



### A Personal Look at Study Abroad

It was my good fortune this summer to visit several British universities that are part of the British Exchange Program which the Eberly College of Science runs under the auspices of the International Exchange Programs office. Actually, the term 'British' is a little too restrictive because among the sister institutions participating in the exchange are Universite Louis Pasteur (ULP) in Strasbourg, France, McGill University in Montreal, and Philipps Universitat in Marburg, Germany, as well as the six British institutions at Bath, Essex, Lancaster, Leeds, Sussex and Wales.

My exposure to some of the Exchange Program institutions and curricula strongly confirmed my conviction regarding the value of undertaking a part of the undergraduate experience in another country. While the importance and benefits of studying abroad are many, I will highlight only a few.

First, we all tend to have a rather parochial world-view that is too often skewed by the way events are reported in the popular press and television. While studying abroad, you will personally experience how world events are viewed from the standpoint of other countries. You will read and hear how statements and actions taken by the US are interpreted by other nations. In short, your world perspective will change. Second, by taking advantage of the extended time involved in living and studying at an exchange partner, you will come to appreciate much more fully the richness of the history and culture of the country in which you study. You will be within easy travel distance of important sites you have studied in the arts, literature, history and science. If you choose to study anywhere in

Europe, you are within easy reach of many countries by just a day's train ride. Third, as is the case at Penn State, the friendships you establish while attending the sister institution could last a lifetime. And lastly, with the number of institutions involved in the exchange program, you can choose the location and type of campus that best suits your preferences. For example, Sussex has a suburban campus that is just a few miles from the beach of Brighton on the English Channel, while Lancaster is situated outside a small, charming English city with its very own castle that sits just a few miles from the Irish Sea. Leeds, on the other hand, is an urban campus located in a bustling city that is well-known for its shopping district and active night life. Yet, not unlike State College, a few miles from center city is rolling pasture land.

If any reader is interested in learning more about the Exchange Program or Study Abroad, there are a couple steps that should be taken. Contact Susan Knell, the College's point person for the Exchange Program, in 520 Thomas, for a timeline and explanation of the steps of application. Contact me (124 S. Frear; 865-4825; [pwm1@psu.edu](mailto:pwm1@psu.edu)) for information about course equivalencies. And lastly, the College is indeed fortunate to have 4 exchange students from the three universities described above -- Lancaster, Leeds and Sussex -- who will be spending the academic year at PSU. I am confident any one of them would be happy to speak with interested students about their home institutions, and I would be happy to put you in touch with them.

## Come to the BMB Mixer

All students who are new to the University Park campus – this includes First Year Students, transfer students from other Penn State campuses, international exchange students, and students who have transferred to PSU from other institutions – are warmly invited to attend a student-faculty mixer on Thursday, September 9<sup>th</sup> from 3:30-5 p.m. The mixer is an opportunity for new students to meet and chat informally with BMB faculty while enjoying some light refreshments at the end of a long day of classes. This is a good opportunity for students to meet their academic and professional advisors for the first time. The Mixer will be held on the new plaza between Althouse and Frear Labs. In the event of rain (a good possibility this Summer!), the mixer will be held in the lobby between North and South Frear.

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## 2 Join BMB Faculty

The BMB Department is pleased to welcome two new members to its faculty -- **Dr. Kouacou Konan** and **Dr Christian Malone**.

**Dr. Konan** comes to Penn State from the Department of Microbiology/Immunology at Stanford University where he was a Research Associate in the laboratory of Prof. Karla Kirkegaard working on the effects of hepatitis C nonstructural proteins on the host cell's secretory apparatus. Dr. Konan received his undergraduate degree from the Université d'Abidjan, Cote d'Ivoire, and his M.A. and Ph.D. degrees in Microbiology and Molecular Biology from Indiana University in Bloomington. In addition to working with Prof. Kirkegaard, he was a postdoctoral fellow in the lab of Prof. Charles Yanofsky at Stanford. Dr. Konan will have his office in 459 N. Frear (863-8254).

**Dr. Malone** received his BS in Biology from Albertson College of Idaho and his Ph.D. in the Department of Molecular, Cellular and Developmental Biology at the University of Colorado, Boulder. He comes to Penn State from the University of Wisconsin where he was a Postdoctoral Fellow in the laboratory of Prof. John White investigating the interaction between the nucleus and centrosome in *Caenorhabditis elegans*.

Welcome to Penn State !!

## Attention First Year Students

During the 03-04 academic year, the University Faculty Senate granted approval on a department proposal to modify the requirements for graduation. Starting with all students entering or being readmitted to the University in SU04 or later, the following graduation requirements will apply:

1. All students must have a C or better in 2 of the following 3 courses: BMB/Micrb 251, 252, and Micrb 201.
2. All students must earn a grade of C or better in 9 credits of 400-level lecture course work.

For **BMB** majors, any 400-level BMB or Micrb lecture course is acceptable.

For **Micrb** majors, any 400-level Micrb or BMB lecture course is acceptable.

For **Biotc** majors, any 400-level Biotc, BMB or Micrb course is acceptable.

