

# ADVISING NEWSLETTER

March 28, 2014

## Dear Biology Students,

It's now time to fasten your seat belts for the mad dash to the end of the 2014 spring semester and final exams! Contrary to popular mythology your professors do not sit around and plan to make your life miserable by having all those papers and exams come due at the end of the semester. Everyone in college (past, present, and future) faces the same time challenges and you too will survive those challenges. So hunker down, organize your studies, and do well on your final exams!

If you plan to return in the fall, it is important that you make time for yourself over the summer. Enjoy yourself, perhaps read a book that you've been meaning to read, take time for yourself and allow yourself to relax and be joyful that you have no classes to attend, studying to do, or exams to prepare for. You will find that after a relaxing summer, you will be ready to face the next academic year with gusto!

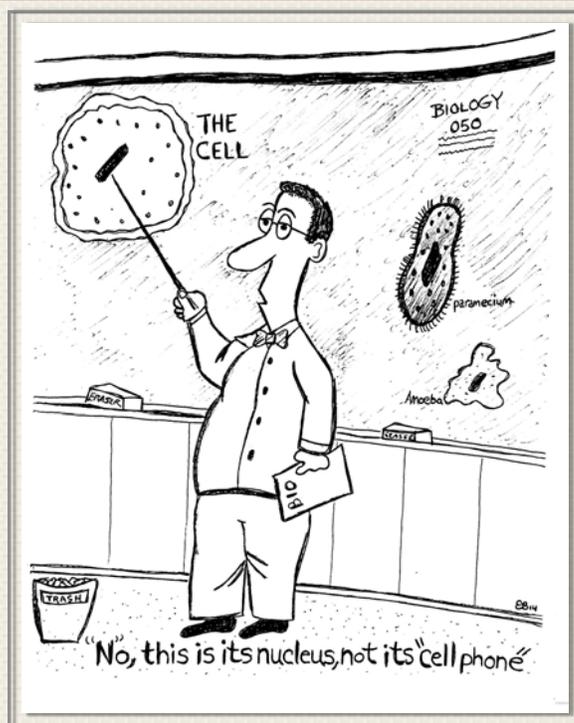
If you are a graduating senior, bring yourself and your parents after the commencement ceremonies to the lawn area adjacent to the faculty

parking lot at noon when the ceremonies end. The biology faculty wants to greet your parents and wish you well personally. We will have food and refreshments together to share and time to reminisce about your time in biology at RI College. During finals week a cookout on **Thursday, May 8th** is planned (under the sponsorship of the Biology Club) to bring together ALL biology students together with faculty and staff. The cookout will be located on the lawn adjacent to the upper parking lot of Fogarty Life Science. If you are able to, please bring some kind of unusual food to share!

We hope that after commencement, you will continue to keep in touch with your advisor, mentor, or staff member of the biology department. We are always thrilled to hear how successfully you are negotiating life and we will always look forward to celebrate your

accomplishments. Whether you are planning on attending graduate or professional school, taking on employment in a new job, or taking some time off to think about your next course of action, our best wishes for your continued success go with you.

For the entire Biology Department,  
**Lloyd Matsumoto, Ph.D.**  
Professor and Chair



# Biology Course Information

To help you with your planning, here is the list of biology “electives” (upper-level courses not offered every semester) that are tentatively scheduled for the upcoming year.

## Fall 2014

BIOL 261	The World’s Forests <sup>2</sup>	Dr. de Gouvenain
BIOL 353	The Plant Kingdom <sup>1</sup>	Dr. de Gouvenain
BIOL/CHEM 420	Biochemistry of Proteins and Nucleic Acids	Dr. Avissar
BIOL 429	Medical Microbiology	Dr. Britt
BIOL 535	Advanced Physiology I	Dr. Hall

## Spring 2015

BIOL 300	Developmental Biology of Animals <sup>1</sup>	Dr. Meedel
BIOL 324	Vertebrate Zoology <sup>1</sup>	Dr. Merson
BIOL 350	Biostatistics <sup>3</sup>	Dr. de Gouvenain
BIOL 431	Immunology	Dr. Kolibuchuk
BIOL 536	Advanced Physiology II	Dr. Hall

- <sup>1</sup> **Organismal elective** for Biology BS.
- <sup>2</sup> **Core 4** (old general education) and **Connections** (new general education).
- <sup>3</sup> This course may substitute for **Math 240** (but not also a 300-level elective).

