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Sixth Annual Progress Report: October 1, 2011 – September 30, 2012

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2011-2012 Year Progress

As detailed in our first annual progress report dated 2006-2007, PRISM was established in fall 2006 to promote the expansion of undergraduate research in the science programs at John Jay College of Criminal Justice of The City University of New York. In that first year, thirteen students shared in \$21,000 of funding. Now having completed its sixth year of operation, the program has greatly expanded and has had a profound influence on promoting undergraduate science research at the college. In the 2011-2012 academic year, thirty students shared in \$106,150 of stipend support, \$59,274 in materials and supplies support, and \$21,323 in travel support. In addition, \$192,122 was made available through PRISM to faculty in the Department of Sciences to update and upgrade research equipment used in the course of student mentoring. This last item includes \$166,202 for six items of equipment given to eight mentors in a competitive application process. Five students participated in non-funded research (all are expected to be funded during the current academic year). Nineteen students participated in our second year research training courses. Nine first year students participated in a day long January Information Day. Additionally, many more John Jay College science majors, students from several CUNY community colleges, and high school students were exposed to PRISM and the possibilities for undergraduate research via attendance at one or more PRISM events held throughout the year. Several dozen parents, college administrators, departmental faculty, and members of the public attended various PRISM events each highlighted by PRISM student presentations of their research efforts.

The quality of undergraduate research continues at a high level. Students engaged in research averaged well over 400 hours in their time commitment. Each of those who received college credit for research has performed 400 hours of mentor-supervised research. Many students are authors or co-authors of research published this past year or in-press as noted in detail in this report. Three students were each awarded a \$3,000 Charina Fellowship for outside research this past summer. For one of these students, this experience resulted in employment at the Rockefeller Institute Department of Virology. Eugene Gonzalez-Lopez received several awards: a \$30,000 NSF Bridge to the Doctorate Fellowship, a \$7,500 NSF Computer Science and Forensic Science Scholarship, and a \$6,000 NSF LSAMP stipend for two years. PRISM students presented their work at national or regional conferences outside of the College and at several meetings at the College and a nearby high school.

The fifth annual John Jay College PRISM Undergraduate Research Symposium was held on May 4, 2012 as part of the annual college-wide Celebrating Student Research & Creativity week. The PRISM Symposium was attended by over 75 students, faculty, and administrators. The event featured an invited talk from a former John Jay College forensic science undergraduate student, Dr. Damon Borg, who earned his PhD in Pharmaceutical Sciences -- Toxicology in 2009 from St. John's University College of Pharmacy and Allied Health Professions. Twenty-nine PRISM students presented posters at the event and one student, Roselynn Cordero, gave an oral presentation as winner of the annual prize for outstanding undergraduate research. The sheer amount of high quality work has reached the point where we now give runner-up awards for outstanding student and awards for outstanding poster presentation.

At the annual day-long PRISM January Information Day for first-year Forensic Science majors, PRISM students presented posters and discussed their research interests, invited speakers gave talks on career options, and program information was distributed. Second year research training continued, and two week long training courses were held in January and June to accommodate all students interested and eligible for undergraduate research. The training courses introduced the process of conducting scientific research, from literature searching to understanding scientific writing, and hands-on laboratory exercises to orient students to laboratory research work. Faculty also discussed the importance of research as well as how they first became interested in science and research. Again, PRISM students presented posters and discussed their research interests.

Outreach to partner community colleges continued this year with a focused effort to engage CUNY Justice Academy (CJA) students in activities that would introduce them to John Jay and to our PRISM students. Four schools were targeted this year: Bronx Community College (BCC), Borough of Manhattan Community College (BMCC), Queensborough Community College (QCC), and Hostos Community College. Outreach activities included an outing to the American Museum of Natural History. Additionally, all community college forensics majors in the CJA were invited to attend the annual PRISM Symposium. Several students attended both the PRISM Symposium and a follow-up tour of four labs belonging to PRISM mentors. Information sessions were held at BCC, Hostos, and BMCC, during which CJA forensics students were introduced to PRISM and advised about their eventual transfer to John Jay within the forensics major. As in the past, a PRISM mentor visited QCC for a guest lecture; this year's lecturer was Dr. Angelique Corthals.

