



The Undergraduate Newsletter

The Department of Biochemistry and Molecular Biology

Fall 2001
Volume 9.1

What do you need to know about the new Academic Integrity Policy?

Inside this issue:

As regular readers of *Undergraduate Newsletter* may recall, Dr. Richard Frisque wrote a guest editorial in Spring 2000 in which he addressed the pending implementation of a revised policy on Academic Integrity (*Newsletter* Vol.7.2) being considered by the University Faculty Senate(UFS) at that time. The revised policy has now been approved and can be found in its entirety on the web at <http://www.psu.edu/ufs/policies/>. In this brief editorial, I would like to highlight the more salient changes created by the new policy.

First, each college is directed to *appoint a Committee on Academic Integrity made up of faculty, students, and academic administrators with faculty being the majority* (Policy 49-20). The purpose of the college committees is to review any cases of academic dishonesty identified by a faculty member and particularly those contested by the student(s).

What this means to you: If a faculty member accuses you of an act of academic dishonesty, you may either admit your guilt and accept the sanction specified by the faculty

member **OR** you may contest the accusation if you did not, in fact, commit the act of dishonesty. In **either case, you must sign** an Academic Integrity form which is forwarded to the college committee. From that time forward in **contested cases**, all arguments – from both student and faculty member - are heard by the college committee. Decisions by the college committee will be final. Second, there is a new grade designation, **XF**, that may be placed permanently on the academic record. This new grade is both an academic and a disciplinary sanction. It is reserved for the most egregious acts of dishonesty and is applied only by the Office of Judicial Affairs following review of any case forwarded to it by the college committee.

What this means to you: Unless you are charged with an act of premeditated dishonesty or, by some deliberate action of yours, have caused another student to have a lowered grade, you will not need to be concerned about this new grade. Should any act be deemed worthy of this sanction, however, you will not be able to have the imposed XF grade re-

moved by such actions as dropping the course, withdrawing from the University or petitioning the University Faculty Senate.

In some ways, it is unfortunate that so much time and effort have been and will need to be expended to create and maintain the necessary structure to deal with cases of academic dishonesty. While honesty and integrity are qualities that should be applicable to all aspects of our lives, it is essential that they be applied to the conduct of science. The very heart of science is that it seeks truth. Scientists know their published results and conclusions will be tested by the refining work of other scientists. All who aspire to work in science or make science a career must, without a second thought, be scrupulously honest. As Dr. Frisque stated in his editorial, let us -- students **and** faculty -- “continue to seek ways to respond proactively to assaults on academic integrity.”

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Dr. Philip Mohr**

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Fall



Spring

Biol 222 to be offered Fall and Spring semesters

Beginning with the '01-'02 academic year, Biol 222, **Genetics**, will be offered in both Fall and Spring semesters. Consequently, there are only 2 as opposed to 4 sections of the course being offered in FA01. If you are having problems fitting all of your required courses into the Fall semester, delaying Biol 222 until the Spring semester may help resolve some or all of your problems!

Dr. Phillips Retires..... and Dr. Ann Marie Daniel Bids Farewell

After more than 30 years of service to Penn State, Dr. Allen Phillips has retired. Dr. Phillips is perhaps best known among undergraduates for teaching the department's two introductory biochemistry course sequences. However, over the years, Dr. Phillips has also mentored numerous students in undergraduate research projects. He has been a dedicated adviser to undergraduate BMB advisees and served as faculty adviser to the Biochemistry Society. Dr. Phillips' research has focused on the enzymology of histidine degradation using the *Pseudomonas putida* system. While he has retired, Dr. Phillips will still be seen around the department in his new role as Professor Emeritus.

Dr. Ann Marie Daniel has left the BMB Department where she will be greatly missed by students and colleagues. The good news is that she has not moved very far! Students may still see Dr. Daniel walking around the Penn State campus in her new position as Associate Director of Graduate Fellows/Internships in the Life Sciences Consortium located in Wartik Laboratory. We certainly wish Dr. Daniel the very best in her new role.



