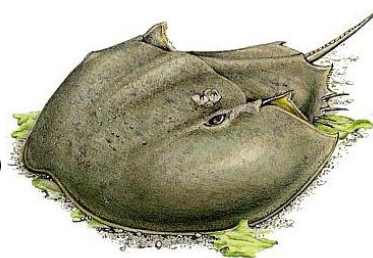


Limulus



NEWSLETTER

Department of Biological Sciences, Wagner College, Staten Island, NY

Volume 2010, Issue Spring-04

April/May, 2010

LETTER FROM THE EDITOR

This Limulus is coming again a little later. Like already at the end of the fall semester when we sent out a November/December issue, we are now presenting to you another two months issue: April/May. With the flood of work at the end of semesters, this procedure is much more convenient for us.

I would also like to announce that we have another new student Assistant Editor: Farha Rashid is a Biology major and

she straight away contributed an article. On pages 6 and 7, Farha reports about the Eastern Colleges Science Conference. Apart of other reports from conferences we have more interesting news from the department. Of course, at this time there is a lot of focus on our seniors (see below).

I wish everybody a great summer!

Dr. Horst Onken

The Editor

SENIORS IN THE RFT MAJORING IN BIOLOGY, MICROBIOLOGY, OR BIOPSYCHOLOGY



In the front from left to right: Janine Bright, Kristyn Beyar, Cassandra Bray, Jessica Cozzolino, Medije Mashkulli, Nicholas Lepore, Yolana Fuks. In the back from left to right: Dina Benedetto, Lara Kirkbride, Rachel Delp, Michael Gutkin, Benjamin Serbiak, Michael Stanton, Almir Spahiu, Sarmed Owaid.





SPECIAL TOPIC

BIOLOGY AND MICROBIOLOGY RESEARCH FUND

In the summer of 2009, with the help and support of the Department of Biological Sciences, the Administration and the Office of Institutional Advancement (OIA), Dr. Ammini Moorthy's hope to establish an **Undergraduate Senior Thesis Research Fund for the Biology/Microbiology Department** became a reality.

Currently all biology/microbiology majors participate in undergraduate research under the supervision of a faculty member as part of their graduation requirement. With the assistance of Ms. Stephanie Rollizo (faculty secretary), Dr. Moorthy worked with Ms. Kristen Koehler (OIA) to reach out to our alumni for help in creating the fund to subsidize this important part of the curriculum. The fund provides much needed resources for our students to purchase materials for their research projects.

The alumni who have already graciously donated are:

Robert Agnello, Danielle Cavallo, Robert Corry, James D'Amico, Louis DeSantis, Letizia Hobbs, Louise Kaufman, Stacy Kubikian, Christina Lamb, Christine Marrone-Massaró, Robert Peterman, Michael Ponzo, and Carol Russell.

With the approval of Dr. Brian Palestis (chair of biological sciences) and Prof. Linda Rath (who maintains expense records), several students have already benefited from this fund. Their names and their research projects are:

Nicholas Lepore and Almir Spahiu (Advisor Kathy Bobbitt): Chemical components and antimicrobial properties of mastic

Medije Mashkulli (Advisor Horst Onken): Set up of a yellow fever mosquito (*Aedes aegypti*) colony

Philip Kaplan, Glenn Muoio, Peter Pisano, Farha Rashid and Lauren Raynor (Advisor Donald Stearns): Developmental changes in larval photosensitivity of the yellow fever mosquito (*Aedes aegypti*)

Kaitlin Eppinger (Advisor Brian Palestis): A banding study of the common tern (*Sterna hirundo*)

Cassandra Bray (Advisor Brian Palestis): Escape response as a behavioral assay of blindness in zebrafish (*Danio rerio*)

Alex Moleson (Advisor Roy Mosher): Site-directed mutagenesis of green fluorescent protein

Roseanna Valant (Advisor Ammini Moorthy): Genotoxicity of mitoxantrone in human cells

Felicia Giunta (Advisor Heather Cook): Effects of endocrine disrupters on *Drosophila* development

