

The Morton K. Blaustein, Department of Earth and Planetary Sciences, Johns Hopkins University, <http://eps.jhu.edu> 410-516-7135

Note from the Morton K. Blaustein Chair

Welcome to the 2011/12 winter edition of the Earth and Planetary Sciences Newsletter. As usual it has been a busy six months, with lots of news and activities and many new members welcomed to the Department.

First, congratulations go to Dr. John Ferry for being elected as a 2012 Fellow of AGU. This is a well deserved recognition of John's scientific contributions.

The numbers within Olin Hall have grown over the last six months with the addition of a large group of first year graduate students, together with several postdoctoral scholars and research scientists, joining the Department. There also continues to be a growth in our majors and number of students in our undergraduate classes. The Global Environmental Change and Sustainability (GECS) major is only two years old but already has nearly 50 majors.

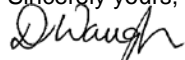
As described later in this newsletter, there have been several field trips over the last six months, involving both undergraduate and graduate students. Faculty and students also attended a workshop in Ethiopia, and field campaigns in Ethiopia are planned for this year.

We held another successful reception at the AGU Fall Meeting in San Francisco. There was a large contingent of current faculty and students at this meeting, and it was great to catch up with former department members at the reception. On a related note, please keep your contributions for the Alumni Corner coming in as it is good to hear what everyone is up to now.

The major event on the calendar for this semester is the 2012 Ernst Cloos Memorial Lecture which will be given by Lindy Elkins-Tanton (Director of the Department of Terrestrial Magnetism at the Carnegie Institution) at 4:30 pm on the 4th April. Please feel free to attend if you are in the area.

If you would prefer to receive the newsletter by email please let us know. We would also welcome suggestions for improving the newsletter.

Sincerely yours,



Darryn W. Waugh

Congratulations to Prof. John Ferry

Dr. John Ferry has recently been elected 2012 Fellow of AGU. For a look at the complete list of newly elected fellows please visit the website:

http://www.agu.org/about/honors/fellows/fellows_current.shtml

INSIDE THIS ISSUE

Note from the Morton K. Blaustein Chair	1
Congratulations to Prof. John Ferry	1
Upcoming Seminars & Lectures	1
Thank You to Our Donors	2
New "Water, Climate, and Health" Graduate Program	2
Field Trips Fall 2011	2-3
In The News	4
Welcome In 2011	4-5
AGU Meeting 2011	5
Alumni Corner	6

Upcoming Seminars & Lectures

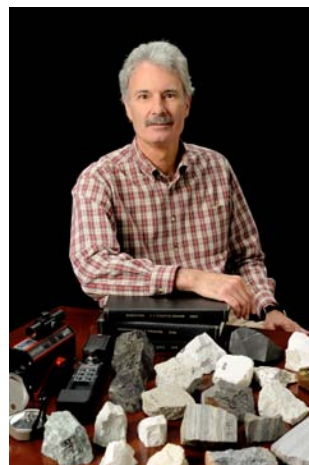
Cloos Lecture – April 4, 2012

➤ Lindy Elkins-Tanton @ 4:30 PM–Olin Hall

Bromery Seminar Series – 12:00 PM on Thursdays

Check our website for any changes <http://eps.jhu.edu>

- Kurt Konhauser – February 2, 2012
- Francis Nimmo – February 9, 2012
- Tony Dalrymple – February 16, 2012
- Nathan Bridges – February 23, 2012
- Ingrid Henty – March 1, 2012
- Sarah Penniston-Dorland – March 8, 2012
- Molly Brown – March 15, 2012
- TBA – March 29, 2012
- Vedran Lekic – April 12, 2012
- William Bottke – April 26, 2012
- Ramon Lopez – May 3, 2012



Thank You to Our Donors

We are indebted to the following alumnae, alumni, friends, and organizations for their contributing to the Department from July 1 to December 31, 2011:

ACS Petroleum Research Fund
Robert W. Adams, PhD
Dr. Gilles O. Allard
Mr. Michael A. Aurelia III
Dr. Edward H. M. Chown
Mr. Michael Alexander Cormack
Dr. Leon Dochinger
Ms. Jennifer Drake
Elaine Eugster, PhD
Harindra J.S. Fernando, PhD

Mr. Jeffrey D. Finocchiaro
Dr. Peter Geiser
Donald G. Hadley, PhD
Peter J. Heaney, PhD
J. Stephen & Emily Z. Huebner
Lee M. Hendler Philanthropic Fund
William R. Kaiser, PhD
Dr. Lynton S. Land
Donald H. Lindsley, PhD
Dr. Joseph H. Makurath

Mr. Richard F. Mercer
Dr. Richard B. Palmer
National Geographic Society
Ms. Supria S. Ranade
Pierre Sauve, PhD
Mrs. Roberta Meares Spang
Mr. Edward J. Wall
Ms. Roxanne E. Yose
Lyndon A. Yose
Chen Zhu

Please accept our apologies if we missed your name on the above list. If you will let us know, we would be most grateful, and we'll make sure we acknowledge your gift in the next newsletter. Your gifts mean more to us than you may realize. We are a small department. We remember all of our alumni and we are heartened to see that, through your gifts, you still support and are interested in the Department and its scholarly activities. Some of the things your gifts allow us to do are: admit more graduate students, pay for student summer field and laboratory work, maintain Singewald Field Camp and purchase equipment, teaching and research materials that are not covered by the department's operating budget. Your generous gifts make a significant difference to the Department of Earth & Planetary Sciences and we thank you.

