PROGRAM OF EVENTS

10—11:30 am  Provost’s Teaching Fellows Presentations
Learn about Fellows’ initiatives in brief, 20x20 presentations.
Brian Bremen, College of Liberal Arts, Department of English
Keith Brown, McCombs School of Business, Department of Finance
Carol Delville, School of Nursing
Jen Ebbeler, College of Liberal Arts, Department of Classics
Mike Mackert, Moody College of Communication,
    Stan Richards School of Advertising and Public Relations
Rick Neptune, Cockrell School of Engineering, Department of Mechanical Engineering
Penne Restad, College of Liberal Arts, Department of History
Cathy Stacy, College of Natural Sciences, Department of Statistics and Data Science
Sean Theriault, College of Liberal Arts, Department of Government
David Vanden Bout, College of Natural Sciences, Department of Chemistry

11:30 am—12 pm  Gallery Walk
Stroll around the mezzanine and visit the presenters for follow-up questions and conversation.

12 pm—1 pm  Discussions and Lunch
Grab a box lunch and join a table for conversations around key themes.

1 pm—2 pm  Faculty Innovation Presentations
Hear from other faculty innovators about exciting work going on across campus.
Pradeep Ashok, Cockrell School of Engineering, Department of Petroleum and Geosystems Engineering
Sally Amen and Kristin Harvey, College of Natural Sciences, Department of Statistics and Data Science
Mark Daniels, College of Natural Sciences, Department of Mathematics
Jeff Hellmer, College of Fine Arts, Butler School of Music
Mark Longaker, College of Liberal Arts, Department of Rhetoric and Writing
Elaine Rich and Alan Cline, College of Natural Sciences, Department of Computer Science
Michael Starbird, College of Natural Sciences, Department of Mathematics
Ramesh Yerraballi, Cockrell School of Engineering,
    Department of Electrical & Computer Engineering

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Learning Sciences
The Provost’s Teaching Fellows (PTF) Program was created in 2013, with a mission of creating and sustaining a community of practice committed to fostering a culture of pedagogical excellence, in order to enhance student learning at The University of Texas at Austin. At the heart of the program lies scholarly inquiry into what constitutes excellence in faculty teaching and student learning. Fellows are expected to adopt an evidence-based approach to teaching/learning through their specific educational initiatives, and to share insights gained with the broader academic community within the university and beyond. The Fellows are also expected to support other faculty interested in improving their teaching by assuming leadership and service roles in curating learning communities, hosting conferences, and creating other venues that facilitate the transfer of pedagogical skills and knowledge. The vision of the PTF program is that we will have a broad, positive, and sustained impact on the quality of teaching across the campus through the identification and support of talented, forward thinking and service-oriented faculty. We are delighted that you are joining us today to celebrate the accomplishments of our first cohort of Fellows and to learn more about their innovative initiatives through presentation and collegial dialog.

Sincerely,

Pat Davis, Chair
SENIOR FELLOWS

Carl S. Blyth
College of Liberal Arts,
Department of French and Italian

Ruth Buskirk, Steering Committee
College of Natural Sciences,
Department of Molecular Genetics
and Microbiology

Pat Davis, Chair
College of Pharmacy

Samuel D. Gosling
College of Liberal Arts,
Department of Psychology

Martha Hilley
Butler School of Music

Lori K. Holleran-Steiker, Steering Committee
School of Social Work

Calvin Lin
College of Natural Sciences,
Department of Computer Science

Robert Prentice
McCombs School of Business,
Department of Business,
Government and Society

Diane Schallert
College of Education,
Department of Educational Psychology

Michael Starbird
College of Natural Sciences,
Department of Mathematics

Mary Steinhardt, Steering Committee
College of Education,
Department of Kinesiology
and Health Education

Jeremi Suri
Lyndon B Johnson School of Public Affairs;
College of Liberal Arts,
Department of History

Anita Vangelisti
Moody College of Communication,
Department of Communication Studies

