Columbia Medicine

Columbia University College of Physicians & Surgeons



SPRING/SUMMER 2016

Women at P&S

20th century pioneers in patient care and research

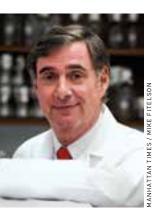
Alumni Profile

Davida Cody'65, coal miner's daughter, makes a difference

STOPPING THE SUPERBUG

Dear Readers,

Visitors to our neighborhood this summer will be greeted with the newest addition to our campus, our neighborhood, and the New York City skyline: the Roy and Diana Vagelos Education Center.



We are enormously grateful to the Vagelos family and to all the donors who made this building possible. Following its June 9 dedication, the building will be ready when the Class of 2020 matriculates in August.

A virtual tour of the architectural vision of the building is available online at www.educationbldg. cumc.columbia.edu/project/virtual-tour. Better still would be a visit in person to see how well the vision aligned with the final product. I invite you all to stop by the building the next time you are near campus.

This new building symbolizes change, the very kind of change that helps us measure the growth of our medical school and medical center. At the same time that we celebrate this new building and the educational opportunities it will support, we also have started to reflect on the medical school's long, illustrious history as we begin planning for our 250th birthday in 2017. Our school's geographic history in many ways mirrors the development of Manhattan northward. After occupying several locations in downtown Manhattan, the school moved to 23rd Street and what is now Park Avenue South in 1856; then to 59th Street between Ninth and Tenth Avenues in 1887; and, in 1928, to 168th Street and Broadway. The last move, which was the longest in terms of distance, was also the boldest because P&S joined Presbyterian Hospital in creating our historic partnership in education, patient care, research, and community service that became known as Columbia-Presbyterian Medical Center. The medical center, built after Edward S. Harkness and his mother, Mrs. Stephen Harkness, donated 22 acres of land in Washington Heights to Columbia University and Presbyterian Hospital, has grown and expanded in both size and scope over the years. Our boundaries now expand beyond those original 22 acres, and the new Roy and Diana Vagelos Education Center is the latest, but by no means the last, addition to our historical campus.

With best wishes,

2.Qu

Lee Goldman, MD, Dean lgoldman@columbia.edu

Columbia Medicine

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Columbia Medicine is published twice a year for alumni, faculty, students, and other supporters of the College of Physicians & Surgeons. It is published by the college and the P&S Alumni Association through the P&S Office of Communications. Additional content can be found in the online edition at columbiamedicinemagazine.org.

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Faculty and staff should contact their departmental administrators to update their addresses, which are obtained through the Columbia University personnel system.

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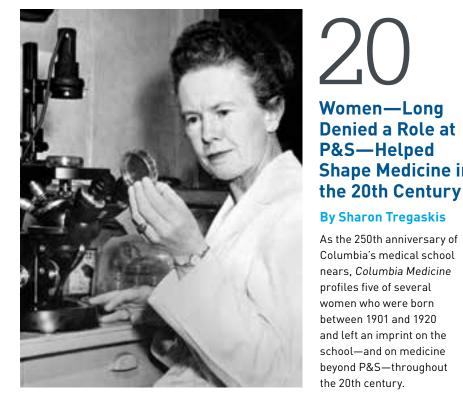
Faculty and alumni who have died

12 **Superbugs:** Improving Citywide Surveillance and **Our Understanding** of Microbes

By Alla Katsnelson

P&S researchers seek ways to stop antibiotic-resistant bacteria.





20Women—Long **Denied a Role at P&S**—Helped Shape Medicine in

By Sharon Tregaskis

As the 250th anniversary of Columbia's medical school nears. Columbia Medicine profiles five of several women who were born between 1901 and 1920 and left an imprint on the school—and on medicine beyond P&S-throughout the 20th century.





Cover Art

I'm the husband of a Columbia-trained physician who went on to do cancer research at an Ivy League school, then worked as an assistant dean at a medical school, and is currently the chief medical officer at a large women's hospital. Her sister is a surgeon who is also a bench researcher at an internationally respected institution, and she currently holds three RO1s and was instrumental in creating a one-of-akind tissue bank for cancer research.

The point of saying this isn't that they're great, it's that despite their accomplishments, as females they get much LESS respect and recognition in their fields for what they do than their male counterparts. Your cover [Fall/Winter 2015 issue] is a perfect example of this.

If the female on your cover picture was meant to be a surgeon it wasn't clear by her white nurses shoes (instead of clogs) and the lack of the white coat that she earned. You offered that dignity to both males and then you put the female at the back of the pack as if the men were carrying most of the weight. It may sound picky but in the cancer research field white males used to be at the forefront carrying most of the weight. Many of them have been replaced by women. My wife once told me, "When I did clinical work, despite me having a white coat on, 90 percent of patients and staff treated me like I was a nurse first and then I had to re-qualify myself almost every single time I met someone new." Bias clearly exists, and it actually pervades the industry from the top down. So whether it's thrown at them by their top male leaders, institutions, medical societies, magazines, or patients, it creates an obstacle that female MDs are constantly challenged to overcome.

Your cover doesn't help; in fact it actually feeds the problem. Female physicians need to be recognized as the leaders in medicine that they are and you need to help break that bias rather than feed it. And with the number of female physicians and world leaders that Columbia puts out, if anyone should be at the forefront of killing these misperceptions, it should be the Columbia College of Physicians and Surgeons.

> Dennis DeVona Via email

Editor's Note: The illustration was intended to portray a surgeon in scrubs.

Fred Herter

The recent issue of *Columbia Medicine* [Fall/Winter 2015] noted the death of Dr. Frederic Herter. I had seen Dr. Herter's obituary in the New York Times and was saddened to read it. He was a wonderful man and teacher, and he had a very distinguished career. I had a unique experience with him. During my second year at P&S, our dean, Dr. H. Houston Merritt, announced his planned retirement for June 30, 1970. A seven-member faculty committee was formed for the dean search, including Dr. Herter. However, when committee members met with the new Columbia University president, Andrew Cordier (recently hired from the U.S. U.N. delegation), they were told that due to the

Henry M. Sondheimer'70 Via email

Editor's Note: Read more about Dr. Herter's role on the 1967-70 search committee that chose Dr. Merritt's successor in an article in one of next year's 250th anniversary issues.

Only the Names Have Changed

I learned a lot from reading the current issue of *Columbia Medicine* [Fall/ Winter 2015], and it was enjoyable. However, I found myself struggling with page 6, because, although healthy in most respects, I am almost 83 and hardly au courant with academic medical matters in New York City, especially those at "P&S," my alma mater (Class of 1959).

The first paragraph ("Chair of Pathology") and the final three paragraphs on p. 6 ("Development SVP") are the cause of my confusion, which has nothing to do with Professor Roth's range of pathologic expertise. He is certain to be a star academic and a busy man, chair of the P&S Department of Pathology & Cell Biology and pathologist-in-chief at an organization that is new to me: NewYork-Presbyterian/Columbia University Medical Center. Under an appointment reported at the bottom of page 6, I realize that I'm really "in deep water"; Ms. [Lynne] Roth has become the "senior vice president for development" at "Columbia University Medical Center," after a career at "NewYork-Presbyterian Hospital."

In my day, and for some decades thereafter, the Washington Heights medical "world" was known as Columbia Presbyterian Medical Center. Downtown on the east side were Cornell University medical school and New York Hospital. Does the latter still exist?

Is there a document on file that explains, for medical folk "raised" on Washington Heights, how we got to where we appear to be? Is there truly an entity known as "New York-Presbyterian/Columbia University Medical Center," and, if so, where is it? Perhaps it's just a legal entity and not a place.

PS: I was a medical academic in the UK for many years, returning to the USA (Maine) in 1998, which may provide a partial excuse for my ignorance rather than early dementia!

