

LIMULUS



NEWSLETTER

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

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LETTER FROM THE EDITOR

As usual, time is running by at the speed of light. Already April! The semester is almost over. Let us all get ready to turn in (or grade) papers, presentations, exams and other assignments. However, let's all take a minute to look back to March. Use the LIMULUS.

Welcome back, Dr. Moorthy! We have the last part of your Dateless Diary with some beautiful photographs. News from our clubs and societies is followed by Opportunities and Experiences. The latter are dominated by the Eastern Colleges Science Conference. At the end, we look back on the visit by Dr. Allan O'Connell.

May spring come now!

Dr. Horst Onken
The Editor

BIOLOGY STAFF AND FACULTY NEWS

DR. MOORTHY'S DATELESS DIARY CONTINUED

My teaching is going well. The students seem to be enjoying my way of teaching. I am learning their names. They are eager to hear the stories and anecdotes that I weave into my lectures. Some of them stay after the class to discuss the lecture topic and ask more questions. In addition to my lecture classes I am also invited to participate and contribute to the work of different academic committees and panels.

Rajiv Gandhi Centre for Biotechnology (RGCB) in Trivandrum is a major Research Center run by the India Ministry of Science and Technology. Their vision "is to be an international hub of biotechnology, providing the right combination of research & development with the dedication, transparency and creativity of a truly academic research center combined with the power of innovation, IPR (Intellectual Property Rights) driven programs and business transformation to deliver discovery for India." This will be accompanied by another highly profitable and critical spinoff – highly trained manpower. RGCB has a Ph.D. program run jointly with the Kerala University. The Ph.D. students have to present a dissertation proposal to the Kerala University when called for by the University. I am invited to be part of the committee that will review dissertation research proposals from three candidates from RGCB. The candidates present their proposals that call for some leading edge research. Each presentation is followed by a lengthy Q&A session during

which the candidate receives constructive feedback. At the end the committee votes to approve, disapprove, or approve with modifications the candidate's proposal. The proposals presented in this session included "Endocrine Regulation of the Tumor Stem Cell in Papillary Thyroid Cancer", "Identification of Better Modes of Drug Delivery Using Nanoparticle-based Releasing Systems", "Identification of Cold Active Promoters and Enzymes from Bacteria Isolated from the Arctic". Luckily for the candidates no proposal was rejected.

India is becoming a destination for Medical Tourism because of the availability of highly qualified medical professionals and state-of-the art hospitals run by private companies. The Apollo chain of hospitals in large cities and various "Institutes of Medical Services" are good examples. In Trivandrum there is such a facility called the Kerala Institute of Medical Services (KIMS). I visited this hospital and was impressed by the buildings that are modern, facilities that are excellent, and the willingness to use technology for efficiency. Patient information is kept in digital format. The service provided is excellent although you have to pay for non-emergency services up front. By Indian standards the charges are in the medium-to-high range but for people who earn U.S. Dollars the charges are quite affordable compared to what they are in the U.S. thus creating the ideal environment for Medical Tourism. One of my daughter's physician friends, Dr. Michael Pirri from the School of Medicine and Health Sciences, GW University, happened to be in Kerala giving a seminar and training in Emergency Medicine in a town north of Trivandrum and he visited us in Trivandrum and stayed with us for a few days. I wanted to get his impression of the KIMS facility and took him there to visit a friend who was recuperating from surgery. Dr. Pirri was quite impressed with what he saw in the short time that he was able to spend.

As a further test I decided to get a small cosmetic surgery done. Over the years the holes in my ears have become large causing my ear rings to fall out and I wanted to correct this. I was able to get an appointment within a day or two of my enquiry and the plastic surgeon, Dr. Manish a UK trained surgeon, took care of the issue quite efficiently and painlessly by surgically closing the opening in a procedure that lasted about thirty minutes. The procedure cost me less than \$100/-. I will get new holes put in the U.S. only because I will be back in the U.S. by the time the wound is sufficiently healed.

Our son Ravi, currently working in Abu Dhabi, came on a short visit for four days (it only takes about four hours by Air).





