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Center for Biomedical Engineering and Technology - University of Maryland School of Medicine  
in conjunction with the Fischell Department of Bioengineering, School of Engineering, University of Maryland, College Park

## UMB Night at Orioles Stadium



September 16th was a good day for the Orioles and a good day for UMB, as UMB President Jay Perman got to throw out the first pitch. Over 1500 UMB tickets to the game secured his spot on the mound. Pamela Wright, BioMET's Assistant to the Director, and her husband attended the game, watching the Orioles first get behind and then pull it out, 8-2.

Ms. Wright was thrilled with the evening. "The weather was perfect for baseball—not too hot. We haven't been to game in ages. It was great fun to see so many UMB people there!"

This was the first UMB Night at the Ballgame since BioMET joined UMB in 2009, and the first time Dr. Perman got to throw out the first pitch. Of course, the Orioles winning season did make it more exciting. Going to the ballgame is particularly easy for UMB staff and faculty, since their parking passes work even on game nights!

For more information and a picture of Dr. Perman's pitching style, see <http://www.umaryland.edu/news/?ViewStatus=FullArticle&articleDetail=23266>. Is that a curve ball he is trying to throw?

### BIOMET SCIENTIFIC PROGRAMS

LABORATORY OF  
MOLECULAR CARDIOLOGY

LABORATORY OF  
NANO BIOLOGY

LABORATORY FOR  
NEURODEGENERATIVE DISEASES

LABORATORY FOR  
PRION DISEASES

PROGRAM IN  
CANCER BIOLOGY

PROGRAM IN  
CELL STRUCTURE AND  
DEVELOPMENT

PROGRAM IN  
MITOCHONDRIAL DYNAMICS

## Long-Term Business Manager Moves On

BioMET Business Manager, Jami Kasco, has taken a new position in the Institute for Genomic Sciences as a Senior Accountant. Jami came to BioMET when it was still the Medical Biotechnology Center, starting as an accounting associate in May 1997. She was quickly promoted in April 1999 and continued to move up to become MBC's business manager and subsequently, BioMET's.

Jami was a dedicated administrator. Her position not only included tracking grant expenditures for faculty, but all expenditures for the center. She also maintained equipment inventories and generally kept things running day-to-day. She was always cheerful and helpful. She also established the shadow system used to insure the budget accuracy. She will be missed and hard to replace. We wish her well in her new position.



UNIVERSITY of MARYLAND  
SCHOOL OF MEDICINE

Congratulations to Dr. Scott Thompson, the now permanent chair of the Department of Physiology. His appointment was finalized some time ago, but the formal announcement came out in October. Most of BioMET's faculty have their academic appointment in the Department of Physiology.

The eighth annual Fischell festival was held October 16, 2014. This year's event emphasized biomedical emergency response and engineering solutions, including those to public health threats. The keynote speaker, Rear Admiral Dr. Stephen Redd from the Centers for Disease Control and Prevention, discussed both influenza, his area of expertise, and Ebola. The annual festival is always interesting and timely.

## Lederer in China

One of the most gratifying trips a faculty member can take is visiting a former student who has done well in his or her career. BioMET Director W. Jonathan Lederer recently took such a trip, visiting Heping (Peace) Cheng, a UMSOM graduate and now head of the Institute of Molecular Medicine at Peking University. Dr. Cheng moved back to China less than 10 years ago, having been at the National Heart Lung and Blood Institute for many years after his graduation. Dr. Cheng was recently elected to the Chinese National Academy and was made an editor of the New England Journal of Medicine in Asia/China, making him an Associate Editor for NEJM. Dr. Cheng's wife, Rui-Ping Xiao, is also a UMSOM graduate and scientist at Peking University. They were early recruits to China's repatriation of scientists who had left China to study in the US and not returned upon graduation.