Benjamin Serbiak (Advisor Ammini Moorthy): The efficacy of sunscreen blockers in prevention of the effects ultraviolet light in *Vicia faba*

Alexander Zilberman (Advisor Adam Houlihan): "Use of PCR to validate culture-based detection of *Salmonella* from waterfowl eggs in the Jamaica Bay Wildlife Refuge

Julianna Maniscalco (Advisor Horst Onken): Inhibition of strong midgut alkalization in larval yellow fever mosquitoes (*Aedes aegypti*)

Thanks again to the alumni who contributed and made this possible. Your generosity is already paying dividends. We need more of you, our alumni, to step forward and contribute whatever you can. During the summer of 2010, the alumni will once again be approached to ask for their support. Alumni who happen to read this article are encouraged to proactively contribute. It is not often that one gets a chance to make a donation and see its impact directly and promptly.

Contributed by Stephanie Rollizo, Dr. Moorthy, and Dr. Palestis.

CURRICULUM NEWS

2010 Summer courses and intended audience:

BI 110/110L Environmental Biology. Session A (Non-science majors and Environmental Studies minors)

BI 120 Human Biology. Runs May 17-May 28 (Non-science majors)

BI 209/209L Human Anatomy and Physiology I. Session A (Nursing and Physician Assistant majors)

BI 210/210L Human Anatomy and Physiology II. Session B (Nursing and Physician Assistant majors)

BI/MI 213/213L Cells, Genes, and Evolution. Session B (Biology and Microbiology majors, Pre-health students)

BI 335/335L Natural History of the Mid-Atlantic States. Runs May 17-May 28 (Biology majors and Environmental Studies minors)

BI/MI 400E Experiential Component of the Senior RFT. Session A (Biology and Microbiology majors)

MI 109 Plagues, Outbreaks and Biological Warfare. Session B (Non-science majors)

MI 200/200L Microbiology. Session A (Microbiology, Nursing, and Physician Assistant majors)

MI/BI 517/517L Electron Microscopy. Session A (Microbiology and Biology majors and Microbiology graduate students)

MI 615/615L Electron Microscopy. Session A (Microbiology graduate students)

MI 797, 798, 799 Research. Session A (Microbiology graduate students)

WAGNER ANNOUNCES NEW 5 YEAR B.S./M.S. MICROBIOLOGY PROGRAM



Recently, I had the opportunity to speak with Dr. Roy Mosher, the director of the Microbiology Masters Program at Wagner. Dr. Mosher teaches a number of courses at Wagner including Biochemistry I and II, Medical and Public Health, Microbiology, Microbial Genetic, Applied, Food, and Industrial Microbiology, and Pathogenic Fungi.





Wagner announced that the Microbiology Program would offer students a chance to obtain a five-year B.S./M.S. beginning in the Fall 2010 semester. The new program is not offered in any other college or university in the Northeast. Associate Provost Dr. Jeffrey Kraus spearheaded the idea for the new program. Dr. Kraus is also head of all the graduate studies programs at the college, and initially he asked Dr. Mosher if it would be possible to develop a five-year B.S./M.S. Microbiology graduate program at Wagner.

Dr. Mosher was a little reluctant at first because the Microbiology Department was shorthanded and would not be able to expand the program due to the limited faculty. Luckily, Dr. Adam Houlihan joined the Wagner faculty recently, and Dr. Mosher believed with Houlihan's help, the new program would be more feasible.

After Dr. Kraus proposed the idea, Dr. Mosher needed to get the program approved by the Biology Department and then by the Academic Program Committee, which regulates academic programs on campus. Dr. Mosher brought the idea to the New York State Department of Education and they finally gave the final approval for the program. The entire process took about a year to complete from start to finish.

Earlier last fall, Dr. Mosher received exciting news from the Department of Education that Wagner would be allowed to offer this new program to students the following year.

According to Dr. Mosher, Professor Christopher Corbo, an adjunct Biology professor at Wagner ('06 B.S., '08 M.S.), deserves a tremendous amount of credit in helping Dr. Mosher obtain the proper certifications for the program. Additionally, Dr. Kathleen Bobbit and Dr. Houlihan played an integral part in developing the program, and Dr. Mosher could not have completed this process without their assistance.

