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Thirteen Undergraduates: MindCORE Lila R. Gleitman Undergraduate Summer 2020 Fellowships

With support from a \$1 million gift from an anonymous donor, MindCORE summer fellowships will now be named the Lila R. Gleitman Undergraduate Summer Fellowships. The endowed fellowships program supports up to 10 Penn undergraduate students with summer research experiences in the labs of MindCORE faculty.



Lila R. Gleitman

Dr. Gleitman is an emerita professor of psychology in the School of Arts & Sciences. Her work has helped define the field of language learning. Always interdisciplinary in her approach, Dr. Gleitman forged ties across linguistics and psychology through her empirically elegant investigations documenting how the inherent endowments that children bring to language learning interact with the input they receive to create language. She earned her master's in linguistics from Penn in 1965 and her PhD in 1967. After three years on the faculty at Swarthmore, she came to Penn, where she has remained for the rest of her career. From 1980 to 2000, she served as co-director of Penn's Institute for Research in Cognitive Science, the predecessor to MindCORE. She has won numerous awards, including Penn's Provost's Award for Distinguished PhD Teaching and Mentoring (*Almanac* April 26, 2005), the John McGovern Award for the Behavioral and Social Sciences Area from the American Association for Advancement of Science, and the American Psychological Association's Distinguished Scientific Contribution Award for significant impact on the science of psychology, both in research and in training of graduate students. She is a former president of both the Linguistic Society of America and the Language Development Society and is a fellow of the Cognitive Science Society, the American Association for the Advancement of Science, the Society of Experimental Psychologists, the American Academy of Arts and Sciences, and the National Academy of Sciences.

With help from additional funds, a total of 13 Penn undergraduates have been selected for summer 2020 fellowships. Participants receive a \$4,500 stipend for their research work with a faculty mentor, a one-week programming boot camp and workshop series in interdisciplinary topics of mind and brain, weekly seminar lectures, professional development training, and one-on-one workplace advising from a research trainee.

Changes to the Penn Computer Connection

The Division of Business Services wishes to inform the Penn Community that as of June 30, 2020, the Computer Connection's retail store, located on the second floor of the Penn Bookstore, will permanently close.

The store has adapted to the many changes in the technology-retail market since it opened 35 years ago, but the combined impact of narrower margins, fewer new product releases, and extraordinary mass-market discounting strategies from large retailers, has had a pronounced impact on the store's ability to sustain its operation.

Going forward, the University remains committed to providing resources and value-added services that align with the technology needs of the Penn community. The Office of Software Licensing will remain and most likely expand its offerings. Also, the Penn Bookstore will expand its in-store inventory of computer supplies, accessories and peripherals to enable the Penn Community to have easy access to such items.

Penn will also continue to leverage its significant purchasing power and maintain its strong vendor relationships to support Penn's Schools and Centers. In partnership with Penn Purchasing, institutional priorities such as collaborative purchasing, bulk orders and post-sale issue resolution will be preserved. Student-focused services, including the distribution of computers to Penn's highly aided student population and support for educational discount programs that promote school-based standards, will also be maintained.

Although the retail store and associated warehouse operations will be discontinued, the fulfillment of existing orders will be honored, and information will be forthcoming and communicated to members of the IT community regarding the availability of inventory and the process for placing new orders

—Marie Witt,
Vice President for Business Services

2020 Models of Excellence Commemorative Video

Since 1999, Penn's Models of Excellence Awards program has recognized the outstanding accomplishments of the University's staff members. This year is no exception. Although the traditional Models of Excellence ceremony could not take place this spring, University invites the entire Penn community to take a moment to celebrate the 2020 honorees by viewing a commemorative video.

Watch the 2020 Models of Excellence Video at <https://vimeo.com/409907040>. The video features staff member interviews, as well as portraits of the 16 Models of Excellence, Pillars of Excellence, and Model Supervisor honorees. (See *Almanac* March 3, 2020 for the list of winners.)

Learn more about the contributions of the 2020 Models of Excellence program honorees by downloading an electronic copy of the

From the President

Statement on the Death of George Floyd

Once again our nation mourns. The tragic and senseless death of George Floyd is a vivid reminder of the inequalities and unacceptable indignities that so many of our citizens constantly endure. The events in Minneapolis this week should lead everyone to recognize how much more work our society must do to realize liberty and justice for all. As a nation we have much work to do.

While the entire Penn community weeps, and our hearts are filled with sadness for this senseless loss of life, we should remember the importance of Penn's commitment to doing our part to create a more inclusive and mutually respectful environment and society free from discrimination and deprivation.

I especially want Penn's African American students, faculty and staff to know how much they and their contributions to our community are treasured. It is particularly important at this difficult time that Penn's students of color know their University supports them, which we unequivocally do. While we may be apart physically at this point in time, we are truly together in spirit.

We all long for the day when we never again bear witness to such a needless death. Our prayers are for the Floyd family, and for a healing of our nation's soul. Let all of us in the Penn community use this moment to recommit, from the deepest corners of our hearts, to creating a living and learning environment that is truly safe and welcoming for all.

—Amy Gutmann, President

special 2020 Models of Excellence keepsake book at <https://indd.adobe.com/view/1beaab32-f0fc-43a0-8d1c-54c52cd6fac7>

Please join the Models of Excellence team in congratulating this year's honorees. Near and far, the Penn community is grateful for your service to the University's mission in education, research and public service.

—Division of Human Resources

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Marna Barrett, PSOM

Marna Sue Eva Barrett, former adjunct associate professor of psychology in Penn's Perelman School of Medicine, died May 14. She was 63.

Born in Tampa, Dr. Barrett received her bachelor's degree from the University of South Florida in 1973 and a master's in human genetics from Sarah Lawrence College in 1981. She worked as a genetic counselor at New York Hospital-Cornell Medical Center and also served as State Regional Genetics Counselor at the North Carolina Division of Health Services before joining the department of medical genetics at the University of Tennessee.

Dr. Barrett went on to make a career change, earning a PhD in clinical psychology from the University of Memphis in 1993. She was an assistant professor of psychology at Indiana University of Pennsylvania for five years before joining the department of psychiatry as an assistant professor in psychology at the Hospital of the University of Pennsylvania (HUP) in 2001. In 2005, she also took on a psychiatry position in the Clinical Practices of the University of Pennsylvania (CPUP). Dr. Barrett became an adjunct associate professor of psychiatry in the Perelman School of Medicine in 2013.

After retiring from Penn, she started a private psychotherapy practice in Media, Pennsylvania, in 2019. She served as the executive officer of the Society for Psychotherapy Research in 2016.

Dr. Barrett is survived by her spouse, Doris Tirado; daughter, Eva Isabel Tirado Barrett; brothers, Jim (Patti), David and John (Cindy); nieces Sarah, Alix and Mahria; as well as relatives in Canada.

