

# UNIVERSITY OF PENNSYLVANIA *Almanac*

Tuesday  
February 16, 2016  
Volume 62 Number 23  
[www.upenn.edu/almanac](http://www.upenn.edu/almanac)

## SP2 Penn Top 10

With the 2016 United States presidential election race ramping up, experts from the University of Pennsylvania's School of Social Policy & Practice (SP2) are analyzing 10 of the nation's key social justice and policy issues in a project called *SP2 Penn Top 10 Social Justice & Policy Issues for the 2016 Presidential Election*.

The project seeks to educate, enlighten and empower a diverse audience of voters and policymakers. The School kicked off the multimedia initiative with a new website: [www.PennTopTen.com](http://www.PennTopTen.com). The site includes essays, animations, author biographies, author interviews and resources related to each of the 10 issues:

- Ending Homelessness
- Gun Policy
- Food Deserts
- Youth Aging Out of Foster Care
- Measuring Poverty and Well Being
- Transforming "Paid Work"
- Interventions for Youth
- Mass Incarceration
- Mandated Mental Health Treatment
- Child Poverty

"We are thrilled to officially launch the *SP2 Penn Top 10* and look forward to the road ahead as this multiplatform initiative unfolds," said Jessica Bautista, *SP2 Penn Top 10* project manager. "The energy and expertise from our team and faculty members has been nothing short of inspiring."

Content and essays on the Top 10 issues will be released each month until the launch of the *SP2 Penn Top 10* book in Washington, DC, on May 19. The dynamic, user-friendly workbook will feature all 10 abridged essays, statistics, policy recommendations and voter resources to inform conversations and decisions leading up to the 2016 presidential election.

"The experts tied to this project are offering arguments about how we should envision the social justice and policy landscape given research that they've conducted," said SP2 Dean John L. Jackson Jr. "Some of these issues, like gun control, are already mainstays of our national political conversation. Others probably deserve a lot more election-time discussion than they receive."

The first essay now featured on the site is a piece by Dennis Culhane, the Dana and Andrew Stone Chair in Social Policy Professor, "Ending Homelessness Now." It explores tangible and evidence-based ways that the US can end homelessness among veterans and nonveterans.

In addition, 10 SP2 graduate students have been chosen to be SP2 Top 10 Fellows. During the semester, they will produce blogs, op-eds and feature stories.

## Mapping Penn GSE's Partnerships with Philadelphia Schools

The crisis of Philadelphia's schools drew preeminent teaching expert Pam Grossman to the dean'ship of Penn's Graduate School of Education (GSE), which she has led since January 2015 (*Almanac* April 1, 2014).

The City of Philadelphia is a national testing ground for many of the issues facing America's educational system: school reform, charters, school funding, deep poverty and a diverse and diversifying student body. Dr. Grossman felt compelled to make a difference here—hoping her work at Penn could have an impact on the community and in national discussions.

Crucial to her strategy was understanding Penn GSE's direct work with Philadelphia schools, which she was surprised to learn extends into every city neighborhood with 513 activities in 247 schools. Dean Grossman also discovered that faculty within Penn GSE and on the Penn campus, although united in their commitment to Philadelphia, do not always have a detailed understanding of the many projects underway. Without that shared knowledge, it is difficult to foster the alchemy necessary for larger change.

To illustrate Penn GSE's work and partnerships in Philadelphia, the school launched an interactive and evolving "heat map." To explore it, see <https://phillymap.gse.upenn.edu/>

Dean Grossman's hope is that the map forms a foundation for further partnerships across not

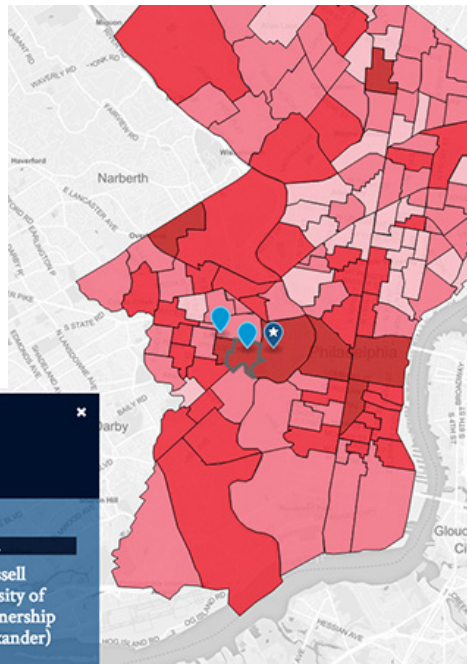


Pam Grossman

are teaching, counseling and leading. GSE's researchers are engaged in efforts like Shared Solutions, a deep partnership between the University and school district to better understand the district's turnaround efforts in order to make changes that can work across systems. Also, programs like the Philadelphia Writing Project provide professional development to hundreds of area educators.

Penn GSE also prepares teachers and leaders for city schools, and students stay committed to Philadelphia after graduating. A majority of its teaching graduates work in Philadelphia area schools. Their leadership programs prepare aspiring and mid-career principals and leaders to make a positive difference in their schools. These alumni are often the catalyst for bringing Penn students, faculty and resources into their schools.

"This is only the first step," said Dean Grossman. "In the weeks and months to come, I'm looking forward to announcing new collaborative efforts to harness the energy and resources of Penn to work towards improving education for all Philadelphia students."



only GSE, but the larger Penn and Philadelphia communities. "At Penn GSE, we're committed to putting our research to work to develop teachers, leaders and resources that can help unlock opportunities for the children of Philadelphia," said Dean Grossman. "We partner with schools in small and large ways to work towards social justice—always endeavoring to leverage the expertise of the larger research university in service of a better education for all."

The map (above) demonstrates the range and depth of Penn GSE's work. Penn GSE's master's and doctoral students participate in training partnerships in more than 90 city schools; they

## IN THIS ISSUE

- 2 Senate: SEC Actions; Trustees February Meetings; Call for Proposals for Penn CREF and GEF; Deaths
- 3 Council: Call for Volunteers for Committee Service
- 4 Models of Excellence Awards
- 5 University Research Foundation; URF Awards
- 6 Concert in Honor of *The Golden Age of King Midas*; Human Resources: Upcoming March Programs Update; CrimeStats; Celebration of African Cultures; University Club Grand Reopening Kick Off Party
- 8 Research Roundup

**Pullout: OF RECORD:**  
Procedures for Resolving Complaints Against Faculty of Sexual Assault, Sexual Violence, Relationship Violence and Stalking

## SENATE From the Senate Office

The following is published in accordance with the Faculty Senate Rules. Among other purposes, the publication of SEC actions is intended to stimulate discussion among the constituencies and their representatives. Please communicate your comments to Patrick Walsh, executive assistant to the Senate Office, either by telephone at (215) 898-6943 or by email at senate@pobox.upenn.edu

### Faculty Senate Executive Committee Actions Wednesday, February 10, 2016

**Chair's Report.** Faculty Senate Chair Reed Pyeritz reported that the annual Faculty Senate Symposium is scheduled for April 6, at 4 p.m., in Houston Hall's Hall of Flags; the topic is the role of faculty in the evolution of the research university. Presidents from three major research universities have committed to participate thus far. Dr. Pyeritz also informed SEC that revised policies on sexual violence and assault will be available for review next month. He announced that Penn Libraries have engaged a PR firm to understand how best to communicate to the University community about the services it offers; he asked for SEC member input on this matter by email.

