A scientific team led by the University of Pennsylvania has received an award from the Defense Advanced Research Projects Agency (DARPA) to develop and validate reproducible methods for studying human social behavior.

DARPA is an agency of the US Department of Defense that invests in breakthrough technologies to support national security. The award is part of DARPA’s Next Generation Social Science program, or NGS2, which aims to revolutionize the speed, scale and rigor with which social science is performed.

The grant provides the Penn-led, multi-disciplinary team with $2.95 million for two years, with a possible additional $2.5 million for a subsequent one-and-a-half years, dependent on progress, to further the goals of the NGS2 program, a key one being to develop a deeper understanding of the factors that drive the emergence or collapse of collective identity in human populations.

Joshua B. Plotkin, a professor in the School of Arts & Sciences’ department of biology, with secondary appointments in the department of mathematics and the School of Engineering and Applied Science’s computer & information science department, will lead the project. His colleagues in the effort are Erol Akçay, an assistant professor of biology at Penn; David Rand of Yale University; Simon Levin of Princeton University; Johan Bolten of Indiana University; and Alexander Stewart of University College London.

“Many global trends, including conflicts among non-state groups and the growing influence of social media, point to the importance of social science for understanding the drivers of social and national stability,” Dr. Plotkin said.

“We are excited about developing and applying cutting-edge science and technology to help social science become an even more predictive field, and, in particular, to better understand the phenomenon of collective identity.”

NGS2 also serves as a response to the so-called “reproducibility crisis” in the sciences, and the social sciences in particular, in which published findings have failed to be corroborated by follow-up studies. The program’s interest in applying rigorous methods to the social sciences aligns with a strategic strength of Penn Arts & Sciences, an emphasis on quantitative explorations of evolving systems.

The proposal by Dr. Plotkin and colleagues will encompass three scales of methods development and experimentation. On one level, the team will use game theory and evolutionary modeling to predict what factors govern group behaviors such as cooperation. The researchers will also play game theory into action, recruiting participants to play in-lab and online games in order to test model predictions for what conditions encourage a group to act as a cohesive whole. Finally, the research team will take advantage of massive data sets from such sources as Twitter to identify how social norms and collective identities arise and change over time in the real world.

“Our project is ambitious because it spans from mechanistic mathematical models to online experiments to observational studies of unfiltered social interactions,” Dr. Plotkin said.

“We have assembled a group of researchers, drawn from a wide range of disciplines who all share a desire to help develop quantitative methods in the social sciences.”

Because the research involves studies on human subjects, it will be subject to IRB and human research protection offices’ review. Study subjects will be informed, and consenting volunteers and data will be de-identified to protect their privacy.

The DARPA award is structured with reproducibility built in: Each of the DARPA-funded teams, after developing and testing its own models and hypotheses in the first phase of the project, will then cross-validate each other’s predictions in a second phase using its own study subjects. In addition, applying a relatively new practice in the social sciences, the researchers will pre-register all of their experimental plans in advance of performing them.

This process, which requires laying out the teams’ hypotheses, protocols and planned analytical techniques, will help ensure a proper, unbiased interpretation of results.

“This DARPA program will hopefully usher in a new research cycle of mechanistic modeling and hypothesis testing to make a predictive science of social phenomena,” Dr. Plotkin said.

Penn Vet’s Shelter Dog Specialty Medical Treatment Project Saves 100th Shelter Dog in Need

A five-month-old Cane Corso named Sidon was saved by Penn Vet’s Shelter Dog Specialty Medical Treatment Project, making him the 100th dog aided by the program since its launch in March 2015.

The life-saving program is made possible through the generosity of the Richard Lichter Charity for Dogs (Almanac March 31, 2015).

When a shelter dog has a medical problem that requires specialty care, shelters often do not have the resources necessary to address the animal’s needs. Experts from Penn Vet’s Shelter Medicine Program and partner facilities select dogs to enroll in the Shelter Dog Specialty Medical Treatment Project. Through this program, veterinarians at Penn Vet’s Ryan Hospital provide specialized medical care to dogs from area shelters that are in need. All diagnostic and medical services are covered free of charge to participating shelters. Following treatment, dogs are placed in foster homes and made available for adoption.

“It is incredible that we’ve been able to give 100 dogs a second chance at life through Richard’s tremendous support,” said Dr. Brittany Watson, director of Shelter Medicine and Community Engagement at Penn Vet.

“The Shelter Dog Specialty Medical Treatment Project has been so impactful for our students, staff and shelter partners, enabling us to collaborate with the shelter community to save the lives of dogs in need.”

“This has been a wonderful opportunity to give a helping hand to dogs who just need some medical assistance in order to be adoptable,” said Richard Lichter.

Sidon arrived at the Pennsylvania SPCA with an extremely swollen neck and shoulder. The swelling appeared to be progressive, so he was sent to Penn Vet’s Ryan Hospital for advanced diagnostics, intensive care and possible surgery. Sidon was placed on antibiotics, which helped to lower his fever and swelling. A CT scan revealed a fluid-filled tract that spread from the base of his tongue to the thorax and the mediastinum, as well as to the shoulder blade and along the back. The extensive infection was the result of an unknown injury, most likely a penetrating foreign body.

Dr. Lilian Aranson and Christine Hsueh performed surgery to debride and flush out the abnormal tissue. They also placed a closed suction drain to remove additional fluid post-surgery. Sidon recovered very well and the drain was removed after 36 hours. He is happily residing with his foster parent, Allison Vetter, one of the nurses who cared for him at Ryan Hospital. “I tell everyone how wonderful the Shelter Dog Specialty Medical Treatment Program is. It makes a big difference for dogs who wouldn’t otherwise have a second chance at life. I have high hopes for Sidon,” said Ms. Vetter.

