Director’s Column

As I indicated in the preceding issue of the HBC Newsletter, the Center has been striving to bring greater visibility to the high level of research and services provided to the University community of biomedical scientists by the Research Professors and Core Laboratory Directors affiliated with the HBC. These scientists participate in multiple research projects, supervise the research being performed in their laboratory, and assist in the training of graduate and undergraduate students. The HBC-affiliated Research Professors and Core Laboratory Directors have offered to present their work in formal seminar sessions so that all investigators in the biomedical sciences may learn about the work performed by the Research Professors, provide feedback to them, and consider future joint projects with the Research Professors.

The first of such seminar presentations by the Research Professors will be given by Dr. Xinkun Wang, Associate Research Professor and Director of the Genomics Laboratory and Genome Sequencing Core, and Courtesy Associate Professor of Pharmacology and Toxicology. The presentation is scheduled for January 10, 2014, at 1:30 p.m. in Room 3004 in the School of Pharmacy building. The title of his presentation is: “The Genomics of Selective Neuronal Vulnerability to Degeneration in Brain Aging and Alzheimer’s Disease.” I would like to urge all HBC-affiliated researchers to attend Dr. Wang’s presentation.

New HBC online travel request system ready to assist travelers

The new online HBC Travel Request Management System should help faculty, staff and students by easing the travel authorization application process and speeding reimbursements. The more advanced system went ‘live’ in mid-November. The link to the request form can be found on the HBC main webpage [www.hbc.ku.edu] on the right-hand side under the subheading “Travelling?”.

Submitting a request for travel authorization is the first step for faculty, staff or students planning to take a trip for University of Kansas purposes and who want to be reimbursed for travel expenses.

Steps for the Traveler

HBC urges researchers to complete the request form as soon as they know that they will be traveling on University business. KU policy requires that researchers have a travel authorization prior to departure or risk not being reimbursed for out-of-pocket expenses. When preparing an authorization the traveler is now required to estimate and provide the costs upfront for the portion of expenses that are reimbursable to insure sufficient funds are set aside. Travelers should have the following information ready before opening the online form:

Name of Traveler:
Gender:
E-mail of Traveler:  (cont. p. 3)
Peterson named 2013 AAAS Fellow

Blake Peterson, HBC faculty member and KU Regents Distinguished Professor of Medicinal Chemistry, has been named a 2013 Fellow of the American Association for the Advancement of Science (AAAS). The AAAS is the world’s largest general scientific society. Fellows are nominated and selected by their peers for distinguished achievements that advance science or its application.

When announcing his selection, the AAAS said Peterson was being honored for distinguished contributions to the field of bioorganic chemistry, particularly the development of synthetic mimics of cell surface receptors and fluorescent probes of biological systems. Peterson’s research focuses on studies of biologically active small molecules. His laboratory works in the fields of organic chemistry and chemical biology to create compounds that can be used to probe cellular biology, understand mechanisms of disease pathways and discover new therapeutic agents.

School of Pharmacy Dean Ken Audus said, “Blake Peterson continues to distinguish himself as an important and influential leader in the chemical biology field. We’re fortunate to have him as a member of the School of Pharmacy faculty.”

The new AAAS Fellows will be honored at the AAAS Fellows Forum on February 15, 2014, during the AAAS Annual Meeting in Chicago. Peterson is the only KU faculty member elected to this prestigious group this year.

Proposal development travel awards available at HBC

An HBC Proposal Development Travel Award may be one tool you want to consider when establishing collaborations outside the KU scientific community. The travel program is one of the avenues HBC sponsors to support multi-investigator grant proposal development. It helps fund costs associated in meeting with collaborators or consulting with program officers at a funding agency.

HBC member and associate professor of molecular biosciences Kristi Neufeld used a travel award this fall. That’s when she traveled to the University of Iowa, Iowa City, IA to meet with a collaborator. In partnership with assistant professor of biology Bryan Phillips, the two submitted one grant to the National Institutes of Health (NIH) and another to the National Science Foundation (NSF).

Neufeld said Phillips and she initially discussed possibilities for collaboration when Phillips spoke at KU more than a year ago. “Bryan’s research involves using the nematode *c. elegans* for experiments that can also be tested in my mouse model. We have begun to compare our findings from studies of both model organisms”.

Neufeld said they wrote the scientific research plans long distance for the two grants. “I planned to use my personal funds to pay for a trip to Iowa City. But when I was visiting the HBC to discuss my grant proposal efforts with Phillips, a staff member recommended I make use of the travel program.”

Neufeld said she thinks the face-to-face interaction will help them create a stronger application. “The next time we submit an R01 proposal we will show that we physically meet to work on the project; it demonstrates a serious collaboration. Really nothing can replace a face to face meeting, where you have several days to hash out experiments and concerns. I very much appreciate the support from HBC to foster this collaboration.”
New online travel request system ready to assist travelers (cont. from p. 1)

**Funding Source:** Several funding sources can be entered in this field. For example, if you wish to split the travel cost between grant 12345 and 45678, enter 12345, 45678 in this field and in the “comments” field enter the percentage of the split.

