INIVERSITY OF PENNSYLVANIA MINIVERSITY OF PENNSYLVANIA

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Risa Lavizzo-Mourey: Penn Integrates Knowledge Professor

Penn President Amy Gutmann and Provost Vincent Price are pleased to announce the appointment of Risa Lavizzo-Mourey, GR'86, HON'10, as the University of Pennsylvania's 19th Penn Integrates Knowledge (PIK) University Professor, effective January 1, 2018.

A world-renowned expert in geriatric medicine, Dr. Lavizzo-Mourey has served since 2003

as president and chief executive officer of the Robert Wood Johnson Foundation (RWJ) and, for 15 years before that, as a distinguished professor and administrator at Penn. She will be the Robert Wood Johnson University Professor of Population Health and Health Equity, with joint faculty appointments in the department of medical ethics and health policy in the Perelman



Risa Lavizzo-Mourey

School of Medicine, the department of health care management in the Wharton School, and the department of family and community health in the School of Nursing.

School of Nursing.

"Whether leading one of the nation's largest health care philanthropies, advising the White House on health care policy or publishing prolifically in some of the world's most influential medical journals, Risa Lavizzo-Mourey is an eminent interdisciplinary change-maker," said President Gutmann. "Her exemplary contributions to geriatrics and other medical fields are matched by her devotion to promoting lasting social change and improving the health of all people. We are delighted to welcome home this truly exceptional scholar, clinician, leader and Penn alumna."

Dr. Lavizzo-Mourey has been named eight times to the *Forbes* list of The World's 100 Most Powerful Women and nine times by *Modern Healthcare* as one of the 100 Most Influential People in Healthcare. At the RWJ Foundation,

the nation's largest philanthropic organization devoted to health, she spearheaded a billion-dollar initiative to reverse the nation's childhood obesity epidemic and built programs to help people obtain better healthcare and provide research and other assistance to states implementing the Affordable Care Act. She led the Foundation's Commission to Build a Healthier America and its landmark 2009 report "Beyond Health Care," which focused on recommendations to improve health at the local, state and federal levels.

At Penn, Dr. Lavizzo-Mourey was Sylvan Eisman Professor of Medicine and director of the Institute on Aging. She began her career at Penn in 1986, after earning an MBA at Wharton in health care administration, and during her tenure served as associate executive vice president for health policy, associate dean for health services research and chief of the division of geriatric medicine. At the federal level, she was deputy administrator of what is now the Agency for Healthcare Research and Quality; worked on the White House Health Care Reform Task Force, co-chairing the working group on quality of care; served on numerous federal advisory committees, including the Task Force on Aging Research, the National Committee on Vital and Health Statistics, and the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry; and is master and former regent of the American College of Physicians, where she chaired the committees on ethics and human rights.

She has published almost 100 original articles, editorials and book chapters, including widely influential and highly cited articles in the *Journal of the American Medical Association, New England Journal of Medicine* and *Annals of Internal Medicine*. In addition to an MBA from the Wharton School, she earned an MD from Harvard Medical School and a BA from the State University of New York at Stony Brook. In recognition of her far-ranging and trailblazing accomplishments, Penn awarded her an honorary Doctor of Laws in 2010 (*Almanac* February 23, 2010).

"Risa Lavizzo-Mourey's work embodies

Penn's deepest mission: using innovative, interdisciplinary research to make a tangible impact on people's lives around the world. I am certain that she will continue to be an inspiring catalyst, colleague, mentor and collaborator across every part of our campus in the years ahead," said Provost Price.

The PIK program was launched by President Gutmann in 2005 as a University-wide initiative to recruit exceptional faculty members whose research and teaching exemplify the integration of knowledge across disciplines and who are appointed in at least two Schools at Penn.

Aaron Roth: Class of 1940 Professor

Provost Vincent Price and Vice Provost for Faculty Anita Allen are pleased to announce the appointment of Aaron Roth, associate professor of computer and information science in the School of Engineering & Applied Science, to the Class of **Bicentennial** Term Chair. It became effective March 1.



Aaron Roth

Dr. Roth is an expert in algorithm design, especially the algorithmic

sign, especially the algorithmic foundations of data privacy, game theory and machine learning.

In 2016, he received the Presidential Early Career Award for Scientists and Engineers (PE-CASE)(Almanac April 26, 2016), and he has also received an NSF CAREER Award (Almanac March 19, 2013), an Alfred P. Sloan Research Fellowship (Almanac March 17, 2015) and a Google Faculty Research Award, among other honors.

He has taught at Penn since 2011 and was the Raj and Neera Singh Assistant Professor of Computer Science from 2011 until 2016.

He earned a PhD in 2010 in computer science from Carnegie Mellon University and a BA in 2006 in computer science and mathematics from Columbia University.

The Class of 1940 Bicentennial Endowed Term Chair was established by the Class of 1940 at its 50th reunion to honor outstanding young professors at Penn.

Penn Vet: First Student Accepted into Special VMD-MBA Program

Melanie Kirshenbaum of Westchester County, New York, is the first student accepted into the new VMD-MBA degree program at Penn Vet's Center for Animal Health and Productivity (CAHP) and the Wharton School of the University of Pennsylvania.

The VMD-MBA combined-degree program is supported by the Robert Marshak-Vernon Hill Scholarship Fund, named in honor of Dr. Robert Marshak, Penn Vet Dean from 1973 to 1987. Established with a generous \$1 million gift from Vernon and Shirley Hill, the fund supports the training of leaders and entrepreneurs with the vision to advance both the science and business of food animal production in order to help ensure global food security.

The Marshak-Hill scholars are required to develop projects that explore the applications of economic and business principles to the health and productivity of livestock industries. The integrated training emphasizes innovative solutions to the complex business, health, environmental, and societal challenges associated with



Melanie Kirshenbaum (continued on page 5)

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 - Music at Annenberg Center Research Roundup

H. Robert Cathcart, Health Care Management, Wharton

H. Robert Cathcart, a longtime Penn faculty member, died on February 25 at the age of 92.

Dr. Cathcart studied economics at Drake University beginning in 1941 and then left to serve in the



Robert Cathcart

United States Army Air Forces in the South West Pacific Theatre. He returned to the US and graduated from the University of Iowa in 1947. He earned a degree in hospital administration at the University of Toronto and completed a Kellogg Foundation fellowship at Blodgett Hospital in Grand Rapids, Michigan. He joined Pennsylvania Hospital as an administrative assistant in 1949 and eventually became vice president and then president of the hospital, a position he held until his retirement in 1991.

Dr. Cathcart joined Penn in 1975 in the health care management department at the Wharton School. He was an adjunct professor from 1975-1990 and continued his affiliation with the department as a senior fellow from 1997-2001. He joined the 25 Year Club in 2000 (*Almanac* December 12, 2000).