Joshua Plotkin

Sidon, resting comfortably after surgery.
Penn President Amy Gutmann’s Remarks at the Walk of Solidarity for the Penn Community on Wednesday, November 16

We are united for justice and solidarity. We are united against hatred, discrimination and intimidation. I just want to say how proud I am of how many people came out. I think that even more would have come out if we had more notice, but this is an amazing turnout. We are in solidarity. We will continue to work together, because in unity there really is strength. I believe that the arch of the universe bends towards justice, only not fast enough. We will work to make it happen. I just want to thank you very much for coming out and making us all proud to be members of this community.

I am glad that we are in solidarity. We are united against hatred. We are united for our Black sisters and brothers. We are united for our Muslim sisters and brothers. We are united for Jews, and Muslims, and Christians, and Buddhists, and Atheists and everybody else regardless of their religion or political ideology. We are united with anyone who wants to join the cause of justice and inclusion.

Higher education matters and we at Penn want to show how much it matters. We are united in respect of all persons. We are united against discrimination. May the word spread throughout the land that respect for everybody will be a requirement for us. Education is about respect for everyone and inclusion. We are united in making this community, our society and the world better, and I couldn’t be more proud to be your president. Thank you all so very much.

(Ed. Note: This is an edited version of off-the-cuff remarks made by President Gutmann at the event, a video of which was posted online by the Philadelphia Inquirer.)

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 senat@pobox.upenn.edu

Faculty Senate Executive Committee Actions

Wednesday, November 16, 2016

Chair’s Report. Faculty Senate Chair Laura Perna did not provide a report but requested that SEC begin its meeting with new business.

New business: Consideration of a statement responding to racist statements sent to Black Penn students. A draft statement was circulated by email to SEC members prior to the meeting. Following a discussion, a modified statement was called to question and approved (25 in favor, none against, and four abstentions). Professor Perna invited SEC members to participate in the Walk of Solidarity for the Penn community, organized in opposition to racist messages targeted at Black Penn students, immediately following the meeting’s conclusion.

Past-Chair’s Report. Faculty Senate Past Chair Reed Pyeritz reported that the Academic Planning and Budget Committee and Capital Council continued to meet and that the Campaign for Community Steering Committee is planned to meet on November 29.

Discussion and vote on proposed amendment to GSE Practice Professor Track. The Senate Committee on Faculty and the Academic Mission (SCOF) reviewed and unanimously approved a proposal from the Graduate School of Education (GSE) that seeks to eliminate the two-term limit for the positions of Practice Professor and Associate Practice Professor in that school. Following discussion, SEC members voted unanimously to approve the proposal.

Discussion on the Role and Representation of the “Non-Standing Faculty” at Penn. Because of time constraints, the discussion was postponed to a future SEC meeting.

Update on the Office of the Provost. Provost Vincent Price began by reinforcing the commitment of his office to supporting Penn students in challenges they are experiencing following the recent national election. He then reported on a number of ongoing activities. The Campaign for Community is continuing to accept applications and he encouraged faculty to submit proposals for programming aimed at fostering an inclusive community at Penn. The final report on the Action Plan for Faculty Diversity and Excellence will be released in spring 2017. A recent gift from Keith and Kathy Sachs will launch an innovative program that provides support to integrate arts programming at Penn in a variety of manners. A Task Force was recently launched that aims to promote a healthy and respectful campus environment. A new space in Van Pelt Library will open in January that will house the Weigarten Learning Resource Center, the Center for Learning Analytics and the Center for Teaching and Learning, among others. He described ongoing work by the Perry World House, Penn Center for Innovation, Pennovation Works and the Pennovation Center. He then responded to questions from SEC members.

2017 Senate Nominating Committee. SEC members voted to adopt a membership slate for the 2017 Senate Nominating Committee. The slate is published in this issue of Almanac for comment.

From the Senate Chair

TO: Members of the Faculty Senate
FROM: Laura Perna, Chair
SUBJECT: Senate Nominating Committee 2017

1. In accordance with the requirements of the Faculty Senate Bylaws, notice is given to the Senate Executive Committee’s nine-member slate of nominees for the Nominating Committee for 2017. The Nominating Committee nominates candidates for election to the Offices of the Faculty Senate, to the At-Large and Assistant Professor positions on the Senate Executive Committee, to the Senate Committee on the Economic Status of the Faculty and to the Senate Committee on Academic Freedom and Responsibility. The nine nominees, all of whom have agreed to serve, are: Joshua Atkins (Associate Professor of Anesthesiology and Critical Care at HUP, Perelman School of Medicine), Vanessa Bamba (Assistant Professor of Clinical Pediatrics, Perelman School of Medicine), Jere Behrman (William R. Kenan, Jr. Professor of Economics, School of Arts and Sciences), Cynthia Connolly (Associate Professor, School of Nursing), Beverly Emanuel (Charles E.H. Upham Professor of Pediatrics, Perelman School of Medicine), Raghuwarr Iyengar (Associate Professor of Marketing, Wharton School), Susan Margules (Professor of Bioengineering, School of Engineering and Applied Science), Robert Ricciardi (Chair and Professor, Department of Microbiology, Penn Dental School), Reed Pyeritz (William Smilow Professor of Medicine & Professor of Genetics, Perelman School of Medicine).