The new program offers students a chance to receive their Masters degree quickly and this program is more research oriented. "The current two-year Masters program allows students to choose whether they would like to do a research based or non-research based thesis. The Masters students simply do not have enough time to sufficient research, and the new program allows students to get a head start with their research," stated Dr. Mosher.

Students participating in the program will begin to conduct research in the laboratory during their junior year. They will be required to complete their senior RFT during the fall semester of their senior year. This allows students to begin their Masters research in the spring semester of their senior year. The advantage of this program is that students can start a research project as an undergraduate student and have the opportunity to defend their thesis as a senior. Eventually, the students can expand on their senior thesis project, and have the opportunity to have an engaging and intensive research experience. "Students completing their Masters in Microbiology usually need time to do research, and by the time they learn the necessary skills to do the research, it is time for the students to graduate," said Dr. Mosher. The new program allows students to spend more time learning the techniques in the lab, and hopefully the students will be able to present their projects at major regional or national conferences.



Currently, seven undergraduate students have officially declared an interest in the program. The program allows students to "exit" out of the program, and students can pursue other graduate schools if they wish. Students hoping to go to medical school or dental school can enroll in the five-year program, but if they get accepted to either medical or dental school, they can opt to "exit" out of the program. Basically, the students can choose to obtain their B.S. in Microbiology, and may opt out of pursuing the Masters in Microbiology in order to attend another graduate school after they complete their senior year at Wagner.



Dr. Mosher offered some important advice for students that are interested in the program. "Anyone that wishes to participate in the program should make the decision by their sophomore year, however, it would be better if you decide during your freshman year. New students and freshman should try to get into Dr. Stearns' and Dr. Houlihan's Learning Community: Bacteria, Human Health and Survival. This LC allows students to complete their basic microbiology requirements and it is important to get the introductory course out of the way. Then, students will be able to fit their other microbiology classes in the following semester, and it would be optimal if students put this LC as their top choice," he stated.

I would like to thank Dr. Mosher for taking the time out of his busy schedule to complete this interview!

Contributed by Nidhi Khanna

BIOLOGY STUDENT NEWS

AWARDS

BIOLOGY STUDENTS HONORED AT UNDERGRADUATE AWARDS DINNER

The Undergraduate Awards Dinner was held on Friday April 30th. Many students from the department received honors and recognition for their exceptional academic work. The awards that students received are in italics. The students that maintained a 4.0 GPA for the Spring 2009 and Fall 2010 semesters received a special plaque. The following students were honorees at the dinner:

Violeta Capric (Biology/Anthropology Majors)- *Academic Excellence Award (4.0 g.p.a)*** and the *Robert D. Blomquist Memorial Award in Biology*

Terryn Marette (Biology Major)- *Biological Science Award*



Peter Pisano (Biology Major)- *Academic Excellence Award (4.0 g.p.a)***

Victor Stora (Biology/Chemistry Majors)- *Academic Excellence Award (4.0 g.p.a)*

Melanie Valencia (Biology Minor)- *Academic Excellence Award (4.0 g.p.a); Diversity Action Council Award; Community Service Award. (Biology Minor)*

Lisa Duncan (Biopsychology Major)- *Academic Excellence Award (4.0 g.p.a)*

Marlena Mason (Biology Major)- *Academic Excellence Award (4.0 g.p.a)*

Nidhi Khanna (Biology/Philosophy Majors)- *Outstanding Service in Communication Award*

Congratulations to all the honorees!

Contributed by Nidhi Khanna (with the help of Stephanie Rollizo)

SENIORS RECEIVE DEPARTMENTAL HONORS

Some seniors received special recognition for their outstanding work in the biology department. Three seniors received awards for presenting at a conference, and for their high GPA. Congratulations to Yolana Fuks, Medije Mashkulli, and Michael Stanton!

Contributed by Nidhi Khanna

GRADUATE STUDENTS AWARDS CEREMONY

During the first week of May, a few graduate students received special recognition for their work in the Microbiology department. Congratulations to all of the winners!