He was involved with health care on the local, state, national and international levels—he was chairman of the Delaware Valley Healthcare Council, president of the Hospital Association of Pennsylvania, commissioner of the Joint Commission on Accreditation of Hospitals, chairman of the American Hospital Association and chairman of the National Commission on Nursing.

Throughout his career, Dr. Cathcart received many awards including Pennsylvania Hospital's Good Samaritan Award, the American Hospital Association Distinguished Service Award and the American College of Healthcare Executives Gold Medal Award. He was awarded an honorary doctorate from Villanova University. He oversaw Penn's Johnson and Johnson Wharton Fellows Program for Management for Nurse Executives and held leadership positions in the National Library of Medicine, the Dorothy Rider Pool Health Care Trust, InterSpec, VHA, Old Philadelphia Development, American Sterilizer Co., Lomax Health Systems, US Retirement Communities, the Mawarid Group, the Hunter Group, HRDI and Waverly Heights.

He was preceded in death by his wife of 65 years, Tressa, who died in 2016. He is survived by his daughter, Tressa Ann (Jules) Silberberg and grandchildren, Tressa Joan, Zara Anne Grace and Jules Robert.

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

However, notices of alumni deaths should be directed to the Alumni Records Office at Room 517, Franklin Building, (215) 898-8136 or email record@ben. dev.upenn.edu

Eugene Garfield, Penn Libraries Overseer



Eugene Garfield

Eugene Garfield, Gr'61, a pioneer of citation analysis who served as a Penn Libraries overseer and established a residency in science librarianship, died on February 26 at the age of 91.

Dr. Garfield was born Eugene Garfinkle in New York City. He earned a bachelor's degree in chemistry in 1949 and a master's in

library science in 1954, both from Columbia University, and a doctorate in structural linguistics from Penn in 1961.

Dr. Garfield's career focused on the fields of information discovery and information recovery. He concocted the journal impact factor, a statistical framework that used citations to quantify the reach of a particular journal in a scientific community. He developed a number of bibliographic tools, including precursors of today's Science Citation Index and founded the Institute for Scientific Information in 1960 to regularly publish the SCI. Dr. Garfield became chairman emeritus of the Institute for Scientific Information in 1993. Thomson Reuters acquired the ISI and its citation index for \$210 million in 1992.

In 1986, Dr. Garfield founded *The Scientist*, a biweekly newspaper for research professionals that is now published as a magazine. He served as publisher and editor-in-chief from 1986-2000.

Dr. Garfield was appointed to Penn Libraries' Board of Overseers in 1992 and served until 2011.

In 2010, Penn Libraries appointed its first Eugene Garfield Resident in Science Librarianship (*Almanac* March 2, 2010). Dr. Garfield established the residency to support the information literacy program in the School of Engineering & Applied Science.

He held honorary doctorates from State University of New York, Thomas Jefferson University and Drexel University. He also was awarded honorary degrees from University of Rome in Italy, Charles University in the Czech Republic and Real Academia de Medicina del Distrito de Granada in Spain.

He is survived by his wife, Meher; three sons; a daughter; a stepdaughter; two grand-daughters; and two great-grandchildren.

James M. Lloyd, Dining Services

James M. Lloyd, former director of dining services at University of Pennsylvania, died on February 27. He was 80 years old. Mr. Lloyd grew up in Camp Hill and attended Paul Smith's College of Arts and Sciences in upstate New York, where he earned an associate's degree in hotel and restaurant management in 1957. He went on to receive a bachelor's in business administration from Florida State University in 1960.

Before joining Penn's staff, Mr. Lloyd was food services director at Glassboro State College (now Rowan University). He became assistant director of dining services at Penn in 1970 and was named director in 1971. He was appointed manager of the Faculty Club in 1974.

Mr. Lloyd later was food service director for

Philadelphia National Bank, now First Union National Bank. He retired in 2001.

He is survived by his nieces, Carol Burke and Sharman Eckhardt; his nephew, Samuel (Rory) Mays; his grandnieces, Erica (Brette) Kubea, Erin Golden and Ellie Eckhardt; and his grandnephews, Samuel Adam Mays and Leonard Eckhardt.

Contributions may be made to Asbury Bethany Village or the Pi Kappa Phi Fraternity Scholarship Fund in Charlotte, North Carolina.

Aran Rana, Undergraduate Student

Aran Rana, a 19-year-old University of Pennsylvania student, died on February 27 at home in Hong Kong. Mr. Rana was on a leave of absence from Penn.

He entered Penn in 2015 as a member of the Class of 2019 in the College and lived in Riepe College House as a freshman.

He is survived by his parents, Aditya and Naomi, and his brother, Makia.

In a statement from Valarie Swain-Cade McCoullum, VPUL, Mr. Rana's mother said he would be remembered for his "friendliness, kindness and his vivaciousness."

Carles Vallhonrat, Architecture



Carles Vallhonrat

Carles (Carlos) Vallhonrat, former lecturer and chairman of the department of architecture at the University of Pennsylvania, died at home in Haverford on February 21. He was 89.

Mr. Vallhonrat was born in Barcelona, Spain and

graduated from the Universidad Nacional del Litoral in Rosario, Argentina. He then earned a master's degree in architecture from Penn.

From 1960-1971, Mr. Vallhonrat worked in the office of Louis I. Kahn as principal assistant to Mr. Kahn, where he contributed to the design of the Salk Institute, the Bangladesh Capital Complex and the Palazzo dei Congressi in Venice. As senior designer and consultant to Ewing Cole Erdman & Eubank, he designed the Federal Reserve Bank in Philadelphia.

Mr. Vallhonrat joined Penn in 1963 as a lecturer. In 1965, he succeeded G. Holmes Perkins as chairman of the department of architecture.

He spent the majority of his teaching career in the School of Architecture at Princeton, where he began in 1972. He also taught at Yale University, Tel Aviv University and others.

Mr. Vallhonrat was founder and president of the original Louis I. Kahn Archive from 1974-1978, having acquired the records and drawings of Kahn, which have resided at Penn ever since.

In addition, he was principal of C.A. Vallhonrat, Architect, his private practice in Philadelphia.

He is survived by his wife, Leslie; his children, Christopher, Gregory, Heather Garrett and Seth; and his grandchildren, Elizabeth, Alice, Carolyn, Charlotte and George.

Gifts in memory of Professor Carles Vallhonrat can be made to the Princeton University Professor Vallhonrat Fund (Princeton University, Alumni and Donor Records, Helen Hardy, P.O. Box 5357, Princeton, NJ 08543-5357).

University Council Meeting Agenda

Wednesday, March 22, 2017 4 p.m. Bodek Lounge, Houston Hall

- Approval of the minutes of February 22, 2017. 1 minute
- II. Follow up comments or questions on status reports. 5 minutes
- III. Reports on Budgets and Plans for the Next Academic Year. 60 minutes
- IV. Five-year update on Penn's Action Plan for Faculty Diversity and Excellence. 50 minutes
- V. New business. 5 minutes
- VI. Adjournment.