> William V. Shaw'59 Via email

Editor's Note: Dr. Shaw is not the first person to express confusion over the nomenclature now used by P&S, the hospital, and the medical center broadly and specifically defined. All entities have undergone several naming changes over the past 80-plus years (not to mention the medical school's multiple naming conventions since opening in 1767). On Jan. 1, 1998, New York Hospital merged with Presbyterian Hospital to create NewYork-Presbyterian Hospital, creating the largest and most comprehensive hospital in New York. (Insiders say the "New" and "York" were combined as one word and joined with "Presbyterian" by a hyphen to keep "NewYork-Presbyterian" on the same

line when the name is used in print. Another version is that the hyphen was added to keep people from thinking "New York" was a geographic locator for "Presbyterian Hospital." The hyphen, therefore, was included to denote two specific entities.) The Columbia-Presbyterian Medical Center term that described Columbia and Presbyterian Hospital's joint endeavor was replaced by one of two names that describe the new NewYork-Presbyterian Hospital's two main hospital locations. The hospital's campus in Washington Heights is called NewYork-Presbyterian Hospital/Columbia University Medical Center. The hospital's location on the Eastside is called NewYork-Presbyterian Hospital/Weill Cornell Medical Center. (Cornell's medical school was renamed Weill Cornell Medical College in 1998.) Columbia University Medical Center is not just a location of one of the NewYork-Presbyterian Hospital campuses; it also describes Columbia University's health sciences schools (P&S, College of Dental Medicine, School of Nursing, Mailman School of Public Health, and the biomedical graduate programs of Columbia's Graduate School of Arts and Sciences). If these changes are still confusing, here is a more targeted response: Dr. Roth chairs pathology at P&S (part of Columbia University Medical Center, the collection of Columbia schools) and is chief pathologist for the hospital's Columbia location. Ms. Roth heads development for Columbia University Medical Center (the collection of Columbia schools, not the hospital location), but her previous job was in the development office of New York-Presbyterian, where she raised money for both locations of the hospital. What would Samuel Bard, one of the founders of P&S whose calls for a public hospital resulted in the creation of New York Hospital, think about these developments and names nearly 250 years later? Send your thoughts to columbiamedicine@columbia.edu.

P&S Memory Prompts Poem by Patient

I am a 1986 P&S graduate who has been in private practice for 25 years. On a recent Friday, one of my long-standing patients asked me about something that triggered my telling him a story about how in medical school I preferred to study for anatomy exams by going up to the lab late at night when I knew I would be undisturbed. Specifically, I related to him my vivid memory of being alone in the lab late one evening, surrounded by six heads whose anatomy I was reviewing.

On the following Monday morning, my patient (a hard-working, 72-year-old farmer) dropped off a poem he had written in response to the conversation we had. I was so impressed and touched by the gesture that I decided to share it with you in the hopes that you might be interested in publishing it. (Read poem at right.) One of the best things about being a doctor is discovering the hidden talents of your patients.

Mark S. Fradin'86 Chapel Hill, N.C.

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The Quiet Places

By William S. Blackwood

Sometimes in the night, when the air is quite still, And I'm half awake, there's a memory so chill That I sit up in bed and survey the room To make sure I'm alone, in the post midnight gloom. There will be no more sleeping, this particular eve, So I make some coffee and sit in my chair To stare through the window at more heavenly fare. An ocean of stars, filled with wisdom and light To calm my poor nerves from somnambulant fright. For in my youth, a post grad degree, At Columbia 'U', which I hoped to achieve, Often caused me to study in labs all alone With just my own thoughts to comfort my bones. 'Twas on such a night, there in old Gotham town, On a floor of a building, much far from the ground, Where I sat in solitude, in an anatomy place, And wished for companionship to cheer up my face. The space was quite lonely, quite lonely indeed, And I thought, in a whimsy, might a bird intercede. What if I heard a soft tap on the door And a raven flew in to quote, "nevermore." Of course, that was foolish: no chance on this night. Then I did hear a sound, oh so faint to my ear, A whisper of words, "You have nothing to fear." That caused me to flinch with a word most profane. As I looked quickly around, for an intruder's good joke, But I was still alone, with my heart in my throat. A simple 'med' student, with courage unfeigned, Yet, no other soul, in that deathly quiet place Could have uttered a word to my back, or my face. Of course, there were 'guests', on my left and my right And the person I worked with, so late on this night. But they were devoid of semblance of life. Then again, that soft voice, without fear or dread. "Please don't worry son; we are merely the dead. You know it's quite lonely, on these tables so cold, We'd like to converse with a warm, living soul." Then, as God is my witness, they all turned around, With sheets over shoulders, like shrouds so macabre That despite their assurance, I choked with a sob. "How can this be?" I could only declare, "For you are deceased, is that not fair?" Then despite trepidation, on my part for certain, They began recitation, like lifting a curtain. I learned of their lives, their loves, and their tales Of how gentle the spirit, of we humans so frail. I sat quite enthralled, in that scene so bizarre Till the first morning glow, of the new day appeared, And all was as before, when the shades disappeared. I could not help but smile, on the way to my home, For I spent the whole night, and was never alone.

Printed with Mr. Blackwood's permission

around the College of Physicians & Surgeons Base Surgeons

New Education Building Nears Completion

June 2016 dedication is planned for the Medical and Graduate Education Building at 104 Haven Ave. The building will be ready when the Class of 2020 begins studies in August.

The building's simulation center, which will open later this summer, will allow students to reach a level of proficiency before they ever see a patient. Nearly 15 percent of the building's 100,000 square feet has been set aside for the simulation center. The 13,300-square-foot center has training rooms featuring standardized patients, computerized, whole-body mannequins, and simulated exam rooms, operating room, and intensive care unit. Suites of dedicated practice exam rooms are wired for high-fidelity sound and video recording. Students will be able to practice with standardized patients there, and faculty will be able to use playback of recordings to offer feedback to students about effective behaviors and areas of improvement.

The 14-story building, which has been under construction for nearly three years, will tower approximately 223 feet above ground. Beyond the simulation center, the building has high-tech classroom facilities, innovative learning spaces for both collaboration and quiet study, a new auditorium and event spaces with integrated technology, and areas that include lounges, a café, and a commons area.

A virtual tour of the building is available online at www. educationbldg.cumc.columbia.edu/project/virtual-tour.



Below: A simulated operating room nears completion Opposite: A diagram of the building's floors

News from

15TH FLOOR MECHANICAL

14TH FLOOR CLASSROOMS, SOCIAL, ADMIN

13TH FLOOR CLASSROOMS, STUDY AMENITIES

12TH FLOOR CLASSROOMS, STUDY AMENITIES

11TH FLOOR SOCIAL SPACE, ADMIN

10TH FLOOR STUDENT COMMONS, ADMIN

9TH FLOOR CLASSROOMS, STUDY AMENITIES

8TH FLOOR SIMULATION, CLASSROOMS, STUDY AMENITIES

7TH FLOOR SIMULATION, CLASSROOMS, STUDY AMENITIES

6TH FLOOR SIMULATION, ANATOMY LAB, SOCIAL

STH FLOOR ANATOMY LAB

4TH FLOOR LARGE LECTURE, SOCIAL, CLASSROOMS

3RD FLOOR AUDITORIUM, MECHANICAL

2ND FLOOR AUDITORIUM, MECHANICAL

GROUND FLOOR LOBBY, FOOD, SOCIAL, ADMIN, RECEIVING AREA

CELLAR LEVEL 1

SIMULATION, MECHANICAL



PHOTOS BY AMELIA PANICO

Residency Match 2016

Family and friends joined members of the P&S Class of 2016 in Bard Hall on March 18 for the annual distribution of residency match envelopes. The Class of 2016 has 165 members, 161 of whom participated in the match. (One member of the class has deferred residency; another three graduates are entering business.)

Most of the graduates matched to residencies in cities on both coasts: Boston, New York, Baltimore, Philadelphia, San Francisco, and Los Angeles. Almost half (47.8 percent) will complete all or part of their residency in New York City (26.7 percent of the class matched to residencies at Columbia).



The most popular residencies matched were internal medicine (36 students), pediatrics (22), psychiatry (13), and emergency medicine (11). Other residency choices: surgery (8), anesthesiology (7), neurological surgery (7), obstetrics & gynecology (7), dermatology (6), ophthalmology (6), neurology (5), orthopedic surgery (5), otolaryngology (5), pathology (4), radiology (4), family medicine (3), urology (3), child neurology (2), oral & maxillofacial surgery (2), radiation oncology (2), surgerypreliminary (2), and surgery-thoracic (1).

A video about Match Day is available on YouTube: http://bit.ly/ColumbiaMatchDay2016.



Diversity Awards Honor Faculty, Resident, Student

At the second annual Dr. Kenneth A. Forde Diversity Alliance Reception on Nov. 11, longtime faculty member Gerald E. Thomson, MD, the Samuel Lambert and Robert Sonneborn Professor Emeritus of Medicine, received the inaugural Kenneth A. Forde Diversity Alliance Lifetime Achievement Award.

Another faculty member, a hospital resident, and a P&S student also received diversity awards at the event.

The Kenneth A. Forde Diversity Alliance was created in 2014 for minority medical students, resident physicians, fellows, graduate students, faculty, and research scientists at Columbia University Medical Center. Its goal is to recruit and retain a diverse community, provide networking events, foster and maintain an environment that supports a diverse community, raise awareness about diversity, support pipeline programs, and provide career and leadership development through mentoring. The alliance is named for Dr. Forde, a 1959 P&S graduate and longtime faculty member. Dr. Forde, the José M. Ferrer Professor Emeritus of Clinical Surgery and a Columbia University Trustee, made remarks at the reception.