A life celebration will be held at a later time. Contributions in Dr. Barrett's honor may be made to the National Cancer Institute or the Abramson Cancer Center at the University of Pennsylvania.

Josh Fidler, Vet, Dental, and Medical Schools

Isaiah (Josh) Fidler, former associate professor of pathology in the School of Dental Medicine and the School of Veterinary Medicine at the University of Pennsylvania, died May 8 at his home in Houston following a long illness. He was 83.

Dr. Fidler was born in Jerusalem. After attending school and serving in the Israeli army, Dr. Fidler came to America and earned his veterinary medicine degree from Oklahoma State University in 1963.

In 1965, Dr. Fidler joined Penn as an assistant instructor in Veterinary Clinical Studies. From 1967 to 1970, he was a predoctoral trainee in medical pathology in the School of Medicine. He then served three years as an assistant professor of pathology in the School of Dental Medicine before being promoted to an associate professor in 1973. In 1974, he took on a secondary appointment in the School of Medicine as an associate professor of pathology. From 1975 to

1984, he was an adjunct associate professor and then adjunct professor of pathology in Penn's Dental School and in the Vet School.

In 1975, Dr. Fidler joined the National Cancer Institute (NCI), part of the National Institutes of Health (NIH), where he led the metastasis program at the Frederick Cancer Research Facility. His eight years there produced some of his early innovative work in unraveling the riddles of how cancer spreads.

In 1983, Dr. Fidler joined The University of Texas MD Anderson Cancer Center as professor and founding chair of cancer biology, a department he led until 2008. He also served as director of MD Anderson's Cancer Metastasis Research Center and Metastasis Research Laboratory. In 2019, Dr. Fidler retired.

His experience as a veterinary surgeon taught him that the lethality of cancer is mainly due to the ability of cancer cells to spread, or metastasize, to other organs, and so he devoted his career to the study of metastasis at a time when no one else was focusing on this topic. His work exposed the origins of metastases, the processes by which these cells spread and thrive in other organs, the molecular diversity that makes them so hard to treat and the crucial supporting role of their surrounding microenvironment.

He was founding editor of *Cancer and Metastasis Reviews* and served as president of the American Association for Cancer Research (AACR) and the International Society of Differentiation. Dr. Fidler was a fellow of the American Association for the Advancement of Science and an inaugural member of the Academy of the AACR. He received numerous honors throughout his career, including the World Health Organization's Gold Medalist for Biological Sciences and the American Cancer Society's Medal of Honor for Basic Research.

Dr. Fidler is survived by his wife, Margaret Kripke; daughters, Morli Josza and Katharine Kripke Tsela; brother, Yaron (Talia); and grandchildren Eden, Evan and Jake Josza.

Hugh Bilson Lewis, PSOM

Hugh Bilson Lewis, former professor of medicine and adjunct associate professor in hematology at Penn's Perelman School of Medicine, died April 25. He was 79.

Dr. Lewis was recognized as an authority in comparative hematology. A native of Wales, Dr. Lewis earned his veterinary medical degree at Glasgow University. He then completed a residency at the University of Pennsylvania School of Veterinary Medicine, where he continued on as an NIH postdoc fellow before joining the faculty as an assistant professor in medicine in 1971. In 1974 he became a lecturer in hematology and became adjunct associate professor in that same department in 1982. During that time he also taught at Purdue for a few years, and he served as senior director of pathology and toxicology at Smith Kline and French Laboratories.

He left Penn in 1986 to become dean of Purdue's College of Veterinary Medicine, a position he remained in until 1996. In 1996, Dr. Lewis left Purdue to join MMI/Banfield, The Pet Hospital, as senior vice president of practice development. He also served as president of DataSavant. He later moved to Vancouver, Washington.

No service is scheduled for this time.

Barry Stupine, Vet School

Barry Stupine, former associate dean the University of Pennsylvania's School of Veterinary Medicine, died May 6 at his home in Rydal of amyloidosis. He was 78.

Born in Wynnefield, he graduated from Overbrook High School in 1959, then attended Temple University, graduating in 1964. He went

on to George Washington University, where he earned an MBA in health-care administration in 1968. Mr. Stupine completed an administrative residency at the Hospital of the University of Pennsylvania in 1968. Mr. Stupine became assistant executive director of HUP from 1969-1971, then joined the Medical College of Pennsylvania as associate hospital administrator.

In 1978, Mr. Stupine returned to the University of Pennsylvania as director of the Veterinary Hospital at the School of Veterinary Medicine. In 1987, he became associate dean for administration at the Vet School, and in 1991, he was named Penn's interim Vice President for Human Resources while continuing his Veterinary School roles. He also held the post of special assistant to the executive vice president, 1992-1994 (*Almanac* October 24, 1995).

In addition to his work at Penn, he was a consultant to Hebrew University in Jerusalem and the US Department of Health Institutional Review Board, which works to ensure that human subjects are protected in research. He advised the City of Philadelphia's Hiring Review Board. He was president of the Abington School Board, founding president of the Freire Charter School Foundation in Philadelphia, president of Old York Road Temple-Beth Am, and a board member of the Albert Einstein Society. Mr. Stupine also helped lead animal welfare groups, including the Philadelphia Animal Welfare Society (PAWS) and the Pennsylvania SPCA.

He is survived by his wife, Susan Rosenberg Stupine; sister, Sharla Feldscher; son, Jeffrey (V'10); daughter, Erika Yablonovitz (C'95, GEd'96); and three grandchildren.

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 Suite 300, 2929 Walnut St., (215) 898-8136 or email record@ben.dev.upenn.edu

Almanac Summer Schedule

Almanac will be publishing weekly through the end of June and as needed throughout the summer. Volume 67 will begin on July 14. The deadline to submit content to be featured in the weekly issues is the Monday of the prior week.

For more information, visit <https://almanac.upenn.edu/publication-schedule-deadlines>



Barry Stupine



Josh Fidler

Tariq Thachil: Director of CASI

Steven J. Fluharty, Dean and Thomas S. Gates, Jr. Professor of Psychology, Pharmacology, and Neuroscience, has announced that Tariq Thachil has been named director of the Center for Penn's Advanced Study of India (CASI) and associate professor of political science. As director of CASI, he will also hold the Madan Lal Sobti Chair for the Study of Contemporary India. The appointment is effective July 1.

Dr. Thachil comes to Penn from Vanderbilt, where he is currently an associate professor of political science. He studies political parties and political behavior, social movements, ethnic politics and urban migration, with a regional focus on South Asia. His current research examines the political consequences of rapid urbanization and internal migration in India.