Trustees' Council of Penn Women Research Grants: April 14

The Trustees' Council of Penn Women (TCPW) wishes to assist Associate Professors working for promotion to Full Professor, as well as Assistant Professors seeking promotion to the permanent rank of Associate Professor. In support of this goal, TCPW offers three research grants, up to \$5,000 each, to female faculty, or faculty members whose research is centrally concerned with the role of women in society, science, or arts and letters. The grant may be used at any time during the 2017-2018 academic year to support research-related expenses, including (but not limited to) conference travel, research assistants, books and other materials.

Applicants should send an application packet saved in a single PDF document to gsws-apc@sas.upenn.edu with "TCPW Grant Application" in the subject line. The application packet includes:

- a TCPW Faculty Grant Cover Sheet (https://www.sas.upenn.edu/gsws/content/trustees-council-penn-women-research-grants)
- a two-page summary of the research you wish to undertake, including an explanation of how the grant will be used to facilitate the research
- a budget information on how TCPW funds will be spent and the requested time period for using the funds
 - a curriculum vitae
 - the name of a University reference.

In your application be sure to describe why the grant would be particularly useful to you at this time. Also, we require that you indicate whether you have other sources of research funding. Those who have previously applied and did not receive an award are encouraged to apply again.

Deadline: Friday, April 14, 2017

Research proposals will be reviewed, and the grants awarded, through a peer review process. Grant recipients are expected to submit a written report accounting how the money was spent to the review panel and to the Trustees' Council at the conclusion of the grant period, and encouraged to present their research at an Alice Paul Center forum. Any subsequent publication of the research results should acknowledge the support of the Council.

To Penn Students, Faculty and Staff

Message about New Executive Order on Immigration

In light of the March 6 Executive Order from the White House, we want to reaffirm our strong support for and solidarity with all international and Muslim members of our community.

Together with university leaders around the nation, we recognize and duly respect the need to protect America's security. At the same time, the procedures used to vet immigrants should address actual risks, be grounded in evidence, and be free of unwarranted discrimination in keeping with our constitutional principles. As President Gutmann wrote when the first Executive Order was issued: "Immigration strengthens the fabric of this nation and our University. Immigrants spark innovation, launch new businesses, and enrich our culture and arts. They are a precious national resource and invaluable to Penn. We must stand together, united in our support of beloved colleagues, students, friends, and families who, no matter where they come from or how they worship, have contributed so much to our University community and to this country."

As events move forward, our office of International Student and Scholar Services (215-898-4661) continues to be your best source of information and support. In particular, all foreign passport holders, including dual nationals and permanent residents, should be in touch with ISSS to understand how changes in immigration policy might affect them. Students concerned about international travel over summer break should contact their ISSS advisor, and ISSS can also provide any member of the Penn community with important information about best practices and necessary steps for travel in the current landscape.

Penn Law continues to provide clinics for any member of the Penn community impacted by the Executive Orders. The next Clinic will be held on *Friday*, *March* 24, from 11 a.m.–2 p.m. at Greenfield Intercultural Center. You can register for a consultation at *http://global.upenn.edu/isss* A third Clinic will be held on *Saturday*, *April* 8.

Penn Global will continuously update resources and information at: http://global.upenn.edu/immigration-policy-notice We encourage all students, staff, and faculty who have questions beyond travel and visa status to consult the Dean's Office in your School about your individual situation.

We thank all the members of our community for their hard work in these challenging times. It has never been more vital for us to come together, as one community, to find strength in our diversity.

—President Amy Gutmann —Provost Vincent Price —Executive Vice President Craig Carnaroli

Call for Course Development Proposals: April 3 Structured, Active, In-class Learning (SAIL) Classes

The Vice Provost for Education and the Center for Teaching and Learning invite faculty to submit proposals for course development grants to support the creation of Structured, Active, Inclass Learning (SAIL) classes.

SAIL classes emphasize the active engagement of students in class through structured work, guided by the instructor. They build upon the premise that students benefit from learning by doing and that class time should be used to help students learn to work with material. To that end, class time is built around highly structured activities, in which students work to solve problems, interpret data or evidence, or otherwise engage in real practices in the discipline. This work is frequently done in groups, with instructors circulating and guiding the process. Although a SAIL class may include some mini-lectures or full-class discussion, the exercises that students engage with are at the heart of the class. In preparation for that in-class work, instructors usually provide out-of-class materials or assignments for students to process prior to class.

These grants provide support for faculty interested in transforming an existing course into a SAIL class or developing a new one. SAIL grants will provide faculty with a \$5,000 research fund for their preparation time or for assistance in the process of developing in-class exercises, any out-of-class materials, or assignments and assessments. Since the purpose of the SAIL grants is to aid faculty who are interested in successfully replacing lectures with active learning and practice in the discipline, proposals to reimagine courses that are often taught as lecture classes are particularly welcome, as are proposals for introductory level classes.

Proposals must include: the proposed course's name, number and expected enrollment; faculty's CV; either a current syllabus annotated with proposed changes or (for new courses) a preliminary syllabus; and department chair's signature indicating approval. Successful proposals will explain how the course will make use of SAIL techniques, and include the following:

- Thoughts on why you want to teach this class as a SAIL class;
- Explanation of the in-class exercises to be developed and used;
- Discussion of how any other teaching methods, out-of-class materials or assignments, for instance, will contribute to the course aims;
- Estimate of the amount of class time that will be spent on structured activities and how much time will be devoted to other techniques, such as mini-lectures;
- Reflection on goals for what students should learn from this course;
- TA support for the course, both currently and in proposed version;
- Where the course fits into the curriculum of the department.

Proposals should not exceed three pages (not including CV and syllabus), and will be reviewed by a faculty committee.

Faculty are encouraged to consult with the Center for Teaching and Learning in developing their courses. See http://www.upenn.edu/ctl/resources/teaching_a_sail_class for more information. Additionally, CTL can provide training for TAs supporting SAIL classes.

Submit proposals to CTL's Sara Demucci at *sdemucci@upenn.edu* by *Monday*, *April 3*, 2017.

Honors & Other Things

Chyke Doubeni: Preventive Services Task Force

Chyke Doubeni, chair and the presidential professor of the department of family medicine and community health in the Perelman School of Medicine at the University of Pennsylvania, has been appointed to the US Preventive Services Task Force.



Chyke Doubeni

The task force is an independent, vol-

unteer group of experts in prevention and evidence-based medicine that works to improve health across the US through recommendations on clinical preventive services, such as screenings, counseling services and preventive medications.

Task force members are appointed to serve a four-year term by the director of the Agency for Healthcare Research and Quality as part of the US Department of Health and Human Services.