Microbiology Award- Zulmarie Franco

Highest Academic Achievement-Kristin Belitz

Outstanding Academic Achievement-Janet Sum

Contributed by Nidhi Khanna (with the help of Stephanie Rollizo)

BIOLOGY STUDENTS INITIATED INTO ODK

The National Leadership Honor Society held its Spring initiation for new members on Friday April 9th at 6pm. Omicron Delta Kappa was founded in 1914 at Washington and Lee University. This organization recognizes excellence in academics and leadership of students at each of its participating colleges.

Several students from the Biology Department were inducted into ODK, as well as a faculty member from the department. Congratulations to all the new members!

Anna Lysenko (Biopsychology Major), Violeta Capric (Biology), Leandra Manfredi (Biopsychology), Aimee Marin (Biopsychology), and Dr. Horst Onken (faculty initiate).

Limulus would also like to recognize the Biology students that were inducted in the fall. I apologize for the late recognition!

Philip Kaplan (Biology Major, chemistry minor), Victor Stora (Biology/Chemistry Majors), and Nidhi Khanna (Biology/Philosophy Majors).

Several graduating seniors from the department have been members of ODK. I would like to wish them the best of luck in their future endeavors!

Yolana Fuks (Biology Major, Chemistry Minor), Shannon O'Neill (Biology Major), Anna Lysenko (Biopsychology Major), Colleen Janson (Biology Minor), and Danielle Sheehan (Biology Minor).

Contributed by Nidhi Khanna



BIOLOGY CLUB NEWS

The Biology Club completed their on-campus community service in the last week of April. Members distributed free condoms in the Union and collected donations to support Community Health Action.

Elections were also held and the newly elected president is Leonid Denisenko and the vice president is Caroline Mroz.

Current President, Cassie Bray had a few final words that she would like to share: "Lastly, I wanted to thank everyone who was an active member this past year. It felt great to know the hard work and time I put into making the club better paid off. I'll miss everyone next year, but be excited for Leonid to take control. Awesome things will get done during his reign!

Have a great summer, everyone!"

-Cassie Bray

Contributed by Nidhi Khanna and Cassie Bray

TRI-BETA NEWS

NEW MEMBERS

Congratulations to the new members of Tri-Beta!

Daniel Fitzpatrick, Philip Kaplan, Terryn Marette, Aimee Marin, Maleeha Memon, Caroline Mroz, Ashley Nati, Farha Rashid, and Victor Stora.

ELECTIONS

Tri-Beta recently held elections for its new officers. Congratulations to all! President: Medije Mashkulli, Vice President: Violeta Capric, Secretary: Philip Kaplan, Treasurer: Peter Pisano, and Historian: Farha Rashid.

GRADUATING SENIORS

The Limulus Staff would like to wish the seniors from Tri-Beta the best of luck in their future endeavors!

Graduating Seniors: Lauren Carasso, Samantha Cook, Jessica Cozzolino (Secretary), Yolana Fuks (President), Colleen Janson, Michele Marotto, Shannon O'Neill (Historian), Danielle Sheehan, Almir Spahiu, Ashley Stackpole, Michael Stanton (Vice President), Salvatore Valenti, and Kayla Wong.

PHOTOGRAPHS FROM THE INITIATION





Secretary: Medije Mashkulli

Treasurer: John Geli

SGA Representative: Lisa Duncan

Current President Aimee Marin and Secretary Nidhi Khanna decided to “retire” from the E-board of the Pre-Health Society, and did not wish to run in the elections. Aimee wrote a final farewell letter to members that I would like to share:

It has been an honor to serve in the office of president for the PHS. We can be proud of our achievements and look forward to even greater achievements in the future. Now is the time for me to turn over the leadership as the club moves forward with fresh ideas.

If anyone has any questions or concerns, feel free to e-mail me. I will be working with the Colleges Against Cancer club next semester, and I look forward to seeing familiar faces at those meetings. Thank you once again,
Aimee Marin

Lastly, I wanted to thank everyone in the society for a great year and for all of your hard work and participation in PHS. It was an honor and such a pleasure to serve as PHS secretary for the past year. I am sure Medije will go above and beyond her duties as secretary next year, and I feel confident of her abilities.