BMB 446

A Reminder for BMB

If you are a BMB major who plans to graduate in FA01 or SP02, and if you have not yet taken BMB 445W, please be reminded of the following change to a required course in your curriculum. Although BMB 445W appears as a 3 credit course on older check sheets, it was recently divided into two courses, BMB 445W and BMB 446, for 2 credits and

1 credit respectively. Many students who scheduled BMB 445W last year did not appreciate that they were signing up for a 2-credit course instead of a 3-credit course. Furthermore, they did not realize that the new course, BMB 446, existed and that they needed to schedule this course to fulfill their degree requirements. Imagine their surprise when they

were told they had not completed all graduation requirements. Don't you be caught in the same situation!! Finally, you need to be aware that BMB 446 is offered **ONLY** in Fall semesters. So, if you will be graduating this fall or coming spring, be sure to schedule BMB 446 THIS SEMESTER.



Megan Bergkessel wins 1...2...3...4 Awards!!

Each year, the BMB Department is proud to have individuals from among its undergraduate body selected for prestigious national awards. This year is no exception. We are particularly proud that Megan Bergkessel (BMB '01) was selected as one of two departmental recipients of a Howard Hughes Pre-doctoral Fellowship in the Biological Sciences. But as if that were not impressive enough, Megan was also selected to receive an NSF Graduate Fellowship Award **AND** a Fulbright Fellowship. Megan is using her Fulbright to study bioinformatics in New Zealand. The Fulbright grant covers travel, board and lodging, as well as tuition costs, for one year's study or research overseas. She did the research for her undergraduate thesis in the lab of Dr. Joseph Reese, and that brings us to Megan's fourth award. Megan was named the win-

ner of the departmental Fred Wedler Outstanding Undergraduate Thesis Award. Readers may view Megan's name and the names of previous winners on a plaque in the lobby of Althouse Laboratory.

After returning from New Zealand, Megan will use her Howard Hughes award to undertake graduate study at the University of California, San Francisco.

The NSF award provides \$14,000 per year plus tuition and fees for 3 years of graduate study leading to the Master or Doctoral degree in physical, biological and mathematical sciences. Awards are made to graduating seniors and first year graduate students.

Megan was also selected as an American Society for Microbiology Undergraduate/Graduate Research Fellow for 2001. Megan presented the find-

ings of her research in a talk **AND** in a poster at the national meeting in Orlando in May. As a Research Fellow, Megan's trip and expenses to the meeting were paid by the ASM.



Co-op Students Investigate 'Real World' Experience

Each semester and frequently including summers, students from the BMB Department apply for and are accepted into Co-op positions in various industries. There are several good reasons to consider undertaking a Co-operative Education experience: 1) discover how the science presented in course work is used in commercial enterprises, 2) be exposed to instrumentation and techniques that are not likely to be found in an academic environment, 3)

gain valuable experience that can enhance a resume, 4) meet people who can serve as references, 5) **get paid!!** This is an incomplete list and does not include intangible factors that may be equally important to many students.

Students who participated in a Co-op experience over the summer are:

[See Page 6]

One last word, Co-op experiences can be arranged almost anywhere in the world! Perhaps you are someone who finds the possibility of working in a company in another part of the world exciting. It can be done! Check with the Co-op Office in 520 Thomas (865-5000) for information on how you can participate in this very worthwhile program.



Drew Lowery Selected for Howard Hughes Award



In the case of Howard Hughes Pre-doctoral Awards, good things come in two's! Drew Lowery was also named a recipient of this very prestigious award. The award provides for up to five years of support for graduate study toward the PhD in biological sciences. Only 80 HHMI Predoctoral Fellowships are awarded nation-wide annually. Drew is attending MIT for his doctoral studies.

... and More NSF Winners

The National Science Foundation makes awards not only to seniors but also to students in their first year of graduate study. In addition to Megan and Drew, Sonja Pyott(BMB '00), who finished her first year in the Neuroscience Department at Stanford University, was named an NSF winner.