In anticipation of this we had made reservations to visit a wildlife sanctuary and stay overnight in a lodge (called Aranya Nivas that translates to “House in the Forest”) inside the sanctuary. All of us rented a mini-van and headed to the Thekkady Tiger reserve about 100 miles north of Trivandrum in Kerala State itself. This sanctuary is in the western ghat mountain range and is surrounded by tea plantations and plantations that grow spices such as black pepper, cardamom, cloves, ginger, nutmeg and others. History buffs would recall that these spices were the magnet that attracted western adventurers such as Columbus, and Vasco De Gama to seek out this land. Columbus ended up in the Americas that he thought was India and mistakenly called the natives Indians but Vasco De Gama did land in the Arabian Sea coast of Kerala. Over the years the British, the Dutch, and the Portuguese as well as Arabs from the Middle East have found their way to Kerala and traded for spices. Many of them ended up settling down in Kerala and the demographics reflect that.

In the Thekkady Tiger Reserve we did not go deep into the jungle and did not see any Tigers. We did see monkeys, wild boars and other small mammals and birds near the lodge but the highlight was the boat cruise that we took in the river Periyar (translates to Big River) that runs through the game reserve. During this cruise we spotted Sambar Deer, Bison, Cormorants nesting in abundance, Ospreys, Kingfisher birds and luckily for us a herd of wild elephants with a baby in their midst. The food at the lodge was absolutely superb and the accommodations were splendid. We were warned to keep the windows closed all the time to avoid unwanted visitors (mostly curious monkeys).

Additionally we visited an elephant park, which housed tame elephants, that offered elephant rides inside a local plantation and my son and I rode an elephant. We also visited a spice plantation and got a nice guided tour. Ravi also found time for an Ayurvedic massage that is also a popular tourist attraction. Thekkady village also boasts lots of wholesale spice shops and I loaded up on high-quality spices and headed back to Trivandrum.

The students are getting more used to the interactive nature of the teaching. Some of them are curious and bold enough to ask me about my students at Wagner College and how they behave in class. The campus has many activities going on at any given time and Dr. Nair, the head of the Biotechnology Department, wants me to participate in these activities as much as possible. One such activity that I got involved and enjoyed with was the inauguration of a Genome Research Center in the University that is being funded by the Kerala State Government. The formal opening was done by the Minister of Education and many other dignitaries participated. It was done in the traditional Kerala style with the lighting of a large auspicious oil lamp and with young girls beautifully dressed up in traditional Kerala style saris holding brass plates filled with fragrant jasmine flowers and other traditional items as they welcome the guests of honor. This function afforded me the opportunity to meet and interact with the Education Minister and the Vice Chancellor (functionally equivalent to a CEO) of the University.

The Research Center, formally called “The Inter-University Centre for Genomics and Gene Technology” is intended to serve as a frontier for research in DNA diagnostics, recombinant vaccine development, genetic engineering, plant/animal tissue culture and microbial technology. It is hoped that the Center will promote cooperation between industry and academia thus benefiting the people more than either one of them could with the fruits of their work. The Center was being staffed while I was there and I was fortunate enough to be invited to be a member of the selection committee comprised of scientists from different departments and participate in a few candidate interviews. All the candidates had Ph.D. degrees in relevant disciplines of Biotechnology.

Another activity that I participated as a committee member was in the defense by a Ph.D. candidate, Ms. Lakshmi Mahadevan, of her research and dissertation. The research done in Kerala university campuses and in the RGCB results in about 20-25 Ph.D degrees being conferred every year. The candidates are typically guided in their research project by mentors from academia and other institutions such as the RGCB, hospitals, and the Plant Genome Research Center. On the average it takes about five to seven years to earn the Ph.D. degree after the B.S. degree. Public defense of the dissertation is the norm where the candidate defends the work in front of at least one outside examiner from another University, the candidate’s mentor(s), invited scientists from other departments, and even peers such as other Graduate Students who might be interested in participating. Lakshmi Mahadevan successfully defended her work through a well-designed presentation and by satisfactorily fielding all the questions directed at her. I also reviewed the dissertations of couple of other candidates but could only provide my feedback to Dr. Nair since their defense is scheduled for some time after I get back to the U.S.

