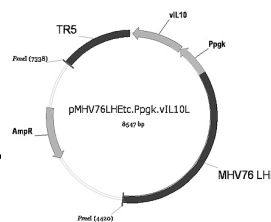


BIOFEEDBACK



The Newsletter of the Biology Department at Rhodes

Volume 21

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Number 2

The purpose of *BIOFEEDBACK* is to provide an important and timely vehicle for the dissemination of information concerning BOTH faculty and students of the Biology Department. Any notices or information that you wish to include in *BIOFEEDBACK* should be submitted to either Dr. Carolyn or Dr. Alan Jaslow. *BIOFEEDBACK* will be published each semester.



The Chair's Niche:

As biologists, we are familiar with multiple meanings of the word community. When we encounter it in our chosen field of study, we're inclined to define it as a collection of species inhabiting a common locale. Yet when we consider ourselves as individuals in a social and professional setting, the term evokes much different and broader connotations. As members of the Rhodes Community, we are encouraged to be active participants; the institution itself is dependent upon the activities of community members. To have an effective community we must do more than just attend to our class work. We must also attend performances and competitions, participate in governance, foster a welcoming social environment, recruit new community members, maintain connection with former community members, connect our local community to the broader community of colleges, universities and scholars, and more. One thing that seems to give Rhodes its particular strength is that its members are keenly aware of and fully committed to their obligations to the community.

But this newsletter is not about the larger Rhodes Community; it is about the community within the Department of Biology itself. It may be tempting to think of the departmental community as one that consists of the faculty and staff housed in Frazier-Jelke (perhaps including some of the six, four, eight, and zero-legged organisms with which we cohabitate). But that would be ignoring the fact that the majority of our community members are students – majors in biology, BMB, neuroscience, minors in environmental science, and even the non-majors who share our

classes. Unfortunately, I sometimes feel that the level of student commitment to department activities is a good bit less than that given to the Rhodes Community, even when the two communities are equally dependent upon the participation of its members. If you also recognize this dichotomy, then you will be glad to know that there are many ways you can be involved in the department. Attend seminars regardless of whether you gain course credit for attendance – you may not understand everything presented, but you will grow intellectually and show that you understand the importance of the sharing of research results. Participate in faculty searches when invited to meet with candidates - you have a say in the faculty who will teach you and future Rhodes students, and we can only recruit the best faculty if we demonstrate an actively engaged student body. Take advantage of sessions that introduce you to future options such as graduate school and health professions. Engage in research and present your own results at URCAS, in the Rhodes Journal of Biological Sciences or at regional or national conferences. In these and other ways the Department of Biology counts on students to contribute to its health and vitality.

--- Dr. Gary Lindquester



Primary Productivity and Secondary Growth:

The following is a list of honors, awards, publications and meeting participation of our faculty and students since October 22, 2006.

Honors and Awards:

CONGRATULATIONS TO ...

..... **Aaron Creek '07**, our new Luce Scholar! Aaron is one of only 15 students from around the country chosen for this honor, and Rhodes is one of only 67 colleges and universities that can nominate students for it. The scholarship will allow him to study in Asia for a year after which he plans to go to medical school at



either Arkansas or Tennessee, both of which have accepted him

.....**Cianna Pender '07** and **William Sheftall '07**, who were each granted a Freshwater Mollusk Conservation Society Award of \$220 for attendance at the meeting in Little Rock over spring break.

..... **Jackie Ward '10** and **Mary Elizabeth Huddleston '10**, who received Merck Fellowships to do research this summer with Drs. Hill and Loprete.

..... **Kelsey Dean '09**, who won last semester's *BIO-FEEDBACK* contest to identify the Biology faculty. See page 7 for this issue's contest.

..... **Dr. Keith Pecor**, who has completed his two years as a Biology Faculty Fellow, and is leaving Rhodes for a tenure-track position teaching ecology at The College of New Jersey.