Because of the high quality of applicants, the NSF also generates an "honorable mention" list of students who are deserving of an award but for whom funding is simply not available. Named to this list were *Drew Lowery* and first (now second) year graduate students: Shannon T. Bailey(BMB '00) at Yale University and Douglas Sheridan(BMB '00), also at Yale.

WALKOVICH WINS HAUSER PRIZE

Each spring, The Schreyer Honors College sponsors an Undergraduate Exhibition in which the results of research conducted by undergraduates is presented in a poster format or, for students in the performing arts, as a recital. Winners are selected in various broad disciplines. From among those winners, one student is selected to

receive the Gerard A. Hauser Prize, representing the best presentation of research findings. For 2001, **Kelly Walkovich** (BMB 01) was awarded the Hauser Prize for her research on "SNPs on Chips: Single Nucleotide Polymorphism Characterization via Micro-fabricated DNA Chip Technology" which she con-

ducted in the laboratory of Drs. Andrew Ewing and Mitch Price in the Department of Chemistry. CONGRATULATIONS, Kelly, on a tremendous honor!!



JASON HUHN WINS UNDERGRADUATE RESEARCH AWARD



Jason Huhn (Micrb 01) was named a third place winner in the Health and Life Sciences division of the 2001 Undergraduate Exhibition. Jason's research was titled "Proteinase-Polymerase Precursor Protein as the

Active Form of Feline Calicivirus RNA-Dependent RNA Polymerase". Jason also won the first prize for an oral presentation of his work at the annual meeting of the Allegheny Branch of the

American Society for Microbiology, held in State College last October. Jason conducted his research in the laboratory of Dr. Craig Cameron. TWO GREAT ACCOMPLISHMENTS, Jason!



Kirstin Milks Selected an ASM Summer Fellow

Kirstin Milks (BMB 02) was selected as an American Society for Microbiology Summer Fellow. The fellowship provides a summer stipend, supply money and funds to travel to the annual ASM meeting, to be held in Salt Lake City next May. Kirstin is working in the laboratory of Dr. Donald Bryant. Kirstin is attempting to produce tagged CsmH, a chlorosomal envelope protein found in *Chlorobium tepidum*, an anaerobe extremely efficient in photosynthesis. At the same time, she is characterizing a null strain, as well as strains with multiple inactivations of the other chlorosomal proteins typically found in the envelope.

**TAKE NOTE BMB 437 TO BE
OFFERED SP02**



The BMB Department is pleased to be able to offer BMB 437, Physiological Biochemistry, in Spring semester. BMB 437 is a 2-credit course that may be used as a List A elective in the BMB major. The *Bulletin* description for the course reads: **Physiological aspects of biochemistry, with emphasis on mammalian metabolism, specialized tissue and fluid functions, detoxification mechanisms, energetics and physiological interrelationships.** The course has a prerequisite of BMB 402. It is tentatively scheduled for MW 2:30-3:20 Schedule #926229. You may wish to include BMB 437 in your planning when the time comes for registering for Spring courses.



Attention CLS Juniors

There will be an informational meeting regarding the senior year clinical practicum on Monday, September 10 at 7 p.m. in 112 S. Frear. All students in the CLS Option of the Biotechnology major who will have completed the nonclinical course requirements of the major by the end of SP02 semester are eligible for admission to the hospital program and should attend this meeting. Information about the profession, the steps of the admission process, the clinical practicum, job opportunities, etc. will be discussed. Contact Dr. Mohr if you plan to apply but are unable to be present that evening.