Dr. Nair also arranged for me to give seminars on topics in Genetics to mixed audiences from different departments. I picked some of my favorite topics such as “Genetically Modified Organisms (GMO)”, “DNA and Forensics”, “ELSI of the Human Genome”, “Stem Cells: Embryonic and Adult Cells”, and “Population Genetics and Human Migratory Studies”. All the seminars were well attended and elicited lots of discussions.

Well all good things end sooner or later. Summer Holidays for Kerala University start by the middle of March and the final exams begin in early March. My visiting professorship here is ending and I am headed back to my home in the U.S. The weather is getting hotter and more humid and crazy as it might sound, for my friends in the east coast of U.S. who endured a brutal January and February, I am longing for some cooler temperatures. Kind words of appreciation were spoken by Dr. Nair and others for my services but really I feel like I got more than what I gave. The enthusiastic and eager young faces of the students, the supportive and friendly colleagues and the reaffirmation that Biological Sciences have expanded tremendously and are flourishing in Kerala University (where I got my start) will always be with me and inspire me. As a token of appreciation by Wagner College and me I am leaving





a set of my books, several PowerPoint presentations, and lecture notes with Dr. Nair.

In addition to my academic endeavors I also got to visit relatives and friends, attend a traditional wedding, eat good food, and shop for saris, jewelry and souvenirs. So many people helped in so many ways to make this a productive and enjoyable trip but I must single out my hosts Drs. Raman and Prema who opened their home and hearts to us as well as to numerous guests that we brought in.

A selection of Dr. Moorthy's photographs follows:

Contributed by Dr. Ammini Moorthy



A wedding hall



Coffee-bean tree



"Miracle banana"



Dr. Michael Perri and Dr. Ammini Moorthy



Monkeys grooming each other



Dr. Ammini Moorthy and husband, Sam Moorthy





BIOLOGY STUDENT NEWS

VOLETA CAPRIC WINS STUDENT GOVERNMENT PRESIDENTIAL ELECTIONS



Junior Violeta Capric is a double major in biology and anthropology. She currently serves at the Vice President of Community Service for the Student Government Association (SGA). Capric ran a successful campaign for the SGA presidency for the 2011-2012 academic year. She served as a SGA Senator during his sophomore year. Additionally, Capric is currently the Vice President of Tri-Beta, and is a member of the co-ed service fraternity Alpha Phi Omega. Last

year, she received the Academic Excellence Award (4.0 GPA) for both the fall and spring semesters and the Robert D. Blomquist Memorial Award in Biology at the spring Undergraduate Awards Ceremony. Congratulations on behalf of the *Limulus* staff!

Contributed by Nidhi Khanna

OMICRON DELTA KAPPA INDUCTS MICROBIOLOGY MAJOR WILLIAM RIVERA



Omicron Delta Kappa (ODK) is the national leadership honor society. The society selects well-rounded students that strive for excellence through both academic and co-curricular achievement. The society acknowledges accomplishments in five areas: athletics; campus/community service, social/religious activities, and campus government; journalism and mass media; and creative and performing arts. Sophomore microbiology major

William Rivera was inducted into ODK at the spring induction ceremony. Rivera is currently doing research in parasitology at Wagner. He aspires to attend dental school upon graduation. Congratulations on behalf of the *Limulus* staff!

Contributed by Nidhi Khanna

TRI-BETA NEWS

TRI-BETA recently held a meeting on Tuesday, March 28th. Members are participating in a new project with Dr. Palestis' help. The organization will develop a way to prevent bird strikes on campus. Recently, many birds have died after they crashed into a few buildings on campus. Students will need to help keep track of any dead birds that are found around either Megerle Science Building or Haborview Hall. Each student will be assigned to check for dead birds once a week. The students will count the birds during the morning hours. This is a great community service opportunity for members.



Additionally, students that need to complete the Undergraduate Research I or II, and the 400E requirement, can use this project as the focus of their research. Any students interested in participating in this project for research purposes should contact Dr. Palestis (bpalesti@wagner.edu). Tri-Beta members that are interested in helping should contact Tri-Beta president Medije Mashkulli (medije.mashkulli@wagner.edu). Tri-Beta elections for the new executive board will be held in the next few weeks.