Dr. Thomson graduated from Howard University's medical school then trained at SUNY Downstate Medical Center where, in 1965, he established and directed one of the nation's first and largest dialysis units for the treatment of end-stage renal disease. He was recruited to Columbia in 1970 to begin a dialysis program at Harlem Hospital Center. He was director of medicine at Harlem Hospital Center from 1971 to 1985.

Dr. Thomson later served as executive vice president for professional affairs and chief of staff at Columbia-Presbyterian Medical Center and president of the hospital's Ambulatory Care Network of community primary care centers in upper Manhattan.



From left: Linda Aponte-Patel, MD, assistant professor of pediatrics at CUMC, who received the faculty diversity award; Ken Forde'59; Ashley White-Stern'18, who received the medical student diversity award; Gerald Thomson; and Iheanacho Obinnaya Emeruwa'14, resident in the Department of Medicine at NewYork-Presbyterian Hospital, who received the resident diversity award.

As senior associate dean at P&S and head of the Office of Minority Affairs (now the Office of Diversity and Multicultural Affairs), Dr. Thomson launched programs to recruit, support, and advise underrepresented minority students at P&S. He also visited and counseled hundreds of minority premedical students at New York City colleges. He received an honorary MD degree from P&S in 1996.

NEWS DIGEST

To see more news about P&S and the Columbia University Medical Center, visit the CUMC Newsroom at newsroom.cumc.columbia.edu. A few articles there that may be of interest (with online links):

- Alzheimer's Disease Research Center: 25 Years of Insight With More Ahead bit.ly/adrc_anniversary
- Coming Home to Columbia P&S: Two First-year Med Students Put a Local Spin on Studying at Columbia bit.ly/washington_heights_students
- Virginia Kneeland Frantz Society Colloquium: Women Discuss Transformative Power of Leadership bit.ly/frantz_society_colloquium
- P&S Student Ashley White-Stern on Activism and Community Engagement bit.ly/student_ashley_white_stern

- Immunotherapy: Cancer's Newest Frontier www.columbia.edu/cancer
- Columbia BRAINYAC Randy Martinez Prepares for Career in Medical Research bit.ly/brainyac_student_prepares_for_career
- Columbia Dermatology Trains Vietnamese Physician to Read Skin Biopsies bit.ly/vietnamese_dermatologist_training
- In Transition: P&S Class of 2018 Begins Major Clinical Year bit.ly/clinical_year_transition
- P&S Asylum Clinic: Students Work With Law School to Offer Help bit.ly/asylum_clinic_law_collaboration



Brain Expo

The annual community brain expo sponsored by Columbia's Mortimer B. Zuckerman Mind Brain Behavior Institute challenged visitors of all ages to feats that required them to use their five senses. Participants were invited to try to distinguish jelly bean flavors without being able to see or smell and to hit a target with bean bags while wearing goggles that distorted their vision. Here, children were given the opportunity to touch a preserved brain.



News in Brief

Four P&S faculty members were named Fellows of the American Association for the Advancement of Science, an honor bestowed upon association members by their peers to recognize scientifically or socially distinguished efforts to advance science or its applications. The four: Robert Burke, MD, the Alfred and Minnie Bressler Professor of Neurology (in Pathology & Cell Biology); Andrea Califano, PhD, the Clyde and Helen Wu Professor of Chemical Systems Biology in Systems Biology, Biochemistry & Molecular Biophysics, and Biomedical Informatics and chair of systems biology; Steven Siegelbaum, PhD, the Gerald D. Fischbach, MD, Professor of Neuroscience, professor of pharmacology, and chair of neuroscience; and Michael Shadlen, MD, PhD, professor of neuroscience.

Karina W. Davidson, PhD, has been named vice dean for organizational effectiveness at P&S. Dr. Davidson is professor of behavioral medicine (in medicine and psychiatry) and director of the Center for Behavioral Cardiovascular Health in the Division of Cardiology in the Department of Medicine. In her new role, Dr. Davidson will oversee the ongoing P&S faculty engagement focus group task force process and implementation of task force recommendations. She also will work with Ronald Drusin, MD, vice dean for education, and his team on assessing and optimizing the learning environment for P&S students. She will work with department chairs, faculty, and staff on other ways to assure the overall effectiveness of P&S in fulfilling its missions.

Muredach P. Reilly, MBBCh, has joined P&S as director-designate of the Irving Institute for Clinical and Translational Research. After a year of transition, Dr. Reilly will succeed Henry N. Ginsberg, MD, as director of the Irving Institute, effective Jan. 1, 2017. Dr. Reilly, who was recruited from the University of Pennsylvania, is internationally known for multidisciplinary translational, genomic, and biomarker research on heart and metabolic diseases. He has led an NIH-funded research group focused on large-scale collaborations to identify and understand the function of new genes for heart disease.

During Dr. Ginsberg's 20-year tenure, he oversaw a center that evolved from the Irving Center for Clinical Research into the Irving Institute for Clinical and Translational Research in 2006 when Columbia successfully competed for one of the first NIH CTSA—Clinical and Translational Science Awards—grants. The grant was renewed in 2011 for another five years, a recognition of success during the first five years of the program. After the leadership transition on Jan. 1, 2017, Dr. Ginsberg will remain on the faculty as a researcher and co-director of the Irving Institute. New devices, procedures, guidelines for clinicians

Clinicaladvances

Fecal Transplants Are a Success for Kids with Severe C. Diff By Jeff Ballinger

hildren with severe gastrointestinal infections caused by *Clostridium difficile* are being treated with fecal microbiota transplants at Columbia and seeing their symptoms disappear after multiple courses of conventional therapy with antibiotics failed to prevent recurrence.

"The procedure has been successful for every patient we treated," says Joel Lavine, MD, PhD, professor and vice chair of pediatrics.

Since 2012, 14 children with recurrent C. *difficile* infections have been treated at Columbia with

transplants, an infusion of a fecal preparation from a healthy donor into the gastrointestinal tract of a patient. "*C. diff*" infections are uncommon in children, but they have increased 10-fold over the past two decades and are becoming harder to treat. In certain cases, *C. diff* inflames the colon and causes severe abdominal pain and debilitating diarrhea.

The goal of a fecal transplant is to replace the patient's harmful microbiota with bacteria that support a healthy gastrointestinal milieu. Donors





are typically parents or siblings of the patient and they are screened to meet strict criteria, such as being free of autoimmune, neoplastic, infectious, and metabolic diseases.

"The families we have worked with describe the therapy as life-changing," says Norelle Reilly, MD, director of the pediatric celiac disease program and assistant professor of pediatrics. "Many of the children we have treated have experienced years of refractory *C. diff* infection and endured numerous antibiotic treatments, limited contact with friends, and missed months of school. It is gratifying to be able to intervene in such a novel and meaningful way."

In one of the first published case series of children treated with fecal transplants (in the Pediatric Infection Disease Journal), Dr. Reilly detailed Columbia's first six cases out of the 14 total now performed, including one in a 21-month-old baby. No clear complications from the transplant occurred, although long-term outcomes remain to be assessed.

"Theoretically, it's possible that a recipient may acquire the donor's predisposition for conditions such as autoimmunity, psychiatric illness, and obesity," she says. Despite these questions, the success of fecal transplants

for C. diff is raising hope about the use of fecal transplant in other diseases.

"A variety of exciting studies are currently ongoing worldwide, exploring the procedure's potential for irritable bowel syndrome, Crohn's disease, ulcerative colitis, liver disease, and type 2 diabetes," says Esi Lamouse-Smith, MD, PhD, assistant professor of pediatrics and a member of the Columbia Center for Translational Immunology. Investigators are also exploring different routes of delivery other than the colon, the use of frozen or fresh specimens, and the use of synthetic microbial suspensions rather than donated specimens. Dr. Lamouse-Smith's own research examines how an infant's gut microbiome determines how a person responds to vaccines, viral infections, and allergens.

Dr. Lavine says it should become clear over time how to refine the protocols to deliver the best results. This includes developing the most effective means for delivery and the optimal dose and timing for treatment.

More information is available by calling the Division of Pediatric Gastroenterology, Hepatology, and Nutrition at 212-305-5903.

Helping Same Sex Couples Conceive By Cecilia Martinez

Having a baby can be relatively straightforward for most couples, but the path to parenthood is quite different for same sex couples. Columbia's Fertility Program for Female Same Sex Couples, directed by Briana Rudick, MD, assistant professor of obstetrics & gynecology at CUMC, has been helping female couples realize their dream of having a baby since 2008.

"We treat people in the LGBT community the same as any other patient: We individualize care," says Dr. Rudick. "Some want more intervention, some want less. Our job is to figure out when more medical intervention is needed and to help them figure out the initial stages of their family building process."