New "Water, Climate, and Health" Graduate Program

JHU was recently awarded a NSF grant to establish an Integrative Graduate Education and Research Traineeship (IGERT) in Water, Climate, and Health. This is a collaboration involving E&PS, the Department of Geography and Environmental Engineering, and departments in the School of Public Health and Howard University. The program provides training in understanding and assessing threats to water resources and health posed by climate change, and the development of innovative adaptive strategies that respond to these threats. It includes place-based capstone courses (in the Chesapeake Bay, Peruvian Amazon, and Nile River basin). Further information can be found at <http://igert.jhu.edu/wch>.

Field Trips 2011: Gettysburg

Some years ago we were asked by the Dean to give a seminar for freshman in order to provide them with an introduction to Earth and Planetary Sciences and it fell upon Bruce Marsh to carry this out. From a small intimate venture called Conversations with the Earth involving fifteen students, the course has grown through popular demand to over 100, and for most of these students these are the first lectures they hear at Hopkins. The philosophy behind the course is to present as wide as possible exposure to cutting edge research involving the timely issues of the day so that they can think intelligently about climate change, energy needs, evolution, etc. In the finest JHU tradition this includes a field trip to Gettysburg to study the Geologic Influences on the Battle of Gettysburg. When told that the bus leaves at 8AM, returns at 5PM, and a lunch, hiking shoes, and raincoat are necessary, there is always a fair amount of moaning and groaning. But at the end of the day, without exception or rain, shine, or snow, they feel differently and the course evaluations invariably show it to be the high point of the class. These are pictures showing the class marching along the rails at the north end of the battlefield near the 'railroad cut' heading for a luncheon spot.



Photo above: Students showing the rifled musket slug (in hand of student on left) found in the mud - it was shot on the afternoon of July 1st, 1863.



Photo to left: Close up of rifled musket slug found in the mud during the field trip.



Photo to right: Students march along the railroad cut north of Lutheran Seminar in the Triassic red-beds.

Sedimentary Geology Trip

Dr. Naomi Levin led two field trips for the Sedimentary Geology course this Fall. Both trips were based in Washington County, MD. The first trip was a rainy, 2-day outing with an overnight stay at Camp Singewald. It included stops at some classic Paleozoic exposures familiar to many Hopkins alumni: the Conococheague Limestone at Dam #5 along the C&O Canal, the Martinsburg Shale, and the Woodmont turbidites. The second trip focused on fluvial systems and paleosols of the Hampshire and Rockwell Formations, exposed along the C&O Canal towpath and Sideling Hill.

With the help of old field guides and tips from Bruce Simonson (PhD, 1982), Bob Demicco (PhD, 1981) and David Brezinski (Maryland Geological Survey), Naomi is starting to learn the good, local spots for Paleozoic sedimentology and to get more students in the field.



Photo to right: Students investigate the exposures of the Conococheague Limestone and enjoy a break from the rain during a Sedimentary Geology field trip. The rain did not stop the students from looking at outcrops but everyone appreciated warming up at Camp Singewald that evening.

Photo to left: Blaustein Postdoc Zelalem Bedaso and first year graduate student Haoyuan Ji check out a fossilized tree root in the Devonian Hampshire Formation near Pearre, MD along the C&O Canal during the Sedimentary Geology field trip on clastics and fluvial systems this fall. Luckily, the wet weather stayed away for this field trip.



GECS Majors Visit Ecuador

Seven students majoring in Global Environmental Change and Sustainability took a field trip to Ecuador to experience first-hand some of the varied ecosystems. In addition to learning about the flora and fauna of ecosystems ranging from the Amazon basin to the peaks of the Andes, students also interacted with a variety of community members to gain perspective on different ways humans interact with their ecosystems.



GECS students and faculty in front of a giant Kapok tree.

Ethiopia Workshop

EPS graduate students Tiffany Smith and Fisseha Berhane, and a JHU School of Public Health graduate student Melissa Poulsen, enjoyed a boat trip on Lake Tana, near the source of the Blue Nile River in Ethiopia. The students were in Ethiopia to participate in a workshop on *Building Climate Resilience in the Blue Nile Highlands*, organized by EPS Assistant Professor Ben Zaitchik and his colleagues at Addis Ababa University, and sponsored by the JHU Global Water Program. The workshop was designed to enhance substantive collaboration between climate scientists, crop and livestock specialists, disaster response organizations, development agencies, health experts, and policy makers to advance climate resilient development. It attracted over 70 participants from Africa, Europe and the United States, including academics, development organizations, government agencies, and graduate students.



