

Graduate Affairs & Research

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COLLEGE OF PHARMACY
UNIVERSITY OF OKLAHOMA
HEALTH SCIENCES CENTER

WELCOME TO NEW COLLEGE OF PHARMACY DEAN JoLaine Reiersen Draugalis, R.Ph., Ph.D.



The College of Pharmacy welcomes the upcoming arrival of Dr. JoLaine Reiersen Draugalis as Dean and Edith Kinney Gaylord Presidential Professor. It is anticipated that Dr. Draugalis will begin her new position as Dean of the College on June 18, 2007.

Prior to coming to the University of Oklahoma, JoLaine R. Draugalis was Professor of [Pharmacy Practice and Pharmaceutical Sciences](#) and Associate Dean for Assessment, Evaluation, and Curriculum in the [College of Pharmacy at the University of Arizona](#). Her research interests are in pharmaceutical education program design, administration, and evaluation, educational applications in pharmacoconomics and outcomes research, and the scholarship of teaching and learning.

She received a B.S. degree in pharmacy with distinction from [Ferris State University](#) in her native state of Michigan. After practicing hospital pharmacy for six years, Dr. Draugalis entered graduate school. She completed a M.Ed. in educational psychology and a Ph.D. in pharmacy (administrative and behavioral sciences) at the University of Arizona.

Dr. Draugalis has 100 peer-reviewed publications, book chapters, or monographs; 75 contributed presentations; and 75 invited presentations. She served a three-year term on the Board of Directors and was the 2004-2005 President of the [American Association of Colleges of Pharmacy](#).

In 1990, Dr. Draugalis and co-authors received the Rufus A. Lyman Award for the outstanding article published in the [American Journal of Pharmaceutical Education](#) and she continues to be a frequent contributor to the journal and is currently on the editorial board. Dr. Draugalis was named Basic Science Educator of the Year in 1990, 1992, 1994, 1997, and 2004 at the University of Arizona, College of Pharmacy. Additionally, she has received nine Searle fellowship faculty mentor awards. In 1997, she received the Gloria Niemeyer Francke Leadership Mentor Award from the American Pharmacists Association and was elected as a Fellow by APhA-APRS in 2001. Dr. Draugalis received the University of Arizona Foundation Leicester and Kathryn Sherrill Creative Teaching Award and was named the Distinguished Pharmacy Educator by the American Association of Colleges of Pharmacy in 1998. She was a 2000-2001 Carnegie Scholar in the Carnegie Academy for the Scholarship of Teaching and Learning of the [Carnegie Foundation for the Advancement of Teaching](#). In 2002, she was named a fellow of the American Society of Health-System Pharmacists. Dr. Draugalis received the first [Henry and Phyllis Kofler Prize](#) for Teaching and the [Mortar Board National Senior Honor Society](#) Hall of Fame Award from the University of Arizona in 2002. The [University of Arizona Alumni Association](#) gave JoLaine the Professional Achievement Award in 2002 and the Extraordinary Faculty Award in 2003. In 2006, she received the [KE/Merck Vanguard Leadership Award](#).

Her memberships include: the American Association of Colleges of Pharmacy, [American Pharmacists Association](#), [American Society of Health-System Pharmacists](#), [Arizona Pharmacy Alliance](#), [International Society for Pharmacoconomics and Outcomes Research](#), [Kappa Epsilon](#), [Omicron Delta Kappa](#), [Phi Delta Kappa](#), [Phi Lambda Sigma](#), and [Rho Chi](#).

Special points of interest:

New College of Pharmacy Dean

New Faculty

Research Seminars

Multiple PIs on Grant Applications

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Welcome new Pharmaceutical Sciences faculty members

Dr. Vibhudutta

Awasthi joined the College of Pharmacy as an Associate Professor of Pharmaceutical Sciences. His research interests are in the development of radiopharmaceuticals, small animal imaging, and use of radiological imaging techniques to answer physiological questions. Dr. Awasthi's current research focuses on the development of liposome-encapsulated hemoglobin as an artificial oxygen carrier and he is studying cerebral oxygen metabolism using positron emission tomography. Dr. Awasthi is a board certified nuclear pharmacist and brings expertise in areas related to drug delivery, formulation development, nuclear pharmacy and small animal nuclear imaging.



Dr. Kelly Standifer joined the College of Pharmacy as Professor of Pharmaceutical Sciences. Her research interests, ultimately, is to develop alternative therapeutic options (to morphine) for the treatment of severe pain. The newest member of the opioid receptor family, opioid receptor like-1 receptor (ORL1), and its endogenous agonist, orphanin FQ/nociceptin (OFQ/N), have been strongly implicated in the development of morphine tolerance. Chronic morphine treatment increases levels of OFQ/N; blocking the actions of OFQ/N significantly reduce the extent to which the analgesic actions of morphine are reduced. Using human neuronal cell lines that natively express mu and ORL1 receptors, she studies the cellular mechanisms of ORL1 and mu opioid receptor activation (by the endogenous peptides OFQ/N and Dynorphin, and the synthetic agonists, DAMGO and morphine), and the cellular mechanisms of ORL1- and mu opioid receptor-mediated mu and ORL1 tolerance and cross-tolerance. Acutely, OFQ/N activates protein kinase C (PKC), which activates and translocates G protein-coupled receptor kinase 2 (GRK2) and GRK3 to the cell membrane where GRK2 can quickly desensitize the mu opioid receptor in the presence of a mu opioid agonist such as morphine. The next step is to determine where these changes occur in vivo, and how they might be manipulated to reduce the extent of morphine tolerance development.