2. Pursuant to the Bylaws, additional nominations may be submitted by petition containing at least 25 signed names and the signed approval of the candidate. All such petitions must be received by December 6, 2016. If no additional nominations are received, the slate nominated by the Executive Committee will be declared elected. If additional nominations are received, a mail ballot will be distributed to the Faculty Senate membership. Please forward any nominations by petition via intramural mail to the Faculty Senate, Box 9 College Hall/6303. Please forward any questions to Patrick Walsh by email at senat@pobox.upenn.edu or by telephone at (215) 898-6943.

ALMANAC November 22, 2016
Peter Berman, CHOP

Peter H. Berman, senior neurologist at Children’s Hospital of Philadelphia and a professor emeritus at the Perelman School of Medicine at the University of Pennsylvania, died on September 1. He was 84.

Dr. Berman was born in Vienna, Austria and fled the Nazi regime to London before emigrating to the Upper West Side of New York City. He earned his medical degree at New York University College of Medicine and completed an internship in pediatrics at Bellevue Hospital, New York City, followed by a residency in pediatrics at the University of Minnesota Hospital, Minneapolis.

Dr. Berman’s work focused on clinical child neurology and pediatric epilepsy. He joined Penn in 1969 as an associate professor of pediatrics and neurology. He then became a professor of pediatrics and neurology in 1979 and held that role until 2011, when he retired and became professor emeritus of neurology. He continued to work at CHOP until his death.

He was recognized in the second edition of The Best Doctors in America published by Woodward/White Inc. in 1994 (Almanac April 12, 1994). He published writings on neurology and pediatrics.

Dr. Berman served as president of the Child Neurology Society from 1991-1993 and received the Society’s highest honor, the Hower Award, in 2003 (Almanac March 18, 2003). He is survived by his wife, Lynne; children, John, Elizabeth and Michael; six grandchildren; and four nieces and nephews.

Dr. Berman may be made to the Philadelphia School, c/o Genevieve Goldstein, Associate Director of Development, 2501 Lombard St., Philadelphia 19146.

Ludo Rocher, South Asia Studies

Ludo Rocher, Emeritus W. Norman Brown Professor of South Asian Studies, died October 31. He was 90 years old.

Throughout his career, Dr. Rocher was renowned for being the most active Sanskrit scholar in the United States and a world authority on classical Hindu legal cultures.

Dr. Rocher was born in Antwerp, Belgium. He attended the University of Ghent, where he earned an MA in classics with a minor in Sanskrit in 1948; a JD in 1950; and a PhD in Indic studies in 1952. He also studied at the University of Utrecht and the University of London. Dr. Rocher was a professor of Sanskrit and comparative philology at the University of Brussels from 1959-1967 and became director for the Center for the Study of South and Southeast Asia in 1961. In 1965, Dr. Rocher became the first non-Africanist to be elected to the Belgian Royal Academy of Overseas Sciences. Prior to his appointment at the University of Brussels, he was a Research Fellow at the Belgian National Foundation for Scientific Research from 1952-1958.

In 1966, Dr. Rocher was invited to Philadelphia by W. Norman Brown, an eminent scholar of Sanskrit and Indology at the University of Pennsylvania. Dr. Rocher was appointed professor of Sanskrit at Penn’s department of Oriental studies (which became the department of Asian and Middle Eastern studies in 1992). Dr. Rocher served as the chair of the department of Oriental studies from 1967-1975 and again from 1988-1994. He also spent time in the department of South Asia regional studies and director of the National Resource Center for South Asia Studies from 1975-1979.

In 2002, he retired and became professor emeritus of South Asia studies.

On April 1, 1961, he married Rosane Debels, professor emerita of South Asia studies at Penn. In June of 1972, both Dr. Rocher and his wife became American citizens. Together, they were awarded the 2015 Prize of the Fondation Colette Caillat of the Institut de France for two books and their “lifelong, signal contributions to Sanskrit studies and the history of Indology.”

Throughout his career, Dr. Rocher authored almost 20 major books and hundreds of articles and reviews. Notable works include The Purāṇas, Jīmūtavāhana’s Dāyabhāga: the Hindu law of inheritance in Bengal, and Studies in Hindu law and Dharmaśāstra.

He received many prestigious grants during his time at the University of Pennsylvania including a Fullbright-Hays Research Grant in 1969, a NEH Translation Grant in 1986 and a grant from the American Institute of Indian Studies in 1994. He also received the Lindback Award for Distinguished Teaching in 1986 (Almanac April 15, 1986).

As an eminent scholar and expert in the field of South Asian regional studies, Dr. Rocher held many posts; he was elected vice president of the American Oriental Society from 1984 to 1985, and president from 1985 to 1986. Dr. Rocher also was elected vice president of the American Institute of Indian Studies from 1981 to 1983, and served as Chairman to the Board of Trustees from 1984 to 1985. He was a Fellow of the Asiatic Society and a member of the American Philosophical Society, the Association for Asian Studies, the Royal Asiatic Society of Great Britain and Ireland, the Bhandarkar Oriental Research Institute, the Vishveshvaranand Vedic Research Institute and the Kuppuswami Sastrī Research Institute.

He is survived by his wife, Rosane.

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

Peter Berman

Ludo Rocher

Deaths
Eric J. Furda, Dean of Undergraduate Admissions

The first part of this presentation is to introduce members of my senior team. I hope today to share a little bit more about how we approach our work, how we think about our work and how we reach out to achieve the type of educational community that we all strive for at Penn.