From left to Right: Fisseha Berhane, Tiffany Smith and Melissa Poulsen

In the News



Arielle Alpert

EPS Undergraduate Senior, Hollings Scholar, Pursues Research at GFDL

Arielle Alpert, an EPS major, was one of six Hollings scholars recognized for outstanding presentations for summer research. The Ernest F. Hollings Undergraduate Scholarship Program is run by NOAA and involves summer internships at NOAA laboratory. Arielle did her summer research at the NOAA Geophysical Fluid Dynamics Laboratory, and worked with Drs. Rong Zhang and Gabriel Vecchi, on a Saharan Dust and Atlantic Hurricanes project. To read more go to : <http://www.gfdl.noaa.gov/2011-arielle-alpert-hollings-scholar-profile> and <http://eeo.oar.noaa.gov/NewsletterSept2011.pdf>.

FESD–Frontiers in Earth System Dynamics



Open Earth Systems is a five-year project funded by the National Science Foundation through its Frontiers in Earth System Dynamics (FESD) initiative. The goal of Open Earth Systems is to combine state-of-the-art models of the atmosphere, ocean, crust, mantle, and core to investigate the causes and consequences of critical processes in Earth dynamics, including mantle convection with plates, core-mantle interaction and geomagnetic field evolution, the slow carbon cycle, extreme volcanism, and climate change forced by continent assembly and breakup. Hopkins EPS participants include **Peter Olson**, **Linda Hinnov**, **Anand Gnanadesikan**, **Darryn Waugh**, **Richard Stolarski**, **Marie-Aude Pradal**, **Evan Reynolds**, and **Renaud Deguen**. Other participants include **Shijie Zhong** (University of Colorado Boulder), **David Bercovici** (Yale University), and **Michael Manga** (University of California Berkeley). Planned outreach activities will include summer internships for Baltimore high school students under a Geoscience Ingenuity Program in collaboration with Baltimore Polytechnic Institute, and short-courses offered to Maryland middle school and high school instructors. More information on Open Earth System projects and activities can be found at <http://www.openearthsystems.org>.

Up and Coming

Zelalem Bedaso, Morton K. Blaustein postdoctoral fellow, deployed precipitation collectors for isotopic analysis on the roof of Olin Hall this January. These collectors are prototypes for collectors that will be deployed in Ethiopia this spring, where snow and ice should not be an issue. We will keep you posted with the progress.



Zelalem Bedaso

Welcome in 2011

Postdocs



Zelalem Bedaso
Blaustein Scholar



Beth Feingold
Glendore & Howard L. Pim Fellow



Amin Dezfuli



Kial Stewart

Asst. Research Scientist



Inga Koszalka

Assoc. Research Scientist



Marie-Aude Pradal

Graduate Students



Hamada Badr



Fisseha Berhane



Mollie Celnick



Huanting Hu



Haoyuan Ji



Sophie Lehmann



Alexandria Russell
Owen Scholars Fellow



Saleh Satti



John (Ben) Warfield

AGU Meeting 2011

Alumni Reception: AGU Fall Meeting

As many of you know, E&PS participates in the AGU Meeting in San Francisco every year. This year we held an alumni reception which was a GREAT success. Thank you to everyone who attended. We hope to see more alumni at next year's reception at the AGU conference.



Left to right: Bill Pan, Weston Anderson, Tiffany Smith and Keith Spangler



Left to right: Katia Matcheva, Richard Stolarski, Linda Hinnov and Stuart Weinstein



Ben Zaitchik and Po-Lun Ma



Joe Domagalski and Barbara Beeman



Left to right: Jon Aurnou, Kathy Szlavecz, Joanne Stubbs and Scott Werts

Alumni Corner

The Morton K. Blaustein

Department of Earth & Planetary Sciences
Johns Hopkins University
301 Olin Hall, 3400 N. Charles Street
Baltimore, Maryland 21218

Phone:

410-516-7135

Fax:

410-516-7933

E-Mail:

ktrent2@jhu.edu



Mark Murphy -- (PhD 1990) continues to thrive in Tucson, AZ as vice-president of and senior scientist at GeoSystems Analysis, Inc., an applied-research firm specializing in natural resources studies that support mining, ground water recharge, and river restoration projects. GSA just opened a new office in Albuquerque, NM. Last year, his daughter, Becca, who once toddled the corridors of Olin Hall, was married and started nursing school. The twins, Jack and Fred (both natives of Towson, MD) and Nathaniel are all fine.



We're on the Web!

Visit us at:

<http://eps.jhu.edu/>

Attention all Alumni- If you have something you would like to share in the next edition, please provide us information by email to **ktrent2@jhu.edu**

****If you would like to receive your newsletter electronically please email your email address to ktrent2@jhu.edu**

The Morton K. Blaustein
Department of Earth and Planetary Sciences
Johns Hopkins University
301 Olin Hall, 3400 N. Charles Street
Baltimore, Maryland 21218