Through Dr. Cheng's contacts, Dr. Lederer was invited to two other universities in China, The Fourth Military Medical University in Xi'an and the Shanghai Jiao Tong University School of Medicine. The latter was the location of a talk sponsored by the Chinese Academy of Sciences. In total, Dr. Lederer gave four talks: "Novel Imaging and Experimental Approaches: A talk and discussion for approaching the impossible," Peking University, Institute of Molecular Medicine, Beijing, China, October 14, 2014; Peking University, Institute of Molecular Medicine, Beijing, China, October 14, 2014; Fourth Military Medical University, Xi'an, China, October 17, 2014; and Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences and Shanghai Jiao Tong University School of Medicine, Shanghai, China, October 21, 2014. The last three had the same title, "Tugging on the Heartstrings: The Cardiac Calcium Signaling Challenge."

Dr. Lederer was accompanied by his daughter, Rebecca.



Left to right: Dr. Xiao, Rebecca Lederer, Dr. Lederer and Dr. Cheng.

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# Kuali Up

The new online grant submission application called Kuali Coeus was finally on board for September submissions. As noted in the previous issue, there are some real advantages to the new online application, but not surprisingly a few bugs have already shown up. BioMET's first Kuali submission had some authorization issues, since the previous order for authorization (BioMET, Academic Department, School of Medicine, Sponsored Program Administration) was not operational. Every proposal submitted by the university on behalf of a principal investigator (PI) has to be authorized by his or her department(s) and school. This is required in part because it is not the PI that is legally responsible for the contract if funded, but the university. Every level needs to be aware of what is being done because they are listed on the proposal via the PI's affiliations and performance site.

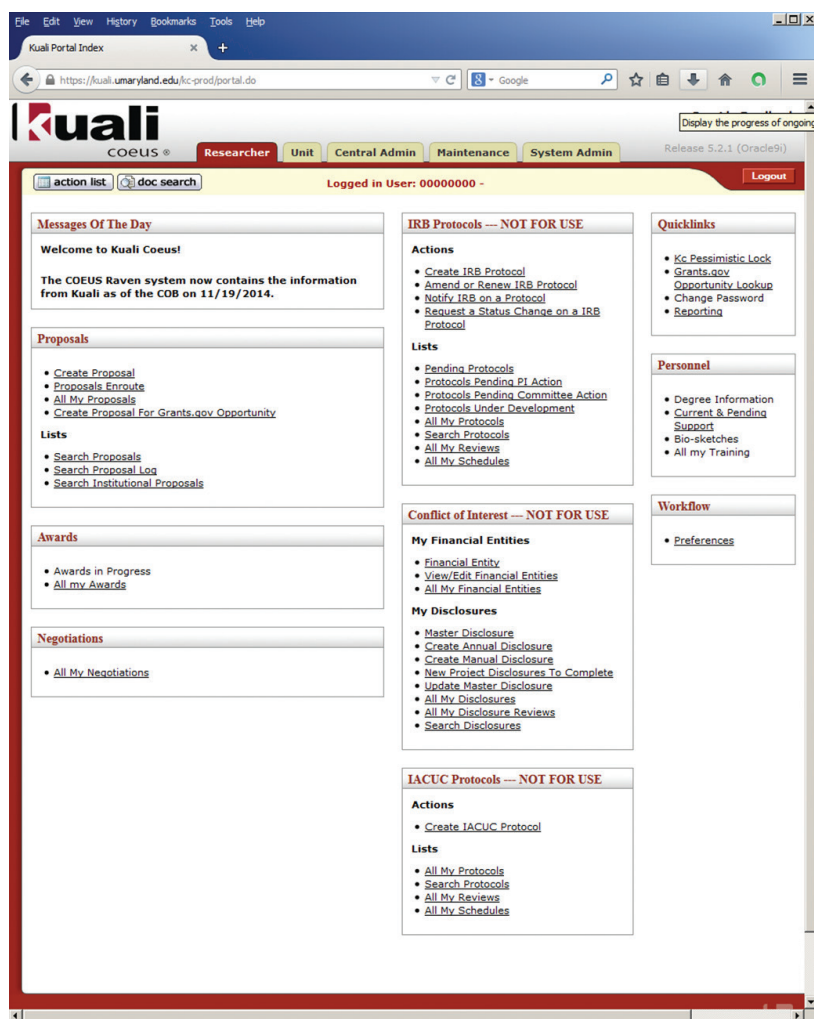
Since then more issues with authorizations have come to light. For example, BioMET cannot be selected as the lead department, only the academic department is on the list. BioMET has to be designated the financial department. While this may not seem like a big issue, it becomes really problematic when reports are generated, and indirect cost dollars are allocated. The university and School of Medicine track how well departments and centers are doing based on some of these reports. Errors on submission assignments can credit or debit the department or center, changing success rates and overall evaluations.