A consultation is the first step for female couples who come to Columbia for treatment. "I review intravaginal, intracervical, and intrauterine insemination," says Dr. Rudick. "In general, the higher up in the female reproductive

"We treat people in the LGBT community the same as any other patient: We individualize care."

tract you go with the catheter, the higher the chance of success. There is always IVF treatment if necessary and something called co-maternity, in which one female partner donates her eggs for the other female partner to carry."

For couples who choose co-maternity—less than 5 percent of Dr. Rudick's cases—she obtains a medical and gynecological history on both partners and inquires about the desire of one partner to carry. "Sometimes there will be medical problems in one partner that will make it either harder for her to carry, or more dangerous," says Dr. Rudick.

Many of the couples choose natural-cycle intrauterine insemination, which doesn't involve ovarian-stimulating drugs. "I think these couples

worry that conception won't be a special process because of the medical and financial aspects of treatment," she says. "They want to be as 'natural' as possible, but there is still a lot of testing that goes into starting treatment."

A decision all female couples must make is where to get donor sperm: anonymous donor or acquaintance? "Lots of people think that using someone you know is easier," Dr. Rudick says, "but it's actually much, much harder. It requires legal clearance, as well as a six-month quarantine of the sperm. And it is much riskier legally."

For male couples who want a child, the process is more complex because they need a surrogate. "A surrogacy contract is not enforceable in the state of New York," Dr. Rudick says, "so for legal reasons, we usually recommend that they seek treatment in New Jersey or Connecticut."

To have a child, same sex couples must be proactive and analytic. "But it's this same level of devotion to making things happen that will serve them in good stead when there's a little one around," says Dr. Rudick. "I admire same sex couples who embark on this journey because it's clear that it costs them so much more in the beginning stages just to get pregnant, from both a medical and legal perspective. And with the medical treatments come a lot of ups and downs. They don't have the luxury of just 'letting things happen.'"

The Fertility Program for Female Same Sex Couples is part of Columbia's Center for Women's Reproductive Care, one of the largest and most successful fertility centers in the United States. For more information, call 646-757-8282 or visit columbiafertility.org/same-sex-couples-andbabies/. This article is adapted from "Introducing the Modern Family," which appeared in the Winter 2014/15 issue of Connections, a joint pediatrics and ob/gyn newsletter.

Neurosurgical Procedure Helps Some Forms of Cerebral Palsy By Helen Garey

Tween Marina Pellicciari is a force on the basketball court. But she has cerebral palsy, and the muscle spasticity that often affects people with cerebral palsy was causing her pain and hampering her game.

Nearly 80 percent of children with cerebral palsy have spasticity, an involuntary stretching reflex that stiffens muscles, making it difficult to coordinate movement. Children with lower-limb spasticity usually walk on their toes, knees pointed inward.

"Kids with spastic CP spend significantly more energy coordinating their movement, which results in pain, fatigue, and postural problems," says Richard Anderson, MD, associate professor of neurological surgery at CUMC.

Treatments range from intensive physical therapy to an implantable pump that delivers a steady dose of muscle relaxant, but most treatments do not address the underlying cause of spasticity. One procedure—selective dorsal rhizotomy, or SDR—gets to the root or, rather, the nerve rootlets of the problem. In SDR, the neurosurgeon cuts tiny, spaghetti-like strands of sensory nerve fibers at the base of the spinal cord. These nerve rootlets normally prevent muscles from overreacting to signals to contract, but the fibers are damaged in cerebral palsy, leading to muscle stiffness and spasticity.

Not everyone with spasticity is a candidate for SDR; it is only effective when spasticity is the main feature of a patient's condition, before orthopedic complications have manifested. And recovery can take up to a year.

"Marina was a great candidate because she had significant spasticity and pain that were not adequately addressed with other therapies," says





Dr. Anderson. "Plus, her positive mindset would allow her to get through the postop rehabilitation required to learn how to walk again in a more physiologic way."

During SDR procedures, Dr. Anderson uses a technique, currently performed at only a few medical centers in the United States, to minimize the amount of bone removed to reach the nerve roots. This reduces pain, recovery time, and the chance of spinal instability after the procedure.

The surgeon electrically distinguishes between motor and sensory nerve roots, then separates the individual sensory rootlets and applies mild electrical stimulation to each one.

"Less current is required to activate a dramatic response in motor nerves compared with sensory nerves, so we are able to guide the surgeon toward the sensory rootlets, and away from motor rootlets, with great confidence," says Edward Gallo, technical supervisor of clinical neurophysiology at Columbia's Comprehensive Epilepsy Center.

Patients treated with SDR have significantly better outcomes in terms of reduced spasticity, improved range of motion in the joints, and overall function compared with patients receiving an implantable pump, according to a large retrospective matched cohort trial. SDR patients also need less orthopedic surgery than pump patients.

Marina had the surgery when she was 11. In her case, her functional abilities surpassed her baseline after just four months, including the seven weeks she spent in intensive rehabilitation to learn how to walk again. She is back to shooting hoops.

"Marina's recovery and progress have been exceptional," says Dr. Anderson. "I think this shows that considering a patient's positive attitude is important when we select the ideal candidate for this procedure."

For more information about SDR and spasticity management in children, contact Richard Anderson, MD, at 212-305-0219 or via email, rca24@ columbia.edu.



IMPROVING CITYWIDE SURVEILLANCE AND OUR UNDERSTANDING OF MICROBES

BY ALLA KATSNELSON

nne-Catrin Uhlemann, MD, PhD, came to Columbia University intending to study drug-resistant malaria, after completing her doctorate on the topic at University College London. But a few months into her clinical fellowship in infectious diseases, an encounter with a patient set her on a different path.

The patient was in his 50s and quite ill, with diabetes as well as end-stage renal disease, and he was admitted with a *Staphylococcus aureus* infection so severe that it had plunged him into septic shock. Blood cultures revealed that the strain had a low-level resistance to vancomycin, an antibiotic commonly used for blood infections. When she and her team later conducted molecular analysis on the bacteria, they found that all but the first of the patient's 12 previous Staph infections had come from the same strain of methicillin-resistant *Staph aureus*, or MRSA, suggesting that somehow, either at home or in the hospital, he was getting reinfected.

That strain was USA300, a MRSA "superbug" that emerged in epidemic waves in schools, sports teams, prisons, and other community environments outside the United States in the 1990s. In most cases the infection only involves the skin and is treatable, but severe pneumonia, blood infec-

"Our study of a community of drug users in Brooklyn was among the FIRST LARGE COMMUNITY-BASED STUDIES LOOKING AT STAPH TRANSMISSION."

tion, or a rare but life-threatening flesh-eating infection occurs in about one in every 10 people with staphylococcal infections. "While these types of infections are described everywhere, there's no place except the United States where one clone accounts for so many cases," says Dr. Uhlemann. "The numbers really went up staggeringly in about 2000."

In 2005, just two years before Dr. Uhlemann encountered her patient, the CDC reported almost 19,000 U.S. deaths after a MRSA infection. And though USA300 first emerged in the community, it is now one of the most common causes of hospital-acquired infections as well. Hospital-acquired infection rates have decreased considerably, but even so the pathogen is still present and very much considered a public health menace.

Dr. Uhlemann and her colleagues were able to treat the patient and finally cure his infection, but she was left with a question she felt compelled to answer: How was Staph's changing genetic makeup making this strain so virulent and propelling its spread? She grabbed the chance to apply what she knew about drug resistance from her studies of malaria to a disease she was encountering so frequently right in front of her eyes. "I saw endless numbers of terrible, invasive *Staph aureus* infections during my fellowship. It made me appreciate what a powerful pathogen *S. aureus* is," Dr. Uhlemann says.