In addition to the outreach activities described above, efforts were also made to more actively engage CJA forensics students in opportunities relating to undergraduate research. A PRISM-organized four day seminar on forensics techniques was offered at BCC over the summer with BCC's Dr. John Molina as the instructor. Several students from various partner schools attended and received a small stipend for their participation. Additionally, students from QCC and BMCC were invited to apply for a Fall 2012 research stipend, to be allocated through PRISM, for research work to be completed at their own schools. Research proposals from one student at QCC and one student at

BMCC were accepted for Fall 2012 funding. Lastly, we contacted our community college partner students who had just recently transferred to John Jay in order to invite them to apply to PRISM. Three transfer students visited the PRISM headquarters to speak with our Outreach Coordinator and to fill out an application. One of these students began preliminary work under the mentorship of Dr. Anthony Carpi, with at least one other set to begin in Spring 2013.

The third *PRISM Chronicle of Undergraduate Research*, a publication that includes short biographies and research abstracts of projects undertaken during the 2011-2012 year was produced in June of 2012. Further, the Program website was updated. We are now publishing monthly electronic Newsletters for both students and mentors. A comprehensive GRE course was offered this past summer with nine students in attendance. We began to organize monthly meetings during which guest speakers were invited to speak to students about options for graduate school or career goals. Speakers included representatives from the Sackler Institute for Biomedical Science at NYU and the Harvard University School of Public Health, among others.

Five 2012 graduates of the PRISM program were accepted and are now enrolled in graduate schools. Mohanram Bassit and Eugene Gonzalez-Lopez are MS students in Forensic Science at John Jay College, Irving Campoverde is a pharmacy student at the Long Island University College of Pharmacy. Eva Santos is in the MA program for Adolescent Science Education (Chemistry) at Hunter College. Jennifer Teubl is a PhD student at the NYU Sackler Institute of Graduate Biomedical Sciences. Another three graduates are employed as lecturers and/or lab technicians at the College. They are continuing with their research and also plan on applying to graduate school. Several others are employed in the field of science.

Near-Term Goals

We will continue to increase the dissemination of the program both internally and externally. We will be maintaining our efforts to further establish and maintain contact with PRISM alumni and report on their achievements to current PRISM students. At this point, we know of twenty-five PRISM graduates who are in or have completed graduate or professional programs. Several remain in active contact with our program and have welcomed contact from our current PRISM students.

In respect to the size of the Program, we do not expect that the numbers of students to rise significantly in the near future as nearly half of all students who graduate with a Bachelors degree in Forensic Science are engaged in research through PRISM. Given that the Forensic Science program also maintains an alternate capstone experience for students wishing to enter professional employment immediately upon graduation, an external laboratory internship, we project that PRISM will continue to serve approximately half of the students in the program with the remainder participating in the external internship program. We are continuing to reach out to faculty and students in the Department of Mathematics and Computer Information Science. Two of our PRISM students this past year were CIS majors.

This year, we will continue research training with second year students during the winter intersession and summer session. The intent is to make it possible for qualified students to start research under a mentor's guidance in the summer after their second year in the major. The daylong January Information Day for specially invited first year students will continue. We plan to continue the development of training classes in laboratory safety as well as to emphasize the development of scientific writing skills in these sessions. The Program also expects to continue to expand the resources we provide to student researchers, including laboratory notebooks, USB data drives, and other supplies.

We will continue outreach to our community college partner students, with continued activities, lab tours, seminars, and guest lectures by PRISM faculty. We expect to fund students from QCC and BMCC for their research and wish to include, for the first time, any Spring semester students in the annual PRISM Symposium. Given the close proximity of Hostos to John Jay, FOS students from this school will be invited to apply for a funded research externship at John Jay, with the expectation that this student(s) would also participate in the annual PRISM Symposium. Students transferring into John Jay as forensics majors in the CJA will also be personally contacted and invited to meet with the outreach coordinator to learn more about PRISM. We expect that the number of community college transfer students participating in funded research will increase in the coming year.