Contributed by Nidhi Khanna

PRE-HEALTH SOCIETY

The Pre-Healthy Society invited the director of the American University of Antigua School of Medicine and Veterinary Medicine to speak at an informational event for Wagner students. Students that could not attend the event, but would like more information about the school should visit the website (<http://www.auamed.org/new-aa-hospital>).

Contributed by Felicia Guinta

PRE-DENTISTRY SOCIETY

The Pre-Dentistry Society will hold their bi-annual Dental Health Promotion Day on the Union Patio (weather permitting) on Tuesday, April 5, 2011. Pre-dental students from the society will be handing out toothbrushes, coupons for local dental practices, and information regarding dental health, all in effort to raise money for the Oral Cancer Foundation (oralcancerfoundation.org).

Additionally, Dr. Steven Cisternas, a dentist from Staten Island, will be presenting topics specifically related to dentistry, including a select few of his treatment cases from start to finish. The symposium will take place at Wagner College on Saturday, April 16th at 9:30 AM in Spiro 2. All of those who are interested are invited to attend.

Contributed by Gregory Balaes

OPPORTUNITIES

RESEARCH WITH MOSQUITOES AND CRABS

Dr. Onken offers research opportunities for students in the frame of a project in which he



collaborates with scientists from Washington State University, the University of Idaho, and the University of Alberta (Edmonton, CA). The project is funded by the National Institute of Health and studies the physiology of the midgut of larval yellow fever mosquitoes (*Aedes aegypti*). Mosquitoes are vectors of a number of parasites, transmit devastating diseases like malaria, yellow fever and dengue, and are a major threat to the health of billions of people on our planet. The principal investigators of this project address larval mosquitoes, because it appears more straightforward to fight these vectors as long as they are confined in an aquatic habitat. In collaboration with colleagues from the U.S. (Mt. Desert Island Biological Laboratories, Maine), Brazil (University of



São Paulo in Ribeirão Preto, University of Paraná in Curitiba) and Canada (University of Manitoba in Winnipeg) Dr. Onken pursues research with Crustacea related to the osmoregulatory capacities and mechanisms of crabs. Together with Dr. Alauddin (Chemistry) and Professor Beecher (Biology), an ecophysiological study is in an early stage of planning.

Dr. Onken can offer research opportunities for two to three students. If interested contact Dr. Onken in his office (Megerle Science Hall Room 411), lab (Megerle Science Hall Room 406) or via e-mail (horst.onken@wagner.edu) or phone 420-4211.

For the spring semester Dr. Onken offers a work study position related to his work with mosquitoes.

Contributed by Dr. Onken

WORK IN THE GARDEN

Students interested in collaborating in the greenhouse and/or garden during the fall and winter of 2010 are encouraged to contact Dr. Onken (horst.onken@wagner.edu). There is also an official student job for collaboration in greenhouse and garden.

Contributed by Dr. Onken

BE A LIMULUS ASSISTANT EDITOR

We just welcomed the third assistant editor for the LIMULUS: Gregory Balaes. The more students actively contribute, the better the newsletter becomes. Proficient student writers are invited to become assistant editors for the newsletter of the Department of Biological Sciences. If you are interested, please, contact Dr. Onken (horst.onken@wagner.edu).

Contributed by Dr. Onken

COMMUNITY SERVICE OPPORTUNITY

Greetings Everyone, I am Nidhi Khanna and I am currently a senior. I am working with this non-profit organization called Planting Peace. Planting Peace has many sub-organizations including one called The Clean World Movement. The Clean World Movement is trying to encourage more individuals around the world to recycle and to take better care of the planet. I am working with The Clean World Movement as the environmental director in my community. I am organizing some clean-ups in Staten Island during the semester. If anybody is interested in helping out, please feel free to contact me at nidhi.khanna@wagner.edu. Thanks for your interest and I look forward hearing from you! If you would like more information about the organization I am working with, please visit: <http://www.plantingpeace.org/>.