Kathryn Bezella has joined the office for the second time. Kathryn heads up our marketing and communications outreach; she has been at Penn for a number of years from undergraduate admissions as well as at the Wharton School in MBA Admissions and in the Vice Dean’s Office. Kathryn has a graduate degree from Penn and an undergraduate degree from Barnard College. Lou Metzger is our head of information and management systems. When you think about the kind of work we do, you need to have that infrastructure backbone – the hardware, the software, the data capabilities in order to do the type of work that you need to do. He has an undergraduate and a graduate degree from Penn Engineering. Yvonne Romero Da Silva came into the Penn Admissions office about four years ago and is our Director of Admissions. Much of the work that you are going to see today was really the work of Yvonne and the team that supported her in that work when we thought about how to bring this office to best serve the needs of the institution. She is an educator who had admissions experience at MIT as well as at the College Board in strategic planning, and an undergraduate degree from MIT, and an MBA from the Harvard Business School. She is currently getting her doctoral degree from GSE. Yvonne is a leader and an educator. I couldn’t be more proud of my three senior leaders and the rest of the individuals who are in the Office of Admissions.

It was 2012 when Yvonne was hired. I said, “Okay, you have eight months to come up with a strategic plan.” And she said “Yes.” And we worked together, we carved out time, about 20% of the time. You might think, “Well how can you have a strategic planning process with all the heavy work that you have in front of you?” And for students and faculty, we know that we need to carve out that time. We assembled the team that 20% of their time would be devoted to this strategy project. From that, and any of you who have done strategy projects before like Yvonne, you will see that we were taking a look at four different areas.

1) The Current State Analysis: where was Penn admissions in 2012? How were we configured? What are the challenges that we have? How do we organize our resources and support from the Provost’s office.

2) The Market Analysis, which was very interesting because it was really about looking at the world’s high school students and graduates of secondary schools, what is the potential to become a Penn applicant and to succeed at Penn. That is very different than looking at who gets in and what that admitted student profile looks like. We had to look more broadly because, as you will see later, the world was shifting and we wanted to make sure that if there was a young person of promise in the country and around the world, we would be able to consider them and know who they are and share information about Penn.

3) Our peer group. Our peer group. Our most immediate peer groups perhaps in the Ivy League and the Ivy Plus Schools, as we refer to them, or the Consortium of Financing Higher Education. Particularly, since this was happening four years after the economic collapse, the competitive landscape was changing. Institutions that are two-year colleges will become part of the competitive landscape. Great land-grant universities are part of the competitive landscape.

4) Constituent Needs Analysis: What’s critical about this is that Penn is a complex place. And as we were thinking about the needs of the four undergraduate schools that we serve, the coordinated dual degrees, thinking about our campus, you might be thinking, are we configured? Are we configured? Our most immediate peer groups perhaps in the Ivy League and the Ivy Plus Schools, as we refer to them, or the Consortium of Financing Higher Education. Particularly, since this was happening four years after the economic collapse, the competitive landscape was changing. Institutions that are two-year colleges will become part of the competitive landscape. Great land-grant universities are part of the competitive landscape.

This is what came from that project. I am not usually into wordy mission statements but there are a few pieces here that I think are critical to resonate with. We are really talking about students as inspiring, promising candidates. This isn’t just recruitment and sending letters out. Some of the work we are doing with Penn First is thinking about students to reach out to so that they can see a Penn education as being possible. So inspiring students is very different from recruitment and maybe some of our other outreach.

Through identifying the next generation of Penn Alumni. You have four short years here as an undergraduate and then you enter this larger body of Penn Alumni. There are a lot of steps in between. Making sure that we are retaining students from freshmen to sophomore year and making sure that we are retaining students from freshmen to sophomore year and making sure that you home base isn’t going to have as many high school students and those individuals who are making decisions about going further away from home and having those conversations, those are the types of shifts that are taking place. You’re also seeing a decrease by about 30% from non-public high schools.

So part of the market research that took place was among guidance counselors. We really needed to find out, we couldn’t just assume that everything would stay as it is because we could not have a very strong brand position, we do have a strong market position. As I showed you before that in those areas that are going to have more students, that perception isn’t as strong. By percentage of students qualifying for free

(continued on page 5)
and reduced lunch, with the Compact and then the Compact 2020, how
are we going to continue to make sure that we are reaching out and being
as inclusive as possible? Here is a lot of your QuestBridge population, and
a lot of your first-generation/low-income students. Then by the percent-
age of students attending a four-year college and then taking a look at
what their perceptions are. More students going to a four-year college, the
more people know about Penn. Fewer people going to a four-year college
within a high school, with 73% or less than 50% is still pretty high, there’s
a big gap there, whether you’re taking 30% of even less than 10%.

So here’s the challenge that we really saw. How did we approach this?
We are really thinking about how we could be a recruitment-driven admissions
office. Most admissions offices are built around the concept that you
create regions because it’s going to add up to about 1,200 applications and
that is the assignment of each admissions officer. You would hear people
say that you have bits of New York and Iowa and parts of some other smaller
state, let’s say. Versus organizing ourselves around these larger macro re-

gions and having a team of about six admissions officers, both domestically
and globally be responsible for a larger geographic area. And this was great
work that came from the strategy project to really think about what do we
need to know about students where these shifts are taking place. What are
their needs? What is on their mind as they are thinking about college choic-
es? So how we would plan our recruitment. How we would measure our
effectiveness. Thinking about how we are selecting students from different
educational systems. Schools that may not have AP and IB as an example.
And then benchmarking to national trends, whether it’s from IPEDS or from
The Western Interstate Commission for Higher Education. We have colleges
in 12 states and our student body is coming from all these different systems.
To meet the needs of students, there are multiple facets to all of us and
we really want to make sure that students are having their interests met
and at different times during the recruitment continuum you are going to
try and meet those interests and needs that they have. Academic achieve-
ment. The faculty want to have students in the classroom who are going to
challenge them just as much as they are going to challenge the students.
Academic interests. Four undergraduate schools and five coordinated dual
degrees. Just the number of major-minor combinations that you can have
here. Socioeconomic diversity. I know something that President Gutmann is
most proud about is talking about First Generation outreach and really think-
ing about that socioeconomic diversity. Now something great happened that
I should have pointed to back in 2008. And that was the beginning of
our grant-based financial aid policies for all of our undergraduate students
who qualify for financial aid. That came as a great opportunity for us to
be able to talk about not only in our recruitment but also what families
were facing, because of the financial crisis. Race and ethnicity. What are
the needs of students? What are the needs of families as they are taking
a look at going to a four-year college that may be an airplane ride away?
What are the needs of schools that we are targeting? How can we reach out to
the students? How can we make sure that they are succeeding and thriving
here? And how can we really make sure that they understand what Penn
is like? Geographic. Again there are going to be nuances there but these
pieces may come together very strongly for some students. Maybe one or
two are going to be the dominant considerations as they are considering
where they are going to apply to college.