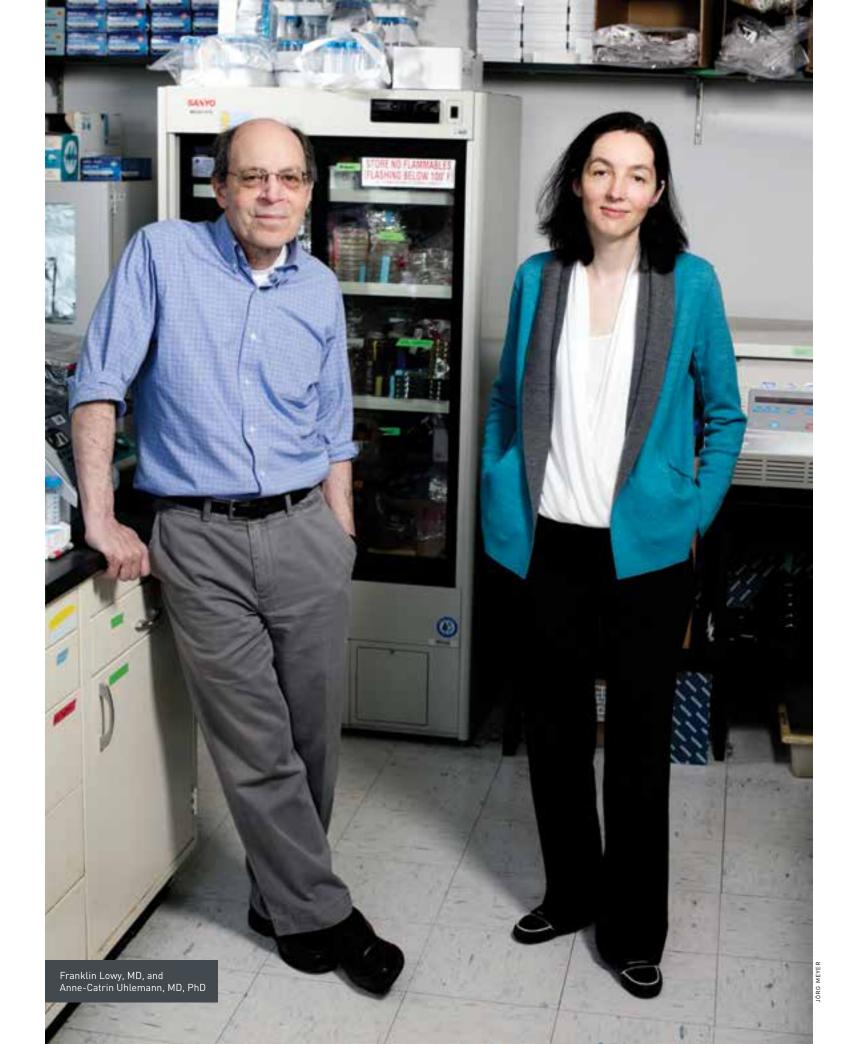
TRACKING DOWN THE SOURCE OF INFECTIONS

When some of the first community-associated USA300 outbreaks began, Franklin D. Lowy, MD, found himself right in the middle of them. He first encountered Staph in the 1970s, during his medical training at Harlem Hospital and his infectious disease fellowship at the Albert Einstein College of Medicine in the Bronx. The neighborhoods around both hospitals were plagued with a high rate of injection drug use, so many of his patients had Staph infections. Staph was the single most important bacterial pathogen among these patients, causing skin infections around the injection site or more serious systemic infections that traveled into their heart, joints, or lungs.

As Staph infections became common in the '90s, Dr. Lowy wondered how the bacteria spread through this population and he suspected that drug users served as reservoirs, potentially seeding others in the community with these bacteria. Techniques for understanding transmission pathways of infection were just being developed at the time, and so-called "hidden populations"-people on the margins of societywere especially hard to track. Dr. Lowy set out to compare isolates of Staph aureus in a group of drug users in Yonkers, N.Y. Working with a local drug counselor, the team swabbed people's noses and their drug paraphernalia, then used a DNA analysis technique called pulsed field gel electrophoresis-the state of the art at the time-to characterize the strains each person carried. By mapping the molecular features of the strains people carried, the group was able to re-create the social network in the group with startling precision. "This was just a remarkable finding that surprised us all in terms of how clean the data were," Dr. Lowy says. "It really provided a method for looking at linkages that were not otherwise detectable."

Using these same techniques, he teamed up with Maureen Miller, PhD, an epidemiologist at the Mailman School and an expert in social networks, to examine transmission in a broader community. "Our study of a community of drug users in Brooklyn was among the first large community-based studies looking at Staph transmission," Dr. Lowy says.

Drs. Lowy and Miller expected to find MRSA spreading through high-risk social networks—injection drug users and people who knew lots of users—but to their surprise, the molecular epidemiology showed that many strains were





spread widely within the entire community. That suggested that people were picking up infections from common environmental sources like homes, workplaces, and schools. Subsequent studies in households and businesses of northern Manhattan and in the New York state prison system supported the notion that a strain could establish itself in a particular environment. But the research still did not reveal how the strains passed from person to person.

As whole genome sequencing became cheaper and more accessible toward the end of the last decade, the researchers embraced its ability to track transmission more precisely; Drs. Lowy and Uhlemann used it essentially to reconstruct the evolutionary history of USA300 in northern Manhattan and the Bronx. At first, the work was slow-going: Sequencing methods were still clunky and it took more than two years to sequence the first eight isolates. But then things took off: In the subsequent four years, the group sequenced

Researchers aim to use genomic data to track infections and maybe even IDENTIFY HOTSPOTS OF RISK BEFORE OUTBREAKS TAKE OFF.

some 400 samples of MRSA from 161 people from these local communities who had experienced communityassociated infections between 2009 and 2011. To map the strain's transmission, each sample was characterized with information on participants' medical histories, antibiotic use, and where they lived.

By looking at differences between strains in both sick people and healthy control subjects, the researchers concluded that community-associated MRSA first arose in 1993

↘ Who's Who

- David Brenner, PhD, the Higgins Professor of Radiation Biophysics (in Radiation Oncology) and director, Center for Radiological Research
- Franklin Lowy, MD, professor of medicine and of pathology & cell biology (in epidemiology) at CUMC
- Maureen Miller, PhD, adjunct associate professor of epidemiology, Mailman School of Public Health
- Dane Parker, PhD, assistant professor of microbial pathogenesis (in pediatrics)

Alice Prince, MD, the John M. Driscoll Jr. MD and Yvonne Driscoll MD Professor of Pediatrics in the Division of Infectious Diseases

Gerhard Randers-Pehrson, PhD, senior research scientist, Center for Radiological Research

Anne-Catrin Uhlemann, MD, PhD, the Florence Irving Assistant Professor of Medicine in these neighborhoods and that it was re-introduced into the geographical area multiple times. The genomic diversity among the strains was surprising, Dr. Uhlemann says. Almost every household harbored its own unique strain. "We were able to provide genetic proof, based on the similarity of isolates within a household, that they sort of ping-pong around between individuals, either as colonizers or sometimes causing infections," she explains. There were only a few cases of a single clone being found in multiple households, and the mechanism for this wider-spread transmission is unknown.

Dr. Uhlemann is now working with Dr. Lowy on his prison studies to determine whether the movement of inmates from one state prison to another accounts for the spread of strains.

Ultimately, says Dr. Lowy, the aim is to use genomic data to track infections and maybe even identify hotspots of risk before outbreaks take off. "In order to disrupt the ongoing epidemic of community-acquired MRSA infections, it's critical that we identify the sources and reservoirs of transmission," say the researchers. Dr. Lowy and Dr. Uhlemann have begun collecting pilot data for creating what they call the New York City "antibiotic resistome," a map of all antibiotic resistance genes across the city, including those found in MRSA. Researchers would sample people's homes, their bodies, and fast food restaurant toilets. The researchers plan to overlay this map with the locations of pharmacies, bodegas, hospitals, day care facilities, and other places where infections often strike in the hope that it will pinpoint variables that might predict where hotspots of antibiotic resistance might turn up. Classically, awareness of an epidemic begins after individuals with infections are identified. "That's already pretty late in the game," says Dr. Lowy. This geographically based analysis, however, might be able to flag an increased risk of an antibiotic-resistant epidemic such as MRSA before people get sick. "It's a very different approach to surveillance," he adds.

In the hospital, too, genomics should play a larger role in pinpointing and containing infections. For example, sequencing and comparing every bacterial isolate that is found can reveal patterns—did all the patients with the same clone see the same respiratory therapist or undergo the same procedure?—that could allow researchers to root out the cause of infections in real time, Dr. Uhlemann says. "This technology really has to become an integral part of delivering care."

WHY IS MRSA SO DESTRUCTIVE?

Methicillin resistance itself is not the scary part of MRSA, explains Alice Prince, MD, who has spent decades investigating how the bacterium activates a damaging immune response in the host. Apart from rare cases—like Dr. Uhlemann's patient—clinicians do have antibiotics in their armament that



can treat it. "What is a big deal is that in addition to that one gene, USA300 has a whole bunch of other virulence factors that make it especially destructive," says Dr. Prince.

Staph colonizes the noses and mouths of about one-third of the population, but only some people get sick. Understanding this differential response requires looking past the microbe itself, says Dr. Prince. People can die from Staph and other infections even when bacteria do respond to antibiotics, she adds. "That suggests to me that there's something other than being able to kill the organism with antibiotics that's important." This other factor is the host response to infection. "With complicated organisms like MRSA, we want to identify what it is about the immune response that is aberrant or dysregulated in some people that causes them to get sick or even die."