**Past-Chair's Report.** Faculty Senate Past Chair Claire Finkelstein reported that the Academic Planning and Budget Committee held a meeting on February 9 and the Capital Council held one on February 10. She gave an update on the Campaign for Community (C4C), informing SEC members that the Faculty Senate's co-sponsored event, "A Conversation About Race and Respect in the Classroom" on January 27, was well received. The C4C Steering Committee continues to solicit proposals for the current academic year and recommends that SEC members encourage their constituencies to submit proposals. The Senate Office can advise faculty seeking to develop proposals. Interested faculty members should contact the Senate Office.

**Update from the Office of the President.** President Amy Gutmann reported on progress toward the three pillars (Inclusion, Innovation, Impact) of the Penn Compact 2020. US Vice President Joe Biden chose Penn as the home of the "Cancer Moonshot" research program that President Obama recently announced in his State of the Union address; it received a warm reception from both major political parties and speaks to the strength of Penn faculty and multidisciplinary engagement. The Penn Museum has opened its *Golden Age of King Midas* exhibit that represents 65 years of excavation by Penn archaeologists in Turkey. President Gutmann will embark on a ten-city "Our Penn" tour of the US, Asia and the UK in which she will convene panels with students in front of alumni, parents and Penn friends to highlight the current Penn student experience. The Action Plan for Faculty Diversity and Excellence has invested \$157 million over the past four years; a report will be released next year that describes the progress made toward the Plan's goals. The Faculty Council on Access and Academic Support has worked for the past eight years to increase access for underrepresented students in STEM fields; it has recently facilitated the introduction of Structured Active In-class Learning (SAIL) environments for classes that engage students in blended learning and improved teaching. First generation and low-income-family students are also being tracked by the Financial Aid office to ensure they have the support they need; a multi-campus student group, FirstGen, is facilitating this effort. The Penn Center for Innovation (PCI) has a model that aids faculty members in bringing new discoveries into the marketplace; President Gutmann encouraged SEC members to engage with PCI in proposing innovative, cross-school ideas worthy of further research and faculty support.

**Update from the Office of Information and Systems Computing.** Tom Murphy, University chief information officer, provided SEC members with an update on the O365 common email and calendar initiative, which involves all schools and centers except PSOM. Primary benefits include access to contacts from a single Global Address list, viewing of free/busy information on all calendars, one terabyte of personal data storage on OneDrive for Business and free Office 365 ProPlus usage on five devices (available for faculty download this month). Mr. Murphy also discussed the continuing work on Next Generation Student Services initiatives, the development of the Penn Research Administration Gestalt of Management Applications (PRAGMA), a Human Capital Management Process program, and information security initiatives including development of a University-wide firewall. He emphasized the importance of transparency and faculty oversight on defining the firewall's initial settings, which are intended to prevent harmful attacks to University technology and not to censor users' freedom of expression or research. He noted that a "Transparency and Accountability Program" will soon be launched within established University policies to allow for proactive management of Penn's computing environments and that more information is forthcoming.

**Faculty Wellness Ambassador Program.** In May 2015, SEC approved a Mental Health and Welfare Pilot program, which aims to help educate faculty on the handling of student mental health issues, thereby improving the response of faculty to students experiencing psychological distress. The program will soon begin its pilot phase and is seeking participation from faculty members who are willing to undergo a one-day training and serve as a resource on mental health issues in their schools or departments. SEC members were asked to nominate colleagues who can serve effectively in this role.

### Call for Proposals for the Penn China Research & Engagement Fund: April 15 and the Global Engagement Fund: March 14

Penn Global is excited to announce the 2016 Call for Proposals for the Penn China Research & Engagement Fund and the Global Engagement Fund.

The Penn China Research & Engagement Fund (Penn CREF), launched in March 2015, is a five-year, \$10 million competitive matching program designed to stimulate and support activity in China and engagement with the Penn Wharton China Center. All Penn faculty and senior administrators are eligible to apply. Proposals for Penn CREF are due by April 15. For additional details about and submission instructions for Penn CREF, visit: <https://global.upenn.edu/global-impact/penn-china-research-engagement-fund>

The Global Engagement Fund (GEF) Annual Program seeks to seed creative projects that will further Penn's global initiatives in the key regions of India, Africa and Latin America and the Caribbean. All Penn faculty and senior administrators are eligible to apply. Proposals for the Global Engagement Fund are due March 14. For additional details about and submission instructions for GEF, visit: <https://global.upenn.edu/gef>

Penn Global strongly encourages faculty and staff who are interested in applying for either fund to contact [global@exchange.upenn.edu](mailto:global@exchange.upenn.edu) with any questions and/or requests and to schedule a brief meeting to further discuss your ideas.

### Penn Trustees Winter Meetings

On February 25 and 26, the following University of Pennsylvania Trustee Committee meetings will be held at the Inn at Penn, except where noted.

Thursday, February 25

8:30-10 a.m.

- Local, National & Global Engagement Committee

10:15-11:45 a.m.

- Facilities & Campus Planning Committee

1:45-3:30 p.m.

- Student Life Committee, Counseling & Psychological Services (CAPS), 3624 Market Street

3:45-5:15 p.m.

- Academic Policy Committee

- Budget & Finance Committee

Friday, February 26

11:30 a.m.-12:30 p.m.

- Stated Meeting of the Trustees

## Deaths

### Harold S. Rosenbluth, Penn Libraries Overseer

Harold S. Rosenbluth, C'47, L'50, a former Overseer of Penn Libraries, died of cancer at home in Haverford, Pennsylvania, on February 3. He was 91 years old.

Mr. Rosenbluth was born in Philadelphia and graduated from Central High School. He served in the US Army from 1942-1944. He earned his bachelor's degree in 1947 and his law degree in 1950, both from Penn.

He worked for three years as a corporate lawyer before joining the family business, Rosenbluth International, Inc. The family sold the business to American Express Co. in 2003, but retained Rosenbluth Vacations. Mr. Rosenbluth remained chairman until his death.

He served on the University of Pennsylvania Libraries Board of Overseers from 1998-2011. He and his wife, Frances Baylinson Rosenbluth, Ed'48, who first met at the Penn Library, established the Max C. and Zipora E. Baylinson Music Fund. The fund supports the Otto E. Albrecht Music Library at Penn and honors Mrs. Rosenbluth's parents.

In addition to his wife, Frances, Mr. Rosenbluth is survived by two sons, Lee and Hal; a daughter, Amy; and seven grandchildren.

Donations may be made to the Harold S. Rosenbluth Memorial Fund at Rodeph Shalom Synagogue, 615 N. Broad Street, Philadelphia, PA 19123.

### To Report A Death

*Almanac* appreciates being informed of the deaths of current and former faculty and staff members, students and other members of the University community. Call (215) 898-5274 or email [almanac@upenn.edu](mailto:almanac@upenn.edu)

**No Issue March 8:** During Spring Break *Almanac* will not publish an issue. Therefore the March AT PENN Update in the March 1 issue will span two weeks, through March 16. The deadline is February 23.

ALMANAC February 16, 2016



## Call for Volunteers for 2016-2017 Committee Service: March 23

### Committees and Their Work

**To:** University Faculty,  
Penn Professional Staff Assembly  
and Weekly-Paid Professional  
Staff Assembly Members

**From:** 2015-2016 University Council  
Committee on Committees

**RE:** Volunteers Needed for  
Committee Service

The University Council 2015-2016 Committee on Committees invites you to nominate yourself or others for service on University Council Committees. Council committees serve as advisory bodies in shaping academic/administrative policy. Please consider taking advantage of this opportunity to learn about the administrative structure of the University and have input into its decision-making.

Membership on the committees listed is open to faculty and staff, and we invite individuals who have previously served to volunteer again. We also encourage faculty and staff who have not previously participated to volunteer so that committees may have a mix of new ideas and experience. Most committees also are open to students; their participation is being solicited through other channels.