So engagements on campus and beyond. What have we really found
and through the support that we have, we want to bring students to our

campus as early as we can. The Penn Early Exploration Program—we have
been bringing students to campus in the fall over the past couple of years
to stay overnight in our college houses to visit classes and you should see
the shift in perceptions. These are high school seniors nationally and some
international students who are deciding which college they want to go to.
We are somewhat on their radar. But by the time that they go through this multi-day
and -night event on our campus, they are more inclined to not only apply to
Penn but maybe even apply to us early decision. A group of these students
were thinking about applying early decision to another institution and after
this they are applying to us early decision and when we have panels with
our cultural resource centers and with the student support resources, we are
making sure that those are more attainable, not only for the application
process but I think even more important for the transition.

Ivy in Your Backyard is reaching out to our Philadelphia community.
For so many students, even if they are only a few blocks away from our
campus, we may seem thousands of miles away. To let students know that
they have this type of institution in their backyard and that this should
be an option to consider. I am really proud because I spoke before about
the perception of guidance counselors and Penn, our community-based
outreach and counselor connection outreach. Counselor connections are
for individuals that work within schools that we bring to campus. Your
guidance counselors bring them to campus usually from within regional
groups that they can come and visit us and have a couple days on our

campus. Visit with some of their students who are currently students here and
get a better sense of the type of atmosphere that we have on our campus.
The community-based organizations, when we started this a couple years
ago the date of the third week of August was proposed. I said, “Okay, I’m
all for it.” Are people really going to come in the third week of August?
They are so busy, maybe just transferring back into the school year. Over
the past couple years we have had close to 50 in each year, directors of
community-based organizations, some national ones like KIPP (Knowl-
edge is Power Program), which we have a partnership with, some smaller
ones like College Track, which has a couple of sites across the US and
Chicago Scholars. We are actively reaching out, not just to school-based
educators but to educators who are providing the after-school program-
ming for students, the weekend tutoring for students, SAT and ACT prep,
these are the individuals who are trusted individuals for many students to
say, “How do I apply?” How will I feel at this institution?

We have a great opportunity at Penn given that we have Coursera as
well as Sirius XM radio, which is right on Locust Walk in Huntsman Hall.
We have been using Sirius XM as a platform to reach out. I have a show
called The Process which talks about the college admission and selection
process. That’s a quarterly show. What’s great about it too is that you
get the content and then we can repurpose it and use it elsewhere.
Provost Price asked whether we could put together a “How to Apply to
College” podcast and then a show on Sirius XM with more conversations
that we have been having. We are going to launch it early February.
Penn is partnered with Steppingstone Scholars, which is a national organization in Boston and here in Philadelphia that reaches out and works with students as early as the
fourth grade. Penn students talk about their transitions of applying to
college and transitioning into college. Our cultural resource directors
and some of our other hub directors were interviewed. So students can
come get a sense of what this campus environment is like. We bring them
through the application process, we bring them through the financial aid
process with Elaine Papas Varas and Student Financial Services. This is
going to be a toolkit that students can access. But really what we hope for
here is that school districts will access these assets. You can download it
right away. It’s on-demand once it’s released. And so there will be a lot of
functional pieces wherever a student is in the admissions process. So I am
very excited about “How to Apply to College.”

Penn offers counseling guidance. This is about Ivy in Your Backyard.
When the cuts were happening in the Philadelphia School District, we
made sure that we reached out as a partner in the local community. We had
the Alumni Interview Program talk about how to interview for college. We
have a great opportunity to talk about how to talk about what college is.
We have been using Sirius XM as a platform to reach out. I have a show
say. How do I apply? How will I feel at this institution?

Now I know that this a public meeting and that this is being shared. I
usually don’t like sharing information like this, but it is all public infor-
mation and we aggregated it together. Believe me, you have to stand on
your own, but in a market you need to also show where you are relatively
positioned. Now applications from 2008-2011 were 22,000, 26,000, then
up to 31,000. You hit the strategy project and this is where our work has
gone and we are close to 40,000 applications from about 31,000 applica-
tions prior to that. This is because of our outreach. This isn’t trying to get
more applicants but to be more selective. We have also seen about 50%
growth in our underrepresented minority applications as well from that
time period. You can see from 2013 and up. And the Penn Alumni Inter-
view Program. We have reached about 93-94% of our applicants in 2016.
This is an investment by the Penn Alumni Office and Penn Admissions
that every student gets interviewed. This is a critical outreach. If we want
to think about how students can tell their story.

Finally, our key priorities for 2016-2017. Some of these are ongoing.
When we really think about the types of messages that are important to the
interests that we are reaching out to. What’s that mean? We have one of
our visitors in New York, which is our visitor center experience: we have about 70,000 each year through College Hall.