Co-op Students Investigate
'Real World' Experience
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Roula Aincharibeh	BMB	Cell & Molecular Technologist, Inc. Phillipsburg, NJ
Kim Allen	BMB	Walter Reed Army Inst. Of Research, Silver Springs, MD
Melissa Baker	BMB	Glaxo Smith Kline, Philadelphia, PA
Dana Benini	BMB	Glaxo Smith Kline, Philadelphia, PA
Joseph Carnicella	BMB	Glaxo Smith Kline, Philadelphia, PA
Tri Duong	BMB	Wistar Institute, Philadelphia, PA
Jennifer Ford	BMB	Glaxo Smith Kline-UK, Hertfordshire Eng
Lisa Gelatko	BMB	Glaxo Smith Kline, Philadelphia, PA
Erin Heritage	BMB	R.W. Johnson Pharmaceutical Research, Spring House, PA
Peter Jordan	BMB	Glaxo Smith Kline, Philadelphia, PA
Monica Kosmatka	BMB	Glaxo Smith Kline, Philadelphia, PA
Kirsten Lynn	BMB	R.W. Johnson Pharmaceutical Research, Spring House, PA
Daniel Lysko	BMB	Glaxo Smith Kline, Philadelphia, PA
Richard Motruk	BMB	McNeil Consumer Healthcare, Fort Washington, PA
Dennis R.Powell	BMB	Glaxo Smith Kline, Philadelphia, PA
Howard Reid	BMB	M&M/Mars, Hackettstown, NJ
Michael Reilly	BMB	Glaxo Smith Kline, Philadelphia, PA
Mark Rodgers	BMB	McNeil Consumer Healthcare, Fort Washington, PA
Thomas Rutkoski	BMB	Supelco, Bellefonte, PA
Shawn Shearn	BMB	Glaxo Smith Kline, Philadelphia, PA
Matt Toner	BMB	Glaxo Smith Kline, Philadelphia, PA
Teo Tran	BMB	Glaxo Smith Kline, Philadelphia, PA
Joseph Vennarini	BMB	Glaxo Smith Kline, Philadelphia, PA
Leslie Albright	Biotechnology	R.W. Johnson Pharmaceutical Research, Spring House, PA
Michael Capaldi	Biotechnology	Centocor, Malvern, PA
Matthew Constanzer	Biotechnology	Glaxo Smith Kline, Philadelphia, PA
Melissa Drexel	Biotechnology	Fox Chase Cancer Center, Philadelphia, PA
Scott Jarvis	Biotechnology	Glaxo Smith Kline, Philadelphia, PA
Patricia Kratz	Biotechnology	Fox Chase Cancer Center, Philadelphia, PA
Dana Pietrzak	Biotechnology	University of Pittsburgh Medical Center, Pittsburgh PA
Heather Reed	Biotechnology	Merck & Co., Inc., West Point, PA
Abby Smith	Biotechnology	Danone International Brands, Inc., Milesburg, PA
Tim Stewart	Biotechnology	Glaxo Smith Kline, Philadelphia, PA
Michael Strunk	Biotechnology	Walter Reed Army Inst. Of Research, Silver Springs, MD
Chia-Hao Tsung	Biotechnology	Walter Reed Army Inst. Of Research, Silver Springs, MD
Jessica Ackerman	Microbiology	Walter Reed Army Inst. Of Research, Silver Springs, MD
Todd Borland	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Kassi Cronin	Microbiology	Walter Reed Army Inst. Of Research, Silver Springs, MD
Richard Egolf	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Michele Gornick	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Natalie Gutleber	Microbiology	Wyeth-Ayerst Research, Pearl River, NY
Donna Heil	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Brenda Hickok	Microbiology	South Carolina Law Enforcement
Christopher Lauricella	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Rebecca Mair	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Timothy Micheler	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Brandy Pigatore	Microbiology	McNeil Consumer Healthcare, Fort Washington, PA
Joseph Shin	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Justin Smith	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Kevin Strancn	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Carolyn Timinski	Microbiology	Glaxo Smith Kline, Philadelphia, PA
Carolyn Wassong	Microbiology	Walter Reed Army Inst. Of Research, Silver Springs, MD
Laura Yerges	Microbiology	Fox Chase Cancer Center, Philadelphia, PA

Come to the Department Mixer!

