

## KINSC

## NEWSLETTER-OCTOBER 2009

Issue No. 4, Volume 1

KINSC FALL  
CALENDAR**Biology**

11/2–2:30 pm Sharpless Aud. Bob Daber, “Dissecting the lac operon”

**Chemistry**

10/29–8:00pm KINSC Hilles 109, Cliff Kubiak, “Fixing CO<sub>2</sub>”

10/30–3:00pm KINSC Hilles 109, Cliff Kubiak, “Important Things You Never Learned About Inorganic Mixed Valency: Ultrafast, Non-Arrhenius, Solvent, and Proton Coupled Electron Transfers”

11/6–4:00pm Bryn Mawr College, Cynthia A. Maryanoff, Cordis

11/13–3:00 pm KINSC Hilles 109, Stefan Bernhard, Carnegie-Mellon University, “Efficient Transition Metal Catalysts for the Photogeneration of Hydrogen”.

11/20–3:00pm KINSC Hilles 109, Veronika Szalai, University of

Maryland, Baltimore County, “Metals in your Mind: How Copper Interacts with the Amyloid-beta Peptide of Alzheimer’s Disease”

12/4–3:00pm KINSC Hilles 109, Pedro Marenco, Bryn Mawr, Dr. Marenco will discuss his geochemical approach to solving paleobiological problems.

**Math Bi-Co Colloquium (all talks @ 4:15, tea @ 4:00 pm in KINSC H208)**

11/2–Danny Kaplan, Macalester College, “Untangling Causation in Complex Systems”

11/9–Brandy Rapatski (At BMC)

11/16–Philippe Guyenne, University of Delaware

11/30–Sarah Bryant, Gettysburg College (At BMC)

**Physics**

10/31–7:00 pm, Chase Aud. “No Night Without a Telescope”

11/7–7:00 pm, Chase Aud. “No Night Without a Telescope”

11/9–6:30 pm BMC Dorothy Vernon Room in Haffner Hall Physics Colloquium: “Quantum vacuum engineering: the long road from Epicurean hooked atoms to nanodevices actuated by absolutely empty space,” Dr. Fabrizio Pinto, InterStellar Technologies.

11/16–4:30pm , Sharpless Aud. Physics Distinguished Visitor, Nobel Prize Winner William Phillips.

11/17–4:30pm , Sharpless Aud. Physics Distinguished Visitor, Nobel Prize Winner William Phillips.

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**Psychology**

10/28–4:30 pm, Chase Aud. Susan Perry, UCLA, “Social Learning and Traditions in Wild Capuchin Monkeys”

11/10–4:30 pm Sharpless Aud. Psychology Distinguished Visitor, Dr. Michael McCloskey

KINSC Director  
Rob Fairman

Welcome back to what already seems to be a very busy semester!

As we have grown to expect, this past summer was a hotbed of research activity in the KINSC. I for one had a great experience working with students in my research lab and hope that those of you who were tied to the “bench” this summer had similar rewarding interactions.

This productivity was recognized in another successful undergraduate research symposium in September, thanks to the efforts of Kate, Phil, Cris, and Corrie. Kate describes the symposium in an article in this newsletter.

Speaking of Cris and Corrie, they are settling in nicely and have rapidly learned our way of doing business! They already seem to be well connected with the rest of the community so that they know how to get things done. They still feel that there is room for

more project-oriented work, so you (especially Chairs!) should definitely feel comfortable asking them to assist you with longer-term projects. I know that Julie Sheehan is hoping that we take full advantage of their talents in this regard. Cris & Corrie have provided you with delightful “Top Ten” lists of things about themselves in this newsletter so that you can get to know them better.

In other office news, Natalie will be coming back to work on November 2, having been on maternity leave for the

first part of this semester. Jacob and Jonah (her sons) are doing well and Jacob is well aware that his mom will be coming back to work (mixed feelings, of course!). Natalie will be moving back into L204 as our new full-time KINSC program coordinator. So as you begin taking advantage of all the new programming options that the KINSC has to offer, you can count on having fantastic support from Natalie!

I thought I would also let you know about some recommendations that will  
(continued on page 2)

(Fairman, continued from page 1)

...be coming out of our Steering Committee meetings. We are discussing two related ideas:

(1) regular KINSC chair meetings;

(2) finding a time and space for informal conversations about scholarship and pedagogy.

We are also planning on discussing the AAMC/HHMI recommendations for science competencies needed by those students

applying to medical schools, and will be consulting with Karin Åkerfeldt, who served on the national committee that was responsible for this AAMC/HHMI report.

Finally, I've been working with facilities to create a

liaison position between the KINSC and Facilities in order to improve communication. Ron Tola has notified us just today that Bob Harper will serve in this capacity. Feel free to send me your ideas and suggestions on these emerging plans.