..... **Dr. Tony Becker**, who will be back next year filling in for Dr. Blundon while he is on sabbatical leave, and three new members of the department. **Dr. Jonathan Fitz Gerald** will be our new specialist in plant biology and development. He is replacing Dr. Stinemetz, who resigned last year to become the Dean of his alma mater, Ohio Wesleyan. **Dr. Zeynep Gromley**, currently a post-doctoral research fellow at St Jude Children's Research Hospital, will be replacing Dr. Miller during her year of sabbatical leave. Additionally, **Dr. Sara Gremillion** will be our next Faculty Fellow, replacing, Dr. Pecor in this two-year position of research and teaching. For more information about these new faculty and the courses they will be teaching, see "New Faces, New & Old Courses," under Curricular Evolution on p. 3

.....**Dr. Jim Armacost**, who not only completed his doctoral degree from Illinois State University this spring, but also got married! Double congratulations!

PLEASE BE SURE TO LET US KNOW ABOUT YOUR AWARDS, HONORS AND ACTIVITIES.

Grants and Fellowships:



Drs. Loretta Jackson-Hayes, **Terry Hill**, Darlene Loprete and **Mary Miller** received a grant from the Merck/AAAS Undergraduate Science Research Program (<http://www.merckaaasusrp.org/>). The program is sponsored by The Merck Institute for Science Education administered by the American Association for the Advancement of Science (AAAS), with the goal of supporting student research at the interface between chemistry and biology, and of encouraging students to attend graduate school. The award (\$60,000 over three years) provides four stipends in each of the next three summers to support students who will work in

these professors' laboratories. Some participating students will be drawn from four regional Historically Black Colleges. The grant also supports a visiting young investigator each year to present a seminar and meet informally with students interested in graduate school. Some additional support for this program is provided by the Provost and the Departments of Biology and Chemistry.

Publications: (Be sure to send us copies of your publications when they appear! Thanks!)

Jose, M.V, **Brian Steinert '06**, V. Thomas, M.A. Abdalla, G. Price, G.M. Janowski, and D. Dean. 2007. Morphology and mechanical properties of electrospun nylon-6/MWNT nanofibers. *Polymer* 48:1096-1104.

Stratton, M.A. '06 and **D.H. Kesler**. 2007. The role of light and oxygen in *Chaoborus punctipennis* (Insecta: Diptera) diel vertical migration. *J. Freshwater Ecol.* 22:101-106.

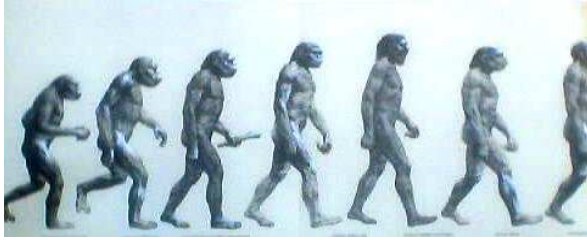
Meetings:

Dr. Jim Armacost attended the 4th North American Ornithological Conference in Veracruz, Mexico, where he presented "Ecology of Amazonian river-island birds" on 4 October, 2006.

Adam Bohnert '07 and **Dr. Roseanna Cappellato** presented "Soil respiration in forested versus non-forested urban areas in Memphis, TN" at the 4th annual Southeastern Ecology and Evolution Conference on March 16-18, 2007 at the University of Central Florida in Orlando, Florida.

In October, **Dr. Carolyn Jaslow** traveled to the meeting of the American Society for Reproductive Medicine in New Orleans to present the results of her research with Fertility Associates of Memphis and the University of Tennessee. At the meeting Dr. Jaslow presented "Relationship of the CD9 protein on human granulosa cells and platelets with fertilization rates in women undergoing in vitro fertilization (IVF)," co-authored with W. H. Kutteh, R. W. Ke, K. S. Patterson, S. Cholera and L. K. Jennings, and "Etiology of recurrent pregnancy loss (RPL) in 1018 women," co-authored with J. Carney, L. Norman, S. Fong, R. W. Ke & W. H. Kutteh. Dr. Jaslow was also co-author of "Elevated homocysteine levels in women with recurrent pregnancy loss (RPL) are associated with A1298C mutations of methylenetetrahydrofolate reductase (MTHFR) in the absence of C677T mutations," with W. H. Kutteh, and R. W. Ke.