Dr. Prince began her career studying why children with cystic fibrosis experience so many respiratory infections. She set out to understand the protective and destructive cell signaling pathways that microbial pathogens could spark. At first, she focused on the bacterium *Pseudomonas aeruginosa*, but in the mid-1990s, a lab member's interest in Staph infections, which are also an issue for kids with CF, broadened her scope.

Basic questions about bacterial infections of the lung were unknown, including how the lung first detected the presence of bacteria and initiated a response. A few years later, a PhD student in the lab and his fiancée, who was studying calcium signaling in neurons, were tinkering in the lab late one night and found that infections with both pathogens activated changes in calcium concentration in airway epithelial cells in the lung. Calcium signaling is a major way that cells communicate. It turned out, as the group's study showed, that cells used it to tell their neighbors that they were infected with these pathogens.

Gradually, the group is learning how these and other signals amplify or limit the intensity of an infection. In 2004, researchers identified one central mechanism through which Staph turns on inflammatory cytokines. A protein on its cell surface called Protein A, they found, plugs into a major immune signaling molecule, tumor necrosis factor, to turn on the spigot of inflammatory molecules in the host's body. This pathway turned out to drive the development of pneumonia after Staph infections. "You need a little bit of inflammation to fight infection," says Dr. Prince, "but a recurring theme of our work is that Staph causes too much inflammation, which turns out to be destructive."

The Prince lab is also looking into why some people are more prone to MRSA infections, including people who have just had influenza. To fight flu, the body activates an immune response mediated by molecules called interferons. The group's studies showed that interferons activated by influenza were helpful for battling the flu, explains Dane Parker, PhD, who led the work while he was a postdoc in the Prince lab. But mice that were genetically engineered to lack specific interferons actually recovered better from Staph infections than normal mice.

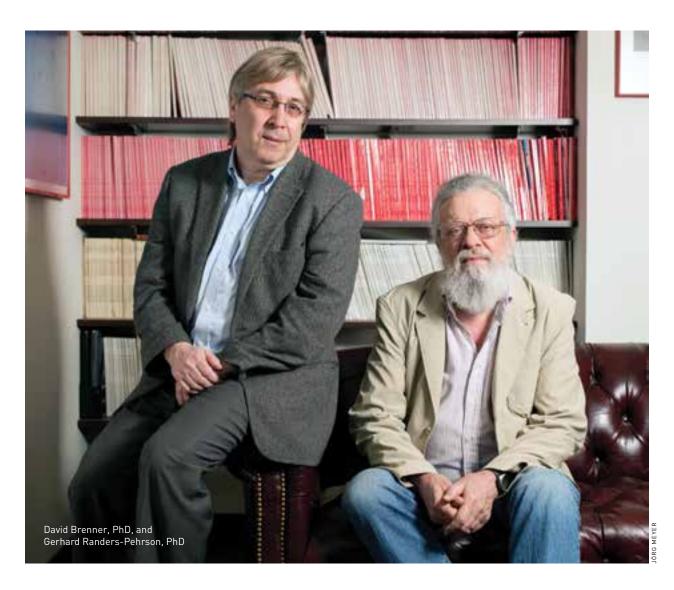
Not only does the body's reaction to influenza hamper its response to Staph, the viral response also seems to invite Staph in. In a study published this year, Drs. Parker and Prince and others in the lab found that when the virus activates type 3 interferons, the bacterial community in a person's nose changes and colonization by Staph increases. That, in turn, means a significantly greater risk of a full-blown infection.

A promising technology selectively kills bacteria but not human cells in a petri dish and has the potential to DISINFECT SURGICAL THEATERS BY BATHING THEM IN ULTRAVIOLET LIGHT.

People with diabetes are more prone to Staph and MRSA infections in their skin. "I've got some preliminary evidence suggesting that high glucose levels dampen cells' ability to kill *Staph aureus*, so I'd like to look more at how glucose manipulates the physiology of the bacterium," Dr. Parker says.

Studying Staph in the lab is difficult, though, compared with some other bacteria, because mice lack receptors for some of the key toxins that the infection produces, particularly those caused by MRSA. Dr. Parker has recently begun using the Columbia Center for Translational Immunology's humanized mouse core, which develops humanized mouse models with functional human hematopoietic and lymphoid systems, including novel humanized mouse models with robust, functional human immune systems.

Ultimately, the immune signaling molecules identified in the host response could provide therapeutic targets to help



treat MRSA infections, say Drs. Parker and Prince. "It won't replace antibiotics, but it could be synergistic," Dr. Parker explains. "Modulating these inflammatory cascades could give the host immune system a better fighting chance to do its job, while the antibiotics work on killing the bacteria."

PREVENTING SURGICAL SITE INFECTIONS

Targeting the immune system, either with antibiotics or immune modulators, deals with infections after they happen. Other researchers at Columbia are working on new ways to prevent them from occurring in the first place.

In the hospital, one major route of hospital-acquired infections is surgery. Every year, some 650,000 people in the United States get sick from infections they develop in the hospital, and 75,000 of them die, according to the Centers for Disease Control and Prevention. MRSA is a particular scourge, causing a quarter of all postsurgical cases.

About three years ago, scientists and physicians at P&S started looking for a solution to the vexing problem of surgical site infections. David Brenner, PhD, who directs Columbia's Center for Radiological Research, immediately thought of a widely used method of disinfecting surgical theaters: bathing them in ultraviolet light.

"We knew that UV light was very good at killing all sorts of microbes, be they bacteria or viruses," he says. "UV light doesn't care whether the bacteria are drug-resistant or drugsensitive; it kills bacteria by a completely different mechanism."

Conventional germicidal lamps, however, use 254-nanometer (nm) light, a wavelength that kills human cells as well as microbial ones and causes cancer and cataracts in exposed people. Dr. Brenner's collaborator, Gerhard Randers-Pehrson, PhD, had a solution. He suspected that UV wavelengths between 200 and 225 nanometers could penetrate and kill small cells, like bacteria and viruses, but leave human cells, which are much larger, unharmed. The duo set out to build a device that delivers this so-called narrow-spectrum farUVC light.

Dr. Lowy provided the radiologists with MRSA and trained them how to work with the pathogen. The team's first study on the approach, published in 2013, showed that their technology, which they call the differential UV sterilizer (DUVS), selectively killed bacteria but not human cells in a petri dish. "That was the first indication that the idea was maybe not a bad one," Dr. Brenner says. More recently, the group examined the device's MRSA-zapping abilities on 3-D sheets of human skin as well as in a mouse model. Both tests showed that DUVS killed MRSA without causing any harm to the human skin or the mouse tissues.

The next step is to determine whether the device helps patients in the real world of the operating room. Those tests are still to come, but Columbia has signed an agree-



ment with the Japanese lighting company Ushio to manufacture the light sources if all goes as planned. Dr. Brenner envisions integrating DUVS light sources into the illumination lamp above the operating table, or perhaps into surgical headlamps that surgeons often wear. The applications potentially go well beyond the operating room, Dr. Brenner says. "Imagine *any* room, like a doctor's waiting room or a classroom in a school," he says, where it could kill not just MRSA but also influenza virus or tuberculosis bacteria. "You might even think of it in airports, to stop the spread of global pandemics."

CHALLENGES REMAIN

Despite progress on multiple fronts, much work remains to be done. Researchers have only just begun to tap the potential of genome sequencing to create more precise systems of surveillance and to identify people at the highest risk of infection, says Dr. Uhlemann. Ideas on developing interventions, too—from effectively eradicating the bug from a host individual to interfering with the inflammatory processes it switches on—are just dawning.

"There is still a lot we need to understand about how these organisms cause disease," says Dr. Prince. �

Women -Long Denied a Role at P&S-Helped Shape Medicine in the 20th Century

By Sharon Tregaskis

Hattie E. Alexander Dorothy Andersen Margarita Silva-Hutner Abbie Knowlton Elizabeth Davis

The College of Physicians and Surgeons,

an independent New York medical school that opened in 1807, merged with Columbia's medical faculty in 1814 before entering into a limited partnership with Columbia in 1860. In 1891, when Columbia and P&S had fully merged, a newspaper article described the merger and its benefits for faculty ("A large amount of money will be spent in the encouragement of original research") and for students ("the opportunities given to the students for advanced study will be greater than have ever before been offered in New York"). Columbia's president was quoted as saying the merger put the college in a position that "will make it the best medical college in America, if not in the world." One stipulation of the 1891 merger was not reported—that the medical school would retain "the right to refuse instruction to women." It would be another quarter of a century before that changed.

In October 1917, 12 women—10 percent of the entering class became the first female students. Chief among them was Gulli Lindh Muller'21, who later became one of the first female interns at Presbyterian Hospital and briefly worked as an instructor at P&S before following her husband to New England.

