

ADVISING NEWSLETTER

Professor Yael Avissar

Professor Yael Avissar will be retiring in December at the end of the fall 2014 semester. She began her academic career at RI College as a biochemical researcher and taught Cellular and Molecular Biology, Biochemistry, as well as Introductory Biology for both majors and non-majors. She was a postdoctoral fellow at Brown University before joining the faculty at RI College.

For her faculty colleagues it is with mixed emotions that we thank her for her service to the department as well as to the college and wish her well in her much deserved retirement. On any campus, professors have multidimensional relationships with both individuals and groups both within and outside their own disciplines through the governance structure of the College. This has probably meant that Professor Avissar, like all other professors, has had to juggle 4 or 5 balls in the air at the same time without losing the focus on any one

ball. She has done this with grace at RI College and in the real world there are a lot of appreciative students who often write to her, crediting her for their success.

If you are a student who has taken a course with her, then you will forever be her legacy even after you graduate. Every professor has a unique way to help students understand the process by which observations, information, and experimentation in science leads to new knowledge. It is this imprint of critical thinking and analysis that you received from Professor Avissar that will always be with you. Biology majors are very busy people who usually juggle academics, work, thirsty Thursdays, in addition to everyday living things (like eating and doing your laundry) that need to get done. So it is not surprising that four years can go by so quickly and you find yourself out in the real world in graduate school, a job, or professional school. And in being so busy we often forget to thank our



professors for their contribution to our own knowledge base. In just over thirty years of teaching at RI College, I have had exactly three students who sought me out after commencement to thank me for the role I played in their education. So if you took a course with Professor Avissar, please stop by to thank her and wish her well; she would appreciate and cherish your gesture.

And lest you forget, old professors never die, they just go to the next lecture hall . . . one that you may well be in, again with Professor Avissar!

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.

Spring 2015

BIOL 240	Biostatistics	Dr. de Gouvenain
BIOL 300	Developmental Biology of Animals ¹	Dr. Meedel
BIOL 324	Vertebrate Zoology ¹	Dr. Merson
BIOL 421	Biochemistry of Energy Metabolism	Dr. Almeida
BIOL 431	Immunology	Dr. Kolibuchuk
BIOL 536	Advanced Physiology II	Dr. Hall

Fall 2015

BIOL 321	Invertebrate Zoology ¹	Dr. Govenar
BIOL 420	Biochemistry of Proteins and Nucleic Acids	TBA
BIOL 425	Comparative Animal Physiology	Dr. Hall
BIOL 531	Mammalian Endocrinology	Dr. Anthony
BIOL 535	Advanced Physiology I	Dr. Hall

¹ **Organismal elective** for Biology BS.

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 **cross-listed 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 November 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.

NOTE:

It’s official! BIOL 240, **Biostatistics**, is now an ongoing course and will be offered every Spring. Students working towards a BS in Biology may use this course or MATH 240 to satisfy the statistics requirement.

NOTE:

Since not all biology courses are offered every semester, every year, you may wish to take a summer course so that you can take an upper division course that is offered every other year. Slated for next **Summer**: 111, 112, 231, 335, and 348.



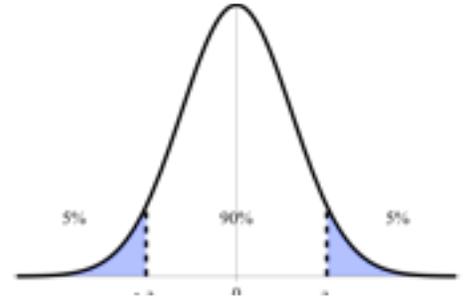
BIOL 460, **Biology Senior Seminar** now requires pre-registration. Pick up a form from Sharon Rogers, Biology Department Secretary, and she will process all registrations.

Featured Biology Courses

Spring 2015

BIOL 240 - Biostatistics

We will first learn enough about elementary probability theory to understand and plan research design, sampling, hypothesis testing, and statistical inference in biology. Throughout the semester will use SPSS® in hybrid lecture/labs to learn hypothesis testing for quantitative and categorical data using t tests, ANOVAs and nonparametric equivalents, χ^2 , linear and logistic regression models, and correlation. All classes will take place in a computer lab. Satisfies the 4-credit statistics requirement for the BS in Biology. Taught by Dr. de Gouvenain (rdegouvenain@ric.edu).