Contributed by Nidhi Khanna

EXPERIENCES

FUN FIELD TRIP

These photos below are from a class field trip for BI 492 Ecological and Evolutionary Theory to two nearby locations in New Jersey, Hutcheson Memorial Forest and Cheesequake State Park. Hutcheson Memorial Forest is owned by Rutgers University and is the sight of various field research projects, including a long-term study of ecological succession. Students were able to see a patch of old-growth forest, forests of known age that developed from abandoned farm fields, a field kept in an early successional stage, and evidence of the effects of deer herbivory and invasive species. Cheesequake contains a wide variety of different habitat types in a small area, due to its location at the borders of northern and southern vegetation and of coastal and upland vegetation. Habitats include deciduous forest, pine barren, cedar and hardwood swamps, and saltmarsh.



Contributed by Nidhi Khanna

PRE-HEALTH SOCIETY

ELECTIONS

The Pre-Health Society held its annual elections on Thursday, April 29th. This was the first time the organization allowed members that could not attend the elections to submit their vote electronically by emailing their votes to the Secretary (Nidhi Khanna). All the candidates were very well qualified and ran a great race! Thanks to all who participated. Congratulations to our new officers!

President: Felicia Giunta

VP of Medicine: Julianna Maniscalco

VP of Allied Health: Victor Stora

VP of Dental: Lisa Schneider



Ben Serbiak and Lara Kirkbride tasting saffras leaves.



The class walks on a boardwalk through the swampy section of Cheesequake State Park.

Contributed by Dr. Palestis

PUBLICATIONS

Jagadeshwaran, U., **Onken, H.**, Hardy, M., Moffett, S. B. & Moffett, D. F. (2010). Cellular mechanisms of acid secretion in the posterior midgut of the larval mosquito *Aedes aegypti*. *Journal of Experimental Biology* **213**: 295-300.

Moffett, D.F. and **Onken, H.** (2010). The Cellular Basis of Extreme Alkali Secretion in Insects: A Tale of Two Tissues. In: *Epithelial Transport Physiology* (ed. George A. Gerencser), pp. 91-112 . Totowa, New Jersey: Humana Press. ISBN: 978-1-60327-228-5.

PROFESSIONAL MEETINGS

EASTERN COLLEGES SCIENCE CONFERENCE

On Saturday April 24th, Pace University hosted the 64th annual Eastern Colleges Science Conference. 209 undergraduate students participated in the meeting with 16 student presentations from Wagner for this prestigious event. A handful of students represented the Biology Department in the conference. Participants included: Yasemin Alev, Violeta Capric, Leonid Denisenko, William Etts, Stefani Fanara, Yolana Fuks, Felicia Giunta, Michael Gutkin, Philip Kaplan, Anna Lysenko, Julianna Maniscalco, Medije Mashkulli, Glenn Muoio, Peter Pisano, Anthony Rafetto, Lauren Raynor, Benjamin Serbiak, Michael Stanton, Megan Stolze, Melanie Valencia, Alexander Zilberman. During the afternoon, attendees had the option to take a tour of Pace University's beautiful Pleasantville, NY Campus. In addition, attendees were able to watch the falcon show presented by the university's very own falcon trainer. During dinner attendees had the pleasure of listening to guest speakers. Dr. Deborah Poe, an assistant Professor of English at Pace University. She read from her collection *Elements* based on the Periodic Table. Her writing has recently appeared in journals such as *Colorado Review*, *Sidebrow*, and *Ploughshares* to name a few. She is also fiction editor of the international online journal of the arts, *Drunken Boat*. The second speaker was Dr. William H. Schlesinger who is President of the Cary Institute of Ecosystem Studies .He gave an interesting lecture about the role of human population growth, resource demands and technology in driving and potentially solving our trajectory of

environmental degradation. The students of the Department of Biological Sciences contributed with platform presentations and posters. See below for the titles and authors. Two platform presentations won Excellence Awards. The Limulus Staff would like to congratulate all of the participants and winners for a job well done!