Contributed by Nidhi Khanna

EXPERIENCES

EASTERN COLLEGES SCIENCE CONFERENCE

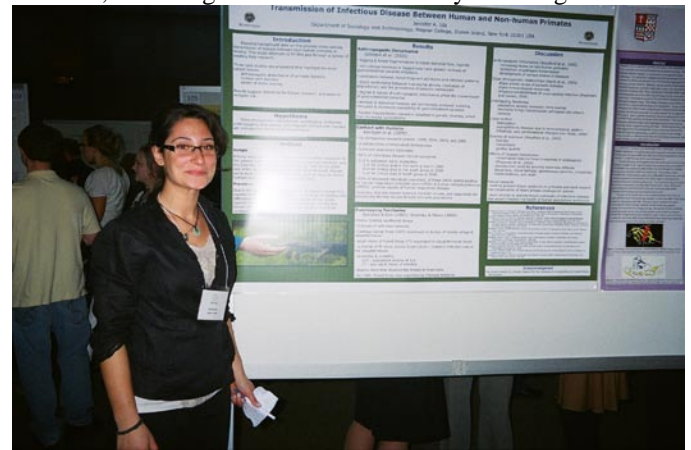
The 65th Eastern Colleges Science Conference was held at Sacred Heart University in Fairfield, CT, on April 2nd. This year, Wagner's cohort was somewhat smaller than in the years before. Nevertheless, it was again a great experience for those who attended.



Ira Flatow, host of Talk Of The Nation: Science Friday, gave the keynote address. Four undergraduate students presented their achievements. In the following we reprint their abstracts and show some photographs from this event.

Jennifer Ida (2011). Transmission of Infectious Disease between Human and Non-human Primates. Department of Anthropology, Wagner College.

Cross-species transmission of disease between non-human primates and humans has increasingly become of great concern; however we still lack essential background data on the process. It is hypothesized that close phylogenetic relationships, overlapping territories, anthropogenic disturbance, and frequent contact with humans will increase the likelihood of transmission. This hypothesis is tested through an analysis of the literature. Specific cases of transmission were examined and the key factors of transmission were identified. Factors were then compared across cases. The research demonstrates that the degree of relatedness between humans and nonhuman primate species, as well as the extent of niche overlap and shared territory, often resulting from human encroachment on primate habitats, are salient factors in explaining frequency of transmission and predicting which species are most affected. The examined species will include gorillas, chimpanzees, baboons, and macaques. In addition, this research highlights possible routes of exposure, including fecal/oral and aerosol/inhalation transmission. The results then suggest directions for future research, including an examination of ways to mitigate risk.

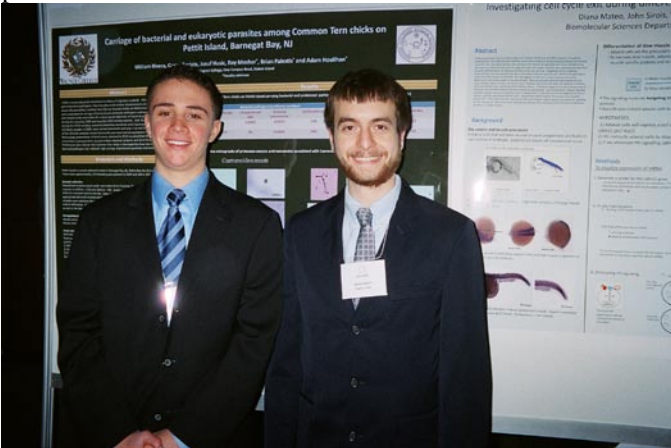


William Rivera, Corey Gaylets, Roy Mosher, Brian Palestis, and Adam Houlihan (2011). Carriage of bacterial and protozoan pathogens among Common Tern chicks on Pettit Island, Barnegat Bay, NJ. Biology Department, Wagner College.