Dr. Thachil's first book, *Elite Parties, Poor Voters: How Social Services Win Votes in India*, in 2014 and received several awards, including the Gregory Luebbert Book Award for best book in comparative politics from the American Political Science Organization. His articles have appeared in the *American Journal of Political Science*, *Contemporary South Asia*, *Journal of Politics and World Politics*. He has written for the *Indian Express* and *The Washington Post*. In 2019, he received the Heinz I. Eulau Award for Best Article in the *American Political Science Review*. He holds a PhD in government from Cornell and a BA in economics from Stanford.

Since its founding in 1992, CASI has advanced understanding of contemporary India by engaging in policy-relevant research focused on present-day challenges; serving as a forum for seminars, workshops and conferences; producing scholarly publications; and providing undergraduate and graduate students with unparalleled internship and research opportunities in India.

"CASI was the first research institution in the US dedicated exclusively to the study of contemporary India, and it is an expression of our commitment to scholarship on India and South Asia," said Dr. Fluharty. "It is a vital part of our drive to not only expand global understanding, but to discover global solutions to issues like sustainability, poverty, and justice. Tariq Thachil will be an outstanding partner in this mission."

"I am extremely pleased Professor Tariq Thachil has agreed to be CASI's next director," said Marshall M. Bouton (G'68), acting director and visiting scholar at CASI, and former chairman and current member of its International Advisory Board. "He will bring to the task not only the depth of his superb scholarship on contemporary Indian politics and society, but also a personal and professional commitment to greater understanding of India and its many challenges."

The Madan Lal Sobti Chair for the Study of Contemporary India was established through the generosity of alumni, parents and friends of Penn, including P.C. Chatterjee; Raman Kapur (PAR'07); Sreedhar Menon; Sunil Mittal; Dalip Pathak (WG'78, PAR'10); Rajiv Sobti (GR'84, PAR'08, PAR'12); and Sanjiv Sobti (WG'85, GR'86, PAR'10, PAR'20). The chair is named in honor of the Sobtis' late father, Madan Lal Sobti, and supports in perpetuity a professorship held by the director of CASI.



Tariq Thachil

Herman Beavers: Faculty Director of Civic House and the Civic Scholars Program

Provost Wendell Pritchett and Vice Provost for Education Beth Winkelstein announce the appointment of Herman Beavers as faculty director of Civic House and the Civic Scholars Program.

Dr. Beavers has taught at Penn since 1989 and is one of the University's most renowned mentors, writers and teachers. He is professor of English and Africana Studies, a distinguished poet and a widely published scholar of 20th century American and African-American literature, especially the novels of Toni Morrison, the traditions of jazz and jazz writing, and the work of 20th-century Southern writers. He received the 2017 SAS Dean's Award for Mentorship of Undergraduate Research in recognition of his well-known attention to advising Penn students, and he was elected that same year as a Commissioner of the Middle States Commission on Higher Education.

Most notably, Dr. Beavers has been a leader in extending scholarship and teaching into the Penn community. His legendary ABCS (Academically-Based Community Service) course on August Wilson, which was awarded the first Community Engagement Award from the Netter Center for Community Partnerships, brings together Penn undergraduates with West Philadelphia residents,



Herman Beavers

Veterans Upward Bound participants and Sayre High School students to read Wilson's plays and write performance pieces, based on interviews with local community members, which are then performed by local Philadelphia actors.

"Herman Beavers," said Provost Pritchett, "is the ideal faculty leader to advance Penn's vital civic engagement programs in the years ahead. His wide range of experience exemplifies our highest ideals for engaging Penn students and scholarship with our community, creating a richer experience for everyone involved. We are indebted to the pioneering work of Professor Walter Licht—founder of the Civic Scholars program in 2006 and faculty director of Civic House since 2002—who will step down from his responsibilities at Civic House at the end of this academic year, while continuing his landmark scholarship as Walter H. Annenberg Professor of History."

Dr. Beavers earned a PhD and MA from Yale University, an MA from Brown University and a BA from Oberlin College.

Civic House is Penn's hub for civic engagement, promoting mutually beneficial collaborations between Penn and Philadelphia community nonprofit organizations. Through social justice education, trainings and workshops, Civic House prepares students for responsible community engagement and empowers them to become advocates for social change. The Civic Scholars Program at Civic House provides undergraduate students with a sustained four-year experience in civic engagement and scholarship, including dedicated proseminars, summer internships and a capstone senior research project.

Kirsten Becker: Gymnastics Head Coach

Kirsten Becker (C'13), a graduate of Penn's College of Arts & Sciences with a degree in communications, an Ivy Classic champion as a student-athlete and assistant coach at Penn, has been promoted to head women's gymnastics coach, the T. Gibbs Kane, Jr. W'69 Director of Athletics and Recreation M. Grace Calhoun announced on May 19. Ms. Becker has served as the program's assistant coach for the past five years, helping lead the Quakers to the 2020 Ivy Classic title and their highest team score in program history in 2019.

"We are excited to promote one of our most accomplished gymnasts and our current assistant coach, Kirsten Becker, to head coach," Dr. Calhoun said. "Kirsten is a strong leader who is composed, organized and passionate about the program. She has proven her ability to recruit high-level scholars and athletes and build strong relationships, and her technical ability has led to record-breaking scores and Ivy Classic titles. We look forward to the bright future of Penn women's gymnastics."

Penn recorded its second-best score in the program's history to win the Ivy Classic title this winter. As the program's beam and floor exercise coach, Ms. Becker led the Quakers to their best beam score in school history at the event.



Kirsten Becker

"I am extremely honored to accept this position and excited to continue the success and growth of the Penn gymnastics program," Ms. Becker said. "I will strive to create a positive experience for every student-athlete. I know how special the current student-athletes are and look forward to picking up right where we left off last season. Thank you to Dr. Calhoun and the Penn Athletics administration for entrusting me with this responsibility. Penn has been a part of many of my most cherished memories over the last 10 years, and I'm excited to continue this journey."

In 2019, Penn compiled its best National Qualifying Score ever and its score at Maryland was the best in program history, breaking a 15-year-old record. The year before, Ms. Becker coached the first NCAA Regional qualifier in five years, Alex Hartke.

As an assistant coach, she mentored 20 all-ECAC gymnasts, six ECAC Scholar-Athletes, four ECAC individual champions and three Ivy Classic champions. This past year, Penn freshmen were named ECAC Co-Specialist of the Year (McCaleigh Marr) and ECAC Co-Rookie of the Year (Rebekah Lashley). Both are firsts for the program.

A decorated collegiate gymnast for Penn, Ms. Becker was a two-time team captain and the 2013 ECAC Gymnast of the Year. A two-time NCAA regional qualifier, she helped the Quakers to two ECAC Championships and two Ivy Classic titles. Ms. Becker was the 2013 USA Gymnastics Collegiate Nationals Uneven Bars champion and was Penn's nominee for the prestigious NCAA Woman of the Year award.