How can we make sure they are having the best experience possible? Our
guidance counselors bring them to campus usually from within regional
groups that they can come and visit us and have a couple days on our

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Basic Plan
This is a summary of the annual report of The University of Pennsylvania Basic Plan (Plan No. 028) sponsored by the University of Pennsylvania, EIN: 23-1352685, for the period January 1, 2015 through December 31, 2015. This annual report has been filed with the Employee Benefits Security Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

Basic Financial Statement
Benefits under the plan are provided through unallocated insurance contracts and a trust fund. Plan expenses were $17,700,268. These expenses included $6,544 in administrative expenses and $17,693,724 in benefits paid to participants and beneficiaries. A total of 22,407 persons were participants in or beneficiaries of the plan at the end of the plan year.

The value of plan assets, after subtracting liabilities of the plan, was $721,672,541 as of December 31, 2015, compared to $687,608,139 as of January 1, 2015. During the plan year the plan experienced an increase in its net assets of $34,064,402. This increase includes net unrealized depreciation in the value of plan assets; that is, the difference between the value of the plan’s assets at the end of the plan year and the value of assets at the beginning of the plan year or the cost of assets acquired during the plan year. The plan had total income of $52,872,540, including employer contributions of $48,464,618, employee rollover contributions of $2,406,847, gains from investments of $1,947,974 and other income of $53,001.

Matching Plan
This is a summary of the annual report of The University of Pennsylvania Matching Plan (Plan No. 001) sponsored by the University of Pennsylvania, EIN: 23-1352685, for the period January 1, 2015 through December 31, 2015. This annual report has been filed with the Employee Benefits Security Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

Basic Financial Statement
Benefits under the plan are provided through unallocated insurance contracts and a trust fund. Plan expenses were $165,842,077. These expenses included $31,073 in administrative expenses and $165,811,004 in benefits paid to participants and beneficiaries. A total of 23,963 persons were participants in or beneficiaries of the plan at the end of the plan year.

The value of plan assets, after subtracting liabilities of the plan, was $3,814,913,677 as of December 31, 2015, compared to $3,811,200,104 as of January 1, 2015. During the plan year the plan experienced an increase in its net assets of $3,713,573. This increase includes net unrealized depreciation in the value of plan assets; that is, the difference between the value of the plan’s assets at the end of the plan year and the value of assets at the beginning of the plan year or the cost of assets acquired during the plan year. The plan had total income of $169,555,650, including employer contributions of $60,006,555, employer contributions of $63,412,657, employee rollover contributions of $11,472,605, earnings from investments of $33,688,387 and other income of $975,446.

Supplemental Retirement Annuity Plan
This is a summary of the annual report of The Supplemental Retirement Annuity Plan of the University of Pennsylvania (Plan No. 002) sponsored by the University of Pennsylvania, EIN: 23-1352685, for the period January 1, 2015 through December 31, 2015. This annual report has been filed with the Employee Benefits Security Administration, as required under the Employee Retirement Income Security Act of 1974 (ERISA).

Basic Financial Statement
Benefits under the plan are provided through unallocated insurance contracts and a trust fund. Plan expenses were $32,635,205. These expenses included $9,749 in administrative expenses and $32,625,456 in benefits paid to participants and beneficiaries. A total of 23,723 persons were participants in or beneficiaries of the plan at the end of the plan year.

This value of plan assets, after subtracting liabilities of the plan, was $922,588,956 as of December 31, 2015, compared to $868,577,777 as of January 1, 2015. During the plan year the plan experienced an increase in its net assets of $21,809,179. This increase includes net unrealized depreciation in the value of plan assets; that is, the difference between the value of the plan’s assets at the end of the plan year and the value of assets at the beginning of the plan year or the cost of assets acquired during the plan year. The plan had total income of $63,301,781 including employee contributions of $45,747,738, employee rollover contributions of $14,621,745, gains from investments of $2,761,202 and other income of $171,096.

Health and Welfare Plan for Retirees and Disabled Employees
(for the period January 1, 2015 through December 31, 2015)
This is a summary of the annual report of the University of Pennsylvania Health and Welfare Plan for Retirees and Disabled Employees (Plan No. 530), sponsored by The Trustees of the University of Pennsylvania, EIN 23-1352685 for the period that began on January 1, 2015 and ended on December 31, 2015. The annual report has been filed with the Employee Benefits Security Administration as required under the Employee Retirement Income Security Act of 1974 (ERISA). Please note that not all employees are eligible to participate in the Plan. Please consult your Plan materials for specific eligibility information.

Retiree benefits were provided through a combination of self-insured payments from the University’s general assets, payments from a trust fund established to fund retiree benefits, and insurance contracts with third party insurance companies.

Medical, Dental and Prescription Drug Benefits
The Plan has contracts with Aetna Health Inc., Keystone Health Plan East, Amerihealth and Metropolitan Life Insurance Company to pay medical and dental claims incurred under the terms of the contracts. The total premiums paid for the plan year ending December 31, 2015 were $359,132,650 as of December 31, 2015, compared to $352,166,486 as of January 1, 2015. During the plan year the Plan experienced an increase in its net assets of $2,966,164. This increase includes net unrealized depreciation in the value of Plan assets; that is, the difference between the value of the Plan’s assets at the end of the year and the value of assets at the beginning of the year or the cost of assets acquired during the year. The Plan had total income of $23,565,512 including employee contributions of $5,922,260, employer contributions of $28,391,718 and losses from investments of $10,742,466.

Plan expenses were $2,965,348. These expenses included $2,853,907 in administrative expenses and $17,745,441 in benefits paid to participants and beneficiaries.