Funded Research Students

	Name	Mentor
1.	Ashley Almonte	(He)
2.	Tamykah Anthony	(Lents)
3.	Mohanram Bassit	(Korobkova)
4.	Ankit Bhatta	(Korobkova)
5.	Irving Campoverde	(Proni)
6.	Danielle Carthorne	(Kubic)
7.	Catherine Chamnankool	(Korobkova)
8.	Sofia Cheliout DaSilva	(Korobkova)
9.	Mircea Comanescu	(Corthals)
10.	Roselynn Cordero	(Proni)
11.	Shoronia Cross	(Roberts)
12.	James Field	(Proni)
13.	Eugene Gonzalez-Lopez	(Cheng)
14.	Michael Hannon	(Sengupta)
15.	Alandra Mitchell	(Rauceo)
16.	Steven Pineman	(Corthals)
17.	Elliot Quinteros	(Roberts)
18.	Baibhav Rawal	(Korobkova)
19.	Andrea Saenz	(Champeil)
20.	Eva Santos	(Carpi)
21.	Sarah Seda	(Champeil)
22.	Kelly Song	(Yaverbaum)
23.	Anna Stoll	(Cheng)
24.	Leonid Sukala	(Rauceo)
25.	Davilenys Tahan	(He)
26.	Jennifer Teubl	(Rauceo)
27.	Szilvia Tobak	(Lents)
28.	Sudip Ulak	(Johnson)
29.	Justin Walters	(Cheng)
30.	Cindi-Ann Williams	(Cheng)

Non-funded Research Students

	Name	Mentor
1.	Danequa Carter	(Li)
2.	Kristi Cho	(Champeil)
3.	Tasheda Kelly	(Korobkova)
4.	Lidissy Liriano	(Li)
5.	Yessica Saenz	(Li)

PRISM Graduates 2012

Name	Mentor
1. Mohanram Bassit	(Korobkova)
2. Ankit Bhatta	(Korobkova)
3. Irving Campoverde	(Proni)
4. Catherine Chamnankool	(Korobkova)
5. Sofia Cheliout DaSilva	(Korobkova)
6. Kristi Cho	(Champeil)
7. Roselynn Cordero	(Proni)
8. Eugene Lopez- Gomzalez	(Cheng)
9. Michael Hannon	(Sengupta)
10. Lidissy Liriano	(Li)
11. James Fields	(Proni)
12 Alandra Mitchell	(Rauceo)
13. Steven Pineman	(Corthals)
14. Andrea Saenz	(Champeil)
15. Eva Santos	(Carpi)
16. Leonid Sukala	(Rauceo)
17. Jennifer Teubl	(Rauceo)
18. Szilvia Tobak	(Lents)
19. Justin Walters	(Cheng)
20. Cindi-Ann Williams	(Cheng)

Second Year Research Training Courses – January and June 2012

These training courses covered a variety of topics in over 20 hours of class and laboratory meetings. Classroom and laboratory topics included Scientific Writing, Ethics in Science & Medicine; Responsible Conduct in Scientific Research; Introduction to Literature Searching for the Scientist; Introduction to Protocol/ Experimental Design; Introduction to Acid/Base Chemistry; Buffers and Protein Quantification; Introduction to Data Analysis Techniques and Introduction to Laboratory Techniques for Bio-Chemical Research. Current research students presented posters.

January 2012 (Dawn Marotta, & Marcel Roberts - Instructors)

1. Joshua Angeles
2. Shain Bailey
3. Marleny Cabral
4. Vida Ho
5. Zhen Gui Lu
6. Herold Menier
7. Angelita Pierre-Noel

8. Eugenia Salcedo
9. Christine Ta
10. Ronna Williams
11. Bik Tzu Huang
12. Yu Ye

June 2012 (Jason Rauceo, & Marcel Roberts – Instructors)

1. Keisha Alexander
2. Jenny Fong
3. Stacey Ishmail
4. Xiao Shan Law
5. Anna Lerer
6. Glen Mahon
7. Jeannie Marenga

First Year Information Day

Outstanding performing students in CHE 103 participated in a day long event designed to provide introductory information on a variety of topics. These included the role of under graduate research in preparing students for graduate and professional schools. Students visited research labs. Current PRISM students gave talks and presented posters.