ORL1 desensitization is produced by GRK3. Tolerance induced by prolonged exposure to OFQ/N and/or morphine treatment also involves GRK. Similar to morphine, prolonged OFQ/N treatment

(24 h or more) upregulates GRK levels. Ultimately, though, it is the increased availability of GRK that produces the rapid tolerance and/or cross-tolerance upon challenge with an agonist. We are in the process of studying ORL1 phosphorylation sites, and how mutation of these sites affects receptor function.

Dr. Shanjana Awasthi

joined the College of Pharmacy as a Research Assistant Professor. Her current research focuses on studying the host-pathogen interaction, innate immunity and immunostimulatory potential of dendritic cells. According to her, "the overall goal of my research is to understand the role played by immune cells and pathogen-recognition receptors and to design and develop immunotherapeutic agents/vaccine. One of my research projects focuses on developing a dendritic-cell based vaccine/immunotherapy for *Coccidioides* species. *Coccidioides* is a soil fungus which causes pulmonary and fatal disseminated *Coccidioidomycosis*. The susceptibility of the host to *Coccidioidomycosis* is related to defective cellular response. Dendritic cells are potent antigen presenting cells and play an important role in regulating the cellular response. We utilize this unique capability of dendritic cells to generate vaccine and examine the efficacy of dendritic cell-based vaccine in mouse model of *Coccidioidomycosis*. In my other project I utilize preterm baboon model. Preterm babies are highly susceptible to infection because their immune system is immature. My studies focus on investigating the phenotype and innate immune responses elicited by dendritic cells and pathogen-recognition receptors against pathogenic stimuli in preterm baboon model. Laboratory techniques used in my research include dendritic cell and T cell culture, genetic transfection, flow cytometry, immunologic, molecular biology and microbiological assays."



Welcome Lerin!

Lerin Luckett has been accepted as a graduate research assistant in Pharmaceutical Sciences at the College of Pharmacy, according to Dr. Les Reinke, Associate Dean for Graduate Studies and Research. Dr. Gallucci will serve as her faculty mentor. Lerin will be supported through a graduate student supplement on Dr. Gallucci's NIH RO1 grant.



April Research Seminars at the College of Pharmacy

Thursday, April 5 Noon, Rm. 101	Graduate Student Seminar "MicroPET/CT: The Newest Research Tool in the OU College of Pharmacy" <i>Presenter: Mark Aldridge; Faculty Mentor: Garo Basmadjian, Ph.D.</i>
Tuesday, April 10 Noon, Rm. 101	Graduate Student Seminar "The role of IL-6 in gene expression during skin repair." <i>Presenter: Lerin Lockett; Faculty Mentor: Randle Gallucci, Ph.D.</i>
Thursday, April 12 Noon, Rm. 103	Philip C. and Ethel F. Ashby Distinguished Lecture Series in Healthcare Economics "Macroeconomics of health care in the United States." <i>Presenter: M. Dewayne Andrews, M.D., Vice President for Health Affairs, Executive Dean, University of Oklahoma College of Medicine</i>
Thursday, April 19 Noon, Rm. 103	Calvin and Linda Anthony Distinguished Entrepreneur in Pharmacy Lecture "Five key strategies to improve funding and generate credible and impactful results for publications." <i>Presenter: Brian Nightengale, Ph.D., Corporate Scientific Officer, Executive Vice President, XCENDA, Palm Harbor, FL</i>
Tuesday, April 24 Noon, Rm. 101	Graduate Student Seminar "Development and validation of a stability indicating HPLC method for deslorelin." <i>Presenter: Craig Trusley Faculty Mentor: Thomas Kupiec, Ph.D.</i>
Thursday, April 26 Noon, Rm. 103	Philip C. and Ethel F. Ashby Distinguished Lecture "Acquiring the gift of resolving drug therapy problems." <i>Presenter: Brian J. Isetts, Ph.D., Associate Professor, Department of Pharmaceutical Care and Health Systems, University of Minnesota at Minneapolis, MN</i>

2007 Summer Grant Writing Institute—

Sponsored by Oklahoma EPSCoR and the Oklahoma State Regents for Higher Education

EPSCoR and OSRHE announce the 2007 Summer Grant Writing Institute for faculty beginner grant writers. The institute's goal is to assist beginning proposal writers in completing proposals for submission. All food, lodging, materials, and sessions will be provided. Participants' institutions are expected to pay their transportation costs.