She is currently pursuing a master's degree in organizational dynamics from the University.

Honors & Other Things

Iuliia Bryzgalova: Tennis All-American

The Intercollegiate Tennis Association (ITA) has named sophomore *Iuliia Bryzgalova* of the University of Pennsylvania women's tennis team an ITA Division I Women's All-American. She is the only Ivy League singles player to receive the recognition.

A native of Moscow, Russia, Ms. Bryzgalova finished the season with a 25-4 record and ranked #13 in the country in singles competition. In late February, she was ranked as high as #10 in the nation, the highest singles ranking in school history. Playing in the #1 spot, she was 7-4 against ranked opponents. Ms. Bryzgalova had a successful fall season before the spring campaign was cut short by the coronavirus.

Jean-Christophe Cloutier: Waldo Gifford Leland Award

Jean-Christophe Cloutier, assistant professor of English in the School of Arts and Sciences at Penn is the 2020 recipient of the Waldo Gifford Leland Award given by the Society of American Archivists (SAA) for his book, *Shadow Archives: The Lifecycles of African American Literature*. In the book, Dr. Cloutier uses a variety of African American novels as alternative repositories for the Black experience. The award is given for writing of superior excellence and usefulness in the fields of archival history, theory and practice.

"Based on a deep understanding of archival history, theory and practice, *Shadow Archives* is a compelling analysis of the power of archives for truth-telling and scholarship that suggests future paths for research," noted the nominator. "Given the lack of institutions dedicated to the Black experience, the novel became an alternative site of historical preservation, a means to ensure both individual legacy and group survival."

Established in 1959, the Waldo Gifford Leland Award is named for one of North America's archival pioneers and SAA's second president. Past recipients include Trevor Owens for *The Theory and Craft of Digital Preservation*; Anthony Cocciolo for *Moving Image and Sound Collections for Archivists*; and Philip C. Bantin for *Building Trustworthy Digital Repositories*.

Urs Giger: Lifetime Achievement Award

Urs Giger, the Charlotte Newton Sheppard Professor of Medicine in the School of Veterinary Medicine at the University of Pennsylvania, has won the 2020 International Canine Health Lifetime Achievement Award.

Dr. Giger was awarded the accolade in recognition of his work, which spans four decades and has been dedicated to the study of clinical hematology, hereditary diseases and genetic predispositions in dogs, and veterinary transfusion therapy, the results of which have impacted diagnostic testing and therapies among many canine breeds.



Urs Giger

Many of Dr. Giger's investigations have involved the discovery of new disorders, the development of new specific diagnostics and the introduction of new and improved therapies in dogs. His studies also have advanced clinical transfusion therapy and blood banking in dogs and helped make canine transfusion practical and safe. In addition, he has also been the Penn-Gen Laboratory Director of the National Institutes of Health resource on Animal Models of Human Disease for the past three decades.

The awards, which are organized by the Kennel Club Charitable Trust and underwritten by a major gift from Vernon and Shirley Hill of Metro Bank, highlight those individuals who go one step further to promote the health and well-being of dogs through their work in the world of veterinary science. Nominations for the awards were judged by a distinguished international panel of influential veterinarians and scientific researchers.

Dr. Giger has published more than 250 peer-reviewed original articles and more than 500 research abstracts. He was also the initiator and organizer of the International Canine and Feline Genetics and Hereditary Disease Congress, which has been held every other year for the past two decades and the WSAVA Hereditary Disease Committee chair for over a decade.

Sarah J. Jackson, Duncan Watts: Andrew Carnegie Fellowships



Sarah Jackson

Duncan Watts

Penn's *Sarah J. Jackson*, Presidential Associate Professor in the Annenberg School for Communication, and *Duncan Watts*, Penn Integrates Knowledge professor with appointments in the School of Engineering and Applied Science, the Annenberg School for Communication, and the Wharton School, have been named 2020 Andrew Carnegie Fellows by the Carnegie Corporation of New York. Each fellowship carries a grant of \$200,000.

The 2020 class of Andrew Carnegie Fellows includes 27 scholars. The candidates' proposals were initially evaluated by an anonymous team of prominent scholars, educators and intellectuals, and the final selections were made by a distinguished panel of 17 jurors, including Penn President Amy Gutmann.

Dr. Jackson will trace the role of African-American media-makers in the 21st century. She will consider how today's Black media-makers—including journalists, filmmakers, podcasters, and digital influencers—are casting light on stories that were once suppressed; sharing new stories that grapple with race and democracy; and

influencing contemporary politics and policy on issues like housing segregation, educational inequality, criminal justice and voting rights. An expert in how communication constructs identity and shapes social change in American culture, Dr. Jackson studies how media, journalism and technology are used by and represent marginalized groups, with a focus on communication by and about Black and feminist activists.

Dr. Watts, a pioneer in the use of digital data to study social networks and collective behavior, seeks to deepen our understanding of the origins, nature, and prevalence of misinformation, and its effects on democracy. Using a unique collection of datasets—including text from online news publishers; closed-caption text from local television news programs; and nationally representative panels of mobile, web, and TV content consumption—Dr. Watts and his collaborators at Penn, Microsoft Research, MIT and Stanford will study how media produce information, how people consume that information, and how it influences public opinion and understanding.

Penn Fellows

Provost Wendell Pritchett and Vice Provost for Faculty Anita Allen are pleased to announce the appointment of the twelfth cohort of Penn Fellows.

The Penn Fellows Program provides leadership development to select Penn faculty in mid-career. Begun in 2009, it includes opportunities to build alliances across the University, meet distinguished academic leaders, think strategically about University governance, and consult with Penn's senior administrators.

Faizan Alawi, associate professor of pathology and associate dean for academic affairs in the School of Dental Medicine, teaches oral and maxillofacial pathology, provides quality care to patients, and serves as director of Penn Oral Pathology Services.

Montserrat C. Anguera, associate professor of biomedical sciences in the School of Veterinary Medicine, focuses her research on how female lymphocytes maintain X-chromosome inactivation, an epigenetic process responsible for equalizing gene expression between sexes.

E. Cabrina Campbell, professor and vice chair for education in the department of psychiatry in the Perelman School of Medicine, has expertise in the management of patients who have severe mental illnesses and serves as the director of residency training for the department of psychiatry.

J. Margo Brooks Carthon, associate professor in the School of Nursing and senior fellow of the Leonard Davis Institute of Health Economics, focuses her research and teaching on the issues of marginalization and inequities in health care.