CONGRATULATIONS TO ANTHONY RAFETTO AS RECIPIENT OF THE AWARD FOR BEST PLATFORM PRESENTATION (CATEGORY: MATHEMATICS AND ENGINEERING SCIENCES)

Anthony Rafetto. "U.S. population growth." Research under the supervision of Dr. Otto Raths.

CONGRATULATIONS ALSO TO MEGAN STOLZE AS RECIPIENT OF THE AWARD FOR THE BEST PLATFORM PRESENTATION (CATEGORY: PSYCHOLOGY)

Megan Stolze. "The association between BMI, sweet preference and drug use." Research under the supervision of Dr. Laurence J. Nolan.

There were 14 additional poster and platform presentations by students from Wagner College:

Benjamin Serbiak. "The efficacy of sunscreen blockers in prevention of the clastogenic effects of long wave and short wave ultraviolet light in *Vicia faba*." (platform). Research under the supervision of Dr. Ammini Moorthy.

Stefani Fanara and Megan Stolze. "Television viewing and food intake: Is physical fitness a factor?" (platform). Research under the supervision of Dr. Laurence J. Nolan.

Michael Stanton. "Behavioral responses of common tern chicks to feather sampling." (platform). Research under the supervision of Dr. Brian Palestis.

Leonid Denisenko. "U.S. population studies." (platform) Research under the supervision of Dr. Otto Raths.

Melanie Valencia, Violeta Capric, William Etts and Yolana Fuks. "Electrophysiology of the isolated and perfused midgut of adult yellow fever mosquitoes (*Aedes aegypti*): First results." (poster). Research under the supervision of Dr. Horst Onken, with co-authors S.B. Moffett and D.F. Moffett of Washington State University.

Michael C. Gutkin. "Detection of proliferating cells in surviving organotypic culture of adult zebrafish (*Danio rerio*) optic tectum." (poster). Research under the supervision of Prof. Christopher Corbo, Dr. Zoltan Fulop and Prof. Linda Raths.

Anna Lysenko and Yasemin Alev. "Scanning electron microscopic imaging of the developing neuromasts of the lateral line system in 7 day old zebrafish embryos." (poster). Research under the supervision of Prof. Christopher Corbo, Dr. Zoltan Fulop and Prof. Linda Raths, with co-author Luesoni Johnson of Kingsboro Community College.

Anna Lysenko. "Effects of alcohol show hormetic characteristics on development of zebrafish embryos." (poster). Research under the supervision of Prof. Christopher Corbo, Dr. Zoltan Fulop and Prof. Linda Raths, with lead author Luesoni Johnson of Kingsboro Community College.

Alexander Zilberman. "Use of an *InvA*-specific PCR primer set to validate culture-based detection of *Salmonella* from





waterfowl eggs in the Jamaica Bay Wildlife Refuge, Queens, New York." (poster). Research under the supervision of Dr. Adam J. Houlihan, with co-author Jessica Browning of the U.S. National Park Service.

Medije Mashkulli. "Set up of a yellow fever mosquito (*Aedes aegypti*) colony." (poster). Research under the supervision of Dr. Horst Onken, with co-authors S.B. Moffett and D.F. Moffett of Washington State University.