Please submit nominations by *March 23, 2016*, using the form below.

To support participation, it is strongly encouraged that offices provide flexibility and release time to the extent possible for staff attendance at University Council Committee meetings. We encourage staff and supervisors to work together to arrange release time in recognition of the operational needs of their school/center. We encourage staff members to provide as much notice as possible in scheduling time for attendance at Council Committee meetings.

To have an idea of a particular committee's work, you may wish to review its most recent annual report published in *Almanac* (March 5, 2015) by visiting the University Council website at <http://www.upenn.edu/secretary/council/committees.html>

### 2015-2016 University Council Committee on Committees

**Chair:** Laura Perna (GSE, Faculty Senate Chair-Elect)

**Faculty:** Claire Finkelstein (Law, Faculty Senate Past Chair)  
Karen Glanz (PSOM/Nursing)  
Firoozeh Kashani-Sabet (History)  
Reed Pyeritz (PSOM, Faculty Senate Chair)  
Florian Schwarz (Linguistics)  
Christophe Van den Bulte (Wharton)

**Students:** Sangya Agarwal (Graduate Student)  
Michael Roberts (Undergraduate Student)

**PPSA:** Kuan Evans (Office of Affirmative Action and Equal Opportunity Programs)

**WPPSA:** Loretta Hauber (Weingarten Learning Resources Center)

**Staff to the Council Committee on Committees:**  
Joseph Gasiewski (Office of the University Secretary)  
Patrick Walsh (Office of the Faculty Senate)

**Academic and Related Affairs** has cognizance over matters of undergraduate recruiting, admissions and financial aid that concern the University as a whole or those that are not the specific responsibility of individual faculties; of all programs in recreation, intramural and club sports and intercollegiate athletics; and of all matters of policy relating to research and the general environment for research at the University, including the assignment and distribution of indirect costs and the assignment of those research funds distributed by the University. The Committee considers the purposes of a university bookstore. It advises the administration on policies, developments and operations of the bookstores and libraries; in such areas as international student services, foreign fellowships and studies abroad, exchange programs and cooperative undertakings with foreign universities; on athletic operations and recommends changes in policy when appropriate; and on those proposals for sponsored research referred to it because of potential conflict with University policy.

**Campus and Community Life** has cognizance over the University's electronic and physical communications and public relations activities; advises on the relationship of the University to the surrounding community; has cognizance of the conditions and rules of undergraduate and graduate student life on campus; and considers and recommends the means to improve safety and security on the campus.

**Facilities** keeps under review the planning and operation of the University's physical plans and all services associated therewith, including transportation and parking.

**Honorary Degrees** is charged with soliciting recommendations for honorary degrees from faculty, staff and students and submits nominations to the Trustee Committee on Honorary Degrees.

**Personnel Benefits** has cognizance over the benefits programs for all University personnel. Special expertise in personnel, insurance, taxes or law is often helpful.

**Diversity and Equity** aids Penn in fostering and taking full advantage of its diversity as well as in strengthening ties across all boundaries to enrich and enliven the campus community. The Committee shall advise the offices of the president, provost and the executive vice presidents on ways to develop and maintain a supportive atmosphere on campus for the inclusion and appreciation of diversity among all members of the University community. The Committee will review and provide advice regarding the University's equal opportunity and affirmative action programs and policies. The areas in which the Committee shall report to the Council include diversity within the educational and work settings, integration of staff and faculty into the larger campus community and ways to foster a campus environment that is inclusive and supportive of difference.

**Note:** Faculty who wish to serve on the Committee on Open Expression may also use the form below. Nominations will be forwarded to the appropriate Faculty Senate Committee. Please forward names and contact information to Patrick Walsh, Faculty Senate Office, Box 9 College Hall/6303, tel. (215) 898-6943; fax (215) 898-0974 or email at [senate@pobox.upenn.edu](mailto:senate@pobox.upenn.edu)

Please respond by *March 23, 2016*.

For Faculty volunteers, mail the form to: Patrick Walsh, Faculty Senate Office, Box 9, College Hall/6303, tel. (215) 898-6943; fax (215) 898-0974; or email at [senate@pobox.upenn.edu](mailto:senate@pobox.upenn.edu)

For Penn Professional Staff Assembly volunteers, mail the form to: Kuan Evans, Office of Affirmative Action and Equal Opportunity Programs, Suite 228, Sansom Place East/6106, tel. (215) 898-6993; or email at [knevens@upenn.edu](mailto:knevens@upenn.edu)

For Weekly-Paid Professional Staff Assembly volunteers, mail the form to: Loretta Hauber, Weingarten Learning Resources Center, Suite 300, 3702 Spruce St./6027, tel. (215) 573-9235; or email at [lhauber@exchange.upenn.edu](mailto:lhauber@exchange.upenn.edu)

Committee(s) of interest: \_\_\_\_\_

Candidate: \_\_\_\_\_

Title or Position: \_\_\_\_\_

Department: \_\_\_\_\_

Campus Address (including mail code): \_\_\_\_\_

Campus Phone and Email: \_\_\_\_\_

Please specify if you think that you are especially qualified for or interested in serving on a particular committee: \_\_\_\_\_

## Recognizing Outstanding Penn Staff Members with 2016 Models of Excellence Honors

At Penn, going the extra mile gets you noticed. In its 17th year, the Models of Excellence Program will honor 77 outstanding staff members who play key roles in Penn's successes every day.

President Amy Gutmann will present honorees from across 13 schools and centers with awards for their exemplary service on *April 21* in Irvine Auditorium.

The Models of Excellence program spotlights remarkable staff contributions to the University's standing as a global leader in education, research and public service. It's also a unique opportunity for staff to appreciate and be appreciated by their colleagues along with the entire Penn community. The awards are presented in three categories: Models of Excellence, Pillars of Excellence and Model Supervisor.

### Models of Excellence

The Models of Excellence Award recognizes staff member accomplishments that reflect initiative, leadership, increased efficiency and a deep commitment to service.

Both the *Penn Wellness/Be in the Know Team* and the *Penn Wharton China Center Project Team* will be presented with the Models of Excellence Award.

#### Penn Wellness/Be in the Know Team

The *Penn Wellness/Be in the Know Team* implemented a University-wide health initiative that engaged thousands of employees on a path to wellness.

Amy Blake, Human Resources  
Chris Blickley, Human Resources  
Stephanie Brown, Human Resources  
Elizabeth Devietti, Perelman School of Medicine  
Matt Gauntt, Human Resources  
Tamika Graham, Human Resources  
Ashlee Halbritter, University Life, Student Health Service  
Moriah Hall, Perelman School of Medicine  
Sheila Hall, Human Resources  
Rebecca Huxta, University Life, Student Health Service  
Chris Iyson, Human Resources  
Karen Kille, Human Resources  
Soncerae Lewis, Human Resources  
Erica Schulke, Human Resources  
Sara Solomon, Perelman School of Medicine  
Katrina Terrell, Human Resources  
Geri Zima, Human Resources

#### Penn Wharton China Center Project Team

The *Penn Wharton China Center Project Team* was chosen for their work supporting research opportunities and fostering Penn's faculty and student relationships with Chinese partners.