"On behalf of my fellow Task Force members, I am happy to welcome Dr. Doubeni to the Task Force," said Kirsten Bibbins-Domingo, Task Force chair. "His clinical and research expertise in chronic disease and prevention, as well as his commitment to public health and vulnerable populations, will be important additions to the Task Force."

Dr. Doubeni is also an associate professor of epidemiology and a senior fellow in the Leonard Davis Institute of Health Economics. In addition, he directs Penn's Center for Community and Population Health, which fosters novel population health and community-informed strategies to promote health and integrate patient perspectives into research and clinical care. His research expertise includes clinical and public health interventions and primary care transformation to improve access to care and eliminate disparities in the burden of chronic disease in communities.

Five Penn Seniors, One Alumna: Thouron Awards

Five University of Pennsylvania seniors and one alumna have received 2017 Thouron Awards to pursue graduate studies in the United Kingdom.

Cole Hurwitz, a logic and information major from Portland, Oregon, will study machine learning and will conduct independent research in applied computer science as related to the autism spectrum disorder in the Institute of Adaptive and Neural Computation at the University of Edinburgh.

Joseph Kiernan, a diplomatic history and political science major from Haddonfield, New Jersey, hopes to study historical international relations and its application for contemporary foreign relations, particularly in Asia and the Pacific. He is a University Scholar with research focused on Cold War Asian international relations.

Suzy Landon, a health and societies major from Newton, Massachusetts, is applying to the London School of Hygiene and Tropical Medicine to pursue a master's in public health. She currently works as an undergraduate research assistant at the Children's Hospital of Philadelphia and was a Thouron Summer Research Prize recipient in 2015.

Kate Samuelson, a political science major from Katy, Texas, plans to study social innovation in health. She currently works part-time at the Children's Hospital of Philadelphia, the Penn School of Social Policy & Practice and the United Nations Association of Greater Philadelphia. Through the John Thouron Summer Prize, she conducted research on NGOs in Central America dedicated to pediatric cancer research at the University of Cambridge.

Tshay Williams, a sociology and Africana studies major from Amityville, New York, plans to pursue a graduate degree in visual anthropology. Her interests lie at the intersection of arts and social impact.

Anna Carapellotti, a 2015 graduate who majored in cognitive science with a neuroscience concentration, plans to pursue a PhD in psychology in order to study the effects of dance therapy on patients with neurodegenerative disorders such as Parkinson's disease through the school's Movement Innovation Lab.

The Thouron Award is a graduate exchange program between the University of Pennsylvania and British universities that aims to improve relations between the United States and the United Kingdom. Scholarship winners receive tuition and stipends for one or two years depending on the time required to earn a graduate degree. The Award was established and is supported by gifts from Sir John Thouron and the late Esther du Pont, Lady Thouron, of Unionville, Pennsylvania. More information is available at www.thouronaward.org/

Michael Horowitz: Karl Deutsch Award

Michael C. Horowitz, an associate professor of political science at the University of Pennsylvania and associate director of Penn's Perry World House, is the recipient of the International Studies Association's Karl Deutsch Award, which honors a scholar in the first 10 years of his or her career who has made a significant contribu-



Michael Horowitz

tion to the study of international relations and peace research.

Dr. Horowitz's work focuses on the nature of violent conflict, including weapons of mass destruction, national political leadership and war, as well as military innovations such as unmanned aerial vehicles, commonly known as drones. His 2010 book, *The Diffusion of Military Power: Causes and Consequences for International Politics*, was cited as an exemplification of a thorough scholarly approach.

Penn: Fifth in 'Unicorn' Founders

A recent study ranking the world's universities according to the number of "unicorn founders" they produced placed *University of Pennsylvania* in fifth place. The term "unicorn" refers to a company valued in the billions. The study

was conducted by Verve Search and sourced on information from TechCrunch and Crunchbase. Penn was found to have produced nine founders of unicorn companies.

Stanford University came in first place with 51 unicorn founders.

Carlin Romano: Knight Foundation Nieman Fellow

Carlin Romano, a lecturer at the Annenberg School, was named a Nieman Fellow for 2017 by the John S. Knight Foundation. The Knight Foundation offers fellowships for projects seeking innovation ideas in journalism. Mr. Romano is among 11 fellows this year.

Mr. Romano, who holds a JD from Columbia Law, will adapt the pro bono model of clinical legal work to the world of journalism. In this model, journalists would commit a certain number of hours a month to helping those unable or afraid to bring important stories they know about to the media.

"Journalists traditionally think they're already operating pro bono 100 percent of the time by doing their day jobs. That may be true of brave investigative journalists like the late Wayne Barrett. But critics, gossip columnists, and your average feature writer? Not so much," said Mr. Romano.

Clinical Care Associates Practices: Level III PCMH Certification

Six Penn Medicine Clinical Care Associates (CCA) Internal Medicine and Family Medicine practices received level III certification, the highest designation granted, for their efforts to provide coordinated, efficient care through the Patient Centered Medical Home program (PCMH) operated by the National Committee for Quality Assurance (NCQA).

Penn Family and Internal Medicine Lincoln, Penn Family and Internal Medicine Longwood, Penn Family Medicine New Garden, Penn Family Medicine Southern Chester County, Penn Family Medicine Unionville and Penn Primary Care and Integrative Medicine Whiteland all were awarded the certification. They bring the total number of University of Pennsylvania Health System practices with this designation to 30.

"These are high performing community practices, but also are spokes of a world-renowned academic medical center hub," said Charles Orellana, chief medical officer of CCA. "Thusly, these practices serve communities throughout the region by continuously utilizing information technology and other collaborative efforts to put patient care first."

The three-year designation comes from NC-QA's Physician Practice Connections—Patient-Centered Medical Home (PPC-PCMH) program, which uses evidence-based, patient-centered processes that focus on highly coordinated care and long-term medical professional-patient participatory relationships.

For a complete list of primary care medical practices and clinicians receiving this NCQA honor, visit http://recognition.ncqa.org

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Michael Mison: Director and Chief Medical Officer, Penn Vet's Ryan Hospital

The University of Pennsylvania's School of Veterinary Medicine (Penn Vet) announces the appointment of Michael Mison to Ryan Hospital director and chief medical officer. Dr. Mison also will continue in his role as clinical associate professor of surgery.

"I feel fortunate to work at Penn Vet and am honored to be promoted into this role," said Dr. Mison. "I'm excited to build upon Penn Vet's tradition of excellence. Along with the leadership team, faculty, and staff, I hope to contribute to Ryan Hospital's promise of delivering advanced medicine and compassionate care, peace of mind for clients and referring veterinarians, and an excellent educational experience for our students."