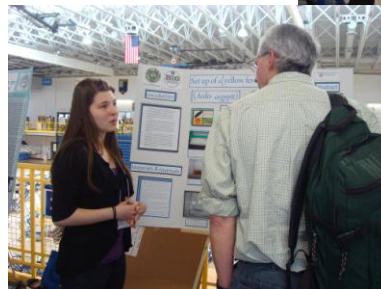
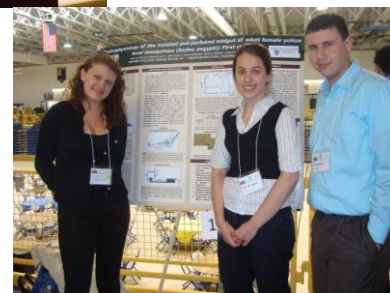
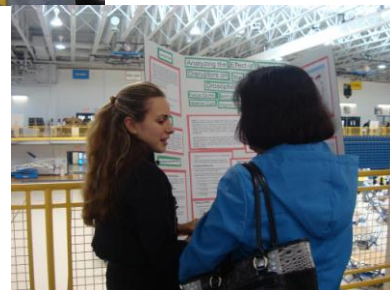
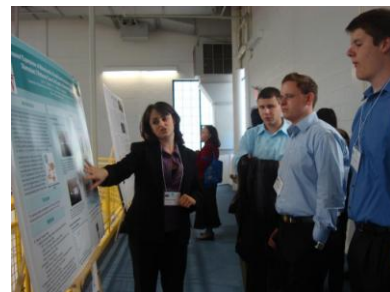
Julianna Maniscalco. "Inhibition of strong midgut alkalization in larval yellow fever mosquitoes (*Aedes aegypti*) with HEPES buffer." (poster). Research under the supervision of Dr. Horst Onken, with co-authors S.B. Moffett and D.F. Moffett of Washington State University.

Yolana Fuks. "Increased expression of mitochondrial glutathione peroxidase 4 and superoxide dismutase 2 reduces cone cell death in retinitis pigmentosa." (poster). Research under the supervision of Lili Lu and Peter A. Campochiaro of Johns Hopkins University School of Medicine.

Felicia Guinta, Bethny Brown and Alexandra Videll. "Analyzing the effect of endocrine disrupting chemicals on *Drosophila* development." (poster). Research under the supervision of Dr. Heather A. Cook.

Peter Pisano, Lauren Raynor, Philip Kaplan and Glenn Muoio. "Developmental changes in larval photosensitivity of the yellow fever mosquito *Aedes aegypti*." (poster). Research under the supervision of Dr. Donald E. Stearns.

Some photographs from the event:



Contributed by Farha Rashid





HORMESIS RESEARCH FEATURED IN DOSE-RESPONSE CONFERENCE

Five representatives from Wagner College participated in the annual meeting of the International Dose-Response Society at the University of Massachusetts (Amherst, MA, 27-28 April, 2010): Dr. Zoltan Fulop, Dr. Brian Palestis, Anna Lysenko (senior Psychology major), Anastasia Kurta (Biopsychology, Class of 2007), and Luesoni Johnson. Luesoni is currently a student at Kingsborough Community College who is working in Dr. Fulop's lab and is transferring in to Wagner.

The major focus of the conference was hormesis, a phenomenon where a substance with inhibitory effects at high doses has the opposite effects at low doses. For example, alcohol is classified as a depressant but often has stimulatory effects at low doses. Hormesis is much more common than most biologists realize, and is characterized by an inverted U-shaped or J-shaped dose-response curve, rather than fitting the standard linear or threshold model.

Hormesis has also been the subject of research in the Department of Biological Sciences for several years (see the Sept 2008 issue of *Limulus* for a summary of the "Hormesis Project"). Much of this work has been funded by an anonymous donor. In Fall 2009, Dr. Ed Calabrese, the leading authority on hormesis, spoke at Wagner College (see the Nov/Dec 2009 issue of *Limulus*) and invited us to attend the conference.

Luesoni and Anna gave a poster presentation on work they have done with Dr. Fulop using zebrafish as a model for fetal alcohol syndrome, and Dr. Palestis presented a poster summarizing the work his students have done on the effects of alcohol on the behavior of adult zebrafish. Dr. Palestis also served as chair of the session on toxicology and risk assessment. In addition, a paper written by Anastasia Kurta and Dr. Palestis was recently accepted for publication by the society's journal, *Dose-Response*. The reference for this paper and for the two poster presentations are given below:

Kurta, A. and B.G. Palestis. (2010, *in press*). Effects of ethanol on shoaling behavior in zebrafish (*Danio rerio*). *Dose-Response*.