Dan Alig, The Wharton School  
Jessie Burns, Provost's Center  
Laura Cavender, President's Center  
Leo Charney, Provost's Center  
Christina Cook, President's Center  
Edwin Datz, Facilities & Real Estate Services  
Tara Davies, Development & Alumni Relations  
Malini Doddamani, The Wharton School  
Jeffrey Edwards, Information Systems & Computing  
Stefan Frank, The Wharton School  
Amy Gadsden, Penn Global  
Eric Greenberg, The Wharton School  
Yanan Guo, The Wharton School  
Michael Hugel, The Wharton School  
Marko Jarymovych, The Wharton School  
Artemis V. Koch, Division of Finance  
Karuna Krishna, The Wharton School  
Jimmy Lieu, The Wharton School  
Anna Loh, The Wharton School



### Pillars of Excellence

The Pillars of Excellence Award, introduced in 2014, recognizes the important support Penn's weekly-paid staff members provide to promote the University's mission.

This year's Pillars of Excellence awards will go to *Brian Anders* of Development & Alumni Relations and *Greg Szydlowski* of Facilities & Real Estate Services.

Mr. Anders is recognized for his leadership, problem solving and customer service in his role as Sweeten Alumni House Building Manager.

With his electrical expertise, Mr. Szydlowski is being honored for his exemplary customer service and initiative in situations of urgent need.

### Honorable Mentions

*Collin Anthony* of the College Houses & Academic Services, *S. Tyler Hoffman* of The Wharton School and *Wilma Smith* of Residential and Hospitality Services will receive Pillars of Excellence Honorable Mentions.

### Model Supervisor Finalists

The Model Supervisor Award honors supervisors who are effective and productive leaders for the University.

The three finalists for the Model Supervisor Award are:

Gary Garofalo, Parking Services,  
Business Services;  
Erika Gross, University Life, Student Health Service;  
Rosey Nissley, Administrative Information Services, Information Systems & Computing.

The recipient of the Model Supervisor Award will be announced at the Awards Ceremony.

Each Models of Excellence, Pillars of Excellence and Model Supervisor Award winner and winning team member will receive \$500 and a symbolic award. Staff members who have earned Honorable Mentions will receive \$250 and a symbolic award.

The 24-member 2016 Selection Committee included people from across the Penn community: administrators, faculty, weekly-paid staff, supervisors and past Models of Excellence honorees. This year, the Selection Committee carefully reviewed 11 Models of Excellence nominations, 11 Pillars of Excellence nominations and seven Model Supervisor nominations submitted by University colleagues and supervisors. All nominees merit recognition for their noteworthy work. Honorees were selected based on their distinguished efforts and impact above-and-beyond expectation.

Congratulations to all honorees, finalists and nominees! The Penn community is invited to attend the Models of Excellence Award Ceremony and Reception on *Thursday, April 21* at 4 p.m. in Irvine Auditorium.

—Division of Human Resources

Maureen McGinness, The Wharton School  
Amanda Mott, President's Center  
Alison Noji, Penn Global  
Maria O'Callaghan-Cassidy, The Wharton School  
Kelly O'Connor, Development & Alumni Relations  
Janice Orlov, Provost's Center  
Roman Petyk, President's Center  
MaryAnn Q. Piccolo, Division of Finance  
Josh Piven, Provost's Center  
James Quinn, The Wharton School  
Orna Rosenthal, Development & Alumni Relations  
Charles Rumford, Information Systems & Computing  
Elizabeth Santilli, The Wharton School  
Scott Sharpe, Development & Alumni Relations  
David Siedell, The Wharton School  
Jane Simons, The Wharton School  
John Singler, The Wharton School  
Laura Park Smith, Facilities & Real Estate Services  
Jerold Steinbrink, The Wharton School  
Mark Wehrle, Information Systems & Computing

### Honorable Mentions

The *Division of Facilities & Real Estate Services (FRES) ACE Mentor Team*, the *Springfield Mills Restoration Team* and the *Wharton Course Match Team* will receive Models of Excellence Honorable Mentions.

#### FRES ACE Mentor Team

Mariette Buchman, FRES  
David Dunn, FRES  
Marilyn Jost, FRES  
Susan Long, FRES

#### Springfield Mills Restoration Team

Robert Gutowski, Business Services  
Thomas Wilson, Business Services

#### Wharton Course Match Team

Frank DeVecchis, The Wharton School  
Alec Lamon, The Wharton School  
Jason Lehman, The Wharton School  
Hugh MacMullan, The Wharton School  
Amy Ortwein, The Wharton School  
John Piotrowski, The Wharton School  
Margaret Troncelliti, The Wharton School

## The University Research Foundation: March 25

The Office of the Vice Provost for Research is pleased to announce three new funding opportunities as part of a restructured University Research Foundation (URF). The goal of the new programs is to optimize resources for Penn faculty to create new knowledge.

The reconfigured URF will offer three grant opportunities: Research Grants, Impact Seminar Grants and Research Opportunity Development Grants. There will be two solicitations for these grant applications each year with the same deadlines.

**URF Research Grants** will continue, as in the past, with awards up to \$50K. Conference support up to \$3K will also continue.

**URF Impact Seminar Grants** will make awards up to \$20K for support for a cross-school, cross-disciplinary event to be held on Penn's campus within a year of the award. Funding for this award can be used to augment an already scheduled University event. The event—which can be a symposium, forum or conference—should occur over one to two days and be open to the entire Penn community. It should highlight the scholarship of Penn faculty and bring distinguished scholars to Penn's campus, with a particular focus on the University's distinguishing strength in integrating knowledge. Documented school and/or department matching funds are required.

**URF Research Opportunity Development Grants (RODG)** assist teams of interdisciplinary investigators in exploring new fields and creating competitive proposals to support substantive new research programs. Teams must include faculty from multiple departments and/or schools and aim to increase Penn's impact in an emerging field by identifying and securing the necessary resources to continue pursuing their research.

The RODG program offers two grant awards with distinct terms and expected outcomes. A Phase 1 grant would typically lead to a Phase 2 grant.

*Phase 1:* Topic Exploration and Team Formation Grants will range from \$2K to \$10K for one year in support of information exchange and benchmarking to explore the potential of new and emerging fields. Examples of funded activities could include workshops, conferences and task forces.

*Phase 2:* Research Development Grants will range from \$50K to \$200K for two years in support of collaborative preliminary research to provide the outcomes necessary for successful substantive proposals in targeted emerging areas of external support for team research. Examples of funded activities could include pilot studies, research consumables, postdoc support and website development. In some limited situations dedicated administrative support would be allowable. Expected outcomes would be a new proposal in an emerging research area, co-authored publications, joint presentations and workshops. Documented matching department and/or school funds will be considered positively.

*Disciplines for all award programs:* Biomedical Sciences, Humanities, Natural Sciences and Engineering, Social Science and Management.

*Budget:* Each program has separate budget requirements.

*Eligibility for all award programs:* Eligibility is limited to Penn assistant, associate and full professors, in any track. Instructors and research associates must provide a letter from their department chair establishing that the applicant will receive an appointment as an assistant professor by the time of the award. Assistant professors must submit a letter from their department chair describing their research independence. Adjunct faculty are not eligible to apply. Awards must be expended on University of Pennsylvania facilities, equipment and/or associated University technical staff and undergraduate students.