Prior to joining Penn Vet in 2015, Dr. Mison founded Seattle Veterinary Specialists as a managing partner in 2007. Earlier in his career, he served on the faculty of Washington State University, where he received the Carl Norden-Pfizer Distinguished Teacher Award as a second-year assistant professor in 2004.

"Blending his experience running a large referral hospital with his experience at several veterinary schools, Dr. Mison is a truly stellar candidate for this important role," said Oliver Garden, department chair of clinical studies in Philadelphia. "I look forward to working with Dr. Mison to deliver the

best and most advanced clinical care for our patients, an outstanding teaching environment for veterinary clinicians of the future, and a client experience second to none."

Dr. Mison received his veterinary degree from the University of Florida in 1998 and completed a rotating internship and surgical residency at Michigan State University. He is board-certified by the American College of Veterinary Surgeons.



The Penn Libraries is proud to announce that Dr. Mary J. Carruthers will deliver the 2017 A.S.W. Rosenbach Lectures, Cognitive Geometries on March 20, 21 and 23 in the Class of 1978 Pavilion in the Kislak Center for Special Collections, Rare Books and Manuscripts.

Dr. Carruthers, Remarque Professor of Literature Emeritus at NYU, describes the lectures as explorations of the close relationships in medieval creative practice among geometric shapes, meditation, and the human ability to create original works. Dr. Carruthers has written extensively on medieval literature, memory, and the history of spirituality.

Focusing on material objects crafted in the 12th century and then disseminated widely during the 13th century, each lecture investigates the fundamental cognitive insight of medieval diagram makers: that shape and pattern not only envision what we already know but also invite us to discover surprising logical relationships that can provoke our thinking in new ways.

On Monday, March 20, she will discuss "Geometry and the Topics of Invention."



Michael Mison

On *Tuesday, March 21* she will address "The Shapes of Creativity 1: Trees, Towers, Buildings.

On Thursday, March 23, she will continue with "The Shapes of Creativity 2: Hands, Spheres, Cubits.'

The Rosenbach Lectures are the longest continuing series of bibliographic lecture-ships in the United States. The series began in 1931, with Christopher Morley as the first fellow. Over the years, lecture topics have included 15th-century printing, the relationships between print and manuscript, papermaking, book illustration, American reading and publishing, and medical and scientific texts. Recent lecturers have included Robert Darnton, Anthony Grafton, Peter Stallybrass, David D. Hall, Michael Warner, Elizabeth L. Eisenstein, Alberto Manguel, Paul Needham, William Zachs and, most recently, Matthew Kirschenbaum.

All of the 2017 A.S.W. Rosenbach Lectures will begin at 5:30 p.m. and are free and open to the public. RSVP requested at: www.alumni. upenn.edu/rosenbach17

Inaugural Susan T. Marx Distinguished Lecture: March 22

The inaugural Susan T. Marx Distinguished Lecture will feature Johnnetta Cole, the director of the National Museum of African Art, a Smithsonian Institution. It will be held on March 22, at 6 p.m. in Claudia Cohen Hall, Auditorium G17.

RSVP required. For more information contact Sara Stewart at sabrady@upenn.edu

The Arthur Ross Gallery's Susan T. Marx Distinguished Lecture Series features a major and exciting figure (museum director, curator, gallery owner, artist) in the art world to address timely issues in the arts. Through this annual lecture series Susan T. Marx, CW'66, and the Arthur Ross Gallery seek to inspire Penn students across disciplines to develop an interest in or a passion for art and to attract a regional and national audience. Funding for the Susan T. Marx Distinguished Lecture Series is provided by a gift to the University of Pennsylvania from Susan T. Marx to fund the lecture series over the next five years (*Almanac* May 31, 2016).

Special VMD-MBA Program

(continued from page 1)

intensive and small-scale livestock and poultry production in a global environment with a rapidly increasing demand for animal-sourced protein.

"The combined-degree program provides students with a unique interchange of knowledge that helps to ensure veterinarians have an important voice in addressing issues of food security both in Pennsylvania and globally," said Joan C. Hendricks, the Gilbert S. Kahn Dean of Veterinary Medicine at the University of Pennsylvania. "We are delighted that Melanie is the first student accepted into this program."

Ms. Kirshenbaum is a fourth-year student at Penn Vet with an interest in global health and agricultural development. After finishing her undergraduate studies in economics at Cornell University, she worked with international development organizations before pursuing her veterinary education. She is pursuing the combined VMD-MBA degree in recognition of the integrated nature of health, food and economic security, as well as the power of industry and multilateral organizations to contribute resources and sustainable interventions in these fields.

"An economic and industry-focused approach to global food security, health, and sustainable development-rooted in science-will be especially important in the coming years,' said Ms. Kirshenbaum. "I'm excited about this opportunity to expand my knowledge of these areas and I'm pleased to be part of the ongoing collaborations between Penn Vet and Wharton."

"We are all excited about Melanie's acceptance into the program," said David Galligan, professor of animal health economics and director of the Center for Animal Health and Productivity. "The integration of Penn's VMD and MBA programs creates a new focus on emerging global food security issues and enables us to train the next generation of veterinarians to deal with these concerns."

The combined VMD-MBA degree program at Penn Vet and the Wharton School was established in 1981. Dr. Galligan oversees the updated program and mentors the Marshak-Hill scholars. Those completing the multi-year program will obtain their veterinary and MBA degrees and a certificate in Food Animal Production Medicine. Marshak-Hill graduates will have unique qualifications for leadership roles in food animal agribusiness, government, nongovernmental organizations, public health, research and academia.

NGSS Town Hall Meeting to Feature Screen Designs for Undergraduate Academic Catalog: April 27

The executive sponsors, project owners, and project managers for the Next Generation Student Systems (NGSS) project invite the entire Penn community to a town hall meeting on Pennant Records and Pennant Aid from 2-4 p.m. on *Thursday, April 27*, in room G-17 of Claudia Cohen Hall.

Project managers will present a concise overview of the multiyear effort, including an update on progress to date and the projected timeline for both Pennant Records and Pennant Aid. Their remarks will highlight the contributions of the many advisory groups and individuals crucial to the successful implementation of these new systems.

The team will also offer a look at screen designs for the first significant deliverable for Pennant Records, a new online Undergraduate Academic Catalog. In addition, the team will share results from extensive research conducted by the UK-based firm Torchbox on how users from a wide cross-section of Penn constituencies currently interact with the InTouch suite of applications. These results will inform the design of an improved user experience for the corresponding functions of Pennant Records.

The remainder of the meeting time will be devoted to questions from the audience. Whether you are just learning about Pennant or want to know how it will affect you, please bring your questions so everyone can benefit from a wide-ranging discussion!