Life Insurance Benefits
The Plan has a contract with Aetna Life Insurance Company to pay life insurance claims incurred under the terms of the contract. The total premiums paid under this contract for the plan year ending December 31, 2015 were $319,658.

Your Rights to Additional Information
You have the right to receive a copy of the full annual report, or any part thereof, on request. The items listed below are included in that report:
1. An accountant’s opinion;
2. Financial information;
3. Information on payments to service providers;
4. Assets held for investment; and
5. Insurance information.
To obtain a copy of the full annual report, or any part thereof, write to the office of the Plan Administrator, c/o Joanne M. Blythe, Retirement Manager, University of Pennsylvania, 3401 Walnut Street, Suite 527A, Philadelphia, PA 19104-6228, or call (215) 898-9947. The charge to cover copying costs will be $5 for the full annual report or 25 cents per page for any part thereof.
You also have the right to receive from the Plan Administrator, on request and at no charge, a statement of the assets and liabilities of the Plan and accompanying notes, or a statement of income and expenses of the plan and accompanying notes, or both.
If you request a copy of the full annual report from the Plan Administrator, these two statements and accompanying notes will be included as part of that report. The charge to cover copying costs given above does not include a charge for the copying of these portions of the report because these portions are furnished without charge.
You also have the legally protected right under ERISA to examine the annual reports in the offices of the Employer at the address for the Plan Administrator, above, and at the U.S. Department of Labor in Washington, D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department should be addressed to: Public Disclosure Room, Room N-1513, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, D.C. 20210.
Celebrations Around the World: Free Family Holiday Event Rings in the Season at the Penn Museum: December 3

Philadelphia is now a World Heritage City, and the Penn Museum offers a free, spirited holiday program with an international focus: Celebrations Around the World on Saturday, December 3 from 11 a.m. to 4 p.m. Guests will receive Museum “passports” to “visit” China, Japan, Kenya, Iraq, the Republic of Georgia and discover a world of holiday traditions throughout the galleries where guests’ passports will be stamped at this annual, all-ages event. Traditional Vietnamese songs as well as world music geared toward children, Tai chi and karate demonstrations, African and African-American storytelling, and “Celebrations Around the World” family gallery tours are all part of the event, along with balloon art, face painting, holiday craft make-and-takes and even holiday cupcakes, while they last!

“This joyful and distinctively international celebration is Penn Museum’s holiday ‘gift’ to our community,” said Julian Siggers, Williams Director of the Penn Museum. “We open our doors in the spirit of cultural understanding and in the hope we all have for a world at peace.”

New Year’s Eve Around the Globe

The celebration begins with an inspirational talk at 11:30 a.m., as Thomas Dixon offers a wide-ranging look at “New Year’s Eve Around the World.” A native Pennsylvanian and a Temple University graduate student, his goal, as he explains on https://thehumanist.com/ is to visit a new city every year on New Year’s Eve, opening himself to new cultures, experiences and people.

Your Rights to Additional Information for Basic, Matching and Supplemental Retirement Annuity Plans (continued from page 6)

Under ERISA, you have the right to receive a copy of any of these full annual reports, or any part thereof, upon request. The items listed below are included in that report for the University of Pennsylvania Basic, Matching and Supplemental Retirement Annuity Plans:

1. An account’s opinion;
2. Financial information;
3. Information on payments to service providers;
4. Assets held for investment;
5. Insurance information; and
6. Information regarding pooled separate accounts in which the plan participates.

To obtain a copy of the full annual report, or any part thereof, write to the office of the Plan Administrator, c/o Joanne M. Blythe, Retirement Manager, University of Pennsylvania, 3401 Walnut Street, Suite 527A, Philadelphia, PA 19104-6228, or call (215) 898-9947. The charge to cover copying costs will be $5 for the full annual report or 25 cents per page for any part thereof.

You also have the right to receive from the Plan Administrator, on request and at no charge, a statement of the assets and liabilities of the plan and accompanying notes, or a statement of income and expenses of the plan and accompanying notes, or both for the Plan. If you request a copy of the full annual report from the Plan Administrator, these two statements and accompanying notes will be included as part of that report. The charge to cover copying costs given above does not include a charge for the copying of these portions of the report because these portions are furnished without charge.

You also have the legally protected right under ERISA to examine the annual reports in the offices of the Employer at the address for the Plan Administrator, above, and at the U.S. Department of Labor in Washington, D.C., or to obtain a copy from the U.S. Department of Labor upon payment of copying costs. Requests to the Department should be addressed to: Public Disclosure Room, Room N-1513, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

The University of Pennsylvania Police Department

Community Crime Report

About the Crime Report: Below are all Crimes Against Persons from a campus report for November 7-13, 2016. Also reported were 7 Crimes Against Property (5 thefts, 1 burglary and 1 fraud). Full reports are available at: www.upenn.edu/almanac/volumes/v63/n14/creport.html

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 November 7-13, 2016. The University Police actively patrol from Market Street to Baltimore Avenue and from the Schuylkill River to 43rd Street in conjunction with 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.

18th District Report

Below are the Crimes Against Persons from the 18th District: 5 incidents with 1 arrest (3 assaults, 1 aggravating assault and 1 domestic assault) were reported between November 7-13, 2016 by the 18th District covering the Schuylkill River to 49th Street & Market Street to Woodland Avenue.