Detailed information including application materials can be found at [http://www.upenn.edu/research/smarts/university\\_research\\_foundation/](http://www.upenn.edu/research/smarts/university_research_foundation/)

---

*In the most recent cycle, Fall 2015, of Penn's internally funded University Research Foundation and URF Conference Support (noted with \*), the Office of the Vice Provost for Research has announced awards to the following members of the faculty for the projects listed below.*

### Fall 2015: University Research Foundation Awards and Conference Support Awards

Nataliya Balashova, School of Dental Medicine, pathology, *Mechanisms of Kingella Kingae RTX-toxin Interaction with Host Cell Membrane*

\*Tracy Bale, School of Veterinary Medicine, biomedical sciences, *Organization for the Study of Sex Differences*

Igor Brodsky, School of Veterinary Medicine, pathobiology, *Penn Vet Epigenetics Resource*

David Cormode, Perelman School of Medicine, radiology, *Effect of Composition and Coating on Iron Oxide Anti-Biofilm Nanocatalysts*

Francis DiTraglia, School of Arts & Sciences, economics, *A Framework for Eliciting, Incorporating and Disciplining Identification Beliefs in Linear Models*

Ivan Dmochowski, School of Arts & Sciences, chemistry, *Blue Laser Advances Chemistry-SEAS-PSOM Collaboration, Stimulates Undergraduate Research*

Raffaella Fabiani Giannetto, School of Design, landscape architecture, *Georgic Grounds and Gardens: From Palladio's Villas to American Plantations*

Zahra Fakhraai, School of Arts & Sciences, chemistry, *Keysight Magnetic AC Mode Upgrade for an Existing Agilent AFM*

\*Grant Frame, School of Arts & Sciences, chemistry, Near Eastern languages & civilizations, *Recontre Assyriologique Internationale*

Yale Goldman, Perelman School of Medicine, physiology, *Single Molecule Fluorescence and Light Scattering Microscope*

Manti Guha, School of Veterinary Medicine, biomedical sciences, *Establishing the Contribution of mtDNA Depletion Towards Metastasis Using a Novel PDX Model*

\*Nancy Hirschmann, School of Arts & Sciences, Alice Paul Center for Research on Gender, Sexuality & Women, *Rethinking Leadership from the Bottom Up*

Megan Kassabaum, School of Arts & Sciences, anthropology, *The Smith Creek Archaeological Project*

\*Justin Khoury, School of Arts & Sciences, physics & astronomy, *New Frontiers in Cosmology and String Theory*

Hans-Peter Kohler, School of Arts & Sciences, sociology, *Understanding Global Family Change*

\*Julia Lynch, School of Arts & Sciences, political science, *23rd International Conference of Europeanists*

Eugene Mele, School of Arts & Sciences, physics & astronomy, *Shape and Function of Nanoscale Kirigami*

Keiko Miyadera, School of Veterinary Medicine, clinical studies-Philadelphia, *Molecular Characterization of a Multigenic Canine Model of Retinal Degeneration*

Philip Nelson, School of Arts & Sciences, physics & astronomy, *From Photon to Neuron: A Textbook on Light, Imaging and Vision*

\*Mitchell Orenstein, School of Arts & Sciences, Slavic languages & literatures, *Russian Foreign Policy in the Putin Era*

\*Eugene Park, School of Arts & Sciences, James Joo-Jin Kim Program in Korean Studies, *Korea with Empire: Resisting, Contesting and Appropriating Transnational Universals*

\*Annette Reed, School of Arts & Sciences, religious studies, *Regional Workshop in Ancient Judaism*

\*Ralph Rosen, School of Arts & Sciences, classical studies, *The Syriac Galen Palimpsest*

Talid Sinno, School of Engineering & Applied Science, biomolecular engineering, *Spatially Coarse-Grained Simulations for Multi-component and Multiphase Systems*

Krystal Strong, Graduate School of Education, education, culture & society, *Training a New Generation of Leaders: The Institutionalization of Leadership for Development in Africa*

Delia M. Talos, Perelman School of Medicine, neurology, *Exploring Novel Anti-Inflammatory Pathways in the Brain and Their Relevance to Epilepsy*

Orkan Telhan, School of Design, fine arts, *Biological Design Studio for Biological Design and STEM Education*

Ebony Elizabeth Thomas, Graduate School of Education, reading, writing & literacy, *Restoring History and Ourselves: An Investigation of Reader Responses to Historical Fiction*

\*Julia Verkholtantsev, School of Arts & Sciences, languages & literatures, *Charles IV: An Emperor in Europe (1316-1616)*

\*Bethany Wiggan, School of Arts & Sciences, Germanic languages & literatures, *Screen Engagements: An Environmental Film Series and Symposium*

Shu Yang, School of Engineering & Applied Science, materials science & engineering, *Continuous Fabrication of Color-Changing and Force-Recording Mechanochromic Sensor Films*

Susan Yoon, Graduate School of Education, teaching, learning & leadership, *App Inventor for Socioscientific Issues to Build Engagement in STEM*



## Relâche's Turkish-Inspired Concert: Saturday, February 27: Honoring *The Golden Age of King Midas*

Relâche, Philadelphia's renowned new music ensemble, will offer a Turkish-inspired concert on *Saturday, February 27* in honor of *The Golden Age of King Midas* exhibition at the Penn Museum.

Admission to the special exhibition at 2 p.m. and concert at 3 p.m. is \$20; \$15/Penn Museum members; \$5/students with ID (and free for an accompanying second student). Guests may pay online in advance ([www.penn.museum/calendar](http://www.penn.museum/calendar)) or at the door, subject to availability.

To make the Turkish connection, Relâche will present two works that reference traditional Turkish music by Turkish-American composer Kamran Ince: *Strange Stone* and *Turquoise*. Also on the program is *Pleiades* by Cypriot-American composer Sophia Serghi. Close by Erling Wold, some Turkish-inspired improvising and a Relâche favorite, Raymond Scott's *Twilight in Turkey*.

Sophia Serghi's *Pleiades* is a suite of musically colorful portraits of six sisters of Greek mythology whose names were given to the stars of the Pleiades cluster in the constellation Taurus. The composer discovers a wide range of musical proclivities among the sisters, from the mesmerizing to the pedantic, with a "funky tango," too.



The Relâche octet commissioned Kamran Ince's *Strange Stone* in 2004; the composer also orchestrated his 1996 *Turquoise* for the ensemble. Imbued with the sound of Turkish music, Mr. Ince's compositions operate at extremely high intensity, alternating with equally intense spiritual calm.

## Human Resources: Upcoming March Programs

### Professional & Personal Development

Improve your skills and get ahead in your career by taking advantage of the many development opportunities provided by Human Resources. You can register for programs by visiting [knowledgeink.upenn.edu](http://knowledgeink.upenn.edu) or contacting Learning and Education at (215) 898-3400.

**Career Focus Brown Bag—Communicating Your Value by Factoring Your Skills, Interests and Abilities;** 3/1; 12:30-1:30 p.m. Need help figuring out exactly what value you bring and the best ways to communicate it? Winners in the workplace understand their value and are able to communicate that value to others in a powerful way. Come to this session armed with some ideas about the accomplishments you've had in your life and we'll help you factor out your strengths, the value that you bring and ways to communicate it.

**Strategies for Improved Communication;** 3/3; 9 a.m.-noon; \$75. Learn how to plan the conversation with the end result in mind; take a systems approach to communicating; identify your communication style; develop more productive working relationships through enhanced interpersonal communication; practice listening techniques to ensure effective communication; and prepare yourself to manage the conversation, overcome challenges and achieve positive outcomes.

**Performance Reviews for Staff;** 3/9; 12:30-1:30 p.m. Join this workshop to understand the performance appraisal process and learn how you can prepare to have a productive review session.

**Effective Performance Management;** 3/18; 9 a.m.-5 p.m.; \$75. Conducting annual performance reviews is a task many managers are not comfortable with. This workshop provides you with information, tips and applications that will make the process easier.

**Dealing with the Elephant in the Room;** 3/22; noon-1 p.m. This seminar will focus on communications strategies to practice being able to talk to anyone about anything. Participants will become comfortable with approaches to confront uncomfortable issues with tact and clarity at home and at work. Please feel free to bring your lunch.