For more information about NGSS and Pennant, consult the project web site at http://www.sfs. upenn.edu/ngss/

-Stephen Schwarz, Project Manager for Pennant Records

ALMANAC March 14, 2017

What Was the Philadelphia School? An Architectural Exhibit at Philomatheon Gallery: March 17-April 17

How Philadelphia architects formed a movement unified by ideas, reinvented modernism, and influenced the entire world is the focus of a new exhibition in the Art Gallery, Philomatheon Halls, on the fourth floor of College Hall. It is presented by Izzy Kornblatt, *Philadelphia* magazine and Penn student Jason Tangson. The opening reception is *Friday*, *March 17*, at 6 p.m. The exhibit runs from *March 17 through April 17*.

The organizers suggest that buildings of the last 60 years in Philly look quite unlike those elsewhere. They are tense: they don't smooth over the multiple and often conflicting aesthetic desires and functional needs that accompany the building process. They draw on history, rather than a glass-and-steel-and-concrete aesthetic of the future—rather to say that they lack the purist sculptures of Europe and Boston and Chicago. These postwar buildings don't usually shout for attention: they reflect a sense of architecture as more or less modest—befitting function rather than showing it off, befitting a place rather than reinventing it. It is these buildings, and the group of formally unaffiliated architects who produced them, that are called the Philadelphia School.

The exhibit will be one of the first attempts to interpret the School as a bona fide movement reflecting a distinctive culture and set of ideas, rather than just a collection of architects united by affiliation with the university and physical proximity.

Please note that College Hall is wheelchair accessible only to the third floor. More information is available at http://www.philomathean.org/philadelphia-school-exhibit/



Above, The Academic Wing of the University of Pennsylvania Museum, the Mitchell Giurgola Architects addition to the Penn Museum, is an example of Philadelphia School architecture.

Children: Photographs by Jerry Porter, at the Burrison Gallery Through April 12

Children: Photographs by Jerry Porter, at the Burrison Gallery, in the University Club at Penn, now through April 12. Travel and photography have been Dr. Porter's principal avocation. He has traveled throughout the world to every continent except Antarctica. He has seen many interesting things, but by far the most interesting things are not "things" but people. The memories he most treasures are the children of the world because they are the future of the world. He has chosen photographs of children from 20 different countries for this exhibit. Dr. Porter has been a member of the Penn community for over 50 years. He is a retired professor of mathematics and a former associate dean of SAS and chair of the Faculty Senate. In retirement, he has been president of the Penn Association of Senior and Emeritus Faculty (PASEF) and has served on the Burrison Gallery Advisory Committee since 2009.

A reception will be held in the Gallery on *Wednesday*, *March 15* from 4 to 6 p.m. The Burrison Gallery is located in the University Club at Penn on the second floor of The Inn at Penn, 3611 Walnut Street, and is open Monday through Friday from 7:30 a.m. to 5 p.m.

At right, children in Morocco, is one of the many photographs in the exhibition.



Entrepreneurs: Call for Nominations for Innovators Walk of Fame: May 19

America was built on the twin bedrocks of immigration and entrepreneurship. In 2017, the University City Science Center will shine a light on immigrant entrepreneurs whose discoveries, inventions and contributions have transformed our world as it solicits nominations for its Innovators Walk of Fame. The Call for Nominations is now open and runs through *Friday, May 19*.

The Innovators Walk of Fame (IWOF) celebrates Philadelphia's innovation story by honoring individuals who have made groundbreaking contributions to the scientific and entrepreneurial communities. Launched in 2013 to commemorate the Science Center's 50th anniversary, the Innovators Walk of Fame highlights the diverse tradition of discovery and innovation in the Greater Philadelphia region. Past honorees have made groundbreaking contributions to the scientific and entrepreneurial communities that have revolutionized the local, regional and global landscape (*Almanac* October 27, 2015).

As the Science Center examines greater Philadelphia's innovation story through different prisms, the third class of the Innovators Walk of Fame celebrates the immigrant entrepreneurs who have transformed the world with their ideas, inventions and creativity.

"This talented and motivated group is creating technologies and products that are transforming our world—and our economy," said Science Center president and CEO Stephen S. Tang. "When immigration and entrepreneurship intersect, magic can—and often does happen.

The Innovators Walk of Fame will recognize these brilliant people, their bright ideas, the companies they form and the jobs they create."

Nominees are not limited by industry or type of innovation. Instead, successful nominations will complete this sentence: "If not for this immigrant entrepreneur, the world would be a lesser place because...."

Nominees, living or deceased must have a connection to the Greater Philadelphia region (including southern New Jersey and northern Delaware). To submit a nomination, visit www. sciencecenter.org/discover/iwof by May 19.

Inductees to the Innovators Walk of Fame will be announced at the Science Center's Nucleus 2017 on September 14, 2017.

Innovators Walk of Fame promotional partners for 2017 include: African American Chamber of Commerce; American Heart Association; Arts + Business Council of Greater Philadelphia; Association for Women in Science, Philadelphia Chapter; Alliance of Women Entrepreneurs; British American Business Council; Campus Philly; The Chamber of Commerce for Greater Philadelphia; The Chemical Heritage Foundation; Chilean & American Chamber of Commerce; Citizen Diplomacy International Philadelphia; City of Philadelphia; Delaware BioScience Association; Delaware State Chamber of Commerce; Drexel University Charles D. Close School of Entrepreneurship; Economy League of Greater Philadelphia; Flying Kite + Keystone Edge; French-American Chamber of

Commerce; Global Philadelphia Association (GlobalPhilly); Governor's Advisory Commission on Latino Affairs; HIAS; Inspiring Women in STEM; International House Philadelphia; Knowledge@Wharton; LATISM (Latinos in Tech, Innovation and Social Media); Life Sciences PA; MedCity News; Mt. Airy USA-Philadelphia Immigrant Innovation Hub; Network of Women in Computer Technology; New Jersey Chamber of Commerce; New Jersey Technology Council; Penn Wharton Entrepreneurship; Pennsylvania Commission on Asian Pacific American Affairs; Pennsylvania Small Business Development Centers (SBDC); Philadelphia Convention & Visitors Bureau/ PHL Life Sciences/PHL Diversity; Philadelphia Alliance for Capital and Technologies (PACT); Free Library of Philadelphia; Philadelphia-Israel Chamber of Commerce; Philadelphia Science Festival; Philly Startup Leaders; Technical.ly Philly; Technology Forum of Delaware; Temple University Fox School of Business and Management's Innovation and Entrepreneurship Institute (IEI); Welcoming Center for New Pennsylvanians; WHYY (NewsWorks); The Wistar Institute; UD Horn Program in Entrepreneurship; Villanova University Center for Innovation, Creativity and Entrepreneurship; Women's Opportunities Resource Center; World Trade Center of Greater Philadelphia; Young Involved Philadelphia.

For more information about the Science Center, go to www.sciencecenter.org

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Update

March AT PENN

EXHIBITS

Now Natural Selection: Lost Cat, Found Ox & Other Inspiring Bonds; paintings by Eleanor Hubbard, exhibit design by Geoffrey White; Steven W. Atwood Library, Hill Pavilion, Penn Vet; photo ID required for entrance (Penn Vet Library). Through March 16.