Sponsored Programs Administration is aware of the problem, but no patch has been implemented yet.

As the screen shot to the right indicates, eventually Kuali will be linked to a number of compliance requirements, including animals, human protocols and conflict of interest. The last is particularly cumbersome to track at the moment, and new rules are expected to come down from NIH that conflict of interest disclosures

for outside collaborators will also have to be tracked in some way.

For the most part, BioMET faculty members will find Kuali significantly better than Coeus. Most of the work in learning the ins and outs of the application will fall to Pamela Wright and Brian Hockenberry.



## Congratulations!

Wedding bells were not just ringing but wildly pealing in the Lederer laboratory! Program Director Dr. Brian Hagen and Postdoctoral Fellow Dr. George (Blair) Williams were both wed, Brian in September and Blair in October. BioMET sends its best wishes to the happy couples.



# BIOMET HAPPENINGS

## Comings and Goings

Jami Kasco, long-time Business Manager, transferred to the Institute of Genomic Sciences as a senior accountant.

Our sincere condolences to Dr. Joseph Kao on the death of his father.

## Publications

Klimova N, Makarava N, **Baskakov IV**. The diversity and relationship of prion protein self-replicating states. *Virus Res*. 2014 Oct 10.[Epub ahead of print]

Wang F, Wu Y, Gu H, Reece EA, **Fang S**, Gabbay-Benziv R, Aberdeen G, Yang P. Ask1 gene deletion blocks maternal diabetes-induced endoplasmic reticulum stress in the developing embryo by disrupting the unfolded protein response signalosome. *Diabetes*. 2014 Sep 23. [Epub ahead of print]

Boyman L, Chikando AC, Williams GS, Khairallah RJ, Kettlewell S, Ward CW, Smith GL, Kao JP, **Lederer WJ**. Calcium movement in cardiac mitochondria. *Biophys J*. 2014 Sep 16;107(6):1289-301.

Katorcha E, Makarava N, Savtchenko R, D'Azzo A, **Baskakov IV**. Sialylation of prion protein controls the rate of prion amplification, the cross-species barrier, the ratio of PrP<sup>Sc</sup> glycoform and prion infectivity. *PLoS Pathog*. 2014 Sep 11;10(9):e1004366.

## Grants and Contracts

### Awards

Monteiro, Mervyn, 9/1/14, NIH, "Validation of ubiquilin for Huntingtons disease," \$189,956, yr 2 of 2.

### Submissions

Monteiro, Mervyn, 10/6/14, NIH, "Studies of Ubiquilin-2 Interaction with hnRNP Proteins," Total Request: \$1,535,000.

Monteiro, Mervyn, 10/6/14, NIH, "Investigation of Disturbances in Proteostasis by ALS-linked Mutations in Ubiquilin-2," Total Request: \$1,918,750.

Fang, Shengyun, 10/16/14, NIH, "ER Stress in Ethanol-Induced Injury to Hepatocytes," Total Request: \$422,125.

## Talks and Travels

**W. Jonathan Lederer**, Speaker, "Novel Imaging and Experimental Approaches: A talk Dr. and discussion for approaching the impossible," Peking University, Institute of Molecular Medicine, Beijing, China, October 14, 2014.