**PI (Name):** If you are the PI on the grant, click ‘Y’ (or ‘yes’) on the provided radio button directly beneath the dialogue box asking for the PI name. Selecting ‘Y’ routes the request directly to the HBC transactions group. If you do not, you will have to approve your own request, which increases processing time.

**Conference Name:**

**Meeting Location:**

**Travel Dates:** From: (date) To: (date)

**Meeting Dates:** From: (date) To: (date)

**Expected Expenses:** Please provide the amount (actual or best estimate) for travel expenses and indicate whether you would like your airfare and/or meeting registration be prepaid by HBC (please do not leave any blank amounts in this section; enter zero if the expense category doesn’t apply to your trip). A traveler can also request HBC make the reservation for his/her hotel room. When the PI later approves the travel request, they will have the option to individually approve or decline each pre-payment/reservation request.

**Other Information:** The traveler also is asked if they are 1) taking personal days during the travel period and if so, how many; 2) if a travel advance is needed; 3) if mileage reimbursement will be requested; 4) if the individual has received a travel award, and 5) if meals will be provided during the symposium and if so, how many breakfasts, lunches and dinners (if yes was checked for this last question, fill each field with the proper number of meals or enter zero if the meal category doesn’t apply to you).

**“Comments” Box:** Please use this section at the end of the form to indicate any special circumstances for your trip, such as the percentage of the split between funding sources.

After the traveler submits the request, the travel request information will be displayed in the browser window and sent to the email address provided by the traveler.

**Steps for the Principal Investigator approving the request**

The PI who needs to authorize the travel request will receive an email indicating that they have a request to approve. The email contains a link to the login page for the PI to click on. Most PIs will need to get their credentials from the system the first time they log in. To do so, they must click on the “New User or Forgot Username or Password” link located below the “Login” button and follow the instructions (Note: If the PI has used the HBC Proposal Submission Tracking System in the past, the same credential can be used to log into the Travel Request Management System.).

Once the PI has signed into the system, they can review the details of the Travel Authorization Request by clicking on the “Details” link on the webpage. The PI should carefully review the funding source(s) information. If the traveler indicated that they would like HBC to prepay airfare, registration, or make hotel reservation, the PI can decline any of these by selecting “No” for any or all options. The traveler will be informed of the PI’s decision through a system-generated e-mail issued after the PI completes this process. By approving the travel request authorization, PIs also approve the prepaid transactions that are checked “Yes.” No actions will be taken on any items marked “No.” The PI can decline the entire travel authorization by clicking the “decline” button at the bottom of the form.

After the PI approves or declines the travel authorization, an e-mail will be sent to the traveler. It will contain the PI’s decision and also request any supplemental information needed to process the approved pre-paid transactions.
Our HBC staff members wish you happy holidays and a joyous new year

HBC congratulates Award Coordination Manager Amy Carlson for completing the Kansas Certified Manager Program (CPM) in November. The program, offered through the KU Public Management Center, requires 300 hours of structured learning. The program is a professional education opportunity for managers working in government agencies, and in nonprofit organizations that contract to provide public services and meet community needs.

Carlson said she found the program beneficial in her public service role. She said, “I don’t have great deal of experience in public administration. We studied so many aspects of working in the public sector, like conflict management, negotiations, project management, and ethics.”

The CPM program is designed to foster effective management practices. As part of the program, participants complete a capstone project focused on an opportunity for cost savings, revenue generation, process improvement, or innovation in their workplace. The program was established in 1993.

Since coming to HBC in 2009, Carlson served as an accountant in the transaction area before becoming an award coordinator, and then being promoted to award coordination manager in 2013. She previously served more than 13 years in the business office at Baker University, Baldwin City, KS.
The Genomics of Selective Neuronal Vulnerability to Degeneration in Brain Aging and Alzheimer’s Disease

Friday, January 10, 2014
1:30 p.m.
Room 3004, Pharmacy Building
KU west campus

Pivotal brain functions, such as neurotransmission, cognition, and memory, decline with advancing age and, especially, in neurodegenerative conditions associated with aging, such as Alzheimer’s disease (AD). Yet, deterioration in structure and function of the nervous system during aging or in AD is not uniform throughout the brain. Selective neuronal vulnerability (SNV) is a general but sometimes overlooked characteristic of brain aging and AD. There is little known at the molecular level to account for the phenomenon of SNV. To generate insights into SNV, we have been employing functional genomic approaches, including GeneChip and RNA-Seq, to study human brain tissues and brains from animal models. Our data show that during normal brain aging and in AD, in comparison to resistant neurons, neurons vulnerable to injury or cell death are characterized by significant decreases in the expression of genes related to mitochondrial metabolism and energy production, synaptic neurotransmission and vesicular transport, cytoskeletal structure and function, and neurotrophic factor activity. A prominent category of genes that are up-regulated in vulnerable neurons are those related to inflammatory response and some components of calcium signaling. These genomic differences between sensitive and resistant neurons reveal new molecular and cellular mechanisms that bring about selective sensitivity of neurons to neurodegeneration in aging and AD.