

Summer 2011

JOHNS HOPKINS
UNIVERSITY

The Morton K. Blaustein Department of
Earth & Planetary Sciences

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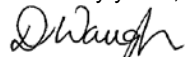
Note from the Morton K. Blaustein Chair

Welcome to the Summer 2011 edition of the Earth and Planetary Sciences Newsletter. There have, as usual, been a lot of developments and activities within EPS over the last six months.

This period has been very good for awards in EPS. As described on page 3, four faculty have received awards/recognition from national and international societies for their research contributions. There have also been awards to graduate and undergraduate students within the Department. I hope you will join me in congratulating all the awardees for the deserved recognition.

We hosted two special events during the spring semester. Dr. Marcia McNutt (director of the U.S. Geological Survey) gave a Walter M. Elsasser Memorial Lecture on the science of the deepwater horizon oil spill. We then hosted a Futures Seminar on "New Perspectives on the Changing Earth." This two half-day event is part of a broad strategic planning process within the School of Arts and Sciences. The first session was a broad discussion of the grand challenges and exciting research questions in Earth and Planetary Sciences, while the second event focused on opportunities for JHU to address the questions identified in the first session. For these discussions we were lucky to be joined by several distinguished outside scholars; specifically, Professors Jess Adkins (Caltech), Douglas Burbank (UC Santa Barbara), James Farquhar (University of Maryland), Michael Prather (UC Irvine), and Ben Weiss (MIT). This was well attended, and there were numerous interesting discussions. We have subsequently written a white paper that outlines our 10-year strategy. I hope future newsletters will be reporting the implementation of this strategy.

Sincerely yours,



Darryn W. Waugh

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Upcoming Seminars & Lectures

Bromery Seminar Series - 12:00 PM on Thursdays

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

- September 15, TBA
- September 22, Brian Arbic
- September 29, Anand Gnanadesikan
- October 6, Bridget Bergquist
- October 13, Seth Guikema
- October 20, TBA
- October 27, Kelly H. Kilbourne
- November 3, Douglas Morton
- November 10, David Johnson
- November 17, George Stone
- December 1, Thomas Haine

Congratulations to Our Graduates

On May 26, 2011 the Department had two PhD students graduate: **Thando Ndarana** and **Po-Lun Ma**. In addition, Masters Degrees were awarded to **Erin Urquhart, Chih-Han Chang, Shuning Li, Christina King, Charlene Estrada, Scott Guzewich, and Stephen Jeffress**. The department awarded Bachelors Degrees to the following students: E&PS Majors **Elizabeth Boden, Sarah Frank, Nicholas Gilson, Tae Hyun Kim, Robert Nedbor-Gross, George Reynolds, Katheen Schiro, Lauren Wiesebron, Allison Zazzali**; Environmental Earth Sciences Majors: **Julia Guarino, Magdalena Nowosadko, Margaret Roth**; and GECS major **Keith Spangler**. We would like to extend our congratulations to all of you.

Thank You to Our Donors

We are indebted to the following alumnae, alumni, friends, and organizations for contributing to the Department from January 1, to June 30, 2011.

Mr. Michael A. Aurelia III
James Gerald Brophy, PhD
Mrs. Kerrie A. Bunting
H. Edward Clifton, Ph.D./ConocoPhillips
Fidelity Charitable Gift Fund
Stanley C. Harrison, Ph.D.
Peter J. Heaney PhD
J. Stephen & Emily Z. Huebner

Blair F. Jones, PhD
Mr. D. Stephen Lane
Stephen M. McDuffie, Ph.D
Mr. Richard F. Mercer
Ms. Supria S. Ranade
Dr. Thomas A. Ryer
Mr. S. William Saunders, Jr
Pierre Sauve, Ph.D.

Shell Oil Company Foundation
Richard A. Sheppard, Ph.D.
Mrs. Virginia Donahue Tourek
Mr. Edward J Wall
Stuart A. Weinstein, Ph.D.
William J. Wiseman, Jr., Ph.D.
Mr. John P. Witzenbocker IV
Lyndon A. Yose

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 will 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 and equipment 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

Elsasser Lecture – February 24, 2011

Marcia McNutt, a distinguished scientist and administrator and the first woman Director of the USGS in its 130 year history, delivered the Walter M. Elsasser Memorial Lecture “How Science Made a Difference in Ending the Deepwater Horizon Oil Spill” on Thursday, February 24th at Olin Hall, with a reception that followed. The Lecture was funded through The Walter M. Elsasser Endowment funds. The Walter M. Elsasser Memorial Scholars program was established in 1991 to commemorate the life and career of the scientist who served many years at Johns Hopkins University. Walter made fundamental contributions in physics, geophysics and biology, but is best known for his seminal work on the dynamo theory of magnetic field generation in planets and stars. The lectures are made possible by generous contributions from Walter's family and many friends.



From left to right: Darryn Waugh, Marcia McNutt and Peter Olson



Marcia McNutt

What have they been up to?



Ben Passey

Assistant Professor Ben Passey examining Oligocene-age sediments in the Fayum Depression of northern Egypt. Ben traveled to Egypt in November 2010 to study the Eocene-Oligocene climatic and biotic transition recorded in fossil-mammal bearing fluvial, deltaic, and near-shore marine strata. The samples he collected for stable isotope analysis were 'MIA' in Egypt for several weeks due to the political unrest earlier this year, but are now secured and apparently in transit to Baltimore.

(photo credit: Tom Bown).