Curricular Evolution:



Course Changes and Announcements:

Meeting Course Demand

Fall pre-registration for upper-level Biology courses was tight, so we established a procedure to consider requests for adding students to its upper level classes. We will continue this procedure this spring. If you wish to add an upper level course after the tree registration system has run, you must complete and submit a request form. Look for the form and a submission deadline to be posted on the department web page under curriculum or courses links. The process allows us to consider all student requests fairly and to address the most pressing needs first (such as graduation requirements). In addition, the information you provide on your form will help us anticipate future demand and work to respond accordingly. For example, from the information we gained during the fall drop/add period, we increased the total number of upper level offerings next year. The down side is that class sizes at the upper level will rise to 20 for lab courses and 30 for non-lab courses. Please have patience with our "growing pains".

New & Old Courses in '07-'08

Our fall course selections are listed in the "Optimal Foraging" table to the right, and with Drs. Miller and Blundon on sabbatical leave, and several new faculty arriving next year, you can imagine that there will be some necessary changes. At present, **Microbiology** and **Neuroscience** are not scheduled to be taught next year, though we plan to offer both in '08-'09. One exciting addition to our fall roster is **Biol. 380, Topics in Biomedical Science**, described in the following paragraph. **Genetics** will be taught in both the fall and spring terms by **Dr. Gromley**, who is Dr. Miller's sabbatical replacement, and **Animal**

Physiology will be taught in the spring semester by **Dr. Becker**, who fills in for Dr. Blundon. Additional courses planned for spring include **Evolution, Mycology, Embryology, Environmental Issues in South Africa, Coral Reef Ecology**, and **Molecular Biology**. Plus, we are very excited about the return of **Mechanisms of Development**, which will be offered in the spring by our new developmental plant biologist, **Dr. Fitz Gerald**.

BIOL 380 - Topics in Biomedical Science

You've seen it in the catalogue for several years; we're finally able to offer it! BIOL 380 will be taught by four post-doctoral fellows from St. Jude with the supervision of Dr. Lindquister. Each post-doc will teach a subject related to her or his research. Each topic will include a couple of lectures on upper level material related to the research, reading and discussion of a review and primary literature article, and discussion of state-of-the-art techniques. A few class sessions may be held at St. Jude. Students will be evaluated by performance on one quiz and one exam for each section. BIOL 380 will satisfy one upper level course requirement without lab or one BMB elective course requirement. It will meet on Tue & Thurs from 7:30 – 8:45 am so the post-docs can get to their research jobs by 9:00 as required by St. Jude.

Optimal Foraging

The following courses will be offered next semester

NUMBER	COURSE TITLE	HOURS OFFERED
130	Biology I	TuTh 8 – 9:15 or 11 – 12:15
131	Biology I Lab	Tu 12:30-3:30, Wed 1 – 4, or Th. 12:30 – 3:30
200	Evolution	TuTh 8:00-9:15
304	Genetics	TuTh 8:00-9:15 Th lab 12:30 – 3:30
307	Cell Biology	TuTh 9:30 – 10:45
BCMB 310	Methods in Cell Bio/Bioch	W 1:00 – 5:00
315	Ecology	MWF 9:00 – 9:50 Tue lab 12:30-3:30
320	Conservation Biology	MWF 10:00 – 10:50 Mon lab 1:00 – 4:00
350	Comp Vert Morph	MWF 9:00 – 9:50 & labs Tue 12:30 – 3:30, F 1 – 3
360	Histology	MWF 10:00 – 10:50 Wed lab 1:00 – 4:00
380	Topics in Biomedical Science	WF 7:30 – 8:45



Methods Lab is now listed under BCMB

Methods in Cell Biology & Biochemistry, formerly BIOL 310, is now listed as BCMB 310. If you want to take this 2 cr. lab with Cell Biology (BIOL 310) or Biochem. (CHEM 414) you should list BCMB 310 in the Lab portion of your tree. Students wishing to take it alone, because they took Cell or Biochem. previously, should enter BCMB 310 in the main tree (A, B, or C).