Margo Crawford, professor of English, Edmund J. and Louise W. Kahn Professor for Faculty Excellence and director of the Center for Africana Studies in the School of Arts and Sciences, specializes in 20th and 21st-century African American literature, cultural movements, and visual art. She studies radical Black imaginations and the global dimensions of Black aesthetics.

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Karen Detlefsen, professor of philosophy and education in the School of Arts and Sciences, focuses her research on early modern philosophy including the history of philosophy of science, the history and philosophy of education, and women in the history of philosophy.

Sandra González-Bailón, associate professor in the Annenberg School for Communication, analyzes the sometimes productive and sometimes problematic ways in which big data/data science and the functionality of various network structures are mobilized to solve vexing problems, emphasizing the inextricable links between data science and social science and between computer code and cultural practice.

Sharon Hayes, professor of fine arts in the Weitzman School of Design, works on developing new representational strategies that examine and interrogate the present political moment as a moment that reaches simultaneously backward and forward, while often addressing political events or movements from the 1960s through the 1990s.

Cait Lamberton, Alberto I. Duran President's Distinguished Professor in the department of marketing in the Wharton School, researches consumer decision-making, financial decision-making, and work that impacts critical policy issues of importance to higher education, such as student applications for financial aid.

Zachary F. Meisel, associate professor of emergency medicine and director of the Center for Emergency Care Policy and Research in the Perelman School of Medicine, researches prescription drug overdose, guideline adherence, opioid use disorder, patient safety, emergency medical services and patient-centered comparative effectiveness.

Alain Plante, professor and undergraduate chair of earth and environmental science in the School of Arts and Sciences and faculty director of the University Scholars Program, researches soil science, ecosystem ecology and environmental science global change, with a focus on terrestrial carbon biogeochemistry.

Timothy Rommen, Davidson Kennedy Professor and chair in the department of music in the School of Arts and Sciences, focuses on coloniality/decoloniality, the political economy of music and sound, Creole musical formations, tourism, diaspora, music and spirituality and the ethics of intellectual history of ethnomusicology.

Sunny Shin, associate professor of microbiology in the Perelman School of Medicine, focuses on uncovering innate immune mechanisms used by host cells to defend themselves against bacterial pathogens and how bacterial pathogens evade host immunity to cause disease.

Quayshawn Spencer, Robert S. Blank Presidential Associate Professor of Philosophy in the School of Arts and Sciences, specializes in the philosophy of science, the philosophy of biology and the philosophy of race.

Melissa Wilde, associate professor in sociology in the School of Arts and Sciences, focuses on the ways in which religious institutions respond to social, cultural and demographic change.

Penn GSE 2020 Faculty Recognition and Highlights

Penn GSE is proud to highlight and celebrate the recent accomplishments and honors of their faculty.



Ed Brocenbrough



Charlotte Jacobs



Michelle Neuman



Sharon Ravitch



Marsha Richardson



Howard Stevenson



Sharon Wolf



Jenny Zapf

Ed Brockenbrough, associate professor and Calvin Bland Fellow, received a Body of Work Award from the American Educational Research Association's Queer Studies Special Interest Group. This group periodically awards a scholar who has contributed a significant body of work that produces important scholarship in the area of LGBTQ studies and/or Queer Theory in education and has shaped the field of LGBTQ studies in education and/or Queer Studies in education.

Charlotte Jacobs, co-director of the Independent School Teaching Residency program, was awarded a fellowship by the Trustees' Council of Penn Women and the National Coalition of Girls' Schools to conduct a pilot study exploring the experiences of adolescent girls of color in all-girls schools.

Michelle Neuman, lecturer in the International Educational Development program, was a guest co-editor of *Early Years: An International Research Journal*, Volume 39, Issue 3, a special issue about early childhood policy in low- and middle-income countries.

Sharon M. Ravitch, professor of practice, has been named a Fulbright Specialist to work with BMN College of Home Science in Mumbai, India, on creating the conditions for protective pluralism for scheduled tribe and scheduled caste first-generation female college students. Dr. Ravitch also recently served as a scholar-in-residence at St. George's University in Grenada, West Indies, where she was asked to be the board chair for the University's Center for Research on Storytelling in Education.

Marsha Richardson, senior lecturer, was selected by the Substance Abuse and Mental Health Services Administration (SAMHSA), in collaboration with Bloomsburg University's McDowell Institute, to become trained as a Youth Mental Health First Aid Trainer. The organization is aiming to certify

early career educators and pre-service students in YMHEA, in response to the Pennsylvania Department of Education's mandates to include trauma-informed pedagogy in training curricula.

Howard C. Stevenson, Constance Clayton Professor of Urban Education, was named the 2020 Gittler Prize recipient by Brandeis University. "Not only has Howard Stevenson brought a better understanding of the detrimental effects caused by racial stress and trauma through his scholarship, he actively leads the way in improving the lives of people affected by these issues," Brandeis President Ron Liebowitz said. The Joseph B. and Toby Gittler Prize was created in 2007 to recognize outstanding and lasting scholarly contributions to racial, ethnic and/or religious relations.

Sharon Wolf, assistant professor, is the recipient of the *Journal of Research on Educational Effectiveness* outstanding article award for her article, "Experimental Impacts of the 'Quality Preschool for Ghana' Interventions on Teacher Professional Well-Being, Classroom Quality, and Children's School Readiness." The paper reports on the results of a randomized controlled trial of a teacher professional development program for public and private kindergartens in Ghana, examining impacts on teacher professional well-being, classroom quality and children's readiness during one school year.

Jenny Zapf, senior fellow, served as a panelist and a finalist judge for the Reimagine Higher Education Global Innovation Awards in London in December. Reimagine Education rewards innovative approaches to enhance student learning and employability, offering \$50,000 in funding and 16 "Oscars" of Education. Dr. Zapf also delivered a keynote address on "Education Entrepreneurship: 3.0" at the European EdTech Network in Finland in February.

