Dear Colleagues,

I hope that your semester is going well.

In September, I had the pleasure of welcoming more than 100 new faculty members to ASU and sharing with them the services we offer through OKED. Our team presented the ways we support research — from strategy and proposal development, through award management and compliance, to technology transfer and launching startup companies. We always welcome feedback and questions from faculty members and hope to engage with you more.

Our faculty are doing outstanding work in conceptualizing new ideas, competing for investments at the national and global level, and executing and disseminating their ideas with tremendous impact. You'll find many examples of their successes in the pages that follow. For example, work led by Dean Ferran Garcia-Pichel was recently featured on the cover of Science. His team’s efforts provide important information about the effects of climate change on soil microbes. Also, I am delighted to report that Dr. Michelle Rojas and Dean Mari Koerner in the Mary Lou Fulton Teachers College have won an $11.6M grant from the Department of Education to prepare new teachers in STEM fields.

I am pleased to report that the student-led startup SafeSIPP was a finalist in this year’s “College Entrepreneur of the Year” contest from Entrepreneur magazine. Over the past three years, five ASU student companies have made the finals. From developing water purification systems to sending mobile medical clinics to developing nations, our socially minded and entrepreneurial students are serving the public good.

I have some sad news to share with you. Dr. Sid Bacon, an associate vice president of OKED and former Dean of Natural Sciences in the College of Liberal Arts and Sciences, passed away in July. Dr. Bacon was an exemplary leader, an outstanding faculty member, a dedicated teacher and mentor, and a trusted friend and colleague. His commitment and passion for mentoring and teaching led him to set up a memorial fund for undergraduate researchers. Contributions may be made to:

The Sid P. Bacon Memorial Research Scholarship
http://asufoundation.org/sidbaconscholarship

or by check, made payable to:

ASU Foundation, to the Department of Speech and Hearing Science
PO Box 870102
Tempe, AZ 85287-0102

I’d like to express my gratitude to all of you for the hard work and passion that drive you to advance our university and the community. We’ve made an effort to showcase your hard work in the most effective way possible with this issue of the bulletin. The new design features an interactive element, allowing you to click through the length of the bulletin or navigate by clicking on individual sections. Wishing you a successful semester!

Sincerely,

Sethuraman “Panch” Panchanathan
Senior Vice President of OKED
Advancing Research, Entrepreneurship & Economic Development
panch@asu.edu
Soil microbes on Science cover

A team of SOLS researchers led by Dr. Ferran Garcia-Pichel discovered that temperature determines where key soil microbes can thrive. In as little as 50 years, global warming may push some of these microbes out of their present location in colder U.S. deserts. The findings were featured as the cover story of the June 28 edition of the journal Science.

Humanities award honors Cuádraz

The Arizona Humanities Council has selected Dr. Gloria H. Cuádraz in the School of Humanities, Arts and Cultural Studies to receive the 2013 Dan Shilling Public Humanities Scholar Award. Dr. Cuádraz was recognized for her work on the Mexican Americans of Litchfield Park Oral History Project, documenting the lives of Mexican Americans and Yaqui who lived and worked in labor camps of what was once the Southwest Cotton Company, and Later Goodyear Farms.

Tao takes Innovation Award

Dr. Nongjian (NJ) Tao, director of the Biodesign Institute’s Center for Bioelectronics and Biosensors, is a winner of the Fourth Annual Innovation Award from Microscopy Today. The annual award recognizes 10 investigators whose work has made an outstanding contribution to their field. Dr. Tao’s award recognizes his development of Plasmonic-Based Electrochemical Microscopy, or P-ECM, which allows for the imaging of local chemical reactions of individual nanoparticles.

Rittmann named water fellow

ASU engineer Dr. Bruce Rittmann was named among the 2013 class of new Water Environment Federation (WEF) Fellows. The WEF is an international technical and educational organization that connects professionals in the water industry to advance efforts in providing clean and safe water resources. Dr. Rittmann was recognized as a fellow for his work in finding new ways to treat wastewater, capture renewable energy and improve human health.
Honors and Awards

Contents
2 Welcome
3 Honors & Awards
4 Honors & Awards
5 Entrepreneurship & Tech Transfer
6 Research & Training Tools
7 Communications
8 Recent Grants & Contracts
9 Recent Grants & Contracts

Rozenberg Tulip Award to Yan and Liu
Drs. Hao Yan and Yan Liu of the Department of Chemistry and Biochemistry received the 2013 Rozenberg Tulip Award in DNA Computing at this year’s International Conference in DNA Computing and Molecular Programming, held at ASU’s Biodesign Institute. The award recognizes outstanding achievements in biomolecular computing and molecular programming.