January 19th, 2012 Information Day

1. Robert Connolly
2. Tara Goldfrank
3. Kathy Liao
4. Jazlene Montes
5. Samantha Morera
6. James Parziale
7. Vladislav Rabiner
8. Jamikah Thomas
9. Shawn Williams

Outreach Event - American Museum of Natural History – April 10, 2012

1. Shain Bailey (JJC)
2. Sasha Caesar (BMCC)
3. Johnny Calixto (BCC)
4. Katie Cuevas (BCC)
5. Liam Flynn (BCC)
6. Dorothy Gyampoh (QCC)
7. Suk Ju Ham (QCC)
8. Janet Hicks (BMCC)
9. Anthony Ho (JJC)
10. Tasheda Kelly (JJC)
11. Samantha Morera (JJC)

12. Ruth Romero (Hostos)
13. Mariela Rose (BCC)
14. Eugenia Salcedo (JJC)
15. Eva Santos (JJC)
16. Stephanie Rodriguez (BCC)

Forensics Seminar at BCC – July 9, 2012 through July 12, 2012

1. Eugenia Belcher-Dunn (BCC)
2. Nyeisha Brathwaite (BMCC)
3. Johnny Calixto (BCC)
4. Katie Cuevas (BCC)
5. Nayma Gonzalez (BMCC)
6. Ruth Romero (Hostos)
7. Orlando Velez, Jr. (BMCC)

Lab Open Houses – May 4, 2012

Four mentors participated along with some funded PRISM students in giving tours of their labs. The participating mentors and students were: Jason Rauceo with students Leonid Sukala and Jennifer Teubl, Marcel Roberts with student Elliot Quinteros, Angelique Corthals with students Mircea Comanescu and Steven Pineman, and Nathan Lents with graduate student Richard Pizcatowski.

Visiting Students and Faculty

1. Rreal Barnes (BMCC)
2. Katie Cuevas (BCC)
3. Liam Flynn (BCC)
4. Maria Guzman (BMCC)
5. Janet Hicks (BMCC)
6. Dr. John Molina (BCC)
7. Ruth Romero (Hostos)
8. Orlando Velez, Jr. (BMCC)

Symposium Attendees from Community Colleges - May 4, 2012

1. Rreal Barnes (BMCC)
2. Katie Cuevas (BCC)
3. Liam Flynn (BCC)
4. Maria Guzman (BMCC)
5. Yasser Hernandez (Hostos)
6. Janet Hicks (BMCC)
7. Dr. John Molina (BCC)
8. Ruth Romero (Hostos)
9. Stephanie Sanchez (BCC)
10. Orlando Velez, Jr. (BMCC)

Awards, Honors, etc.

Roselynn Cordero was selected as the recipient of the 2011-2012 Outstanding Science Undergraduate Research Student at John Jay College

Eugene Gonzalez-Lopez and Leonid Sukala were selected as runner-ups as Outstanding Undergraduate Student at John Jay College

Eugene Gonzalez-Lopez, Leonid Sukala, and Jennifer Teubl were selected as co-winners for Outstanding Poster Presentation at the PRISM Annual Symposium

Ankit Bhatta, Sofia Cheliout DaSilva, and Davilenys Tahan were each awarded a \$3,000 Charina Fellowship for outside research this past summer.

Eugene Gonzalez-Lopez received several awards: a \$30,000 NSF Bridge to the Doctorate Fellowship, a \$7,500 NSF Computer Science and Forensic Science Scholarship, and a \$6,000 NSF LSAMP stipend covering two years.

John Jay College Scholarship Winners

Several PRISM students were awarded NSF Scholarships:

Spring 2012			Fall 2012		
Last	First	Award	Last	First	Award
Almonte	Ashley	3750	Almonte	Ashley	3500
Anthony	Tamykah	3750	Bailey	Shain	3500
Bailey	Shain	3750	Seda	Sarah	2793
Gonzalez-Lopez	Eugene	4250			
Seda	Sarah	2604			
Williams	Cindi-Ann	1990			

Publications

1. Champeil, E., Paz, M. *, Lukasiewicz, E., Kong *, W., Watson, S. *, & Sapse, A.M. (2012). Synthesis of a major mitomycin C DNA adduct via a triaminomitosene. *Bioorganic and Medicinal Chemistry Letters*, 22, 7198.
2. He, Y., Pedigo *, C. E., Lam, B., Cheng, Z., & Zheng, Y. (2012). Bioaccessibility of arsenic in various types of rice in an in vitro gastrointestinal fluid system. *Journal of Environmental Science and Health, Part B*, (47), 74–80.
3. Korobkova, E., Nemeth, J., Cadougan, M., Venkatratnam, A., Bassit *, M., & Azar, N. (2012). Reactive metabolites of desipramine and clomipramine: The kinetics of formation and reactivity with DNA. *Bioorg. Med. Chem.* 20 (1), 340-

345.