Also of note:

**Always check prerequisites!** Most BIOL numbered 200 or above require Biology 111 and Biology 112 (with a grade of C or better) as prerequisites. Some classes (like BIOL 300 and courses in biochemistry) require additional prerequisites.

500-level courses are open to graduate students, and advanced undergraduate students (senior status) with permission from the instructor and the Dean’s office.

If you are using a biochemistry course toward a minor in Chemistry, it is advised that you register as CHEM. If you are using it as a Biology elective, it is advised that you register as BIOL.

Both BIOL 241 (Biology Colloquium 0.5 credits) and BIOL 460 (Senior Seminar, 3 credits) are offered every Fall and Spring semester. Consider taking one session of BIOL 241 concurrently with BIOL 460; attendance at some seminars is a requirement for Senior Seminar anyway.

Contact a faculty member if you are interested in doing a research project (BIOL 49X). Proposals are due April 15 for the Fall semester.

## NOTE:

BIOL 300, **Developmental Biology of Animals**, will be offered in the Spring of 2015, but not in the Spring of 2016. If you would like to take this course, you should plan accordingly.



BIOL 460, **Biology Senior Seminar** now requires pre-registration. Pick up a form from Sharon Rogers, Biology Department Secretary, and she will process all registrations.

# Featured Biology Courses

Fall 2014

## **BIOL 261 - The World's Forests**

The World's Forests will be taught by Dr. de Gouvenain. This is a 4-unit General Education *Connections* course open to all students, biology majors or not, and as with all Connections courses, it will be reading- and writing-intensive, with emphasis on critical thinking and communication. We will survey the three different forest types of the world (boreal, temperate, and tropical), their ecology, their inhabitants, as well as the social, political and cultural forces that have shaped these forests over time, and that now are influencing their future. Student projects will include a poster, three papers, and four short oral presentations. If you like trees and are interested in learning about forests, come and join us! Email Dr. de Gouvenain at [rdegouvenain@ric.edu](mailto:rdegouvenain@ric.edu) for details.

## **BIOL 353 - The Plant Kingdom**

The Plant Kingdom (Lecture + lab), will be offered for 4 credits (counts as organismal elective for the B.S. in Biology), taught by Dr. Roland de Gouvenain. We will learn how green plants evolved from green algae to colonize land, and how they adapted to a variety of habitats on Earth, from the most desolate deserts to the most luxuriant tropical rain forests. A field lab to the Roger Williams Park Botanical Center will provide us with live examples of plant adaptations to various biomes and environments, and you will collect, press, and prepare fern specimen to learn about these evolutionary ancient plants while making your own herbarium. Finally, we will learn how plants have benefited all civilizations on Earth since humans got the idea to domesticate and breed plants for food, medicine, building material and much more. So come join us on this adventure around the plant kingdom. Email Dr. de Gouvenain at [rdegouvenain@ric.edu](mailto:rdegouvenain@ric.edu) for details.

## **BIOL 420 - Biochemistry of Proteins and Nucleic Acids**

(Formerly BIOL 410 Biochemistry I) Biochemistry is among the fastest developing areas of scientific endeavor today, constantly changing, fascinating and new. The course will lay the groundwork for in-depth understanding of life at the level of molecular structure and function, regulation and interactions. To accommodate working students, the course is offered twice a week, at night. BIOL 420 satisfies the Biochemistry requirements of most graduate programs in the Life Sciences. Lecture only. 3 semester hours. Prerequisite: BIOL 111/112 and CHEM 206. Offered by Dr. Yael Avissar.