**Performance Reviews for Managers;** 3/23; 12:30-1:30 p.m. If you are supervising or managing other employees and feel the need to learn more about how to prepare for and conduct performance appraisals, this is the course you've been looking for! Join us to find out best practices for this important annual procedure.

**TED Talk Tuesday Brown Bag—Your Body Language Shapes Who You Are;** 3/29; 12:30-1:30 p.m. In this session we will view and discuss social psychologist Amy Cuddy's TED Talk, "Your Body Language Shapes Who You Are." In her talk,

Dr. Cuddy shows how "power posing"—standing in a posture of confidence, even when we don't feel confident—can affect the brain, and might even have an impact on our chances for success. Body language affects how others see us, but it may also change how we see ourselves.

**Customer Service Bootcamp;** 3/31; 9 a.m.-noon. If you are the first person that the student, the customer, the patient or the client encounters in your organization, it sets the tone and reputation for your organization. Ensuring that your "soft skills"—those skills you use in customer interaction—are at their best is imperative. It is equally important to learn ways to take care of yourself in difficult customer situations. You need the tools to help you feel good as you deal effectively with customers. What sets this program apart from other customer service training programs is the strong focus on stress-reduction and self-esteem, two factors that position the individual for success.

### Quality of Worklife Workshops

Dealing with the demands of work and your personal life can be challenging. These free workshops, sponsored by Human Resources and led by experts from Penn's Employee Assistance Program and Quality of Worklife Department, offer information and support for your personal and professional life challenges. For complete details and to register, visit [www.hr.upenn.edu/myhr/registration](http://www.hr.upenn.edu/myhr/registration) or contact Human Resources at (215) 573-2471 or [qowl@hr.upenn.edu](mailto:qowl@hr.upenn.edu). Please feel free to bring your lunch.

**Guided Meditation—Take a Breath and Relax;** 3/3; noon-1 p.m. Practice mindful breathing that focuses your attention on the present moment with kindness, compassion and awareness. Self-massage and gentle mindful movements that promote relaxation and reduce stress may also be included in the workshop. No experience necessary. Also 3/11 at Morris Arboretum.

### Healthy Living Workshops

Get the tools you need to live well year-round. From expert nutrition and weight loss advice to exercise and disease prevention strategies, we can help you kick-start your body and embrace a healthy lifestyle. These free workshops are sponsored by Human Resources. For complete details and to register, visit [www.hr.upenn.edu/myhr/registration](http://www.hr.upenn.edu/myhr/registration) or contact Human Resources at (215) 573-2471 or [qowl@hr.upenn.edu](mailto:qowl@hr.upenn.edu).

**Gentle Yoga;** 3/2, 3/16, 3/30; 11 a.m.-noon. Let your body reward itself with movement! Join us for this Gentle Yoga session and explore the natural movements of the spine with slow and fluid moving bends and soft twists. During this session, you will flow into modified sun salutations that loosen those tightened muscles and joints of the lower back, neck, shoulders and wrists. As an

added bonus, you'll get a workout in the process. Mats and props will be provided.

**Chair Yoga;** 3/9, 3/23; noon-1 p.m. Interested in trying yoga but don't know where to start? Join us for our chair yoga series! You get the same benefits of a regular yoga workout (like increased strength, flexibility and balance) but don't have to master complex poses. Chair yoga can even better your breathing and teach you how to relax your mind and improve your wellbeing.

**Be in the Know Biometric Screenings;** 3/10, 3/21; 9 a.m.-1 p.m. Start this year's *Be in the Know* campaign and sign up for a free and confidential biometric screening, which measures your:

- Blood pressure
- Blood sugar (glucose)
- Non-fasting cholesterol (total and high density lipoproteins)

Biometric screenings are conducted by AREUFIT Health Services, an experienced worksite health promotion company. These screenings should only take 20 minutes. On the spot, you'll receive your results and learn what they mean from an AREUFIT health educator.

Visit our *Be in the Know* webpages at [www.hr.upenn.edu/beintheknow](http://www.hr.upenn.edu/beintheknow) to learn about the full campaign, including complete details regarding this year's Core Activities (biometric screening and online health assessment) and Bonus Actions. Get started today and earn up to \$180\* and be entered into various drawings for exciting prizes!

\*Note: All *Be in the Know* incentives are less applicable payroll taxes.

**March Wellness Walk;** 3/11; noon-1 p.m. March is National Nutrition Month, so we're celebrating. Meet the Center for Public Health Initiatives staff at noon in front of College Hall by the Ben Franklin statue and walk a one-mile or two-mile route around Penn's campus. Chat about nutrition and how you can develop a mindful eating pattern that includes nutritious and flavorful foods. Walkers will also receive healthy and delicious recipes to take home and try. Bring your water bottle and don't forget your sneakers!

**Colon Cancer Awareness Workshop;** 3/17; noon-1 p.m. Colon cancer is the second leading cause of death in this country, despite the availability of effective screening and treatment for early stages of the disease. Everyone over the age of 50 (as well as some additional high risk groups) should be screened, but one third of the population is not up to date. Shivan Mehta, assistant professor of medicine in the division of gastroenterology, will talk about the epidemiology of colon cancer, methods for screening and efforts by Penn Medicine to improve the quality and access of cancer screening.

—Division of Human Resources

# Update

February AT PENN

## CONFERENCE

**19** *Geographies of Intimacy*; Nayan Shah, USC & Rebecca Stein, Duke, keynote speakers; Katherine Ball, Wesleyan; Amy Kaplan, English; Amber Jamilla Musser, Washington University; Jennifer Row, Boston University; Deborah Thomas, anthropology; 1-6 p.m.; Kislak Center, Van Pelt-Dietrich Library; register: <http://www.phf.upenn.edu/> (PHF).

## FITNESS & LEARNING

**20** *Rape Aggression Defense (RAD) Classes*; 9 a.m.-3 p.m.; DPS, 4040 Chestnut St.; for female students, staff and faculty at Penn; RSVP: (215) 898-4481 (Public Safety). *Continues February 27.*

### Penn Libraries Workshops

In Van Pelt-Dietrich Library.  
Register: <http://tinyurl.com/objw8zp>

**16** *Microsoft Word: Formatting your Report*; 2:30 p.m.; rm. 114, Goldstein Electronic Classroom.

*Research Teas: UnTranslatables*; with Bethany Wiggin & Catriona MacLeod; 4 p.m.; rm. 223, Meyerson Conference Room.

**17** *Welcome to the new Butler AT Room!*; 12:30 p.m.; Butler Room, ground floor.

*Adobe InDesign*; 2 p.m.; rm. 124, Class of '68 Seminar Room.

*Intro to Text Mining*; 2 p.m.; rm. 623, Vitale II Media Lab, Kislak Center.

*Early Books Collective*; 4 p.m.; rm. 623, Vitale II Media Lab, Kislak Center.

**19** *Microsoft PowerPoint: Audio and Video in your Presentation*; 10:30 a.m.; fl. 1, Weigle Information Commons.

**20** *Tumblr Blogs and Personal Websites*; 2 p.m.; rm. 124, Class of '68 Seminar Room.

**22** *Make your own Prezi*; 10:15 a.m.; rm. 114, Goldstein Electronic Classroom.

**23** *WordPress Basics*; 11 a.m.; rm. 124, Class of '68 Seminar Room.

*Microsoft Word: Formatting your Report*; 2:30 p.m.; rm. 114, Goldstein Electronic Classroom.

*Diversi-Tea*; Brian Peterson, Makuu; 4 p.m.; rm. 223, Meyerson Conference Room.