Penn Museum guests will explore celebrations and cultures around the world on Saturday, December 3.
Making a Lasting, Real Impact on Students

Jane Dmochowski

Engage Students Outside the Major

My college dance history professor took breaks from lecture to perform dances—in costume—from the periods we were studying. That class, although it did not directly relate to my major in geophysics, was vital to my education. My professor understood that others like me may be going into the class with an existing joy for dancing (or not), but it was his job to help us see dance as an art form that has evolved through time and impacted history. His engaging and creative style moved me to go beyond a simple memorization of the periods of dance and to more fully appreciate how dance can tell a story, heal, imitate nature and more. Students learned not just when the Académie Royale de Danse was formed, but how dance often mirrors and influences our ideas of gender, style, politics and health—things we cared deeply about. I enjoyed the course, but more importantly it impacted my intellectual growth as an educator. As a scientist, I want my non-science students to feel the same way about our oceans as I do. I cannot put on scuba gear and dive to the bottom of the ocean in front of the class, nor take my students along on an adventure across the Pacific, but I can try to open the doors of science in other ways.

I find three things to be very helpful in the process of opening those doors for students of all majors: varying the type of assignments, using multiple methods of teaching and making an effort to connect the course material to the students’ lives.

Use Variation in Assignments

I try to remember that students coming from different disciplines don’t always have the same familiarity or mastery with every type of assignment. One student may learn best from problem-based assignments, while another may thrive by completing an essay assignment. Aiming for some range of different assignments can ensure that students feel they’re able to put their best foot forward on at least some of the assignments, no matter what the content.

A friend once told me his favorite thing about his college earth science course was writing a poem for one of the assignments. I initially assumed that he had not taken a very “serious” course. But over the years I have continued to think about what he said, and I find myself adding more creative assignments, even poems (1), to my course. At the end of an exercise on Climate Change Impacts, Adaptations and Vulnerability the last prompt is, “Now, write a letter to your favorite (or least favorite) politician, diplomat or notable public figure explaining what the likely climate change impacts are for their state/country.” The last prompt on the Seasons exercise instructs the groups, “In the creative mode of your choice (a letter, a poem, a very detailed picture, a song…), describe why we, on Earth, experience seasons.” I also give students the options to do a video or instructional pamphlet for their final project, as the result of a conversation I had with a student who told me how drawing the processes we discussed in class helped her learn the processes we discussed in class with a student next to them before we discuss an issue as a class (“think-pair-share”). Alternatively, in “gallery walks” students move around the classroom responding to prompts on the board creating a visual guide to that lesson’s concepts that can be summarized and reported to the class as a whole by the students and instructor. I also like to throw in metacognitive activities like “minute papers” or “concept maps,” where students complete tasks—writings and sketches—that require them to think about their own learning process.

Incorporate Multiple Methods of Teaching

Using multiple teaching methods, including both lecture and active learning, allows me to more effectively move students toward those higher order learning objectives: applying content to a new problem, analyzing new information, synthesizing material and evaluating a conclusion or solution. For example, I often pair content with activities such as using real data to make a decision about where to put a wave power plant. I use other strategies like “jigsaw activities,” where the class is divided into several groups, each of which is to become expert on one aspect of the material being taught, and after some portion of the activity is completed in the expert groups, all students are redistributed into new groups, where they can share their “expert” knowledge and learn from others before tackling the final portion of the class assignment together. I also have students make predictions or solve problems individually and then share their answers with a student next to them before we discuss an issue as a class (“think-pair-share”). Alternatively, in “gallery walks” students move around the classroom and describe why we, on Earth, experience Climate Change Impacts, Adaptations and Vulnerability the last prompt is, continued to think about what he said, and I find myself adding more creative

Connect the Material to Their Lives

The material we teach our students is important. We know this, but sometimes it takes being a bit more explicit, or incorporating a creative assignment or activity, to get the point across to our students. We’re told by cognitive scientists that students learn best when they have a context for the new knowledge. For example, Donovan & Bransford (2005, p. 4) write, as part of the Introduction to How Students Learn: History, Mathematics, and Science in the Classroom that, “new understandings are constructed on a foundation of existing understandings and experiences.” This is crucial when emphasizing the importance of addressing preconceptions, but it also reminds us to connect the concepts in our course to those the students already care and know something about. In oceanography, I can build on the political science student’s interest in Conference of the Parties (COP21) when discussing ocean atmosphere dynamics and the greenhouse effect, the engineering student’s knowledge of renewable energy when discussing global tidal patterns and how tidal power plants operate, the history student’s background in 19th century British history when discussing early navigation advances, and so on.

What’s the point, and what else helps?

I work to make the relevance of my course more obvious and keep students engaged with the methods described above in order to deepen their understanding of Earth and help them acquire the fundamental concepts of science literacy. I want them to learn science so that they will vote intelligently, read the newspaper thoughtfully, make smart investments, appreciate nature and care for our planet. Admittedly, it is challenging to make a lasting, real impact on a student outside their major, but I find it easier when I focus on what I really want my students to learn and repeatedly remind myself and my students of both the oceanographic content objectives (e.g., I can describe the many active geologic processes that occur at plate boundaries and how these shape the bathymetry of the oceans) and science literacy objectives (e.g., I can explain the scientific process and how our understanding of Earth changes through time due to scientific investigations and the increasing availability of more information). While I want my students to learn a lot, it can be overwhelming, and I don’t want to teach a course that’s a mile wide and an inch deep (a criticism I received some years ago and tried to learn from). I want to teach a course that will stick with my students forever, as that dance history class did for me.

Jane Dmochowski is a senior lecturer in earth and environmental sciences and the assistant director of the earth and environmental science undergraduate programs in the School of Arts & Sciences.

This essay continues the series that began in the fall of 1994 as the joint creation of the College of Arts and Sciences, the Center for Teaching and Learning and the Lindback Society for Distinguished Teaching. See www.upenn.edu/almanac/teach/teachall.html for the previous essays.