Festa makes “Forty under 40” list
Dr. Fernanda Festa, a postdoctoral researcher in ASU’s Biodesign Institute, earned a spot in the Phoenix Business Journal’s annual “Forty Under 40” list, which honors outstanding young leaders in the metropolitan area. Dr. Festa has been working with Dr. Joshua LaBaer in improving a platform technology, called NAPPA, to rapidly identify and validate biomarkers from the complete set of thousands of potential proteins in the human body.

Sala named fellow of ecological society
The Ecological Society of America named GIOS professor Osvaldo Sala a 2013 fellow. The organization recognizes researchers who have made exceptional contributions to scientific fields and advance ecological knowledge in academics, government, non-profit organizations and broader society. Dr. Sala was named a fellow for his exceptional contributions to the study of biodiversity in ecosystems.

Saikia wins book award
Entrepreneur Office Hours available to faculty

The Entrepreneurship and Innovation Group offers Entrepreneur Office Hours for faculty startup companies. During this time, faculty entrepreneurs can get one-on-one guidance from experienced entrepreneurs and business professionals. Entrepreneur Office Hours take place Thursdays from 9 a.m.-noon at the Changemaker Central location on the Tempe campus.

Sign up for an appointment or contact wiley.larsen@asu.edu for more information.

ASU spinout companies raise new funding

ASU spinout companies HealthTell and Heliae have recently raised significant new funding from investors. HealthTell, which is developing an array of new tools to help individuals monitor their health status, has raised $4 million over the past few months to help commercialize a new test for lung, breast, prostate and colorectal cancers. Learn more

Heliae, which has commercialized a platform technology that generates high-value products from algae, has raised $28.4 million that will be used to support the operation and expansion of its first commercial facility in Gilbert, Ariz. Learn more

AzTE Technology Transfer Fellow

The AzTE Technology Transfer Fellows Program is an experiential education program being launched in the fall of 2013. It is available to graduate (Masters/PhD/MBA/JD) students and Post-Doctoral Fellows at ASU with a focus on the schools of engineering, arts and sciences, and business. The program concentrates on providing support for the assessment of the commercial potential of new technologies disclosed to AzTE. If you know a student or post-doc who might be a good candidate, please encourage them to apply online at azte.com

Faculty make impact through tech transfer

The Association of University Technology Managers publishes an annual survey of the technology transfer operations at almost 200 universities and research institutions. From 2010-2012, ASU has been one of only three schools with a cumulative top ten rank in inputs (invention disclosures) and outputs (startups, technology licensing deals) per $10M in research expenditures. Do you have an idea that has commercial potential? AzTE can help you navigate the process of protecting your IP and finding investors. Find out more at http://azte.com/index.php/inventors

Help Propel Ideas from Lab to Launch

The Arizona Furnace Technology Transfer Accelerator is a startup accelerator designed to launch new companies created from technologies and intellectual property licensed from Arizona’s premier research institutions, including ASU. Furnace seeks new and seasoned entrepreneurs to accelerate the commercialization of research organizations’ technology assets in an intensive nine-month accelerator program.

For more information on Furnace and the application process, visit http://azfurnace.org
Learn how to produce more winning proposals!

OKED’s Funding Success Skills Series (fs³) is a series of lunchtime forums designed to improve the quality and quantity of proposals submitted by ASU faculty. The events feature faculty members with strong award records and high-level administrative professionals involved in proposal development. Upcoming workshops include:

**NSF Day**
December 5
7:45 a.m. – 4:45 p.m.
Memorial Union

This forum will serve as a comprehensive introduction to the NSF and will include breakout sessions by directorate.

**NSF Proposal Clinic**
January 9, 2014
7:30 a.m. – 5:00 p.m.
ISTB 4, Marston Theater

Give your NSF application a competitive edge! Existing and potential NSF PIs will get insights on NSF trends and strategy; hands-on experience with application development; tools for addressing education, broader impacts, and diversity requirements; and more.

To RSVP or learn more about fs³ and NSF workshops, visit [http://rsg.asu.edu/research-forums](http://rsg.asu.edu/research-forums) or email ResearchStrategy@asu.edu

**Funding Success Skills Series (fs³)**
Learn how to produce more winning proposals!
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**What you see is what you get:**
**Effective messaging in proposals**
October 25, 11:30 a.m. – 1 p.m.
Old Main, Basha Library (2nd floor)

**Some (sum) of its parts:**
**Creating a persuasive and distinctive proposal narrative**
November (Date - TBD)

To RSVP or learn more about fs³ and NSF workshops, visit [http://rsg.asu.edu/research-forums](http://rsg.asu.edu/research-forums) or email ResearchStrategy@asu.edu

**SciVal Funding on the way**
In addition to Community Of Science/Pivot, OKED will be launching a new funding opportunities database, Elsevier’s SciVal Funding. SciVal Funding will integrate with SciVal Experts to facilitate targeted funding identification for researchers based upon a researcher’s SciVal Expert profile. Stay tuned for more details!