BIOL 300 - Developmental Biology of Animals

A descriptive and experimental approach is applied to animal ontogeny, with consideration of cell fate determination, differentiation, morphogenesis, and pattern formation. Lecture and laboratory. 4 semester hours. Prerequisites: required - BIOL 111/112, BIOL 221 (Genetics) and completion of or concurrent enrollment in BIOL 320 (Cell and Molecular Biology). Offered by Dr. Thomas Meedel (tmeedel@ric.edu).

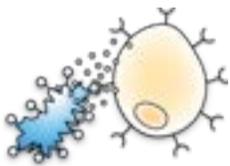


BIOL 324 - Vertebrate Zoology

With emphasis on diversity, evolution, and life history we will study adaptations of vertebrates. We will explore local fauna, form, and function through laboratory activities and field trips. Lecture, laboratory, and field trips. 4 semester hours. Prerequisites: BIOL 111, 112. Offered by Dr. Rebeka Merson (rmerson@ric.edu).



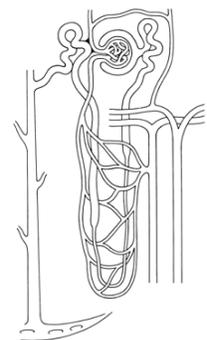
BIOL 431 - Immunology



This is a study of animal immune responses, with emphasis on the properties of antigens and immunoglobulins, cellular communication, pathology, and the development and regulation of humoral and cellular immunity. Lecture. 3 semester hours. Prerequisite: BIOL 111, 112; CHEM 205, 206; or consent of department chair. Offered by Dr. Dana Kolibachuk (dkolibachuk@ric.edu).

BIOL 536 - Advanced Physiology II

This is the second half of a full year medical physiology course which is consistent with the first year physiology curriculum at most medical schools. Topics for the spring semester will include renal function, acid-base balance, gastrointestinal system and endocrinology. 4 credit hours. Prerequisite: BIOL 535. Offered by Dr. Eric Hall (ehall@ric.edu).



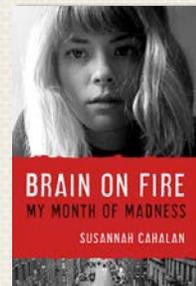
Introducing Career Panel Discussions to help Biology Majors see a Wider Range of Opportunities



The Biology Book Club and the Biology Club hosted a **Brain Science Career Panel** on October 22nd. Nine panelists brought enthusiasm about their careers and advice for undergraduates to the event. Students in biology, nursing, and medical imaging all could find something relevant to their own career exploration. The panelists, including three RIC grads, were at different stages of their careers and worked in (or have worked in) research, industry, health care and education. Each described their path to their current position, including several surprising and interesting stories. For example, a current graduate student in Biomedical Engineering started out pursuing a career in music! **Holly Dirks '10** went from a career in nursing to a RIC degree in secondary education to being a research coordinator at the Advanced Baby Imaging Lab at Brown University. She brought along several of her colleagues that participate in the research there in various roles. **Sara Moore '14** spoke highly of her experience here at RIC and the challenges and rewards of finding the next step. **Jessica Fidalgo '09** demonstrated the rewards of hard work. She had a double major in Biology and Psychology and then earned an MA at Boston University and now has a career in mental health counseling. RIC's own **Dr. Stilwell** and **Dr. Threlkeld** (Psychology) told students about research opportunities available at RIC and the minor in Behavioral Neuroscience. **Some of the advice from the panel? Ask questions. Get a mentor. Work hard. Do what you love. Network. Explore outside your comfort zone. Challenge yourself.** Plans are in the works for a Spring semester panel addressing careers in infectious disease. Stay tuned for announcements. Please forward comments and/or questions to Suzanne Conklin (sconklin@ric.edu). Thanks to the Biology Club for refreshments, advertising and logistical assistance. Photo credit: Dr. Govanar.

Biology Book Club

There are two remaining events scheduled for this Fall. We continue to focus on brainy things after reading Brain on Fire: My Month of Madness, by Susannah Cahalan. Everyone is encouraged to attend, even if they've never attended before and didn't read the book!



