moving forward. NY-CAPS prepares postdocs with a commitment to underserved populations to attain tenure-track teaching positions through: Mentored productive, independent research at Stony Brook; Focused pedagogic training with professional development; and Mentored teaching experience at our minority-serving partner institutions: CUNY Brooklyn College, SUNY College at Old Westbury and Suffolk County Community College.

1. **IRACDA Postdocs:** Three new postdoctoral scholars were recruited and began their appointments this year:
 - a. **Dr. Sarah Alaei**, under the mentorship of Dr. David G. Thanassi in the Department of Molecular Genetics and Microbiology
 - b. **Dr. Elizabeth Atkinson**, under the mentorship of Dr. Brenna Henn in the Department of Ecology and Evolution
 - c. **Dr. Jillian Cypser Nissen**, under the mentorship of Dr. Styliani-Anna Tsirka in the Department of Pharmacology

2. **Publications, Presentations and Awards**

Tracy Callendar	Publication of "Down-regulation of Rad51 activity during meiosis in yeast prevents competition with Dmc1 for repair of double-strand breaks," <i>PLOS Genetics</i> , 10/2013. Presentation: "The relevance of meiosis – Maintaining the integrity of our gametes," Partner Institution Science Class, 12/2013.
William Gillis	Publication (Author) GTPBP2 destabilizes Axin and is required for embryonic Wnt signaling. Publication (Coauthor) Prototypical Arthropod Gene Content and Genome Organisation in the Centipede <i>Strigamia maritima</i> . <i>PLoS Biology</i> Poster presentation at the Society for Developmental Biology 73rd Annual Meeting: Gtpbp2 destabilizes Axin and is required for embryonic Wnt signalling Grant funding: Coauthor on funded Carol M. Baldwin Breast Cancer Research Award, "A novel GTPase as a potential breast cancer drug target."
Gretchen Lopez-Hernandez	1 Book chapter "Presynaptic nicotinic acetylcholine receptors and the modulation of circuit excitability," <i>The Nicotinic Receptors</i> , 1 invited review paper "Optogenetic studies of cholinergic circuits," <i>Reviews in the Neurosciences</i> , 1 poster presentation, "Optogenetic analysis of basal forebrain cholinergic neurons: Comparison of wild-type and type III neuregulin 1 mutant mice," Society for Neuroscience 43rd Annual Meeting, 11/2013.
Dr. Javier Monzón	in-kind support from NYS DOH. Submitted grant application to Prairie Biotic Research (pending). Sought by local and NYC media as scientific expert in environmental news stories. Evolution 2013 Conference; International Conference on Lyme Borreliosis and Other Tick Borne Diseases.
Marianne Moore	Publications (co-author) – 1) "Mercury in bats from the Northeastern United States," <i>Ecotoxicology</i> ; DOI 10.1007/s10646-013-1150-1; "Effects of sewage-water contamination on the immune response of a desert bat; <i>Mammalian Biology</i> ; in press. Received a \$318,455 grant from the U.S. Fish and Wildlife Service to study skin immune proteins as predictors of resistance against white-nose syndrome (WNS) with Dr. Liliana Dávalos (SBU) and Dr. Amy Russell (Grand Valley State University, MI)
Taylor Schoberle	Submitted publication "A Novel C2H2 Transcription Factor that Regulates gliA Expression Interdependently with GliZ in <i>Aspergillus fumigatus</i> ."

3. **Annual Conference in Albuquerque, New Mexico on June 8-10, 2014:** The theme this year was "Elevating Science and Education." NY-CAPS Scholars presented posters on their various research projects. Tracy Callendar presented a poster highlighting the impact of the IRACDA NY-CAPS relationship on course and curriculum development at SCCC.

4. **Annual Meeting on December 12, 2013:** The IRACDA NY-CAPS Annual Meeting provided an opportunity to bring together the executive committee, advisory board, research mentors, teaching mentors and NY-CAPS Scholars. The goals of the program were discussed along with the program's progress to date. Scholars also made presentations on their progress in the program.
5. **Pedagogy Course:** NY-CAPS initiated the revamping of campus teaching training offerings that led to the creation of the University's first-ever pedagogy **course specifically for postdoctoral trainees**. This course is now being offered to all postdocs at SBU. Moreover, the NY-CAPS Pedagogy Course focuses specifically on teaching in the sciences and integrates novel workshops from SBU's Alan Alda Center for Communicating Science. These elements enrich scholars' ability to communicate with peers and nonscientists alike: students in class, the media, large audiences of colleagues at scientific meetings and even search committees. Scholars made particular progress in this area after taped interviews with an award-winning science documentary producer.
6. **Postdoc Videos:** We piloted a new initiative to film video profiles of our NY-CAPS Scholars. Each video provided an introduction of the scholar, a brief description of their research and a summary of what they hope to gain from the NY-CAPS. We filmed our first cohort of three scholars, which are currently available on the program website.
7. **Alda Center and Communicating Science workshops:** In conjunction with the pedagogy course, our first two cohorts of NY-CAPS Scholars attended three communicating science workshops facilitated by the Alan Alda Center for Communicating Science. The workshops included the following:
 - a. **Improvisation Workshop** - Scholars learned to 1) talk more spontaneously and directly about their work, 2) pay dynamic attention to their listeners and 3) connect personally with their audience.
 - b. **Communicating Science: Distilling your Message (Parts 1 and 2)** - Scholars learned to speak clearly and vividly about their work and why it matters, in terms non-scientists can understand; this included practice interviews, which were recorded on film.

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