**Required training for researchers**
Depending on the nature of your research, you may be required to complete training on subjects such as fire safety, conflict of interest, animal research or others. To make it easy for you to view all requirements, we have compiled a list of courses and who is required to take them in the Faculty Toolbox under Researcher Responsibilities.

If you have any suggestions for improvements, please contact Debra Murphy, 480-965-2179, Debra.Murphy@asu.edu
ASU communicators can help you share your news and discoveries in a variety of ways:

### Press releases and media pitches

Are you publishing a study in a major journal or presenting at a conference?

Have you received a prestigious award or a major grant?

Let your communications representative help you spread the word. ASU communicators always respect journal/event embargoes and will never release information before it is allowed, but they need advance notice to craft a great pitch.

To find out who your department/college communicator is, contact Amelia Huggins at: Amelia.huggins@asu.edu

### Media training

Does the thought of talking to news reporters make you want to hide under your desk?

ASU can provide training to help you feel comfortable and confident during an interview. Learn more at: https://asunews.asu.edu/media_training

### Feature stories and videos

Are you conducting research that is helping solve an important societal problem?

Do your friends and family say, “Wow, that’s cool!” when you talk about your work?

Please suggest story and video ideas for Research Matters to Diane Boudreau at: dianeb@asu.edu

### Reach new heights

Algae + sun = fuel

### Water Forum:

Supply and Demand

Have you seen our buses?
ASU’s research enterprise continues to grow, reaching $405 million in research expenditures for fiscal year 2013. The following are some of our recent large grants.

The United States Agency for International Development announced a $4.3 million partnership with the Mary Lou Fulton Teachers College to share educational best practices with Indian teachers. In partnership with the Government of India Ministry of Human Resource Development, the India Support for Teacher Education Program (In-STEP) will send 110 Indian educators to ASU for a three-month intensive training course.

Dr. Ariel Anbar in the School of Earth and Space Exploration was awarded $3 million from the National Science Foundation to study the dynamics of Earth system oxygenation.

Dr. Cady Berkel, in the Department of Psychology, was awarded $2.5 million from the National Institutes of Health for implementation of evidence-based preventive parenting programs.

Researchers in the Learning Sciences Institute have received three awards from the Institute of Education Sciences:

- Drs. Danielle McNamara and Tanner Jackson were awarded $1.6 million for the project “Exploring the Educational Game Landscape through Focused Studies and Ecological Interventions.”

- Dr. Carol Connor and her multi-institutional team were awarded $1.6 million for the project, “Exploring Effective Reading Comprehension Instruction: Classroom Practice, Teacher, and Student Characteristics.”

- Dr. Connor was also awarded $1.5 million for the project, “Making Individualized Literacy Instruction Available to All Teachers: Adapting the Assessment to Instruction (A2i) Software for Multiple Real-World Contexts.”

The National Institute for Excellence in Teaching, in partnership with Mary Lou Fulton Teachers College, was awarded an $11.6 million Support Effective Educators Development (SEED) grant from the U.S. Department of Education. The three-year project will prepare 214 new teachers in STEM fields in 21 school districts across Arizona through the iTeachAZ model. The ASU portion of this project is led by Dr. Michelle Rojas.

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Dr. Thomas Dishion, in the Department of Psychology, was awarded $2.4 million from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to study relationship dynamics and young adult drug use/abuse.

Dr. Marilyn Carlson, in the School of Mathematical and Statistical Sciences, was awarded $2.1 million from the NSF for transforming undergraduate mathematics teaching and learning.

Dr. Heather Bimonte-Nelson, in the Department of Psychology, was awarded $1.6 million from the National Institutes of Health to develop safe and effective hormone therapies for menopausal women.

Dr. Wendy Oakes, in the Mary Lou Fulton Teachers College, was awarded $1.25 million from the Department of Education’s Office of Special Education Programs to enhance teacher preparation in early childhood special education.

Dr. Will Corbin, in the Department of Psychology, was awarded $1.5 million from the NIAAA to study contextual influences on alcohol response and its relation to drinking outcomes.

Dr. Michael Barton in the School of Human Evolution and Social Change was awarded $1.3 million from the NSF to study the emergence of coupled natural and human landscapes in the Western Mediterranean.