Video

The Secret Life of the Brain

Friday, November 14

12:00 noon - 1:00 pm

FLS 213

Snacks provided

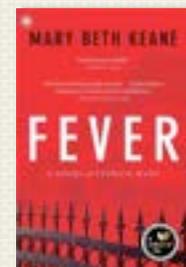
Book Discussion

Friday, November 21

12:00 noon - 1:00 pm

Brown bag lunch, dessert provided

Student raffle



The book for winter break will be Fever, a novel by Mary Beth Keane about the woman known as "Typhoid Mary." Read with the Biology Book Club!

FOGARTY LIFE SCIENCE Under Construction

President Carrioulo's comments about the upcoming FLS construction:



"The Fogarty Life Science renovation is limited to the areas devoted to the School of Nursing and includes a 9,000-square-foot addition that will house additional laboratories, a human patient simulator room, a student lounge and administrative offices. The project, designed by RCG Architects of Baltimore, will be bid for construction early next year. Construction is expected to start in late spring or early summer of 2015."



RIC STUDENTS TRAVEL TO SOUTH AFRICA

Dr. de Gouvenain and undergraduate students from RIC, Eric O'Rourke (left) and Bruno Ramos (right), traveled to South Africa with a group of botanists from the University of Connecticut to study two plant genera from one of world's biodiversity hotspots. The students collected specimens, made measurements, analyzed data and toured Cape Town and the nearby coast. What an adventure!



The Biology Club is hosting a Halloween Party during the free period (12:30-2:00 pm) on Wednesday, October 29 in the Biology Lounge. There will be food, fun, and a costume contest!

SENIOR SEMINARS

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

Come support our graduating seniors!

THUR 20 NOV: Kavohn Hadjisoffi, Bruno Ramos, Eva Gutierrez

WED 3 DEC: Keyshla Melendez, Zahra Melendez, Kaitlyn O'Connor

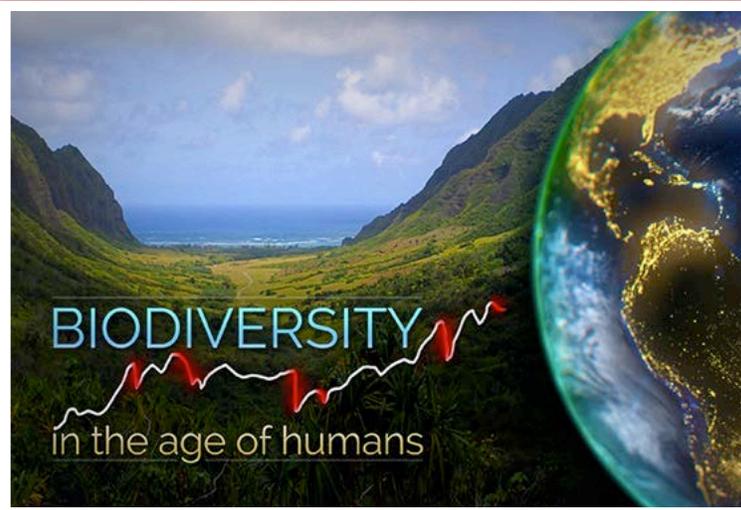
THUR 4 DEC: Alexander Todorovich, Meg Warburton, Rosezana Dong

THUR 11 DEC: Roberto Ramirez, Tiffany Ethier-Ribeiro, Joe Burgess

Greetings from down under!



Dr. Roberts sent this photo of a koala he took from the parking lot where he's now working. He said he sunburned his head watching it for 20 minutes!



The RIC Student Chapter of NSTA is hosting a screening of this year's series of Holiday Lectures on Science from the Howard Hughes Medical Institute. Six 1/2 hour lectures will be presented over two Fridays: October 24 and November 7.

10:00 am – 12:00 pm in FLS 209. Refreshments provided!

MA IN BIOLOGY

Did you know the Biology Department offers a research-based masters degree in Biology? Check it out at:

http://www.ric.edu/biology/program_ma.php



Xenia Fernandez completed her Master's degree last Spring under the direction of Dr. Britt.

Photo credit: Sara Moore

Did you catch it?



Our own **Dr. Lloyd Matsumoto**, Professor and Chair of the Biology Department, gave the faculty address at the First-Year Convocation on September 3, 2014. Check out the RIC news item to read more about his remarks:

http://www.ric.edu/news/details.php?News_ID=2599

Photo Credit: Dr. Meedel

REGISTRATION IS UNDERWAY!

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

Remember:

Biology Senior Seminar (BIOL 460) now requires pre-registration. See Sharon Rogers for details.

Independent study proposals are due November 15.