4. Korobkova, E. Sukala, L.* , (2012). Small molecules targeting mitochondria: applications for cancer and neurodegenerative disease therapeutics. *Chemistry and Biology Interface*, 2 (2), 59-75.
5. Lesar, C.T., Decatur, J., Luckasiewicz, E.* , & Champeil, E. (2011). Identification of Gamma-Hydroxybutyric acid (GHB) and Gamma-Butyrolactone (GBL) in beverages using NMR and the PURGE solvent-suppression technique. *Forensic Science International*, 212, 40.
6. Li, R., & Liriano, L.* . (2011). A bone sample cleaning method using trypsin for the isolation of DNA. *Legal Medicine*, 13(6), 304-308.
7. Li, R., Klempner, S., Carter, D*., & Saenz, Y* . (In Press). Evaluation of methods to process bone evidence for forensic DNA analysis. *Proceedings of the 22nd Conference of the International Academy of Legal Medicine*.
8. Mahmood, N.* , He, Y., Petraco, N.D., (2012). Elemental fingerprints profile of beer samples constructed using fourteen elements determined by inductively coupled plasma – mass spectrometry (ICP-MS): Multivariation analysis and potential application to forensic sample comparison. *Analytical and Bioanalytical Chemistry*, 402, 861–869.
9. Petrovic, A., Vantomme, G., Negron-Abril, Y., Lubian, E., Saielli, G., Menegazzo, I., Cordero, R.* , Proni, G., Nakanishi, K., Carofiglio, T., & Berova, N. (2011). Bulky melamine based Zn-porphyrin tweezer as a CD probe of molecular chirality. *Chirality*, 23(9), 808-819.
10. Williams, A.* , Cheliout-Dasilva, S.* , Liu, M.* , Rawal, B.* , Bhatta, A.* , & Korobkova, E. (2012). Determination of the drug-DNA binding modes using fluorescence-based assays. *Anal. Biochem.*, 422, 66-73.

* Denotes a PRISM student or alumnus.

Conference Presentations

1. Gonzalez-Lopez, E.* *The Role of Microtubule on Dithiocarbamate Cytotoxicity*, Society for Experimental Biology, April, 2012.
2. Gonzalez-Lopez, E.* , & Cheng, S. *The Role of Microtubule on Dithiocarbamate Cytotoxicity*, Society of Toxicology, San Francisco, March, 2012.

3. Marotta, D., Teubl, J. *, Sukala, L. *, Rauceo, J. *Regulation of the Osmotic Stress Response by Transcription Factor Sko1*. American Society of Microbiology (ASM) Conference on Candida and Candidiasis, San Francisco, 2012.
4. Mitchell, A. *, Rauceo, J. *Synthesis of Candida albicans ALS1 Mutant Expression Vectors*. 15th Annual CUNY/AGEP STEM Conference, New York, 2012.
5. Obatusina, M., Cordero, R. *, Jameel, Q., Proni, G., Petrovic, A. *Helical molecular programming via supramolecular complexation of bis-porphyrins*, 243rd ACS National Meeting, San Diego, March 25-29, 2012.
6. Piszczatowski, R. * & Lents, N.H. *MZF-1 Regulates the CTGF Gene in the Hematopoietic Compartment*, Amer. Soc. of Biochem. & Mol. Bio. (ASBMB); Experimental Biology, San Diego, CA, April 25, 2012
7. Stoll, A. *, Cheng, S. *Role of Alpha-synuclein and Its Mutants on Dithiocarbamate Cytotoxicity*. American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting, ABS#9968, San Diego, April, 2012.
8. Troselj, P., Mazzeo, G., Proni, G., Cordero, R. *, Carofiglio, T., Petrovic, A., Berova, N. *Host-guest complexes with metalloporphyrin tweezers: insight into factors determining molecular recognition and chiroptical response*, ICCP-7 7th International Conference on Porphyrin and Phthalocyanines, Jeyu, Korea, July 1-6, 2012

* Denotes a PRISM student or alumnus.