The annual BMB Department Mixer for students new to the University Park campus will be held -- rain or shine -- on Thursday, September 6, from 3:30-5 p.m. on the patio on the west side of the Frear Lobby. This is a great opportunity for first year students and transfer students from other Penn State locations and other institutions to meet BMB faculty and their peers in their respective major. The event is organized by the members of the Biochemistry Society and the Student Chapter of ASM. So, you can speak with club officers about their organizations' activities at the mixer, too. Oh yeah, did we mention **FREE FOOD?!!**



The Department of Biochemistry
and Molecular Biology

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We are on the
Web!
www.bmb.psu.edu

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BMB Undergraduate Newsletter is a publication of the Department of Biochemistry and Molecular Biology. Items for inclusion in the newsletter should be sent to BMB Undergraduate Newsletter, 108 Althouse Laboratory, University Park, PA 16802. Tel. (814) 865-5497; FAX. (814) 863-7024. U . E d . SCI 01-13

NEW FACULTY MEMBER JOINS THE BMB DEPARTMENT

We welcome to the BMB faculty Dr. Wendy Hanna-Rose. Dr. Hanna-Rose comes to Penn State from a postdoctoral position in the Howard Hughes Medical Institute laboratory of Dr. Min Han at the University of Colorado. Dr. Hanna-Rose received her undergraduate degree from Anderson University in Indiana, and her Ph.D from Harvard University where she worked on the molecular mechanism of transcriptional repression by the *Drosophila* protein *Krüppel*. In her postdoctoral work, Dr. Hanna-Rose changed systems and is now investigating the mechanisms of organogenesis using *C. elegans* vulval development as a model. You can learn more about Dr. Hanna-Rose's research by visiting <http://www.bmb.psu.edu/deptpage/hanna-rose.htm>. Dr. Hanna-Rose will be teaching BMB/Micrb 460, Cell Growth and Differentiation, in Spring semester, and she has her office in 406 Althouse Laboratory.

...as do Two New Instructors

We also welcome to the Department Drs. Elizabeth Pease and V. Reddy Padala. Dr. Pease is actually returning to Penn State where she received her Ph.D in the laboratory of Dr. Ming Tien. Dr. Pease received her B.S. from the University of Maine, and following conferral of her doctoral degree, took a postdoctoral position at Dartmouth, where she worked on the genetic analysis of circadian-regulated genes in *Arabidopsis*, and then a second postdoctoral in industry at Ecogen, Inc. where she investigated the interaction of insect proteins with toxins from *Bacillus thuringiensis*. Subsequently, Dr. Pease served as Assistant Professor and Adjunct Faculty

member in the Department of Biochemistry and Molecular Biology at the Philadelphia College of Osteopathic Medicine. Her research project sought to identify and characterize IL-1 induced genes in human synovial and gingival fibroblasts. Dr. Pease will be teaching BMB 212, BMB/Micrb 342 and PSU 016. Her office is currently in 261 N. Frear.

Dr. Padala received his BSc in Agricultural Science from the Agricultural College in Bapatla, India. His MSc in Biochemistry was conferred by the GB Pant University in Pantnagar, India, and his Ph.D, also in Biochemistry, was earned at the Indian Institute of Science in Bangalore, India. Dr. Padala has undertaken postdoctoral work at the University of Michigan where he worked on luteinizing hormone and at the Hormel Institute of the University of Minnesota where he investigated the biosynthetic pathways of phospholipids in experimentally induced myocardial infarction. Dr. Padala served as an assistant professor in the Department of Biochemistry at the University of Minnesota, Duluth School of Medicine. He then moved to industry as a senior scientist at Ciba Corning Diagnostics where he worked on the development and evaluation of Ciba Corning Diagnostics clinical chemistry products. In 1994, Dr. Padala accepted the position of Senior Research Associate in the Department of Veterinary Science and Environmental Resources Research Institute here at Penn State. His research has focused on the mechanism of lipid peroxidation. Dr. Padala will be teaching BMB 401, 437, 443W, and 444. His office is in 266 N. Frear.

*Welcome to the BMB Department,
Drs Pease and Padala!*