## HHMI Update

### HHMI Undergraduate Summer Research Symposium

Saturday, September 26<sup>th</sup> was a lively day in the KINSC – the 6<sup>th</sup> Annual Summer Research Symposium! Students from Haverford, Bryn Mawr and Ursinus presented 70 research posters at the symposium, encompassing topics in Math, Physics, Psychology, Biology, Chemistry and Computer Science.

Cooperating research institutions included the three participating colleges as well as the University of

Pennsylvania, Children's Hospital Oakland Research Institute, Children's Hospital of Philadelphia, Sloan-Kettering School of Biomedical Sciences, UCLA, Hospital of the University of Pennsylvania, Thomas Jefferson University Medical School, Albert Einstein College of Medicine, RWTH Aachen in Germany, Rockefeller University, and Woods Hole Oceanographic Institute. Funding sources for these student research projects included grants from the KINSC, HHMI, and MSP.

This year's keynote event was the presentation of four talks by students:

- David Fischer '10 (HC Psychology) described his work on the

relationship between pain and social behavior in mice, which was conducted in Wendy Sternberg's lab.

- Aakash Shah '10 (UC Biology) studied behavioral defects in PAM-1 mutants of the nematode *C. elegans*, under the mentorship of Rebecca Kohn and Rebecca Lyczak.
- Kate Alfieri '10 (HC Chemistry), in Casey Londergan's lab, worked with a model system to develop a technique to characterize membrane-protein interactions on a picosecond scale.
- Yusup Shin '11 (HC Biology) traveled to the Pasteur Institute in Paris as part of the

HHMI International Scholars program to work with Robert Menard on imaging cell infection and cell traversal by malaria parasites.

Each student presentation was equally impressive, and students and faculty alike enjoyed hearing about (and seeing) the ongoing research efforts at the participating institutions.

Thanks to all the students and faculty mentors for their hard work in making this research – and the presentations – possible! Thanks, too, to Cris and Corrie for their help in organizing the event.

## New Staff Member Update

# 10 little-known or possibly helpful-to-know facts about...

### Cris:

1. I am alternately horrified and impressed by the moxie and creativity of Philadelphia drivers.
2. I'm a morning person.
3. Proofreading is one of my favorite things to do. Seriously.
4. I have a Masters degree in teaching, and spent the last eight years working in a college prep school – in the classroom, teaching English and theology (a social justice course), and as the administrator of the school's service learning program.
5. With No. 3 in mind, please know that I will be thrilled to help brainstorm answers to pedagogical questions, plan service learning projects, offer tips on enhancing (or avoiding) lectures, etc. I have spent years studying effective teaching and learning, and I like to use what I know!
6. I love the ocean, and I'm interested in marine ecology and policy, specifically fisheries law.
7. Favorite books include Mountains Beyond Mountains, by Tracy Kidder, David Guterson's Snow Falling on Cedars, and The Great Gatsby (maybe a clichéd choice, but I've taught Gatsby so many times, and it just gets better every time I read it).
8. Things I miss about teaching: My students, the constant challenge, and the fact that it never got boring.
9. Things I don't miss about teaching: Getting up at 3:30 every morning to grade essays before work, and grading essays in general. (I will gladly share my list of worst sentences from 9<sup>th</sup> grade essays on The Odyssey with anyone who needs a laugh).
10. My favorite thing about Haverford? The fact that there's a cricket team.

### Corrie:

1. I changed my major several times (Painting, Literature, History, Photography, Literature again) before deciding to change again and get a B.S. in Physics...and then went and worked as a Systems Administrator.
2. #1 means I have experience working with websites, so if there are things you'd like me to help with, please let me know!
3. I memorize the lyrics to songs whether I like it or not. Because, clearly, knowing all the words to random pop songs is incredibly useful.
4. I'm a native Houstonian, and 3.5 years into my time in Pennsylvania, I'm still excited about having public transportation that isn't a spectacular failure. (Check out Houston's "light rail" sometime).
5. I took meteorology in college, and I still like reading weather maps.
6. The thing I do really miss about Houston is the food – I miss 24-hr Vietnamese restaurants, Lebanese Delis, Tex-Mex on every block, and year-round local produce.
7. To compensate for foods I miss, I cook even more than I used to, and I'm always accepting cookbook recommendations. I just got The Bread Bible by Rose Levy Beranbaum and so far everything out of it is fantastic. I'm amazed at how much difference homemade hamburger buns can make.
8. Favorite (non-cooking) books include J.G. Ballard's High Rise and The Kindness of Women, Anthony Bourdain's A Cook's Tour, Fuschia Dunlop's Shark's Fin and Sichuan Pepper, and Arthur Koestler's The Sleepwalkers.
9. I always get excited about the changing of the seasons, and I really enjoy winter after so long on the Gulf coast.
10. My favorite thing about Haverford? Right now, walking across campus from the trolley stop every morning and seeing the fall colors.