Annual PRISM Symposium Presentations and PRISM Chronicle Abstracts

1. Almonte, A. *, He, Y. (2012). *Determination of Trace Metals in Wool Samples*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
2. Anthony, T. *, Lents, N. (2012). *Exploring the Mechanism of How Zinc Supplements Reduce the Detection of THC in Urine*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
3. Bassit, M. *, Korobkova, E. (2012). *DNA Damage in the Presence of Arylamines*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
4. Bhatta, A. *, Korobkova, E. (2012). *Response of Mammalian PC12 Cell to Primary Arylamine*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
5. Campoverde, I. *, Proni, G. (2012). *NMR- Based Study of Urines of Opioids-Overdosed Patients*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.

6. Carthorne, D. *, Kubic, T. (2012). *Establishing a Pigment Database using FTIR and Raman Spectroscopy*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
7. Chamnankool, C., * Korobkova, E. (2012). *How Mammalian Cells respond to Oxidative Stress: Kinetic Studies*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
8. Cheliout DaSilva, S. *, Korobkova, E. (2012). *Fluorescence-based Study of Drug-DNA Binding Modes*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
9. Comanescu, M. *, Corthals, A. (2012). *Quantifying Molecular Damage in Both Human and Non-Human Ancient Skeletal Remains for the Purpose of Genotyping and Evolutionary Studies*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
10. Cordero, R. *, Proni, G. (2012). *Helical Molecular Programming Via Supramolecular Complexation of Bis-Porphyrins*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
11. Cross, S. *, Roberts, M. (2012). *Development of a Novel Fingerprint Scanner with Explosive Metabolite Detection Capabilities*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
12. Field, J. *, Proni, G. (2012). *Index of Freshness Analysis of Tuna Sushi and Sashimi Gathered from New York City*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
13. Gonzalez-Lopez, E. *, Cheng, S. (2012). *The Role of Microtubule on Dithiocarbamate Cytotoxicity*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
14. Hannon, M. *, Sengupta, S. (2012). *Investigating Spectrum-Agile Security Vulnerabilities in Wireless Networks*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
15. Mitchell, A. *, Rauceo, J. (2012). *Synthesis of Candida albicans ALS1 Mutant Expression Vectors*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
16. Pineman, S. *, Corthals, A. (2012). *Quantifying Molecular Damage in Both Human and Non-Human Ancient Skeletal Remains for the Purpose of Genotyping and Evolutionary Studies*, Prism Undergraduate Science Symposium, John Jay College, New York, NY May 4, 2012.

17. Quinteros, E. *, Roberts, M. (2012). *Surface Modification for the Development of a Novel Drug Detection and Fingerprint Scanner*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
18. Rawal, B. *, Korobkova, E. (2012). *Cytochrome C in Apoptosis*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
19. Saenz, A. *, Champeil, E. (2012). *Sequence Selectivity Determination for Decarbamoyl Mitomycin C DNA- β Monoadduct*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
20. Santos, E. *, Carpi, A. (2012). *Decomposition and Flux of Mercury Species from Water*, Prism Undergraduate Science Symposium, John Jay College, New York, NY May 4, 2012.
21. Seda, S. *, Champeil, E. *Novel Molecular Sensors for the Detections of both Fluoride Anions and Mercury (II)*. Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
22. Song, K. *, Yaverbaum, D. *A study in Visual and Linguistic Cognition Regarding Galileo's Principle of Relativity: That all (unaccelerated) reference frames are physically equivalent*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
23. Stoll, A. *, Cheng, S. (2012). *Role of Alpha-Synuclein and Its Mutants on Dithiocarbamates Cytotoxicity*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
24. Sukala, L. *, Rauceo, J. (2012). *Functional Conservation of Candida albicans Transcription Factor SKO1p in Baker's Yeast*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
25. Tahan, D. *, He, Y. (2012). *Determining Trace Metals in Wool Samples Using ICP-MS*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
26. Teubl, J. *, Rauceo, J. (2012). *In silico Analysis of Putative Candida albicans SKO1p Binding Site*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
27. Tobak, S. *, Lents, N. (2012). *Identifying and Defining the Specific Regulation of Myeloid Zinc Finger-1 (MZF-1) as a Transcription Factor for the Protein Connective Tissue Growth Factor (CTGF)*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.