Time at the institute will consist of writing instruction/mentoring, writing, critiquing/reviewing, presentations by experienced grant writers, and professional sharing and networking. Participants who come well prepared and work hard during the institute will leave with a completed proposal ready to submit to the granting agency of choice.

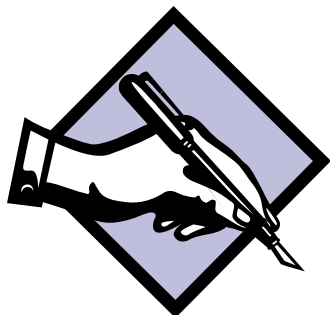
All applicants are requested to submit a 1-2 paragraph outline of their proposal, the name of the intended funding agency, and/or the name of the grant program. This will help determine how to best support the proposal efforts. Two weeks before the institute, participants will submit a background literature survey, the Request for Proposal or program guidelines, and as much of the proposal as they have drafted. Participants will be encouraged to have as much as possible completed in advance, which will increase the likelihood of departing with a nearly finished proposal.

Participants who would like assistance in selecting a grant funding source may attend an optional one-day workshop, *Grant Search and Selection*, on June 12 or June 18 at the Oklahoma State Regents for Higher Education at 655 Research Parkway, OKC, or by videoconference. Make videoconference arrangements by contacting Linda Mason at lmason@osrhe.edu.

A mentoring team of experienced grant writers will be available during the month before the institute for advisement to the participants. A one-day workshop will be provided at no cost to those participant applicants who need help in searching for and selecting a grant funding agency.

Each applicant must provide a completed application form, a letter of support from the college or university president, and a deposit of \$50 by May 25, 2007. Registration for the institute is \$200; the balance of \$150 is due at the beginning of the institute. For more information, please contact Linda Mason (lmason@osrhe.edu) or 405-225-9486. Information is also available on the website: <http://www.osrhe.edu>

Research News You Can Use



NIH Formalizes Multiple Principal Investigator Awards Policy

The NIH has formally announced that it will accept multiple principal investigator (PI) applications beginning

with research grants submitted for February 2007 receipt dates. The policy applies to most "R" grant mechanisms, and some paper PHS 398 application forms if the soliciting Request for Applications or Program Announcement specifically indicates the multiple PI option. While NIH expects the number of applications submitted with more than one PI to be relatively small, a goal of the policy is to encourage multidisciplinary efforts.

The decision to apply for a multiple PI grant remains the responsibility of the investigators and the applicant organization. The announcement emphasizes that each Project Director (PID)/PI shares the authority and responsibility for leading and directing the project. Peer review comments received during the multiple PI pilot program, launched last February, expressed concern that some applications did not adequately identify a PI's function on the leadership team or identified a PI who appeared to be too junior to function in a PI role.

The notice outlines the features of multiple PI applications and the differences between these applications and those with single PIs. The differences include the following:

- All PIs must be registered in eRA Commons with the PD/PI role type. Each PD/PI must include their respective eRA Commons ID in the "Credential" field.
- The first PI listed must be affiliated with the institution submitting the application and will be named the "contact PI" responsible for communications between the NIH and the rest of the leadership team.
- A "leadership" or management plan will be required for each application, regardless of the number of PIs listed. This plan should explain the research project, how members of the leadership team will function on the project, and how this approach facilitates the project's goals.

NIH Explains FY2007 Funding Policy

In its December 15 *NIH Guide*, the National Institutes of Health (NIH) published its fiscal policy for FY2007 awards. The announcement indicated that NIH will not make any inflationary adjustments for existing noncompeting renewal awards. It will continue its current policy of funding noncompeting awards at the 80

percent level until either the final FY07 appropriation bills have been enacted (unlikely) or the continuing resolution under which the NIH is now operating is extended. Link to Announcement No. OD-07-030: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-07-030.html>.

Addressing Reviewer Comments

Bad reviews on your paper?

Follow these guidelines and you may yet get it past the editor! (from www.phdcomics.com)

CASE 1:

Reviewer Comment: "The method/device/paradigm the authors propose is clearly wrong."

❑ How NOT to respond:

"Yes, we know. We thought we could still get a paper out of it. Sorry."

❑ Correct response:

"The reviewer raises an interesting concern. However, as the focus of this work is exploratory and not performance-based, validation was not found to be of critical importance to the contribution of the paper."



CASE 2:

Reviewer Comment: "The authors fail to reference the work of Smith et al., who solved the same problem 20 years ago."

❑ How NOT to respond: ***"Huh? We didn't think anybody had read that. Actually their solution is better than ours."***

❑ Correct response: ***"The reviewer raises an interesting concern. However, our work is based on completely different first principles (we use different variable names), and has a much more attractive graphical user interface."***

CASE 3:

Reviewer Comment: "This paper is poorly written and scientifically unsound. I do not recommend it for publication."

❑ How NOT to respond: ***"You *&^#% reviewer! I know who you are! I'm gonna get you when it's my turn to review!"***

❑ Correct response: ***"The reviewer raises an interesting concern. However, we feel the reviewer did not fully comprehend the scope of the work and misjudged the results based on incorrect assumptions.."***