16 On The German Historical Novel of the 1930s, Inglorious Comparisons; curated by Simon Richter and the students of "Writing in Dark Times"; 3-5 p.m.; Henry Charles Lea Library, Van Pelt-Dietrich Library; for Penn faculty and students (Germanic Languages and Literatures).

SPECIAL EVENTS

17 *Grad Ben Talks*; TED Talk-Style presentations by Penn Arts & Sciences graduate students; noon-5 p.m.; South America Room, I-House (Arts & Sciences).

TALKS

14 Brexit and the Future of International Institutions: A Lunch Discussion with Lady Catherine Ashton; noon; World Forum, Perry World House; register: http://tinyurl.com/h55udmj (Perry World House).

Galapagos: Then and Now: An Evening with Galapagos Naturalists Ernesto Vaca and Fausto Rodriguez; 5 p.m.; World Forum, Perry World House (Perry World House).

15 Europe on the Rocks: A Series of Public Talks Black Russian/White Russian: Is Russia Undermining or Saving Europe?; Rudy Sil, Phil Nichols, and Mitchell Orenstein, Penn; 3-4:30 p.m.; Global Policy Lab @ Perry World House (PWH).

16 Inglorious Comparisons: On the Uses and Abuses of Historical Analogy; Eric Rentschler, Harvard; 5 p.m.; Kislak Center, Van Pelt-Dietrich Library; for Penn faculty and students (Germanic Languages and Literatures).

Terrorism and the Trump Administration: Issues in Countering Violent Extremism; Richard Clarke; 5 p.m.; World Forum, Perry World House; register: http://tinyurl.com/goqg6wn (PWH).

17 *Inglorious Comparisons*; Adrian Daub, Stanford; 3 p.m., World Forum, Perry World House (PWH).

AT PENN Deadlines

The February AT PENN calendar is now online at www.upenn.edu/almanac The deadline for the April AT PENN calendar is today, March 14, 2017.

Additional 2017 Summer Camps at Penn

Below are two more options for children to enjoy summer 2017 at Penn—Penn Gymnastics Camp and Summer Workshop for Young Writers. See the recent Almanac Supplement with a collection of numerous 2017 Summer Camps and Programs at Penn at http://www.upenn.edu/almanac/volumes/v63/n21/summercamps.html

Penn Gymnastics Camp: Junior Olympic Camps: June 25-28 and July 30-August 2. Recreational Camps: June 12-16, June 19-23, July 10-14, July 17-21, July 24-28 and August 7-11. Recreational camps are open to all boys and girls ages 5-12. Junior Olympic camps are open to all girls ages 8 to pre-college. Cost: Recreational, \$395/week; Junior Olympic day camp, \$475/week; Junior Olympic overnight camp, \$615/week. Contact: jceralde@upenn.edu or kstra@upenn.edu

PPSA: Interviewing Skills

PPSA is hosting a meeting at noon on Tuesday, *March 21*, devoted to those looking for the opportunity to take their career to the next level at Penn. Join them in the Golkin Room, Houston Hall for the chance to sharpen your interview skills. Learn more about the newest tips and trends in interviewing and then have a chance to practice your skills. Since this year's theme is *Inspiration@Work*, come be inspired and learn what it takes to grow and develop your career by learning how to articulate all the great things you are already doing here at Penn. Be prepared for opportunities you might not have even thought about yet.

Light lunch will be provided. Please register at http://penn-ppsa.org/ Space is limited.

OWN IT UPenn Summit: March 25

OWN IT is events, summits and opportunities to motivate and connect young women everywhere. OWN IT UPenn is a one-day summit on *March 25* by young women, for young women. OWN IT seeks to address the leadership gap; they believe that you cannot be what you do not see. They are bringing over 40 women of all different backgrounds, fields and interests to campus. By creating an event that is accessible to college-age students they hope to provide Penn students with the ability to see, learn from and connect with female leaders of the 21st century.

The OWN IT Summit is designed to inspire, teach, and empower. This is open to everyone,. Tickets cost \$10 for students and \$20 for other community members. If you would like to attend OWN IT but are prohibited by ticket costs, send an email to ownit.upenn@gmail.com, and they will accommodate you. For more information about OWN IT, visit ownitupenn.squarespace.com

Summer Workshop for Young Writ-

ers: July 9-19. Offers an opportunity for promising high school writers from diverse backgrounds to learn from Penn faculty and staff as well as their fellow participants in the friendly environment of the Kelly Writers House. Open to rising high school juniors and seniors. Application due this Friday, March 17. Apply: http://writing.upenn.edu/wh/sunmer/ Contact: summer-writing-work-shop@writing.upenn.edu



Lurrie Bell & The Campbell Brothers: Sin & Redemption (above) will perform at Annenberg Center on March 24. They will illuminate the undeniable connection between the blues and gospel music. Rousing Saturday night juke joint sounds morph into Sunday morning gospel tunes. Tickets: www.annenbergcenter.org

Almanac

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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.

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The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: There were no Crimes Against Persons or Crimes Against Society from the campus report for February 27-March 5, 2017. Reported were 14 Crimes Against Property (4 thefts, 2 burglaries, 2 other offenses, 1 disorderly conduct, 1 drunkenness, 1 fraud, 1 liquor law, 1 vandalism and 1 weapons charge). Full reports are available at: www.upenn.edu/almanac/volumes/v63/n26/creport.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 27-March 5, 2017. 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.

18th District Report

Below are the Crimes Against Persons from the 18th District: 3 incidents with 0 arrests (3 assaults) were reported between **February 27-March 5, 2017** by the 18th District covering the Schuylkill River to 49th Street & Market Street to Woodland Avenue.

 02/28/17
 12:43 AM
 3401 Civic Center Boulevard
 Assault

 02/28/17
 5:55 PM
 4200 blk of Spruce St
 Assault

 03/01/17
 6:05 PM
 Unit blk. of S 43rd St
 Assault

Researchers Gain Insight into a Physical Phenomenon That Leads to Earthquakes

Scientists at the University of Pennsylvania are studying a phenomenon called ageing that could help in predicting earthquakes — including when

they will strike and how powerful they will be.

During ageing, static friction means that the longer that materials are in contact with each other, the more force is required to move them. Therefore, the longer something like a fault sits still, the more static friction builds up in the fault, causing it to become stronger.

Faults that grow stronger over time create a large amount of stress and

energy that is released in the form of a powerful earthquake.