## **BIOL 429 - Medical Microbiology**

Have you ever wondered why some infections are deadly, while others only give you the sniffles? In BIOL 429 we take an up-close look at the fascinating world of microorganisms that cause human disease. We'll consider the arsenal of molecular tools bacteria use to invade our bodies, avoid our defenses, outsmart our antibiotics and make us sick. In the lab portion of the class you will learn the techniques necessary to handle infectious materials safely, along with traditional and modern methods for identifying microorganisms. The course will also take a look at viral and parasitic infections and the unique ways they make use of their human hosts. Prerequisites: required - CHEM 205, 206, BIOL 348 and curiosity! 4 semester hours. Offered by Dr. Deborah Britt.

## **BIOL 525 - Advanced Physiology I**

Examination of human physiology and pathophysiology in relationship to anesthesia practice. This course will utilize a systems approach to the topics of cellular physiology, neurophysiology, cardiovascular and respiratory physiology. 4 credit hours. Prerequisite: Enrollment in the MSN Nurse Anesthesia option or permission of the instructor.



## An Interview with the Biology Department's Newest Faculty Member, **Dr. Geoff Stilwell**

### **What were you doing before you came to RIC?**

Drug discovery and development at a biotechnology company (Cambria Biosciences) and at Mass General Hospital. Much of my recent work has focused on understanding the molecular mechanisms underlying certain neurological diseases and identifying compounds that might suppress disease phenotypes. I have spent almost my entire career working with *Drosophila melanogaster*. Believe it or not, flies make excellent models for studying human disease!

### **What made you want to teach?**

In industry, I 'mentored' a number of new-hires who had graduated recently and had no laboratory experience to speak of. It was gratifying to see them get excited about their work and mature as scientists. I also taught a Genetics lab class in 2011 and saw the same level of interest, motivation, and dedication in my students. By the way, I am not sure I would like teaching at a traditional 4-year school, in which 100% of the students came directly from high school; I think RIC students tend to be more deliberate and introspective when

making decisions regarding school, classes, majors, and future plans.

### **What courses do you teach or do you plan on teaching?**

There are way more ideas than time! I am dedicated to teaching Genetics now. I am also planning a class on modeling human disease, which will also incorporate research practices from biotechnology, as one new class. Other ideas include a bioinformatics class and a neuroscience class that will complement Dr. Threlkeld's class.

### **Tell us about the research you are planning in your lab.**

One big area will be to develop new models of neurodegenerative disease using *Drosophila* as a model. I also plan to continue a few projects that I began in biotech.

### **What do you think about RIC so far?**

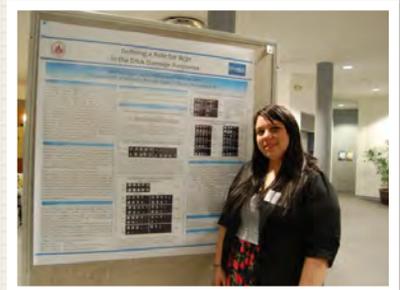
RIC is great! I have no regrets about leaving private industry even though I get way less sleep now!

### **What is the best part of your new job?**

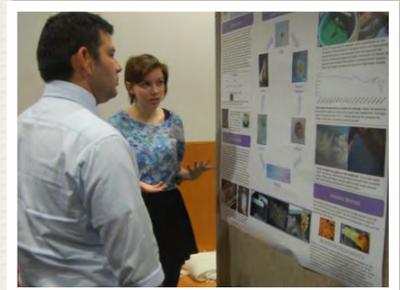
Becoming personally invested in my students.

## RIC Biology NURDS

Students doing research here at RIC presented their work in March at the Northeast Undergraduate Research and Development Symposium in Maine. Besides those shown below, Sara Moore (Govenar lab) and Jose Soares (Spinette lab) gave talks, Breanna Canning (Baker lab), and Leah Smith (Govenar lab) prepared a presentation.