## TALKS

**18** *The cancer epigenome*; Peter A. Jones, Van Andel Research Institute, 10 a.m., Sarah and Matthew Caplan Auditorium, Wistar Institute (Wistar).

*A Conversation about LGBT Civil Rights: What Challenges Lie Ahead?*; Helen 'Nellie' Fitzpatrick, LGBT Affairs: City of Philadelphia; noon; Glandt Forum, Singh Center for Nanotechnology; register: <http://www.upenn.edu/affirm-action/offering.html> (SEAS; LGBT Center; OAA.EOP; QPenn).

*Metapoesis in the Arabic Tradition*; Huda Fakhreddine, Middle East Center; 5:30 p.m.; rm. 244, Fisher-Bennett Hall (Middle East Center).

**20** *26th Annual National Council of Teachers of English (NCTE) African American Read-In; Picture Books that feature African American history*; Ebony Elizabeth Thomas, GSE, 1 p.m., Penn Bookstore. For her pick of children's books: <https://www.gse.upenn.edu/news/ebony-elizabeth-thomas-picks-best-children%E2%80%99s-books-2015>

**23** *Oxford Jews and Christian Hebraism in the Thirteenth Century*; John Tolan, historian; 5:15 p.m.; rm. 231, Fisher-Bennett Hall (Jewish Studies; Medieval Studies; NELC).

**24** *Careers and Internships in Washington*; Deirdre Martinez, Penn in Washington; Jake Gutman, Carnegie Endowment; noon; rm. 108, ARCH Bldg. (Middle East Center).

## AT PENN Deadlines

The February AT PENN calendar is online at [www.upenn.edu/almanac](http://www.upenn.edu/almanac). The deadline for the April AT PENN calendar is March 15.

Info is on the sponsoring department's website; sponsors are in parentheses. For locations, call (215) 898-5000 or see [www.facilities.upenn.edu](http://www.facilities.upenn.edu)

## University Club Grand Reopening Kick Off Party: February 18

We hope that members will join us in celebrating the reopening of the University Club. In addition to joining us for lunch, we'd also like to invite Club members to our Kick Off Party on Thursday, February 18 from 4:30 to 7:30 p.m. Email [universityclub@pobox.upenn.edu](mailto:universityclub@pobox.upenn.edu) to RSVP.

—Kristin Cummings, University Club Coordinating Liaison

## The University of Pennsylvania Police Department Community Crime Report

**About the Crime Report:** Below are all Crimes Against Persons and Crimes Against Society from the campus report for February 1-7, 2016. Also reported were 9 Crimes Against Property (2 incidents of drunkenness, 2 other offenses, 2 thefts, 1 burglary, 1 DUI and 1 fraud). Full reports are available at: [www.upenn.edu/almanac/volumes/v62/n23/crreport.html](http://www.upenn.edu/almanac/volumes/v62/n23/crreport.html). Prior weeks' reports are also online. —Eds.

This summary is prepared by the Division of Public Safety and includes all criminal incidents reported and made known to the University Police Department between the dates of February 1-7, 2016. The University Police actively patrol from Market Street to Baltimore Avenue and from the Schuylkill River to 43rd Street in conjunction with the Philadelphia Police. In this effort to provide you with a thorough and accurate report on public safety concerns, we hope that your increased awareness will lessen the opportunity for crime. For any concerns or suggestions regarding this report, please call the Division of Public Safety at (215) 898-4482.

02/05/16	1:15 AM	300 University Ave	Offender attempted to strike police officer with vehicle
02/06/16	5:05 PM	215 S 33rd St	Male struck complainant in the face
02/07/16	2:27 AM	300 S 41 St	Currency and headphones taken
02/07/16	4:01 PM	3925 Walnut St	Cell phone taken

## 18th District Report

Below are the Crimes Against Persons from the 18th District: 10 incidents with 2 arrests (4 robberies, 3 aggravated assaults, 2 indecent assaults and 1 rape) were reported between February 1-7, 2016 by the 18th District covering the Schuylkill River to 49th Street & Market Street to Woodland Avenue.

02/01/16	6:44 AM	4700 Walnut St	Aggravated Assault/Arrest
02/01/16	11:00 PM	3700 Locust Walk	Indecent Assault
02/03/16	10:52 PM	4800 Chester Avenue	Indecent Assault
02/04/16	7:31 PM	4400 Osage Avenue	Robbery/Arrest
02/04/16	10:35 PM	4400 Chestnut St	Rape
02/05/16	1:15 AM	321 University Ave	Aggravated Assault
02/06/16	2:10 PM	1100 S 47th St	Robbery
02/06/16	5:32 PM	215 S 33rd St	Aggravated Assault
02/07/16	3:38 AM	300 S 41st St	Robbery
02/07/16	4:43 PM	3925 Walnut St	Robbery



## Celebration of African Cultures: February 27

Modern African dance and traditional African music, an African marketplace, a mancala game station and craft making for families converge at the Penn Museum's annual Celebration of African Cultures on Saturday, February 27, from 11 a.m. to 4 p.m. Local griots and artists lead guests in an interactive exploration of traditions from across the African continent, set among the Museum's collection of textiles, sculpture and masks in the Africa Gallery, as well as among statuary and tomb materials from 5,000 years of Egyptian culture in the Egyptian galleries. Egun Omode (Children of the Ancestors), a West African dance and drum and Yoruba-folklore performing arts collective, will offer a grande finale performance.

## Almanac

3910 Chestnut Street, 2nd floor  
Philadelphia, PA 19104-3111  
Phone: (215) 898-5274 or 5275  
FAX: (215) 898-9137  
Email: [almanac@upenn.edu](mailto:almanac@upenn.edu)  
URL: [www.upenn.edu/almanac](http://www.upenn.edu/almanac)

The University of Pennsylvania's journal of record, opinion and news is published Tuesdays during the academic year, and as needed during summer and holiday breaks. Its electronic editions on the Internet (accessible through the Penn website) include HTML, Acrobat and mobile versions of the print edition, and interim information may be posted in electronic-only form. Guidelines for readers and contributors are available on request and online.

EDITOR	Marguerite F. Miller
ASSOCIATE EDITOR	Rachel Ward Sepielli
ASSISTANT EDITOR	Victoria Fiengo
STUDENT ASSISTANTS	Elizabeth C. Alexander, Jackson Betz, Danielle S. Citera

ALMANAC ADVISORY BOARD: For the Faculty Senate: Martin Pring (chair), Sunday Akintoye, Christine Bradway, Al Filreis, Carolyn Marvin, Cary Mazer. For the Administration: Stephen MacCarthy. For the Staff Assemblies: Nancy McCue, PPSA; Ijanaya Blackwell, WPPSA; Rachelle R. Nelson, Librarians Assembly.

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, color, sex, sexual orientation, gender identity, religion, creed, national or ethnic origin, citizenship status, age, disability, veteran status or any other legally protected class status in the administration of its admissions, financial aid, educational or athletic programs, or other University-administered programs or in its employment practices. Questions or complaints regarding this policy should be directed to Sam Starks, Executive Director of the Office of Affirmative Action and Equal Opportunity Programs, Sansom Place East, 3600 Chestnut Street, Suite 228, Philadelphia, PA 19104-6106; or (215) 898-6993 (Voice).



MIX  
Paper from  
responsible sources  
FSC® C012856



## Diving Deep for Alternative Energy

When Alison Sweeney, an assistant professor in Penn's School of Arts & Sciences' department of physics & astronomy, went scuba diving in Palau this summer, she wasn't on vacation. A tropical paradise on the surface, the coral reefs under the tiny island nation's azure waves are actually a laboratory unlike anywhere else on the planet. The seemingly placid environment features some truly extreme conditions—an evolutionary crucible that has produced creatures with traits that rival the best of human ingenuity. Dr. Sweeney's job is to understand how they got that way and why.