Penn Museum Online Activities

While nearly everyone is at home, the Penn Museum is offering its many activities online—from traditional recipes and culturally inspired arts and crafts on its Pinterest boards to informal lectures and anthropology projects on the new Penn Museum At Home website at www.penn.museum/athome/

Upcoming virtual events include:

- *World Wonders* which offers live interactive opportunities for school-aged children and their families Wednesday mornings at 11 a.m. Celebrate the diversity of the world's cultures through these weekly workshops that will run all summer. The first installment on June 10 is "Can You Match That X-Ray," which welcomes young adventurers to learn more about the materials, symbols and process of making coins. For more information, visit www.penn.museum/events/kids-family/world-wonders
- Starting June 8, adult learners can read *Between the Lines* with the Penn Museum's virtual book club, which features carefully curated books with cultural connections each month. June's featured book is *Americanah* by Chimamanda Ngozi Adichie and the online discussion will be moderated by Dwaune Latimer, the Friendly Keeper of Collections in the African Section. \$5. For more information,

visit www.penn.museum/calendar/438/between-the-lines

- *Discover Ancient Rome, Pompeii, and Herculaneum* with C. Brian Rose, the Curator-in-Charge of the Mediterranean Section in a four-part evening class designed to introduce adults to ancient Italy's art and archaeology, beginning Thursday, June 4 (see image). This is the first in a new series, "The Deep Dig." \$175 General/\$125 Member. For more information, visit <https://tinyurl.com/discoverrome>

In addition, on July 2, the Museum's participation in the *Wawa Welcome America Festival* will go virtual this year, with a 10 a.m. interactive tour of the Egypt Galleries; "At Home: Anthro LIVE," an engaging session for elementary- and middle-school children to dig into archaeology and cultures from around the world at 11 a.m.; and at 1 p.m., the "Digital Daily Dig."



a three-minute "pop-up" talk to showcase one extraordinary artifact. At 5:30 p.m., raise a glass to democracy during a special *Living Room Lecture* with C. Brian Rose. An archaeologist for more than 40 years, he has much to say about the field—from life in Ancient Rome to current-day excavations in Turkey. To participate, visit facebook.com/pennmuseum/

Follow @PennMuseum on social media to stay up-to-date with news and information, including the "Community Spotlight," which welcomes the public to share their perspectives and shape the direction of an upcoming exhibit through online voting.

Change to Work Addresses in Workday Due to Remote Working

The University of Pennsylvania continues remote working to address the health and well-being of its employees during the coronavirus (COVID-19) pandemic. As remote work progresses toward 90 days and more, we are now moving forward with making a change in Workday to update work addresses to home to ensure compliance with state and local tax withholding requirements. The good news is that the University has identified a method to make a systemic change to update work address. This systemic change will take the burden off the schools and centers to manually make these changes, as we previously thought.

For employees residing outside of Philadelphia who are working remotely, their work address in Workday will be updated to be the same as their primary home address effective June 1, 2020. Work addresses will not be changed for identified groups of individuals in functional areas who cannot perform their job functions remotely, as follows:

- FRES, Business Services, and Public Safety union staff;
- Penn Child Care Center employees;
- Certain ULAR and EHRS employees (identified by the Provost's Office);
- Certain Ryan Hospital employees (identified by the Vet School); and
- Individuals identified as essential employees to HR

No change in work location will be made for students; temporary employees; postdocs; faculty in early retirement; individuals on STD, LTD or scholarly academic leave; or for individuals with a primary home address outside of the US. Note that this change will affect pay dates after June 1, 2020. The change will not be retroactive to March 13, 2020.

Impact to Employees

- Employees residing in Pennsylvania:
Non-Philadelphia residents—will no longer have Philadelphia City Wage tax withheld from

their pay but instead will have any local taxes withheld for the tax jurisdiction in which they reside.

Philadelphia residents—will not have their work location changed as there would be no change to their tax withholding.

- Employees residing outside of Pennsylvania:

Employees who live in reciprocal states (New Jersey, Ohio, Maryland, Virginia, West Virginia and Indiana) who have elected to be taxed in their state of residence instead of the state in which they work (PA)—will no longer have Philadelphia City Wage Tax withheld from their pay and will instead have any local taxes withheld for the tax jurisdiction in which they reside. Additionally, any credit received against state tax withholding for Philadelphia City Wage Tax withheld will be adjusted for the change in local tax withholding.

Employees who live in reciprocal states (New Jersey, Ohio, Maryland, Virginia, West Virginia and Indiana) who have NOT elected to be taxed in their state of residence, but are instead taxed in the state in which they work (PA)—will no longer have Philadelphia City Wage Tax or Pennsylvania state tax withheld, but will instead have state and local tax withheld based on the state and locality of where they reside.

Employees who live in non-reciprocal states—will no longer have Philadelphia City Wage Tax or Pennsylvania state tax withheld and will instead have state and local tax withheld based on the state and locality of where they reside.

Workday Tasks to be Completed by Employees

For individuals residing outside of Pennsylvania—To ensure they are properly taxed, workers should access Workday on June 1 to review and update their tax information. Individuals whose work address has been changed will receive a notice in Workday of a To-Do task

"Address Change: Possible Updates Needed to Tax Elections." Workers should click on the "BSI Tax Withholding Form Employee" link and review and complete the appropriate state or local tax forms displayed. Individuals should also click on the "Pick Other Forms" button to determine if additional forms are available to be completed. For additional information, refer to the Self Service-Access Tax Withholding Forms tip sheet at www.workday.upenn.edu/docs/default-source/tip-sheets/self-service-access-tax-withholding-forms.pdf?sfvrsn=2acb8f56_30

City Wage Tax Refunds

Non-residents of Philadelphia may make a claim directly with the City at the end of the year for Philadelphia City Wage Tax withheld from their pay while they worked outside the City for the period March 13 through May 31, the remote work period prior to the effective date of the work location change. The completed petition form must include the following:

- W-2 showing Federal, State, Medicare and Local wages
- Statement of dates worked outside the City of Philadelphia signed by both the employee and the employer
- Signatures from both the employee and the employer

Any refund claim must be filed within three (3) years from the date the tax was paid or due, whichever date is later.

For any days worked outside Philadelphia, the employee may be liable for taxes in other jurisdictions within Pennsylvania or in another state. It is the employee's responsibility to determine whether they have any such liability, to file the appropriate tax forms, and to make any payments due to such other jurisdictions.

If you have any questions, please contact the Penn Employee Solution Center at hcmsolution-center@upenn.edu

—Department of Human Resources

Support Local Businesses Through the Retail Restart Fund

A family-owned restaurant serving the neighborhood for over 30 years. The local co-op making sure customers can shop as safely as possible. Independently-owned shops for books, unique gifts, board games and hardware. Local businesses are the backbone of our neighborhood, and they need our support. That's why we are launching the Retail Restart Fund to get more cash directly into the hands of University City business owners and operators.

Each spring, as we near the close of our fiscal year, we write to ask that you consider a contribution to UCD so that we may sustain and grow our investments in places and people. Amid crisis, this year is different. If you're able, we ask that you consider summoning the same wonderful generosity and commitment to community, and direct it toward our local retailers and restaurants through the University City Retail Restart Fund, a new initiative to support our local economy we will launch in the next few weeks. 100% of all proceeds raised through this fund will be regranted to independently-owned businesses in our community to help them absorb the costs of re-opening safely—covering the purchase of supplies ranging from personal protective equipment (PPE) and contactless payment systems, to plexiglass dividers and outdoor tables. More details on how businesses can apply will be sent out soon!

UCD is more than halfway toward the \$50,000 goal, which would allow us to make mini-grants for up to 100 independently-owned retailers and restaurants.