Little is known about the intestinal microflora of migratory seabirds. If these avian species harbor gastrointestinal pathogens, they may disseminate them along migratory flyways. To assess this possibility, Common Tern (*Sterna hirundo*) chicks on Pettit Island in Barnegat Bay, NJ were evaluated for carriage of bacterial and protozoan pathogens and nematodes. Oropharyngeal and cloacal swabs were taken for culturebased detection of bacterial gastrointestinal



pathogens during the June/July 2009 and June/July 2010 nesting seasons. Bulk fecal samples were also taken during the 2010 nesting season to determine nematode and *Cryptosporidium* oocyst loads. Of 125 birds samples in 2009, none carried *Salmonella* and only 1 carried *Campylobacter*. In 2010, 1 of the 54 birds sampled carried *Salmonella* and none of them had *Campylobacter* in their intestines. Microscopic examination of fecal smears obtained in 2010 revealed that 39 of 54 Common Tern chicks had *Cryptosporidium* oocysts in their intestines and 10 of 54 carried adult and larval nematodes. Preliminary data indicate that Common Tern chicks in Barnegat Bay have low intestinal carriage of bacterial pathogens but relatively high carriage of protozoan parasites and nematodes.

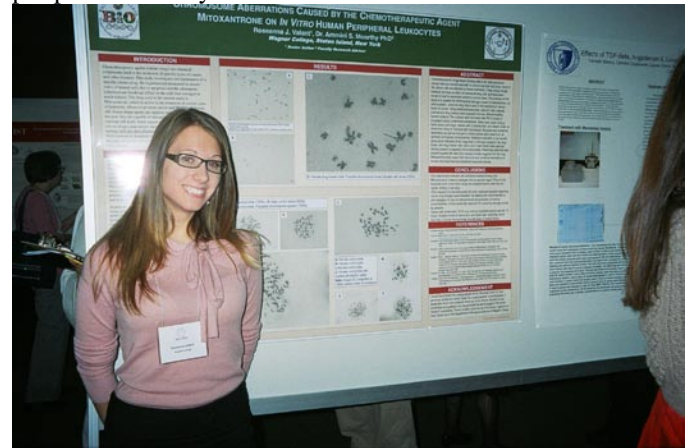


Roseanna Valant (2011). Chromosome Aberrations Caused by the Chemotherapeutic Agent Mitoxantrone on In Vitro Human Peripheral Leukocytes. Biology Department, Wagner College.

Chemotherapeutic drugs target dividing cells in the body and since cancer cells are transformed with no control over their cell cycle, more of the cancer cells are affected by these treatments. These chemo drugs however, do have an effect on normal dividing cells and have been known to lead to secondary cancers in some cases. The purpose of this study is to assess the chromosomal damage caused by Mitoxantrone, an antineoplastic, antitumor drug that is used in the treatment of various types of cancer. Using peripheral leukocytes, sets of *in vitro* cultures (normal and drug treated) were prepared from two different healthy human subjects. The cultures were harvested after 68-72 hours of incubation using conventional procedures. Slides were made using a flame drying technique, stained with a Giemsa stain and viewed under oil immersion using an Olympus light microscope. Structural and numerical aberrations as well as changes in mitotic indices were noted from all samples and digitally photographed. Statistical evaluation of our results gives us an indication of the magnitude of damage caused by this drug. Slides with drug treated cells had a much lower mitotic index and cell density present compared to the control slides. Preliminary data from this project coupled with data from previous studies suggests that the drug Mitoxantrone does cause both structural and



numerical aberrations on human chromosomes from peripheral leukocyte cultures.



Anthony Rafetto gave a platform presentation:

Anthony Rafetto (2011). A Mathematical Economic Model. Mathematics Department, Wagner College. A mathematical economic model based on the laws of Newtonian physics will be presented. The economies of several nations, including the U.S. and China, are evaluated using this model.



Contributed by Dr. Onken with photographs by Professor Rath



NATURAL HISTORY OF THE MID-ATLANTIC STATES

Do not miss the experience! Summer Field Course: BI 335 Natural History of the Mid- Atlantic States. This course, taught by Dr. Palestis, runs for two weeks (May 16-27) after the end of the Spring semester and before the start of the main summer session. It can be used as an elective for the Biology major and minor and for the Environmental Studies minor. The course is a great opportunity to experience nature, as it is almost entirely field-trip based. Trips include several nearby locations such as the New Jersey Pine Barrens, Jamaica Bay, and the Great Swamp. There will also be two overnight trips, to witness the horseshoe crab spawning/shorebird migration spectacle on Delaware Bay and to hunt for marine fossils in the Pocono Mountains. Students will learn about the organisms, ecology, and geology of a wide variety of habitat types, and will also learn basic methodology for field research.