Michael Webber
Cockrell School of Engineering,
Department of Mechanical Engineering
The goal of this initiative is to reorganize the E314 classes—a primary lower-division English course offering (with 32 sections per year)—by keeping the major variants but having each course structure itself according to a series of units that focus on particular analytical, expressive, or research-oriented skills, relevant to both the study of literature and the academic success of a student, regardless of the field of study he or she chooses to enter. The project team will offer a series of workshops in each semester in order to train graduate students in how to best develop those skills in their students and mentor these instructors throughout the year.
A primary tool in helping instructors improve their teaching skills is a careful assessment of the strengths and weaknesses they exhibit in the classroom environment. The goal of this Provost Teaching Fellows (PTF) initiative is to create a systematic and on-going program of peer teaching observation and evaluation for the Department of Finance, wherein faculty members engage in a thorough review and critique of each other’s course content mastery and prowess in the classroom. This effort has involved three distinct steps: (i) designing a set of standardized forms used in the observation process, (ii) developing a formal policy statement to govern the process, and (iii) launching and maintaining the program. One of the most exciting aspects of participation in the PTF program is the ability to collaborate with colleagues from across the campus who share the same interest in the process of peer teaching observation. Together, the Fellows have formed a learning community around this topic to increase effectiveness in the classroom and produce better learning outcomes for students.
Carol Delville
School of Nursing

Carol Delville is transforming health professional education through the design and implementation of collaborative interprofessional opportunities. Her projects focus on discovering the role(s) of other health professionals and learning how collaboration improves client care through shadowing experiences, joint ethics presentations, and interprofessional team community service quality improvement projects. Shadowing experiences and the interprofessional hospital simulations are now part of graduate nursing education. A video interview highlighting student outcomes from shadowing experiences is shared on HealthIPE.org.

Dr. Kenneth Shine, former Institute of Medicine president, spoke to over 130 students from a wide variety of health disciplines on preventing medical errors and included interactive case studies. The graduate nursing students built on this experience as they worked on community-based quality improvement projects.

Communication is a key component of interprofessional education. Dr. Delville completed “Master Training” for TeamSTEPPS, a research based program focused on team-based quality improvement and patient safety. All Master’s graduate students in nursing now complete basic training, and faculty participate in a development class to integrate TeamSTEPPS into clinical experiences, simulations, and classroom learning. The biggest project outcomes are from nine interprofessional team quality improvement projects. Healthcare professional students from the Schools of Nursing, Pharmacy, and Social Work, and residents in the Dell Graduate Medical Program worked with community agencies and highlighted their results in poster presentations before graduating! Community response is extremely positive with six new projects underway. Being able to give back to the Central Texas community, the people who provide students with learning opportunities, has a powerful impact on motivation and learning.
Identifying Successful Learning Strategies in Online and Blended Classrooms

Jen Ebbeler
College of Liberal Arts, Department of Classics

Dr. Ebbeler’s goals include observing student learning strategies in online course environments, determining student perceptions about the value of recorded lectures vs. interactive learning tools, determining whether different types of learners are more likely to succeed in blended vs. online classes, and describing the qualities of a successful online learner.
Health communication faculty face increasing expectations regarding their academic productivity, including the expectation to seek and secure external funding. Doctoral training in health communication that does not fully prepare students for the challenges of securing external funding is doing them a disservice that will make them less competitive for academic positions and less likely to succeed in the academic positions they assume. Teaching Fellow Mike Mackert has used his initiative funding to launch an interdisciplinary program inside the Moody College of Communication to address this need.

The Health Communication Scholars Program (HCSP) provides students with experiences that put them at a huge advantage: students learn to write grants, compete for funding, and design research projects. HCSP participants responding to an evaluation survey had overwhelmingly positive experiences; respondents felt the program provided great value, improved their writing skills, gave them skills to pursue funding in the future, and helped them secure tenure track faculty positions. The program has become a permanent program of the UT Center for Health Communication.
Integrating Computational Techniques in the Engineering Curriculum

Rick Neptune
Cockrell School of Engineering, Department of Mechanical Engineering

Many engineering systems are too complex to be studied with experimental or analytical methods. Thus, computational techniques are essential elements in the engineering profession. The current mechanical engineering curriculum introduces these tools during the sophomore year in ME 318—Engineering Computational Methods, but there is limited opportunity for “spiral learning” to reinforce the concepts and techniques learned.