Give today at <https://donatenow.networkforgood.org/ucd20/donate> to invest in the vibrancy of our neighborhood and the vitality of our neighborhood businesses.

—University City District

2020-2021 PPSA Election

Visit https://upenn.col1.qualtrics.com/jfe/form/SV_8wwN61Nxm7VBkxf to view the candidate profiles and cast your vote. Voting will end at 11:59 p.m. tomorrow, June 3. Voters' emails must be on the PPSA email listserv for votes to be counted.

To watch the presentation about the Penn Museum that was given at the recent PPSA meeting go to <https://www.youtube.com/watch?v=l7Z2wrlQpJ0&feature=youtu.be>

Penn Libraries Summer Workshop Series

Trying to figure out how to have a productive summer? Looking for training? Exploring new skills? The Penn Libraries is offering a variety of workshops and series to help you make the most of Summer 2020.

Let them know what you want to learn by visiting <https://tinyurl.com/PLWorkshopSeries> and keep an eye on their calendar for upcoming opportunities by visiting <https://guides.library.upenn.edu/workshops>

WPPSA Call for Nominations: June 10

The Weekly Paid Professional Staff Assembly is seeking nominations for the following board positions:

- WPPSA Chair
- WPPSA Chair-Elect (must be a former board member)
- WPPSA Treasurer (2)
- WPPSA Secretary
- WPPSA Communications Manager (includes: outreach, listserv management, and website management)

If you, or a colleague you know of, are interested in these positions, please visit https://upenn.col1.qualtrics.com/jfe/form/SV_cOnCmWu4f8EQgk to learn more and to submit an application.

Applications are due by June 10 by 5 p.m.

Please direct questions to Thalia Mangan at tmangan@upenn.edu

The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are the Crimes Against Persons or Crimes Against Society from the campus report for **May 18-24, 2020**. Also reported were 22 crimes against property (5 bike thefts, 4 thefts from building, 3 thefts from vehicle, 3 vandalism, 2 auto thefts, 1 fraud, 1 retail theft, 1 theft other and 2 other offenses) with 5 arrests. Full reports are available at: <https://almanac.upenn.edu/sections/crimes> 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 **May 18-24, 2020**. The University Police actively patrol from Market St to Baltimore Avenue and from the Schuylkill River to 43rd St 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.

05/19/20	8:32 AM	3400 Civic Center Blvd	Complainant assaulted by known offender
05/19/20	12:10 PM	3400 Spruce St	Complainant harassed by offender
05/19/20	1:36 PM	400 University Ave	Offender attempted to rob complainants
05/20/20	12:35 AM	100 S 43rd St	Cab driver carjacked/Arrest

18th District

Below are the Crimes Against Persons from the 18th District: 6 incidents (3 assaults and 3 robberies) with 1 arrest were reported for **May 18-24, 2020** by the 18th District covering the Schuylkill River to 49th Street & Market Street to Woodland Avenue.

05/18/20	3:46 PM	3400 Civic Center Blvd	Assault
05/18/20	11:07 PM	4500 Regent St	Robbery
05/19/20	1:39 PM	400 University Ave	Robbery
05/19/20	1:55 PM	3400 Spruce St	Assault
05/20/20	12:35 AM	137 S 43rd St	Robbery/Arrest
05/22/20	8:21 AM	4700 Chester Ave	Assault

Update

Summer AT PENN

FITNESS AND LEARNING

Morris Arboretum

Register: morrisarb.org/learn

6/3 *All About Succulents: A Guide to Succulent Houseplants and Landscape Plants*; discusses the cultural requirements for a variety of succulent plants and ways they can be incorporated into landscape design; 2 p.m.; \$8/member, \$10/non-members.

SPORTS

Fridays at 2:30 p.m., Quaker Classics will feature live rebroadcasts of Penn victories; www.youtube.com/PennSportsNetwork

6/5 (W) Basketball vs. Brown; original broadcast: March 3, 2018.

TALKS

6/3 *Stopping the Hate and Starting to Heal: Living With and Through the COVID-19 Pandemic*; moderated discussion; 7 p.m.; info: <https://tinyurl.com/y7wk5wze> (ASAM, PennGlobal).

Webinar Wednesdays

Webinar Wednesdays is a series of live, recorded events designed to keep Penn staff informed about relevant topics. Workday administrators are invited to attend the live events or access the video recordings on-demand.

Webinars are conducted live, every other Wednesday at noon, unless otherwise noted. The schedule may change because of presenter, topic or technical issues as well as other factors.

For upcoming webinars and as well as recordings of past webinars, visit www.workday.upenn.edu/home/News/webinar-wednesdays

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As the COVID-19 pandemic began to be felt, scientists at Penn started work to develop a vaccine and assess possible treatments. But the scope of COVID-19 studies at the University goes much broader. Scientists whose typical work finds them investigating autoimmune disease, influenza, HIV/AIDS, Ebola, cancer, hemophilia and more, are now applying their deep understanding of biology to confront a novel threat.

Coming Together to Solve COVID-19 Mysteries

What Does SARS COVID-19 Do To Our Lungs? Another respiratory infection, influenza, has been a focus of research led by Andrew Vaughan, Penn Vet assistant professor of biomedical sciences. But Dr. Vaughan didn't hesitate to begin studies of the novel coronavirus once its eventual impact became apparent. Now, graduate students and research specialists in his lab—working no more than two together at a time to maximize social distancing—are conducting new experiments focused more specifically on the biology of SARS-CoV-2, alongside parallel efforts by Edward Morrissey from PSOM. Knowing that the ACE2 receptor on lung cells is the gateway for the virus into the human body, they're genetically manipulating alveolar type-two lung cells, which are particularly essential for continuing oxygen exchange deep in the lungs, to alter or block ACE2 gene expression to try to prevent viral entry.

Why are Men Worse Off Than Women? In a separate project, Dr. Vaughan is partnering with Montserrat Anguera, Penn Vet associate professor of biomedical sciences, to explore a curious feature of COVID-19 disease: the fact that more men than women become severely ill and die. A number of hypotheses have been put forward to explain the disparity, but the two labs are investigating one particular possibility.

"Dr. Anguera had posted something on Twitter saying that the ACE2 gene happens to be on the X chromosome, meaning that women have two copies of it," said Dr. Vaughan. "I immediately texted her and said, 'I think there's something to that.'"

Hormone expression levels are another factor that may influence sex differences in disease. Together, Drs. Anguera and Vaughan's groups are both studying ACE2 expression and exposing alveolar type-two cells to various hormones to see how expression of viral receptors, ACE2 and others, changes. "Ultimately we'd like to see if this changes susceptibility to infection, working with Susan Weiss and others," said Dr. Vaughan.