Comparative Vertebrate Morphology Biol-350

CVM will again be offered with two 9 AM lectures most weeks and two (unequal) formal lab meetings a week. One is Tue lab meeting from 12:30-3:30 PM. The second lab each week is Fri. for a minimum of 50 minutes, either from 1-1:50 PM or from 2-2:50 PM. Two additional lab hours are required but these may be at other times during the week. The variable Friday lab time allows students to pre-register in another class meeting MWF at either 1 or 2 PM. CVM has two course numbers this year, the first will include the lecture and Tuesday lab. This one must be enrolled from the main tree (A, B, or C). The second number will offer two sections for the two Friday lab times. Please pick the 1PM Friday time if you can. This Friday part should be added from the Lab portion of the tree. See Dr. A. Jaslow if you have any questions.

SENIOR SEMINAR LOTTERY

Wednesday March 28th

Next year, the Biology Department will offer four sections of Senior Seminar (topics described below). In addition, Biology majors may sign up for limited openings in the BMB senior seminar in the spring, or the fall Neuroscience senior seminar, offered through the Psychology Department. If you want to enroll in either the BMB or the Neuroscience seminars (described below) you must e-mail Dr. CJaslow, who will honor those requests in the order they are received beginning at noon on Monday March 26. **Students who wish to reserve a slot in one of the other four seminars must do so via lottery to be held in the Biology Library at 12:00 noon on Wednesday, March 28.** If you cannot attend the lottery, you must send a representative prepared with an ordered list of your choices. Once you have signed up by lottery, list your reserved senior seminar section last on the tree under the category of "Other Courses" when you do pre-registration for that particular semester. Students will not be allowed to enroll in a seminar section other than the one which they reserved. If you have questions about the lottery, or are planning to graduate in December, contact Dr. C. Jaslow

Senior Seminar Choices for '07 -'08

BIOL 485(1). Visiting Asst. Professor **Dr. Anna Bess Sorin** will teach "**Molecular Ecology**" Tu/Th 9:30-

10:45. Advances in molecular biology have revolutionized all areas of biological research, especially population ecology and animal behavior. Modern techniques, when coupled with field research, can address questions regarding degrees of relatedness among individuals, parentage analyses, how social systems affect population structure, and the distribution of species (phylogeography). The goal of this seminar will be to introduce students to the methods and questions currently being addressed in molecular ecology, and to equip them with the skills to appreciate and critically assess the value of these studies.

BIOL 485(2): Meeting on Tu/Th 4-5:15, **Dr. Hill's** fall seminar is "**Medical Mycology**". The course will focus on fungal pathogens of humans and other animals – with student-elected topics such as molecular mechanisms of pathogenesis, the ecology of fungal pathogens, cellular aspects of development, molecular biology of drug resistance, recent advances in vaccine development. Emphasis will be placed upon recent research from the primary literature, selected, presented, and discussed by students in the class. All students will be responsible for submitting summaries and discussion questions from the assigned readings and for evaluating one another's work.

NEUR 485. In the fall, **Dr. Gerecke** from the Psychology Department will offer "**Neuroscience of the Altered Mind**" MWF at 3:00 PM. This seminar will examine the biological underpinnings of psychological and neurodegenerative disorders, with special attention to how alterations in the normal workings of the brain manifest as behavioral and cognitive dysfunctions. This seminar is required for all Neuroscience majors, but may be taken by Psych. and Bio. majors, with openings for up to 5 Biology majors, who should enroll by e-mailing CJaslow as described above.

BIOL 486(1): **Dr. C. Jaslow's** spring seminar, "**Reproductive Biology**," will meet Tu/Th. 11:00 – 12:15. The first half of the semester will focus on human reproduction, with students reading and presenting background information and primary literature on pre-assigned topics such as sperm maturation and hormonal control of egg development. During the second half of the semester, students will select a topic to research and present concerning any aspect of reproductive biology, from human issues (male contraceptives, immunology and the fetus) to other topics (parthenogenesis, variation in placentas). All students will be responsible for submitting summaries and discussion questions from the assigned readings, and for evaluating one another's work.