Dr. Neptune’s initiative introduces scientific computing and programming throughout the undergraduate mechanical engineering curriculum to provide spiral learning opportunities by emphasizing and utilizing computation in several classes and developing resources that can be used in other classes and departments within the Cockrell School of Engineering.
Dr. Restad’s initiative began with a straightforward goal: to curate a collection of practical ideas, strategies, resources, and advice about teaching that could spark reflection on one’s own practice. She soon realized that the first steps toward breaking out of comfortable, “good enough” teaching habits in order to foster more active learning are often taken with and among colleagues before even seeking expert advice.

Dr. Restad worked diligently over the past two years to expand the opportunities available to UT faculty to “talk shop” and gather together to discuss strategies. Some of her successes include establishing the Provost’s Teaching Fellows First Friday Think Tank, assisting with the January Teaching Colloquium and new faculty orientation, and beginning a small-scale Trading Zones group for the College of Liberal Arts where people can gather to discuss how best to engage students in their respective disciplines.
The current pass rate in the introductory programming class for students with no programming experience is 65% compared to 80%–85% for students with some programming experience. This initiative aims to increase the pass rate for students with no prior programming experience by offering small classes with closed labs exclusively for students with little to no programming background, as well as requiring these students to complete lots of problems sets in class with guided practice. The pilot program for this initiative launched Fall 2015. Future work will focus on flipping the class and recruiting the highest-need students.

*Dr. Scott cannot present at today’s showcase, but you can contact him to learn more about his initiative at scottm@cs.utexas.edu.*
Teaching Fellow Cathy Stacy developed the OnRamps Statistics initiative to enhance college readiness for Texas high school students. OnRamps Statistics is a dual-enrollment course that covers the fundamentals of statistics and data modeling and is designed to be implemented using a blended instructional model. Developing independent learners is a hallmark of the course. Assessments are designed to progress from highly supported activities to more independent work on the same concepts. Through this highly scaffolded approach, students learn to use the R programming environment to tackle questions about real-life data, ultimately developing the ability to answer these questions independently in a real-time exam setting.

The pilot year was a great success. Seventeen different high schools across the state partnered with OnRamps to offer OnRamps Statistics to over 500 students. A good number of these students went on to successfully claim UT credit for the course. Throughout the year, Dr. Stacy and her project team received lots of positive feedback about the scaffolding of the course and the real hands-on data exercises using R studio. The high school teachers were very invested in helping the course run smoothly, and their input has led to some new features that will streamline grading and improve communication for this next year. Nearly all of the teachers from the pilot are returning, and several new schools will partner with OnRamps for this next run as well!
Teaching Mentorship

Sean Theriault
College of Liberal Arts, Department of Government

Teaching Fellow Sean Theriault is developing a teaching mentorship program for new faculty within the College of Liberal Arts. By matching each new teacher with a member from the Academy of Distinguished Teachers (ADT), the program aims to ease the new teachers' transitions into the classroom and to integrate them more quickly into the UT community.

The ADT member observes the new teacher in the classroom, and the new teacher observes the award winning teacher. Afterward, they have a conversation about improving their teaching. Should the program prove successful, it may become a standard component of new teacher orientation and also a mechanism to reinforce the good practices shared at that forum.
Data-Driven Course Design: 
Differentiation of Chemistry Concept Retention between Standard and Hybrid Courses

David Vanden Bout 
College of Natural Sciences, Department of Chemistry

Chemistry has recently undergone a major transformation from a purely lecture-based course to a hybrid course. In this new hybrid model, the in-class learning is supported by a significant set of online resources to support independent learning outside of the classroom. This approach marries the flexibility and customized nature of web-based learning modules to deliver factual and procedural knowledge with relevant, engaging classroom-based instruction that will serve to motivationally engage the students. It has been well documented in general that student-centered learning leads to deeper understanding and better retention. However, it is not clear with the current hybrid course what types of in-class activities lead to improved retention. Dr. Vanden Bout’s initiative seeks to examine how technology can be leveraged in hybrid courses to improve student retention of key concepts in chemistry while also striving to serve as an exemplar of how to use data on student learning to systematically improve teaching in large lecture courses.
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Interested in getting involved with the Provost’s Teaching Fellows? Contact Chair-elect Mike Mackert, mackert@utexas.edu, about applying for the program. Or continue the conversation with us at a First Friday event; contact Penne Restad, restad@mail.utexas.edu, or Michael Starbird, starbird@math.utexas.edu, for more information.
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