Johnson, L.D., A. Lysenko, C. Corbo, L. Rath, B. Palestis, and Z. Fulop. 2010. Alcohol shows hormetic characteristics on development of zebrafish embryos. Annual Meeting of the International Dose-Response Society. Amherst, MA. 27-28 April.

Palestis, B.G. 2010. Effects of ethanol on the behavior of zebrafish (*Danio rerio*). Annual Meeting of the International Dose-Response Society. Amherst, MA. 27-28 April.

Contributed by Dr. Palestis

MICROBIOLOGY GRADUATE PRESENTS AT PRESTIGIOUS CONFERENCE

Recently, Zulmarie Franco presented her research at a conference at Harvard Medical School in February. She is the first Wagner student that was ever selected to present at this conference. I would like to thank Zulmarie for taking the time to help me with this interview.

Q: What was your research?

A: My research was entitled Morphophysiological Characterization of Peripheral Blood of Adult Zebrafish

(*Danio rerio*). This research was performed to aid in the study of degenerative and regenerative processes that take place in the injured zebrafish brain, main focus of study in Dr. Fulop's lab. Information such as the ultrastructural features and the basic characterization of the blood cells was necessary to understand these processes and to be able to record the activities of white blood cells in brain injuries. So I collected the blood from the heart of a mature zebrafish and with it I prepared blood smears, which I stained to be able to differentiate among the different white blood cells in the light microscope. Also I characterized the cells using the transmission electron microscope and from the scanning electron microscope I was able to obtain information on the physiological activities of the cell. I performed other tests but these were the most significant ones.

Q: What was the conference like?

A: It was a great experience. Its main focus was on Biomedical careers and research projects. The speakers were very motivating; besides talking about their current research they would start by telling their stories of how they were able to get to where they are right now. They were mostly minorities so they talk about all the obstacles they had to overcome to be where they are right now. Particularly there was one speaker that I found his story very impressive and motivating, his name is Dr. Alfredo Quinones Hinojosa, he is a Neurosurgeon at John Hopkins and performs research on the role of stem cells in the origin of brain tumors and the potential role stem cells can play in fighting brain cancer and regaining neurological function. His story was very impressive because he talked about how he started working in the fields when he came to the states and after years of hard work he decided to go to school and after overcoming all the obstacles he became a well known doctor conducting a very promising research

Q: Was the conference overall a good experience? How does it feel to be the first student from Wagner to attend the conference?

A: There were around 300 poster presentations of students from bachelor's degree level up to MD/PhD, so it was very competitive. You would have two hours to stand by your poster and talk to the judges and anyone else who would go by your poster, about the research. But the posters were set up early in the morning for exhibit while the students were participating in the conferences. Amazing research projects were being presented. For me the experience of just being selected to present my research there made me feel really proud and thankful for all the opportunities I had at Wagner and for the great people that helped me all the way (Dr. Fulop, Chris and my family back in Puerto Rico). I can say that all the hard work was definitely worth it.

Contributed by Nidhi Khanna





ALUMNI

Dear Alumni,

If you are interested in contributing to our newsletter, you are very welcome to do so. Contact Dr. Onken by e-mail (horst.onken@wagner.edu) with your submission, comment, ideas or questions! We are excited to hear about where you are, how and what you do!

CARTOON



Cartoon from graduationcards.blogspot.com

GUIDELINES FOR CONTRIBUTORS

Authors in all sections should keep in mind that not all readers are specialized in their area of interest. Keep your contribution on a level that everybody can understand.

Contributions may vary in length between about 50 and 500 words and must be submitted by e-mail to horst.onken@wagner.edu.

Photographs or other images that accompany an article are very welcome, but must be submitted as separate files (high quality jpg is the preferred file format) attached to the e-mail. Be aware that photographs/images may be minimized in size.

Indicate the section of the newsletter where you want your contribution to appear.

The deadline for submission of a contribution is the 20th of the month. Contributions received later may or may not be considered.

The editor reserves his right to edit your contribution or post an immediate response.

Editing may involve to publish contributions in other sections as indicated by the author.

All contributions will clearly indicate the author's identity.

All contributions are reviewed and publication may be refused by the editor.

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