Though Dr. Sweeney's departmental colleagues include condensed-matter physicists and theoretical topologists, she is a biologist by training. She came to be in this interdisciplinary nexus because the biological structures she studies are exquisite manipulators of the electromagnetic spectrum. Many sea-creatures have evolved light-reflecting structures that are used to hide from predators, confuse prey, attract mates, and in the case of the giant clams that live in Palau, grow their own food.

The clams have a symbiotic relationship with algae, which grow in pillars inside their flesh. As the algae reproduce, they push each other off of the bottom of the pillars and into the clam's stomach. "They are essentially farming the algae for nutrients," Dr. Sweeney said.

As part of the Evolution Cluster, which brings together scholars from departments across Penn Arts & Sciences to study different facets of this core scientific concept, Dr. Sweeney's research involves understanding how the clams came to be able to perform this trick. Though Palau's landscape is lush, surviving there is harder than it seems.

"Sunlight at the equator is so intense that most plants can't make use of it without being damaged," Dr. Sweeney said. "But we've found that the clams have a way of scattering the light into wavelengths that the algae can most efficiently absorb."

The evolutionary solution that the giant clam has stumbled upon is a structure known as an iridocyte. Roughly spherical cells packed with reflective proteins, a layer of these iridocytes is spread on top of the pillars, giving the clams their iridescent sheen when seen from above. Below, the iridocytes spread that blue and red light to the sides of the algae pillars. Because the plants are green-brown, and thus reflect more light of those wavelengths, the clams can grow them most efficiently by sparing them from all but the most valuable photons.

Evolution has so precisely tailored giant clams to their environment that their algae-farming efficiency outstrips anything humans have achieved in the quest to use the single-celled plants as a biofuel. State-of-the-art bioreactors can quickly fill tubes or pools with the neon green organisms, but that is only half the battle. Algae on the surface of these reactors block light from reaching their brethren on the inside; to keep them all alive, the reactors must be constantly stirred, losing whatever energy gains harvesting the algae would produce.

With this challenge in mind, Dr. Sweeney is collaborating with Penn's School of Engineering & Applied Science's Shu Yang on a National Science Foundation grant that aims to replicate the light-scattering abilities of iridocytes with lab-made materials. The funding will support a Palauan graduate student, who will travel to Penn to work with Drs. Sweeney and Yang, as well as several local interns.

## Cigarette Warnings with Images: Better at Conveying Risks of Smoking

A study using a real-world approach to evaluate graphic warning labels on cigarette packs has found that the emotionally engaging images are more successful than simple text warnings at educating smokers about the risks of smoking. In research released in the journal *PLOS One*, the first study of day-to-day exposure to the pictorial warnings proposed by the Food and Drug Administration in 2011 showed that smokers using their own brand of cigarettes for four weeks with the pictorial warnings were better able to recall the warnings and name the health risks associated with the habit than smokers who were merely exposed to textual information. The graphic warning labels also were found to be more credible.

"This study shows that pictorial warnings do a better job of educating smokers than text alone," said Daniel Romer, research director of Penn's Annenberg Public Policy Center (APPC). He co-directed the study in a joint project with researchers at the Ohio State University. "Concerns raised by the courts that pictorial warnings that illustrate the risks of smoking are uninformative overlook the potential of these warnings to help smokers confront the risks of their habit."

In a suit brought by tobacco companies, the US Court of Appeals in Washington ruled in 2012 that the FDA-proposed graphic warning labels "do not convey any warning information at all" and were "unabashed attempts to evoke emotion (and perhaps embarrassment) and browbeat consumers into quitting."

The *PLOS One* study analyzed data from 244 adults who smoked between five and 40 cigarettes a day. The smokers, from both Philadelphia and Columbus, Ohio, were given their own brand of cigarettes to smoke for four weeks with either the pictorial labels proposed by the FDA on the front and back of the packs or the text mandated by Congress in the Family Tobacco Act of 2009 on the side of the pack, where current warnings reside. Those text warnings were presented more prominently and included more information about the risks of smoking than the current warnings, which research has shown are largely ignored. The pictorial warnings were seen as more believable than the text-only warnings and were more likely to change smokers' feelings about their habit.

Research in other countries such as Canada, where color pictorial warnings were first introduced in 2001, suggests that they encourage smokers to quit. However, this research does not permit clear conclusions because the warnings are almost always introduced along with other changes in the market, such as price increases.

"The value of a clinical trial, such as the one that we conducted, is that it enables us to isolate the effects of exposure to pictorial warnings in direct comparison with text-only warnings," Dr. Romer noted.

Co-authors of the study were Abigail T. Evans and Ellen Peters of the Ohio State University; Andrew Strasser of Penn's Perelman School of Medicine; Lydia F. Emery of Northwestern University; and Kaitlin M. Sheerin of the University of Missouri.

## Illustrating Impact of Drone Usage in Areas of Conflict

The use of drones has had significant consequences for how governments conduct counter-terrorism operations. But technological limitations mean they are less likely to effect wars between countries, according to a new paper co-authored by Michael C. Horowitz, a political scientist in Penn's School of Arts & Sciences. In "The Consequences of Drone Proliferation: Separating Fact from Fiction," Dr. Horowitz, associate director of Penn's Perry World House, argues that drones have the potential to enhance security in disputed border regions because they easily allow states to monitor what's happening.

The article's co-authors, which include Sarah E. Kreps from Cornell University and Matthew Fuhrmann from Texas A & M University, examine the effects of drones in counterterrorism, interstate conflict, crisis onset and deterrence, coercive diplomacy, domestic control and repression. They underscore ways in which the analysis challenges emerging views on drone proliferation, and they identify national security implications for the US.

The article explains that there are two polarizing schools of thought regarding drones. Pessimists draw attention to all of the ways drones are undesirable, while others believe that unmanned aerial vehicles are harmless because of their operational limitations, which include a low flying speed and vulnerability to air defense systems. The authors maintain that both of these views are incomplete and that there are many other factors to consider.

"Those who argue that drones are transformative overlook important operational limits of the technology," Dr. Horowitz said. "The more dismissive view, by contrast, fails to fully appreciate how removing pilots from aircraft changes the decision-making calculus of using drones versus manned alternatives."

With a comprehensive assessment of the consequences of current-generation drone proliferation, including how both perspectives are misguided, Drs. Horowitz, Kreps and Fuhrmann say what's missing from the current debate is a realistic understanding of what today's drones can and cannot do.

"Accurately capturing the capabilities of current generation drones is critical to understanding how drones may or may not change military affairs or world politics more generally," Dr. Horowitz said.

The article explores the history of unmanned aerial vehicles dating back to the mid-1800s and ongoing trends. For example, during the Xinjiang protests in 2014, China sent out surveillance drones to monitor the situation. But, as the use of armed drones continue to spread, it will mean dictators can do more than just surveillance. With armed drones, there is a possibility for repression.

"Drone proliferation carries potential significant consequences for counterterrorism operations and domestic control in authoritarian regimes," Dr. Horowitz wrote. "Drones lower the costs of using force by eliminating the risk that pilots will be killed, making some states, especially democracies, more likely to carry out targeted attacks against suspected militants."

The co-authors conclude that, if used to monitor disputed territories and borders, drones have the potential to reduce uncertainty about an adversary's behavior, which could promote peace if the enemy's intentions are benign. "Drones are neither a game changer across every dimension of international security, nor simply a redundant military technology with little significance for international security. The consequences could change dramatically as technical advancements occur over time."