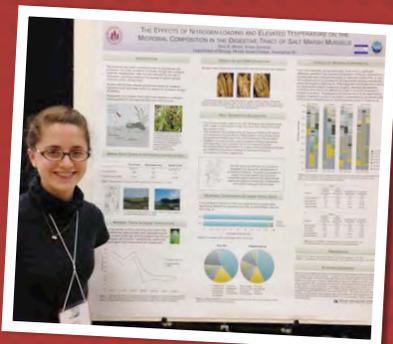
Sabrina Elgar (Britt lab)



Meg Warburton (Meedel lab)



Emmanuel Aseidu (Meedel lab)



## RIC Biology Students Win Prestigious NESP-BioNES Awards

Read more at RIC News: [http://www.ric.edu/news/details.php?News\\_ID=2396](http://www.ric.edu/news/details.php?News_ID=2396)

# THE BIOLOGY CLUB

Photos from a Biology Club visit to RIC's own greenhouse, and the Biology Club Valentine's Day party!



The Biology Club will be visiting the **American Museum of Natural History** in New York City on Sunday, April 27th. At the museum you can tour the Butterfly Conservatory, visit the Hall of Biodiversity and walk among dinosaur fossils! The trip will be for the entire day and transportation will be provided, but details regarding exact timing and cost are still being worked out. Email [smoore\\_6564@email.ric.edu](mailto:smoore_6564@email.ric.edu) if you'd like to sign up or need more information.



## SENIOR SEMINARS

(FLS 050, WED @ 12:30, THUR @4:00)

Come support our graduating seniors!

**WED 2 APR:** Sara Moore, Andrew Blanchard

**THUR 3 APR:** Lynn Cooper, Ariel Woolsey

**THUR 10 APR:** Tim Bock, Renata Ivanov, Richard Meza-Lopez

**WED 16 APR:** Stephanie Prusko, Jesse St. Pierre, Eric O'Rourke

**THUR 17 APR:** May Cervantes, Evan Saia, Jose Solares

**WED 23 APR:** Leah Smith, Nathan O'Keefe, Catherine Cioe

**THUR 24 APR:** Edward Lyons, Sue-Ellen Jimenez, Jonathan Olarte

**THUR 1 May:** Hector Nunez, Sabrina Elgar, Breanna Canning

## Dr. Roberts is off to Australia!

Dr. Eric Roberts will be spending a sabbatical year with his wife, URI Botany Professor Dr. Alison Roberts, at the University of Adelaide in Australia (July 2014 to July 2015). While they are having exciting adventures (especially investigating the mysteries of mixed-linkage  $\beta$  glucans), and seeing new sites, Dr. Roberts will be sorely missed here at RIC. Some changes that you should be aware of for the 2014-2015 academic year:

- **Dr. Rebeka Merson** will serve as the Biology Department Assistant Chairperson.
- **Dr. Breea Govenar** will be the advisor for the Biology Club.
- Someone will need to water the plants in the student lounge.

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APRIL 3-6, 2014

For updates and information, visit  
[www.nsta.org/boston](http://www.nsta.org/boston)

**NSTA** National  
Science  
Teachers  
Association

The RIC Student Chapter of NSTA is getting ready to attend the national conference in Boston. If you are interested in STEM (science technology engineering math) education and would like to be involved with these future teachers, contact Maggie Lopes ([mlopes\\_6137@email.ric.edu](mailto:mlopes_6137@email.ric.edu)).

## BIOLOGY BOOK CLUB

The Biology Book Club will host its book discussion of *The Family That Couldn't Sleep* by D.T. Max on Friday, April 11, 2014 at noon in FLS 200. Lunch is provided and all are welcome. Student attendees are automatically entered into a raffle for an Amazon gift card! See Dr. Conklin or Dr. Roberts for more information.



### This just in!



Students **Sara Moore** and **Leah Smith** were presented with Robert M. Young Scholarships for excellence in biology at the 15th Annual Robert M. Young Memorial Lecture on March 19, 2014. They are pictured here with the lecturer, James T. McIlwain, Fox Professor of Ophthalmology and Visual Science, Emeritus, Brown University.

### REGISTRATION IS UNDERWAY!

Make sure you meet with your advisor to make sure you are thoughtfully planning your degree progress!

Remember:

Senior seminar now requires pre-registration. See Sharon Rogers for details.

Independent study proposals are due April 15.