Perhaps the college's most famous luminaries for the better part of the 20th century were two Virginias: Virginia Kneeland Frantz'22 and Virginia Apgar'33. A surgical pathologist, Dr. Frantz was a renowned teacher, author, and researcher who served on the P&S faculty from 1924 to 1964. Second in her class of 74 students, Dr. Frantz was the first woman named to a surgical internship at Presbyterian Hospital. In 1949, Dr. Apgar, an anesthesiologist, became the first woman to be appointed to a full professorship at P&S. She gained renown for her Apgar newborn scoring system.

These women are legendary among P&S history enthusiasts. Presented here are profiles of just a few of the other women who made contributions to P&S history while serving on the faculty during the 20th century; they, too, shaped the course of P&S—and medical—history.

First In Class

Hattie E. Alexander, MD, 1901-1968

B acteriologist Hattie E. Alexander, MD, started her P&S career as an intern at Presbyterian Hospital in 1931. She remained a vital presence at the college throughout the next four decades and by the time she earned the rank of professor emeritus of pediatrics in 1966, achieving firstin-class status had become second nature to the Baltimore native.

As an assistant professor of pediatrics in 1939, Dr. Alexander developed the first effective treatment for meningitis caused by *Hemophilus influenza*, turning pediatric bacterial meningitis from a certain death sentence into a condition with an 80 percent recovery rate. In 1961, Dr. Alexander was the first female recipient of the American Therapeutic Society's Oscar B. Hunter Memorial Award. Three years later, she became the first woman elected president of the American Pediatric Society.

Today, pediatricians have a wealth of antibiotic drugs available to treat newborns diagnosed with bacterial meningitis. Dr. Alexander's development, an *H. influenzae* anti-serum prepared in inoculated rabbits, saved thousands of lives in the years before sulfa-based drugs—and later, antibiotics like penicillin—rendered the anti-serum obsolete. "Beginning with the great impact of the sulfa drugs in 1936," she told the New York Times, "and continuing with the emergence of the antibiotics in the 1940s, progress controlling children's diseases was almost indescribably dramatic. There is no more dramatic story in all of medicine."

As signs emerged that overuse could weaken the effect of antibiotics, Dr. Alexander and her

Hattie Alexander was the first woman elected president of the American Pediatric Society.

research associate, Grace Leidy, demonstrated the role of genetic mutation in antibiotic resistance and turned their attention to analyses of DNA in *H. influenza* and, later, polio, tuberculosis, and other infectious diseases. Throughout her career, Dr. Alexander was a leading authority on the treatment of bacterial meningitis, integrating her work in theoretical biology with active clinical service and teaching duties. She also directed the bacteriology laboratory at Babies Hospital. Dr. Alexander published 20 textbooks and more than 100 peer-reviewed papers and helped to found the journal Pediatric Research. "It was Hattie's hope that the results of her studies on the inheritance of genetic traits in microorganisms might prove applicable to the understanding of traits in human cells," wrote Carpentier Professor of Pediatrics Edward J. Curnen, MD, in Dr. Alexander's obituary. "Creative scientist, compassionate physician, perceptive teacher, and lovely lady, she was ever a seeker of truth—tough minded and gentle, inquisitive, industrious, kind, determined, even stubbornly tenacious, intolerant of bluff or compromise, loyal, devoted, and helpful to the causes and people she believed in."

Dorothy Andersen's series of lectures on congenital heart anomalies proved important for the development of openheart surgery.

Identification of Cystic Fibrosis

Dorothy H. Andersen, MD, PhD, 1901-1963 A fter she was denied a surgical residency at the University of Rochester due to her sex, Dorothy H. Andersen, MD, decamped to P&S, where she joined the staff in the Department of Pathology. From 1929 to 1935, she served as an instructor of pathology, conducted basic research into the endocrine glands and mechanisms of female reproduction, and earned a PhD.

Dr. Andersen also conducted research that provided a foundation for open-heart surgery at Presbyterian Hospital; recognized cystic fibrosis as a unique disease and developed the first tests for its diagnosis; and investigated glycogen storage diseases. Over the course of her career, she authored or coauthored close to 100 papers.

Dr. Andersen "in great measure had two characteristics that seem selfcontradictory: a powerful drive for hard, steady work and extraordinary flexibility," wrote Nicholas Christy'51, in a "Faculty Remembered" profile (Spring/Summer 2004 *P&S Journal*). "In her long research career she successfully reinvented herself two or three times without stumbling, without interrupting the progress of her investigative work."

Dr. Andersen began her rise through the ranks at Babies Hospital in 1935, where she held posts as pathologist and pediatrician for the next 28 years, with faculty appointments at P&S. Immediately on her arrival at Babies, she embarked on an exhaustive study of congenital heart anomalies. Her series of lectures on the topic for cardiovascular surgeons and specialists in pediatric cardiology proved important for the development of open-heart surgery.

Simultaneously, Dr. Andersen became intrigued by the digestive tract. A 1938 paper, "Cystic fibrosis of pancreas and its relation to celiac disease; clinical and pathological study," garnered great renown and sparked a quarter century of research. "Trained neither as a chemist nor as a clinical pediatrician, she met the demands of her cystic fibrosis work by training herself along these lines and in the course of time became an able clinician, always with a sense of humility and an awareness of her limitations, though the awareness usually exceeded the limitations," recalled Douglas S. Damrosch'40 in an obituary for the Journal of Pediatrics.

In addition to conducting research, Dr. Andersen carried a large clinical load at Babies, maintained a full teaching schedule, and organized regular conferences on clinical pathology. It was in her approach to the workload that Dr. Andersen's childhood in the Green Mountains was perhaps most evident, recalled Dr. Damrosch, whose own career at Babies began with his residency in 1941. "The only complaints heard from her were the sort of dry, laconic remarks you would expect from a Vermont farmer contemplating the amount of granite to be removed from a potential pasture."

An accomplished carpenter and stonemason, expert with saw and scythe, Dr. Andersen found weekend respite on her farm in New Jersey's Kittatinny Mountain range, where she regularly hosted colleagues and young house officers from the hospital. "My guests find some of the entertainment strenuous, for they have shared in building the fireplace, the kitchen chimney, and in doing carpentry and other manual labor around the place," Dr. Andersen wrote in an undated manuscript. "It is also a good place for sketching, photography, birds, flowers, cooking, eating, and conversation."

Matriarch of Medical Mycology

Margarita Silva-Hutner, PhD, 1915-2002

Margarita Silva-Hutner, seated, with Rhoda Benham, PhD, her predecessor as director of the Laboratory of Mycology Margarita Silva-Hutner started in a Columbia mycology lab in Puerto Rico as a technologist. In the natural world, fungal growth fuels decomposition, speeding the cycle of nutrients back into the soil. Given their affinity for heat and humidity, fungi play a particularly vital role in tropical and subtropical ecosystems. Within the human body, however, they can wreak havoc; fungal infections precipitate an array of conditions from the relatively benign diaper rash and athlete's foot to such fatal afflictions as valley fever and meningitis.

Margarita Silva was just 9 years old when the first laboratory of medical mycology in the United States was established at Columbia in 1926. The scientific field was in its infancy and physicians had little to offer by way of diagnosis, let alone treatment, but in the Puerto Rico of Ms. Silva's childhood, the debilitating and disfiguring consequences of fungal infections would have been readily apparent.

Ms. Silva was a freshly minted, 19-year-old graduate of the University of Puerto Rico when she landed a job as a technologist in the mycology lab of Columbia's School of Tropical Medicine in San Juan. For the next 13 years, Ms. Silva and her mentor, Arturo L. Carrión, MD, would devote much of their research to chromoblastomycosis, a condition that still runs rampant in Puerto Rico. A subdermal fungal infection introduced by a contaminated thorn or splinter, the condition is characterized by painless but refractory lesions that erupt years after the initial injury.

At Dr. Carrión's urging, Ms. Silva accepted a scholarship and in 1950, at the age of 35, began graduate studies in plant pathology at Harvard. Later that same year, Ms. Silva joined the P&S Laboratory of Mycology as a researcher and completed her dissertation, "Studies on the Biology of the Fungi of Chromoblastomycosis," commuting between Manhattan and Boston. In 1952 she joined the dermatology faculty at P&S and in 1956, a newly married Dr. Silva-Hutner became director of the Laboratory of Mycology.

From 1956 until many years after her 1981 retirement, Dr. Silva-Hutner taught a 12-week course that introduced generations of P&S students to general mycology and the fundamentals of fungal structures, as well as the particulars of medical mycology.

Dr. Silva-Hutner's career spanned the discovery of the first antifungal drug approved for use in humans and an explosion of research into the opportunistic fungal infections that afflict people with compromised immune function, including those with HIV/AIDS. She published more than 50 articles on the taxonomy and biology of pathogenic fungi and her findings helped lay the groundwork for the 1950 discovery of nystatin, the first true antifungal agent.