**W. Jonathan Lederer**, Speaker, "Tugging on the Heartstrings: The Cardiac Calcium Signaling Challenge," Peking University, Institute of Molecular Medicine, Beijing, China, October 14, 2014.

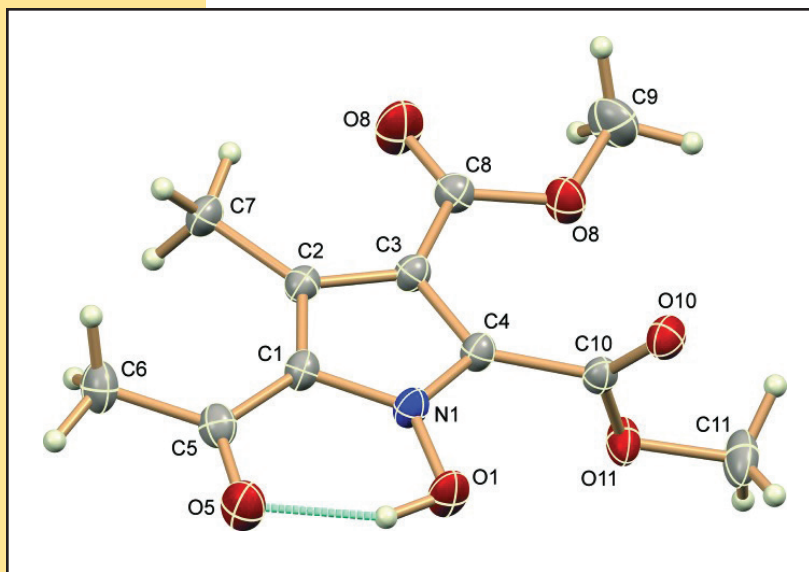
**W. Jonathan Lederer**, Speaker, "Tugging on the Heartstrings: The Cardiac Calcium Signaling Challenge," Fourth Military Medical University, Xi'an, China, October 17, 2014.

**W. Jonathan Lederer**, Speaker, "Tugging on the Heartstrings: The Cardiac Calcium Signaling Challenge," Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences and Shanghai Jiao Tong University School of Medicine, Shanghai, China, October 21, 2014.

## MPower Update

*Editor's Note: While BioMET may not participate in all activities relating to the new initiative, the success of the entire enterprise benefits everyone. Thus, all activities of the new initiative will be highlighted in BioMET Now. As before, all members of the BioMET community are encouraged to look at the MPower web site at [mpowermaryland.com](http://mpowermaryland.com) for current information.*

MPowering Maryland enters its third year of operation. It has had its share of successes, but some things are still slow to change. UM Ventures, the joint intellectual property office, is a real highlight of the initiative. Joint grant administration and professorships are still slowly moving ahead, with many hurdles still to be attempted. However, the overall initiative has been a positive influence and one that is still in its infancy. Given the long adversarial history of two institutions, it is particularly admirable that so much has already been accomplished. It is undoubtedly attributable to the support of both President Perman of the University of Maryland, Baltimore and President Loh of the University of Maryland, College Park. BioMET looks forward to participating in MPower Maryland in as many ways as possible. Happy Anniversary!



*Unnaturally beautiful! The diagram is of Dimethyl 5-acetyl-1-hydroxy-4-methyl-1H-pyrrole-2,3-dicarboxylate, an oxidation-resistant N-hydroxypyrrole. A synthetic molecule created in the course of research by Gerald M. Rosen, School of Pharmacy, and Joseph P.Y. Kao, BioMET (Published in Acta Crystallogr Sect E Struct Rep Online. Feb 1, 2014; 70(Pt 2).)*

## Fall Teaching

**Bruce Vogel**, lecturer, GPLS 601 Genetics Section, 2 lectures

**Mariusz Karbowski**, course director and lecturer, GPLS701 Advanced Molecular, and GPLS 601 Protein Trafficking, 1 lecture