Students in BI335 from Summer 2007 in front of a cranberry bog at Double Trouble State Park in Ocean County, NJ. Students from left to right are Shannon O'Neill, Amanda Rollizo, Jusuf Husic, and Frankie Costanza. Photo by Dr. Palestis.



Shorebirds feeding on horseshoe crab eggs at Reeds Beach on Delaware Bay in Cape May County, NJ. Most of the birds in this photo are ruddy turnstones. The endangered red knot and more than one species of sandpiper are also visible. Photo by Dr. Palestis.
Contributed by Dr. Palestis

PUBLICATIONS

Palestis, B.G., J. Cabrero, R. Trivers, and J.P.M. Camacho. 2010. Prevalence of B chromosomes in Orthoptera is associated with shape and number of A chromosomes. *Genetica* 138: 1181-1189.



PRESENTATIONS

Palestis, B.G. and K.E. Eppinger. 2011. A banding study of common terns on Pettit Island, NJ: Preliminary results. Greater New York/New Jersey Harbor Herons and Waterbirds Working Group. Staten Island, NY. January 12-13.

Palestis, B., I. Nisbet, J. Hatch, J. Arnold, and P. Szczys. 2011. The importance of tail length for sexual selection in roseate terns. Waterbird Society. Grand Island, NE. March 13-16.

ALUMNI

MICROBIOLOGY ALUMNI GATHER FOR A MEMORIAL TO REMEMBER DR. EDITH KERSHAW

Students gathered on March 26th, 2011 to remember Dr. Edith Kershaw, who served as the Chair of the Bacteriology department (now called the Microbiology department) at Wagner College.

Contributed by Gregory Balaes

ALLAN F. O'CONNELL VISITS WAGNER



Wagner College alum Allan F. O'Connell (graduate of 1976) visited Wagner College on March 28. Dr. O'Connell gave a lecture entitled "Endangered Species, Climate Change, and Alternative Energy: Implications for Natural Resource Conservation in the 21st Century". Allan O'Connell is currently a research wildlife biologist with the US Geological Survey's Patuxent Wildlife Research Center in Laurel, Maryland. He has 30+ years of experience with the Department of Interior as a field biologist, natural resource management and science program manager, administrator, and most recently as a research scientist at Patuxent, the world-renowned ecological research center known for its work on ecotoxicology, endangered species conservation, and population ecology. Dr. O'Connell discussed various techniques used to get an estimate of a population size. Since a lot of the species he works with are hard to detect such as frogs and kangaroos, detection probability is so important. He taught us that probability plays an important role in making an accurate estimate of endangered species. Dr. O'Connell mentioned that there are very few tigers left in the world, in particular India. He says that good management is necessary



to alleviate this problem. Camera trapping is a technique used to sample all species without going to the actual site and does not require one to actually catch the animal. The way this works is that a photograph is taken of the animal. Camera trapping is a technique that is revolutionizing how wildlife populations are being sampled around the world. One project that Dr. O'Connell worked on was reducing the raccoon population at Cape Lookout, in order for the oyster catcher population to survive. In addition, Dr. O'Connell has been working on sea birds and off-shore wind energy. A concern is that the location of wind turbines will affect bird species and all other marine mammals. On behalf of the Limulus staff, I would like to thank Dr. O'Connell for taking the time to come to Wagner and presenting his work in front of the student and faculty body.

Contributed by Farha Rashid

CARTOON



Cartoon from www.lab-initio.com

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!

The Editorial Board:
Editor: Dr. Horst Onken, Associate Professor
Assistant Editor: Stephanie Rollizo, Dept. Secretary
Student Assistant Editor: Nidhi Khanna
Student Assistant Editor: Farha Rashid
Student Assistant Editor: Gregory Balaes
Student Assistant Editor: WANTED!

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.