BIOL 486(2). Scheduled Tu/Th 4-5:15, **Dr. Zeynep Gromley's** spring seminar, "**Eukaryotic Cell Cycle Regulation**," covers topics such as protein phosphorylation and degradation controls of the cell cycle, and regulation of mitotic cyclins and cyclin dependent

kinases. Dr. Gromley will introduce these topics and others important to cell cycle regulation (and the loss of regulation that occurs, for example, in cancer) before specific papers are assigned for student presentations. Course goals are to familiarize students with current cell cycle concepts, to develop their ability to read primary literature and interpret experiments, and to improve oral presentation and writing skills.

BCMB 486(1) **“St. Jude/Biochemistry and Molecular Biology Interdisciplinary Senior Seminar”** will be meet spring semester MW 4:15-5:45. This course, offered by **Dr. Loprete**, will focus on the biochemistry and molecular biology of human health problems, with faculty from St. Jude Children's Research Hospital, visiting Rhodes to present their research. Students will read and present background information and primary literature on the topics to be covered. This seminar is required for all BMB majors, but may be taken by up to 6 Biology majors. Biochem. (Chem 414.) is a prerequisite. Additional prerequisites are Genetics (Biol. 304), Molecular Biology (Biol. 325) or Cell Biology (Biol. 307), or permission of Dr. Loprete. Biology majors who wish to take this seminar should enroll by e-mailing CJaslow as described above.



Signals and Displays (short communications)

TN ACADEMY OF SCIENCE MEETINGS

The Western Collegiate Tennessee Academy of Science Meeting will be held at LeMoyne-Owen College on Sat. March 24. This is a chance for you to learn about the research conducted by undergraduates in our area. You do not need to present a poster or paper to attend. Come support Rhodes at this event. If you have any questions, contact Dr. Kesler - he'll even give you a ride to the meeting! .

BIOLOGY SEMINAR SERIES

Our final scheduled seminar is coming up quickly. On Wednesday, March 28th, **Dr. Julia Cherry '99** from The University of Alabama will speak about “Global Climate Change and the Persistence of Coastal Wetlands.” Please come hear her talk.



The seminar will begin in FJ-B at 4:15. Refreshments, and an opportunity to meet and speak to Dr. Cherry, will be available in the Biology Library at 4:00.

TRI-BETA NEWS

Beta Beta Beta ($\beta\beta\beta$) is the biological honor society for the Rhodes Biology Department. $\beta\beta\beta$ has a two-fold purpose. The first is to provide a club where individuals with a shared interest in biology can get together, in a setting free of classroom pressures, and have a little social interaction and fun. The other purpose is that of an honor society. $\beta\beta\beta$ is a national honor society and is dedicated to the enrichment of its members' scientific experiences and to the sharing and dissemination of information gleaned from those experiences. Current chapter activities include participation in the Rhodes Journal of Biological Sciences, work on a collaboration between Central High School students and post-docs from St. Jude, a Science Fair Expo for Snowden Elementary School students in April, and monthly meetings. $\beta\beta\beta$ provides a forum to recognize those students, with biology as their undergraduate major, who excel academically. Regular membership can only be attained through invitation, but any student meeting the criteria below who is interested in becoming an associate member for the next school year should contact the $\beta\beta\beta$ president. Membership for regular and associate members has already concluded for this school year ('06-'07). Any questions may be directed to current $\beta\beta\beta$ president, Aaron Creek (creat@rhodes.edu).

$\beta\beta\beta$ Associate Membership requirements:

- ☞ 1 completed biology course (grade of B or better)
- ☞ An interest in biology
- ☞ One time \$35 initiation fee

$\beta\beta\beta$ Regular Membership requirements:

- ☞ Must be a Biology Undergraduate
- ☞ 3 completed semesters of Biology at Rhodes
- ☞ At least a 3.0 average in Biology at Rhodes and 3.0 average overall
- ☞ General good academic standing at the college
- ☞ One time \$45 initiation fee

\$\$ BIOLOGY RESEARCH AWARD \$\$

This spring, the Biology Department will again be presenting the **"Award for Outstanding Student Research in Biology"**. Any student who has completed research at Rhodes or elsewhere is eligible for this award and cash prize. To be considered, a student must submit a three to five page research paper, plus a recommendation from the research supervisor, to Dr. Miller by Friday, March 30th. Copies of the recommendation form may be obtained from Dr. Miller. Announcement of the award winner will be made at spring awards ceremony on Friday, April 27th.