*This new requirement has been added to the student audit.*

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## Important dates to remember for the Fall 2004 semester:

- »Classes Begin  
**August 31**
- »Labor Day Holiday— No Classes  
**September 6**
- »Late Registration & Drop/Add Period  
**August 31—September 9**
- »Intent to Graduate—Activation Period  
**August 16—September 13**
- »Final Exam Conflict—Filing Period  
**October 4— 17**
- »Study Day—No Classes  
**October 15**
- »Late Drop— Deadline  
**November 18**
- »Thanksgiving Holiday—No Classes  
**November 24—26**
- »Withdrawal Deadline  
**December 10**
- »Classes End  
**December 10**
- »Study Days  
**December 11—12**
- »Final Exams  
**December 13—17**
- »Commencement  
**December 18**

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## **Mt. Nittany Medical Center— A New CLS Affiliate**

It is a genuine pleasure to announce that Mt. Nittany Medical Center (formerly Centre Community Hospital) has affiliated with Penn State through the Department of Biochemistry and Molecular Biology to provide the clinical course work required as part of the **Clinical Laboratory Science** (CLS) program. Mt. Nittany Medical Center joins Pennsylvania Hospital in Philadelphia as a partner in the preparation of PSU students who seek to pursue a career as a professional clinical laboratorian. Certified CLS graduates perform highly complex testing in any type of laboratory that handles human specimens (hospital, physician's office, reference lab).

One attractive feature of the new affiliation is that students who have been attending the University for the first 3 years of their undergraduate education can remain in the area to complete their senior year in the Medical Center's program. It should be mentioned that the number of positions available in the Medical Center's program is limited and admission to the clinical program is on an academically competitive basis. The CLS program is an option within the Biotechnology major. If you would be interested in learning more about the CLS program and our two affiliates, see Dr. Mohr in 124 S. Frear or at [PWM1@PSU.EDU](mailto:PWM1@PSU.EDU). If you are a student with junior standing or a senior in any of our majors who might be interested in entering the clinical program following graduation, see the following announcement about an information session on how to apply for the clinical practicum. *Oh, and did we mention that job opportunities for CLS graduates are **outstanding**?*

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## **Attention Juniors in the CLS Option!!**

An informational meeting for students of at least Junior standing in the Clinical Laboratory Science option of the Biotechnology major who will have completed all University-based courses by the end of SP05 will be held on September 14<sup>th</sup>, at 7 p.m. in 112 S. Frear. Information regarding the professional opportunities, selection of a clinical site, admission to clinical sites, grading policy, and a timeline for applying will be discussed. A Q&A session will follow. If you cannot attend this meeting, please contact Dr. Mohr as soon as possible.

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## **A Word of Caution for All Students...**

Due to the change in graduation requirements for first-year and readmitted students explained above, all students who use either the paper checksheets or refer to the electronic version on the department's web site need to be aware that there are now **2 sets** of these forms for each major. The set that carries the label ***For students entering Fall 2002*** should be used by students who have a semester standing of 2 or higher and who have been continuously enrolled since entering the University. The set that carries the label ***For students entering Summer 2004 and later*** should be used by students who were admitted to the University starting in either of the two Summer sessions or later, or who withdrew from the University or were dropped from degree status for academic reasons and then readmitted in SU04 or later. If you are unsure of the checksheet that is appropriate for you, either consult your audit, which will automatically use the correct requirements, or ask your advisor or one of the staff in 108 Althouse.

## Special Topics Courses for Upperclassmen Coming in SP05

Juniors and Seniors looking for 400-level courses to complete SP05 schedules should note the following Special Topics course offerings:

**Dr. Emine Koc** will teach **BMB 497A, *Mass Spectrometry in Proteomics***, in the second half of Spring semester on a TR 9:05-9:55 schedule in 317 Wagner Building. Dr. Koc has provided the following description of the course:

*The study of expressed proteins, known as proteomics, has been revolutionized by the use of mass spectrometry to study protein structure. As the technology has improved over the last decade, mass spectrometry has been applied to critical questions in biochemistry and cell biology. This course will give students the background necessary to effectively design mass spectrometric experiments and interpret data. The instrumentation will be described at a level appropriate to undergraduate students in biochemistry and the structure of biological macromolecules will be described as it applies to mass spectrometry. Students will leave the course with a full understanding and effective use of mass spectrometric data in their research. Lectures will be devoted to instrumentation, ionization methods, and applications to analysis of proteins. The uses of the technology in proteomics, biotechnology and medicine will also be covered.*

**Dr. Carsten Krebs** will be teaching **BMB 497B**, a 1-credit course titled ***Metals in Biology***, on Wednesdays at 3:35-4:25 in 208 Thomas. Dr. Krebs provides the following description:

*Proteins that contain metal ions in their active sites play important roles in almost every aspect of life. Moreover, they catalyze some of the most difficult chemical reactions known, such as the oxidation of water to dioxygen or the reduction of dinitrogen to ammonia. The field of 'Bioinorganic Chemistry' deals with understanding the details of these fundamental processes. This research area is highly interdisciplinary, encompassing diverse disciplines, such as inorganic chemistry, biochemistry, molecular biology, spectroscopy and computational methods. This 1-credit lecture course gives an introduction to this field by providing a descriptive overview of important concepts and methods (~1/3 of lectures), followed by presentation of examples of reactions carried out by metalloproteins (~2/3 of lectures).*

**Dr. Christian Malone**, a new member of the BMB faculty will be teaching **BMB 497C, *Fluorescent Microscopic Techniques*** on Thursdays at 1:25-2:15 in 101 Pond Lab. Dr. Malone states:

*We will explore the techniques and applications of modern fluorescence microscopy in biological science. We will study the applications of fluorescence microscopy through the study of interesting papers from a broad spectrum of biology. Various examples include calcium imaging in neurons, fluorescence speckle microscopy of cytoskeletal dynamics and multi-photon microscopy of light sensitive embryos.*

These three Special Topics courses can be petitioned for use as a List A elective in the BMB major.

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