In The News



Cindy L. Parker

A Major Passion

Cindy L. Parker had modest expectations for the new **Global and Environmental Change and Sustainability (GECS)** major and minor when it was introduced in Fall 2009. To read more about this go to: # 7 on the website:

<http://krieger.jhu.edu/magazine/sp11/f1.html>



Ben Zaitchik

Covering the Waterfront

News that global warming will cause the average temperature to rise by 3 or 4 degrees in the next 100 years is difficult to get excited about, unless you happen to be an arctic polar bear... to read more about this go to #9 on the website: <http://krieger.jhu.edu/magazine/sp11/f1.html>



Anand Gnanadesikan

Ocean Color can Deflect Hurricanes, Study Suggests

Led by oceanographer Anand Gnanadesikan, the study used computer simulations to look for links between ocean color and strong tropical cyclones--called hurricanes in the North Atlantic Ocean and the northeastern Pacific and known as typhoons in the northwestern Pacific:

<http://news.nationalgeographic.com/news/2010/08/081013-ocean-color-hurricanes-environment-weather-science-global-warming/>



Dimitri Sverjensky

Dr. Dimitri Sverjensky

Named recent Fellow of the Geochemical Society.

<http://www.geochemsoc.org/news/announcements/eagandgsannouncethe2011geo.htm>



Naomi Levin

2011 GSA Award Recipients

GSA's 2011 medals and awards will be presented at the Presidential Address & Awards Ceremony at the 2011 Annual Meeting. Among the recipients will be Naomi Levin receiving the Subaru Outstanding Woman in Science Award and receiving the 2011 GSA Division Named Award for Distinguished Geologic Career Award is John Ferry. Congratulations to you both.



Peter Olson

Peter Olson Awarded the Petrus Peregrinus Medal of the European Geosciences Union

This medal has been established in recognition of the scientific achievements of Petrus Peregrinus to honour outstanding scientists whose work is related to magnetism and palaeomagnetism. The award was presented to Dr. Olson during the General Assembly of the Union that was held on April 3-8, 2011 in Vienna, Austria where they highlighted Dr. Olson's impressive accomplishments to the whole geosciences community.

<http://www.egu.eu/awards-medals/awards-and-medals/award/petrus-peregrinus.html>



John Ferry



From left to right: Naomi Levin, Dean Kathy Newman, Peter Olson, John Ferry, Dimitri Sverjensky

Hats off to our students!



Chih-Han Chang

Chih-Han Chang is among the recipients of a Smithsonian Graduate Student Fellowship. The award provides 10 week support for graduate students who have not yet taken their GBO-s. Recipients will conduct research at a Smithsonian facility. Chih-Han will share his time between two institutions this summer: the National Museum of Natural History and its Suitland facilities, and the Smithsonian Environmental Research Center in Edgewater. Congratulations!



Lijun Xia

Graduate Student Won Best Presentation Award

Graduate student did it again! Lijun Xia has won the Best Student Oral Presentation Award in the Biogeosciences section at the recent meeting of the Canadian Geophysical Union in Banff. The title of her presentation was "Soil Respiration Responses to Temperature are Affected by Substrate Supply and Earthworm Activities". Last year Lijun came home with a similar award from the 2010 Ecological Society of America Annual Meeting. Congratulations!



Natalie Bray

Natalie Bray received a Provost's Undergraduate Research Award (PURA) and will be doing research on the effects of increasing CO₂ on leaf litter palatability and chemistry for soil animals. Congratulations! To read more about what PURA is go to: <http://web.jhu.edu/administration/provost/pura/index.html>

To view the 2011 PURA Recipients go to: <http://web.jhu.edu/administration/provost/pura/recipients2011.html>

E&PS Hanging Out

We like to take some much needed group time away from the office and classrooms. This year we planned a department picnic at Camp Singewald, relaxed at our End of the Year Party and took in some O's time.



Field Trip 2011: Geobiology Field Trip to Western Maryland

Naomi Levin's Geobiology course took a field trip to fossil localities throughout western Maryland in October 2010. The two day trip included searches of Pennsylvanian plants in Frostburg, Devonian crinoids in Big Spring, and Devonian brachiopods, corals, and bryozoans in Corriganville. The trip also included a stay at Camp Singewald, where the bbq pit and the wood stove kept everyone well fed and warm.



The picture on the left is students uncovering Pennsylvanian plant fossils in Frostburg, MD



To the right: Graduate student Greg Henkes and Shuning Li looking for Devonian fossils in Corriganville, MD



The above picture: Geobiology class posing in front of the Pleistocene "bone cave" in Corriganville, MD

Field Trip 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.



BRUCE MARSH
PROFESSOR

Transferring his knowledge of geology to battle strategy, Marsh annually takes students to Gettysburg to discuss land structures.

<http://perspectives.jhu.edu/2011/07/gettysburg-the-lay-of-the-land/>



Alumni Corner

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

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Paul F. Hoffman -- (PhD 1970) was awarded the 2010 Walter H. Bucher Medal at the AGU Fall Meeting Honors Ceremony, held in December 2010, the medal is for "original contributions to the basic knowledge of the crust and lithosphere." To see more go to: <http://www.agu.org/journals/eo/eo1108/2011EO080016.pdf#anchor> In addition to this Paul was announced the GSA 2011 Penrose Medal Recipient, Congratulations! To read more about this go to: <ftp://rock.geosociety.org/pub/GSAToday/gt1107.pdf>

We're on the Web!

Visit us at:

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

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