28. Ulak, S. *, Johnson, H. (2012). *Classification of Human Movement Using Kinetography Laban*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
29. Walters, J. *, Cheng, S. (2012). *The Toxic Mechanism of Dithiocarbamates and Vesicular Monoamine Transporter 2 in HEK-DAT Cells*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.
30. Williams, C. *, Cheng, S. (2012). *Maneb and Mancozeb Activate the NF-Kappa B Signaling Pathway*, Prism Undergraduate Science Symposium, John Jay College, New York, NY, May 4, 2012.

* Denotes a PRISM student

John Jay College Presentations

1. Gonzalez-Lopez, E., *The Role of Microtubules on Dithiocarbamate Cytotoxicity*, First Year Science Majors PRISM Information Day, January 19, 2012.
2. Comanescu, M., *Quantifying Molecular Damage in both Human and Non-human Ancient Skeletal Remains for the Purpose of Genotyping and Evolutionary Studies*, PRISM Research Training Workshop, January 17, 2012.
3. Stoll, A., *Role of Alpha-Synuclein and its Mutants on Dithiocarbamates Cytotoxicity*, PRISM Research Training Workshop, January 17, 2012.
4. Sukala, L., *Functional Conservation of Candida albicans Transcription Factor SKO1p in Baker's Yeast*, First Year Science Majors PRISM Information Day, January 19, 2012.
5. Teubl, J., *The Role of Research in an Undergraduate Science Major Life*, John Jay College Career Days, March 19, 2012.
6. Gonzalez-Lopez, E., *The Role of Research in an Undergraduate Science Major Life*, John Jay College Career Days, April 3, 2012.
7. Ulak, S., *Classification of Human Movement Using Kinetography Laban*, Celebrating Student Research and Creativity Week, May 2, 2012.
8. Chamnankool, C., *How Mammalian Cells Respond to Oxidative Stress: Kinetic Studies*, Science Technology Entry Program (STEP), May 5, 2012.
9. Santos, E., *Decomposition and Flux of Mercury Species from Water*, Science Technology Entry Program (STEP), May 5, 2012.

10. Stoll, A., *Role of Alpha-Synuclein and its Mutants on Dithiocarbamates Cytotoxicity*, PRISM Research Training Workshop, June 19, 2012.
11. Quinteros, E., *Surface Modification for the Development of a Novel Drug Detection and Fingerprint Scanner*, PRISM Research Training Workshop, June 19, 2012.

Monthly Meeting Student Presenters

12. Eugene Gonzalez-Lopez – Mentor: Dr. Shu-Yuan Cheng – December 2011
13. Roselynn Cordero – Mentor: Dr. Gloria Proni – January 2012
14. Leonid Sukala – Mentor: Dr. Jason Roberts – March 2012

Other Area Presentations

1. Quinteros, E., *Surface Modification for the Development of a Novel Drug Detection and Fingerprint Scanner*, High School for Environmental Studies (forensics class), April 18, 2012.
2. Carthorne, D., *Establishing a Pigment Database Using FTIR and Raman Spectroscopy*, High School for Environmental Studies (forensics class), April 18, 2012.
3. Gonzalez-Lopez, E., *Nanoengineering of Bismuth Telluride based Thermoelectric based Materials*, CUNY Graduate Center, New York, October, 2011.
4. Pineman, S., Comenescu, M., *Quantifying Molecular Damage in both Human and Non-human Ancient Skeletal Remains for the Purpose of Genotyping and Evolutionary Studies*, SUNY Stony Brook Department of Ecology and Evolution, June, 2012.

Other Presentations

1. Gonzalez-Lopez, E., *The Role of Water Governance and Awareness*, Universidad Del Valle, Cali, Columbia, July, 2012.

Conferences attended at which PRISM students made presentations

15th Annual CUNY/AGEP STEM Conference, New York, 2012

243rd ACS National Meeting, San Diego, CA, March 25-29, 2012

American Society of Microbiology (ASM) Conference on Candida and Candidiasis, San Francisco, 2012

ICCP-7 7th International Conference on Porphyrin and Phthalocyanines, Jeyu, Korea, July 1-6, 2012

Society of Toxicology Annual Meeting, San Francisco, March, 2012

Society for Experimental Biology, San Diego, April, 2012

American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting,
San Diego, April, 2012.

PRISM Research Symposium, John Jay College, New York, NY, May 4th, 2012