"This ageing mechanism is critical in underlying the unstable behavior of faults that lead to earthquakes," said Robert Carpick, the John Henry Towne Professor and chair of the department of mechanical engineering and applied mechanics in Penn's School of Engineering and Applied Science. "If you didn't have ageing, then the fault would move very easily and so you'd get much smaller earthquakes happening more frequently, or maybe even just smooth motion. Ageing leads to the occurrence of infrequent, large earthquakes that can be devastating."

The Penn-based project takes a new look at the friction of rocks by studying rock friction at the nanoscale rather than the more commonly studied macroscale. Using this method, the researchers verified the first fundamental theory to describe ageing and describe what happens when the load increases.

The researchers conducted the study with silicon oxide, the primary component of many rock materials. They used a nanoscale tip made from silicon oxide to create force against a sample of silicon oxide, all under an atomic force microscope. They then varied the amount of normal force on the sample to determine how load affects the ageing behavior.

"That's a very important question because load may have two effects," Kaiwen Tian, Gr'17, a physics graduate in the School of Arts & Sciences, said. "If you increase load, you will increase contact area. It may also af-

fect the local pressure.'

Previous research had suggested bonds could form more easily when more pressure was applied, but the new study found increasing the normal force actually just increases the amount of contact and the number of sites where atoms can react.

The researchers' next step is to conduct the same study at very short timescales in order to learn more about the details of the energetics of the chemical bonds. This will show whether some bonds can form easily and if others take longer to form.

This work could lead to the creation of more efficient nano-devices due to an improved understanding of silicon friction. The researchers hope it also will lead to a better understanding of ageing, enabling better predic-

tions of when earthquakes will occur.

"Earthquake locations can be predicted fairly well," Dr. Carpick said, "but when an earthquake is going to happen is very difficult to predict, and this is largely because there's a lack of physical understanding of the frictional mechanisms behind the earthquakes. We have a long way to go to connect this work to earthquakes. However, this work gives us more fundamental insights into the mechanism behind this ageing and, in the long term, we think these kinds of insights could help us predict earthquakes and other frictional phenomena better."

Study Examines Evidence of How Geospatial Characteristics Affect Prevention and Care Outcomes for Those Most Affected by HIV

A study of geospatial indicators and their association with the prevention and care of HIV among young men who have sex with men (YMSM) has proposed prevention strategies for communities with heavy concentration of HIV. The study focused on those who are disproportionately affected by HIV: YMSM, in particular, racial/ethnic minorities and youth who live in socioeconomically disadvantaged communities.

A group of researchers led by University of Pennsylvania School of Nursing's José A. Bauermeister, Presidential Associate Professor of Nursing and director of the Program in Sexuality, Technology and Action Research (PSTAR), conducted a review of 17 different studies published since 2010. They identified a range of geospatial vulnerabilities contributing to HIV by synthesizing the ways demographic, physical and social contexts in which individuals interact correlate to behavioral and biological HIV risk.

The study supports a call for policy and community efforts to strengthen accessibility to and quality of HIV prevention and care resources for YMSM, in line with the vision of the National HIV/AIDS Prevention Strategy.

"Our findings highlight the importance of understanding how structural factors shape access to high-quality HIV prevention and care services and contribute to HIV disparities across geographic areas," said Dr. Bauermeister.

Penn Researchers Identify Missing Link for Fighting Viral Pneumonia

Viral infections that occur in a patient's lungs are a significant cause of hospitalization and death among children and the elderly, but virtually no vaccines or treatments exist for these infections. That could soon change thanks to a study from the Perelman School of Medicine at the University of Pennsylvania and the University of Pennsylvania School of Veterinary Medicine. Researchers believe the cytokine, Interleukin 27 (IL-27), could help to fight and treat these infections.

The researchers worked with a mouse-model of parainfluenza virus infection, Sendai virus, which causes similar symptoms and patterns of tissue damage to respiratory syncytial virus (RSV) and found that mice without IL-27 signaling suffered worse illness and higher mortality. IL-27 signaling was blocked by genetically engineering mice to lack working IL-27 receptors or IL-27 proteins.

"IL-27 is a specific cytokine naturally produced by immune cells to regulate the response to infection, limiting symptoms such as severe airway inflammation," said Gaia Muallem, a Perelman School of Medicine Measey Fellow in the division of renal, electrolyte and hypertension. "Our recognition of IL-27's importance in mouse models could lead to improved diagnosis and prevention of lung disease following a viral infection in human patients."

Additional studies are needed to determine whether the administration of IL-27 — possibly via an intranasal spray — can successfully treat several illness stemming from viral infections.

Tired Teens More Likely to Commit Crimes as Adults, Penn Study Shows

Teenagers who self-report feeling drowsy at mid-afternoon have been found more likely to behave anti-socially by lying, cheating, stealing and fighting. Further research from the University of Pennsylvania and the University of York in the United Kingdom found that those teens also are 4.5 times more likely to commit violent crimes as adults.

"It's the first study to our knowledge to show that daytime sleepiness during teenage years [is] associated with criminal offending 14 years later," said Adrian Raine, the Richard Perry University Professor with appointments in the departments of criminology and psychology in the School of Arts & Sciences and the department of psychiatry in Penn's Perelman School of Medicine.

Dr. Raine and Peter Venables, emeritus psychology professor at the University of York, published their findings in the *Journal of Child Psychology and Psychiatry*.

The data for the study was collected by Dr. Raine as part of his PhD research 39 years ago, studying under Dr. Venables, but had never been analyzed. For this research, he tested 101 15-year-old boys from three secondary schools in the north of England. Participants underwent a lab session from 1-3 p.m. and then were asked to rate their degree of sleepiness on a 7-point scale, with 1 being "unusually alert" and 7 being "sleepy." Dr. Raine also measured brain-wave activity and sweat-rate responses to stimuli, to determine brain-attentional function.

He then collected data about anti-social behavior, using self-reports from participants and reports from teachers who had worked with the teens for at least four years.

Last, Dr. Raine conducted a computerized search at the Central Criminal Records Office in London to find out which of the original study participants had criminal records at age 29. The study excluded minor violations, focusing instead on violent crimes and property offenses and only those crimes for which participants were convicted.

The results showed 17 percent of participants had committed a crime by that point in adulthood.

After considering study participants' socioeconomic status, Dr. Raine found a connection.

"Is it the case that low social class and early social adversity results in daytime drowsiness, which results in inattention or brain dysfunction, which results 14 years later in crime? The answer's yes," he said. "Think of a flow diagram from A to B to C to D. Think of a chain. There is a significant link."

He further explained, "Daytime drowsiness is associated with poor attention. Take poor attention as a proxy for poor brain function. If you've got poor brain functioning, you're more likely to be criminal."

This knowledge could potentially help with a simple treatment plan for children with behavioral issues: Recommend they get more sleep at night.

"That could make a difference not just for anti-social behavior at school with these teenage kids but more importantly, with later serious criminal behavior," Dr. Raine said. "More sleep won't solve crime, but it might make a bit of a dent."

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