WORK IN THE BIOLOGY DEPARTMENT!

The [Biology](#) Department is looking for several students to work as lab TA's for the core biology classes next fall and spring. These TA positions will consist of approximately 8-10 hours a week of work. We prefer someone who has an interest in Biology and has taken Bio I and II for [the](#) job. Pay and further details concerning [being a TA](#) will be discussed on an indi-

vidual basis. Please feel free to contact Christian Hardin at 843-3561 (email: Hardin@Rhodes.edu) for additional information. Applications for [the lab TA](#) job can be find outside room FJ 127W. The deadline for the fall/spring positions is April 13th, 2007.

Student Research 2006-07 Sponsored by Programs at Rhodes (Rhodes faculty supervisors listed)

Teresa Bell '07. *Fos expression elicited by suckling in neonatal rat pups.* UT Undergraduate Neuroscience Research Fellow with Dr. Matthew Ennis, UT Anatomy & Neurobiology, (Dr. Jay Blundon).

Teresa Bell '07. *Size-age relationship, patch growth, and genetics of the Pawpaw (Asimina triloba) in Overton Park.* Bio 451 (Dr. David Kesler).

Adam Bohnert '07. *Soil respiration in Overton Park.* Bio. 451 & 452 (Dr. Rosanna Cappellato).

Christie Champion '07. *Size-age relationship, patch growth, and genetics of the Pawpaw (Asimina triloba) in Overton Park.* Bio 451 (Dr. David Kesler).

Aaron Creek '07. *Calcium overload-induced proteolysis of ventricular myocytes* with Dr. Polly Hofmann, Dept Physiology, UT Health Sci. Center.

Tyler Cullender '08. *The activity of the budding yeast G1 cyclin Cln3 in the absence of genes primarily associated with mRNA export.* Bio 451 (Dr. Mary Miller).

Tyler Cullender '08. *Hydrodynamics and behavioral tradeoffs in crayfish.* Bio 451 (Dr. Keith Pecor).

Ryan Dagen '08. *Broad-spectrum suppressor of cell wall mutants in Aspergillus nidulans.* Bio. 452 (Drs. Terry Hill & Darlene Loprete).

Mary Landon Downs '08 *The role of nucleoporin components Nup2 and Nup188 in G1 cyclin Cln3 dependent viability in the budding yeast S. cerevisiae.* Bio 451 & 452 (Dr. Mary Miller)

Kelsey Dean '09. *The influence of hydrodynamics on chemically-mediated behavioral tradeoffs in the red swamp crayfish, Procambarus clarkii.* Bio 452 (Dr. Keith Pecor).

Kimberly Green '09. St. Jude Summer Plus research program with Dr. Jeff Sample, Biochemistry.

Jacki Hancock '10 *The role of the UBE3 gene in G1 cyclin Cln3 dependent viability in the budding yeast S. cerevisiae.* (Dr. Mary Miller)

Anastasia Hartzes '08. *Analysis of male factor infertility relative to contraction of Chlamydia and corresponding treatment.* Bio. 452 (Dr. Carolyn Jaslow).

Kelly Hoth '08. St. Jude Summer Plus research program with Dr. Matthew Krasin, Radiation Oncology.

Jessica Johnson '10. *The effects of predation risk and female choice on male advertisement calls in the spring peeper, Pseudacris crucifer.* (Dr. Keith Pecor).

Stephanie Juchs '08. *Green spaces creation in an underprivileged urban community in Memphis.* Bio. 451 & 452 (Dr. Rosanna Cappellato).

Katherine Key '07. *A contrast of sampling techniques for amphibians.* Bio 451 (Dr. Keith Pecor).

Katherine Key '07. *The effects of non-lethal exposure to pesticides on amphibians.* Bio 451 & 452 (Dr. Keith Pecor).

Katherine Key '07. *The effects of predation risk and female choice on male advertisement calls in the spring peeper, Pseudacris crucifer.* Bio 452 (Dr. Keith Pecor).