Do Genetics Influence Susceptibility? Individual differences in how people respond to infection may be influenced by their unique genomic sequences. PIK Professor Sarah Tishkoff of PSOM and SAS is probing the rich sources of genomic data her group already had in hand to look for patterns that could explain differences in disease susceptibility. Using genomic data from 2,500 Africans collected for another project, Dr. Tishkoff's team is looking for patterns of genetic diversity. Early findings suggest that natural selection may have acted upon on a version of the ACE2 gene, making it more common in some African populations with high exposure to animal viruses.

She is also collaborating with Anurag Verma and Giorgio Sirugo of Penn Medicine to analyze genetic variation in samples from the Penn Medicine Biobank, looking in particular at people of African descent.

How is the Immune System Reacting? "The immune system is what eliminates the virus," said E. John Wherry, chair of Systems Pharmacology and Translational Therapeutics at PSOM. "The immune system is what we need to activate with a good vaccine. But also, especially in many respiratory infections, the immune system is what also causes damage. A healthy outcome means your immune system is striking a balance between killing off the virus and not doing so much damage that it kills you."

Dr. Wherry and Michael Betts, professor of microbiology, have embarked on a study to discern both the magnitude of patients' immune responses as well as their "flavor," that is, what components in the immune system are being activated by the coronavirus. They are doing so by working with clinicians at HUP and, soon, at Penn Presbyterian Medical Center, to collect blood samples from patients with severe and more mild infections, as well as patients who have recovered from illness, to profile their immune reactions. Variety across patients strongly suggests that the treatments that work for one patient may not for another, Drs. Wherry and Betts note. They are speaking daily with their colleagues on the front lines of COVID-19 care, relaying what they're finding out in the lab.

The PSOM's Ronald Collman, professor of medicine, and Frederic Bushman, William Maul Measey Professor in Microbiology, have been devoting attention to how the community of bacteria, viruses, fungi and parasites that dwell in the respiratory tract affect health and disease risk. They are now addressing that question in the context of COVID-19. According to Dr. Collman, "The microbiome can help set the tone for the immune response to infections, influencing whether a patient ends up with mild or severe disease. And second, the microbiome is where infectious agents that can cause infection can arise from. So if a patient dies of an eventual pneumonia, the pathogen that caused that pneumonia may have been part of that individual's respiratory tract microbiome."

Working with nurses at HUP to collect samples, Drs. Collman and Bushman are analyzing the microbiome of both the upper and lower portions of the respiratory tract of COVID-19 patients. Their labs are using these samples to identify the types and quantities of organisms that com-

pose the microbiome to find patterns in how they correlate with disease."

What Drugs Might Make An Impact? Absent a vaccine, researchers are looking to existing drugs—some already approved by the US FDA for other maladies—to help patients recover once infected. Throughout his career, Ronald Harty, Penn Vet professor of pathobiology and microbiology, has worked to develop antivirals for other infections, such as Ebola, Marburg and Lassa Fever.

Though many of the biological details of how SARS-CoV-2 interacts with the human body are distinct from the other diseases Dr. Harty has studied, his group noticed a similarity: A sequence he's targeted in other viruses—a motif called PPxY—is also present in the spike protein of SARS-CoV-2, which the coronavirus uses to enter cells.

"This caught our eye," said Dr. Harty, "and piqued our interest in the very intriguing possibility that this PPxY motif could play a role in the severity of this particular virus." He is testing antivirals he has helped identify that block the replication of Ebola, Marburg and other viruses to see if they make a dent on the activity of SARS-CoV-2. Those experiments will be done in collaboration with colleagues whose labs can work in BSL-III or -IV laboratories.

Also of interest is the speculation that the coronavirus might disrupt cell-cell junctions in the human body, making them more permeable for virus spread.

Another faculty member is assessing whether a drug developed for a very different condition—pulmonary arterial hypertension (PAH)—could serve coronavirus patients. Henry Daniell, vice-chair and W.D. Miller Professor in Penn Dental's department of basic and translational sciences, shared news that a drug grown in a plant-based platform to boost levels of ACE2 and its protein product, angiotensin (1-7), was progressing to the clinic to treat PAH. Dr. Daniell is now working with Kenneth Margulies, PSOM professor of medicine and physiology and research and fellowship director of the Heart Failure and Transplant Program, to explore whether this novel oral therapy can improve the clinical course of patients with symptomatic COVID-19 infection.

Reduced ACE2 expression has been linked to acute respiratory distress, severe lung injury, multi-organ failure and death, especially in older patients. The earlier preclinical studies in PAH animal models showed that orally delivered ACE2 made in plant cells accumulated ten times higher in the lungs than in the blood and safely treated PAH. Now, new clinical studies have been developed to explore whether oral supplementation of ACE2 and angiotensin-1-7 can help mitigate complications of COVID-19 disease. The fact that freeze-dried plant cells can be stored at room temperature for as long as a year and can be taken at home by COVID-19 patients make this novel approach an attractive potential option.

"This trial has been given a high priority by the Penn Clinical Trial Working Group," said Dr. Daniell. "I'm pleased that this looks to be on the cusp of moving forward to help the growing number of COVID-19 patients."

As the coronavirus began to spread in the US, Joshua Plotkin, Walter H. and Leonore C. Annenberg Professor of the Natural Sciences, began to raise alarms about Philadelphia's St. Patrick's Day parade. His studies of the 1918 flu pandemic had explored disease incidence and spread, and it was hard to avoid noticing the role of the Liberty Loan parade down Broad Street in triggering a rampant spread of flu back then. Now, with work conducted with two graduate students and faculty member Simon Levin from Princeton University, Dr. Plotkin has mathematically sound advice for policymakers hoping to effectively stem the spread of a pandemic. In a preprint on *arXiv.org*, they share "optimal, near-optimal, and robust" strategies.

Their analysis makes the realistic assumption that policymakers can only enforce social distancing for a limited amount of time and aims to minimize the peak incidence of disease. The optimal strategy, they found, is to start by introducing moderate social distancing measures to keep the incidence rate the same for a period of time. This would mean that every person with COVID-19 would infect one additional person. Then the intervention should switch over to a full suppression—the strongest possible quarantine—for the rest of the period. At the end of that period, all restrictions would be lifted.

"This works because you don't want to fully suppress disease spread right off the bat," said Dr. Plotkin, "because then at the end, after you remove restrictions, there will be a second peak that is just as large as the first. By employing a moderate suppression at the beginning, you're building up a population of people who are going to recover and become immune, without letting the epidemic get out of control."

Dr. Plotkin and colleagues are hoping to share the findings widely to help navigate a likely second wave of COVID-19.

—Adapted from a story by Katie Baillie, Penn Today
Visit <https://tinyurl.com/pennandcovid> for the full story.