Haynes Kleimeyer '08. St. Jude Summer Plus research program with Dr. Jon McCullers, Infectious Diseases.

Sarah Mercer '08. *KAP114 and YLR004C impact G1 cyclin Cln3 dependent viability in the budding yeast S. cerevisiae.* (Dr. Mary Miller).

Kareem Mansur '08. *Determining the quantity of infectious virus in the lungs of mice infected recombinant and wild type gammaherpesvirus.* Bio 452 (Dr. Gary Lindquester).

Megan McKenna '08. *Generation of revertant control virus for the analysis of Epstein-Barr virus interleukin-10 homolog in a murine infectious model.* Bio 451 & 452 (Dr. Gary Lindquester).

Beven McWilliams '08. *Ecological interactions between birds and invasive plants.* Bio 451 (Dr. Jim Armacost, Jr).



Beven McWilliams '08. *Parasite intensity in fish.* Bio. 452 (Dr. David Kesler).

Arian Moshref '08. *Effect of high glucose on human peripheral blood endothelial cells.* Bio 452 with Dr. Frankie Stentz (UTHSC), (Dr. Gary Lindquester).

Suvi Murti '07. St. Jude Summer Plus research program with Dr. Allen Porter, Infectious Diseases.

Sini Nwaobi '07. *The role of IL-16 signaling in long term potentiation of CA3 recurrent collateral synapses in the mouse hippocampus.* (Dr. Jay Blundon).

Cianna Pender '07. *Abundance and distribution of freshwater mussels in the Chipola River below the Dead Lakes in Gulf County, Florida with focus on the Chipola Slabshell, Elliptio chipolaensis.* Bio 452 (Dr. David Kesler).

Crystal Phelps '08. *Broad-spectrum suppressor of cell wall mutants in Aspergillus nidulans.* Bio. 452 (Drs. Terry Hill & Darlene Loprete).

Adam Robinson '07. *Ecological interactions between birds and invasive plants.* Bio 451 (Dr. Jim Armacost, Jr).

Caroline Sartain '07. St. Jude Summer Plus research program with Dr. Beatriz Sosa-Pineda, Genetics Tumor Cell Biology.

William Sheftall '07. *Do freshwater mussels form a single growth ring every year?* Bio. 452 (Dr. David Kesler).

Ed Smith '07. *The role of IL-16 motor learning in the mouse hippocampus.* Bio 451& 452 (Dr. Jay Blundon).

Nicole Thomas '08. St. Jude Summer Plus research program with Dr. Sue Kaste, Radiological Sciences.

Amy Wells '07. St. Jude Summer Plus research program with Dr. Clinton Stewart, Pharmaceutical Sciences.



Cover page figures: At left: Dog Skeleton <http://www.arthursclipart.com/>, At right: Plasmid Map

Your Chance to Win a Fabulous Prize

Scavenger Hunt: How well do you know the Biology Department and the Frazier-Jelke Science Center?

1) What area in FJ has a plaque honoring a donor whose name matches that of mass murderer, Charles Manson?

2) Who won the first award for Research in Biology? _____

3) To whose memory is a rose dedicated? _____

4) How many rest rooms are there in FJ? _____

5) Name three organisms featured in the old nature posters on the walls of FJ.

6) Which teaching laboratory in the department has the largest number of doorways leading into other spaces (i.e., into a hallway or another room)? (Give the room number) _____

7) Who is the best person in the department to ask if you need to borrow a stapler _____

8) In which FJ corridor will the water fountain squirt your friend who is standing 3 feet away from you?
northeast, northwest, southeast, southwest, west

9) What retired (now deceased) Rhodes Biology faculty member was the first Director of the Rhodes Electron Microscopy Laboratory? Hint: his original electron microscope is on public display somewhere in the department" _____

10) How many Biology faculty are there presently (not including the new hires for next year)? **9 10 12 14**

Name: _____ **e-mail to notify if you win:** _____

All entries must be turned in to the Biology Department office FJ 102 before 4:00 pm on Friday April 13, 2007. If there are multiple correct entries, the winner will be selected from a random drawing. The prize is a \$15 gift card at The Middle Ground.