A Quiet, But Telling, Example

Esther Abbie Ingalls Knowlton, MD, 1918-1997

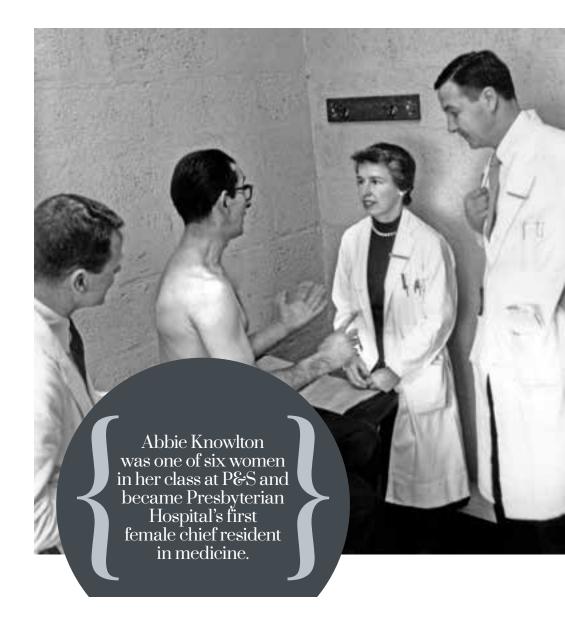
A bbie Ingalls Knowlton'42 devoted more than a half century to the institution where she completed medical school and began her training. "Dr. Knowlton served as an incomparable role model for all those fortunate to be associated with her," wrote her P&S colleagues in an obituary in the New York Times. "Wise, vigilant, faithful, and tender in her care of patients, she taught by quiet but telling example what it is to be a physician and friend."

A nationally and internationally recognized expert in the management of Addison's disease, Dr. Knowlton authored dozens of papers early in her career that contributed to a basic understanding of adrenal gland physiology. Her contributions to the field were formally recognized in her election to membership in the American Society for Clinical Investigation.

Dr. Knowlton's research spanned renal insufficiency, the pituitary adrenal axis, the role of aldosterone in normal physiology, and the role of the kidney and renin in normal blood pressure control. Her clinical studies of Addison's disease in diabetes presaged the trajectory of research and discovery related to the role of autoimmunity in endocrine disorders and her scientific contributions to internal medicine reflect the evolution of the understanding of adrenal, pituitary, and renal physiology. "One of her early papers on Cushing's disease published in the American Journal of Medicine is a classical paper which is as valid today as when it was first published," wrote a SUNY Downstate professor in a 1971 letter endorsing Dr. Knowlton's promotion to associate clinical professor of medicine.

As a teen, Dr. Knowlton shadowed the family doctor on his rounds through the rural resort community of Hot Springs, Va., where she was raised. "The basic business of the physician is the one-to-one relationship with the patient," she told a reporter in 1996. "No government regulation or HMO constraints can change that." As one of six women admitted to P&S in 1938, Dr. Knowlton excelled in her studies and on rounds. "One of the best students that I ever taught—hard worker, full of information, and able to use her facts," scribbled one professor in his report on her third-year rotation in surgery. Declared another, "This girl's attitude is certainly brilliant in many ways and she catches the points fast and securely and doesn't have to be told twice." In June 1942, Dr. Knowlton embarked on her training at Presbyterian Hospital and in 1945 was named the hospital's first female chief resident in medicine.

Dr. Knowlton was hired by the medical school as an instructor in 1947 and rose through the ranks to clinical professor of medicine; at the time of her death, she was professor emeritus of medicine.



A Heart for Harlem

Elizabeth Bishop Davis, MD, 1920-2010

E lizabeth Bishop Davis'49 was a first-year medical student at P&S in 1946 when she began the work that would launch her career commitment to providing psychiatric services for the people of Harlem: serving as a clerk at the first mental health clinic in Harlem. Conceived by novelist Richard Wright and psychotherapist Fredric Wertham, MD, the LaFargue Clinic was housed in the basement of the 134th Street parish house of St. Philip's Protestant Episcopal Church, where the future doctor's father, civil rights activist Shelton Hale Bishop, and his father before him served as rector.

At the clinic, which operated two evenings each week, volunteer psychiatrists and social workers counseled the working class, predominantly African-American clients. Those who could afford the fee paid 25 cents per session; for those of more limited means, services were free.

After graduation from P&S, Dr. Davis, who received glowing assessments from the faculty, interned at Harlem Hospital and completed her residency at the New York State Psychiatric Institute and Columbia's Psychoanalytic Clinic. In 1953 she was hired as a therapist at Harlem's Northside Center for Child Development, founded by civil rights activists Kenneth and Mamie Clark, Columbia University's first PhD graduates in psychology. In 1955, Dr. Davis gained her certification as a psychoanalyst from Columbia's Center for Psychoanalytic Training and Research. Throughout the 1950s, she maintained a private practice, while continuing her association with an outpatient clinic at Harlem Hospital. In 1957, she joined Columbia's clinical faculty.

In the early 1960s, New York City hospitals commissioner Ray Trussell began forging relationships between municipal hospitals and private medical schools. P&S was paired with Harlem Hospital and in 1962, Dr. Davis was appointed founding director of Harlem Hospital's new Depart-



ment of Psychiatry and assistant professor of clinical psychiatry. A decade later, when she was considered for tenure, Dr. Davis' colleagues echoed the assessments she had earned from P&S teachers 25 years earlier. "Under her initiative and guidance this service has become one of the outstanding service, teaching, and training centers in the city, able to recruit and retain high caliber staff and to develop innovative service and training programs," wrote Alexander Thomas, MD, director of Bellevue's psychiatric division.

By the time Dr. Davis retired in 1978 and became professor emeritus of clinical psychiatry, the Harlem Hospital's Department of Psychiatry had grown to include an adult inpatient unit, a day hospital, a greatly expanded outpatient clinic with specialty clinics for alcohol and substance abuse, a geriatric clinic, a large social and vocational rehabilitation service, a children's service with inpatient beds, a children's day hospital with a public school and recreation program, and a fully accredited psychiatric residency training program.

Alumni News Motes

By Marianne Wolff'52, Alumni Editor, and Bonita Eaton Enochs, Editor

1942

Paul Lurie, who calls himself "the oldest pediatric cardiologist in the world," moved to New Paltz, N.Y., in 2011 at the age of 94 to be closer to his daughter after his wife died. There he took up swimming. He and his swim buddy, Marilyn Dilascio (at age 16, she was the first person to swim across Lake Ontario and the youngest person to swim the English Channel) were featured in a Feb. 16, 2016, Wall Street Journal article about their individual swimming training. When not swimming, Paul keeps busy with watercolor classes, concerts, lectures, and singing in a chorus. He also does woodworking. Paul's book, "A Cardiologist Explains Things," combines his love of teaching and years of experience into an accessible guide to



heart health. The book is described in Alumni in Print.

1962

Henry Solomon gave an invited lecture on translational medicine at the 301 Military Hospital in Beijing, China, where many senior Chinese government officials receive their medical care. It was Dr. Solomon's 18th trip to China in the past four years.

1965

Anthony H. Horan presented a poster titled "To respond fully to the USPTF Critique, redirect 'elevated PSAs' to BPH and its therapy" at the 26th international Prostate Cancer Update at Vail, Colo., in January. "Everybody got two minutes to speak in front of their poster to the assembled experts and I got mine," he wrote. "I only saw one representative of New York medicine. This is the best meeting on prostate cancer in

the world. P&S grads should consider it, not only for the skiing."

1967

See Alumni in Print to read about a collection of short stories written



Benet Kolman'67

NLM Leader Retires After Long Career

Donald A.B. Lindberg'58 retired after 31 years heading the world's largest medical library, the National Library of Medicine at the NIH. He was the library's longest-serving director and one of the longest-serving NIH leaders.

A March 2015 NIH tribute attended by librarians, informatics researchers, and health providers from across the country included video highlights from his 1984 swearing-in ceremony speech, during which he made predictions about the future of medical information that became reality. He predicted a time when "the



Donald Lindberg was sworn in as the 19th director of the National Library of Medicine in 1984. Former NIH director James Wyngaarden administered the oath. Mary Lindberg and one of the Lindbergs' three sons, Jonathan, participated in the ceremony.

book or journal on the shelf will become increasingly too remote for immediate patient-care decisions," and he said medical informatics would emerge as a formal research field and academic discipline.

"I hope you saw how true and prescient his observations were," noted NIH director Francis Collins at the tribute. "Don created programs that transformed our approach to information."

Don trained as a pathologist before becoming a pioneer in the use of computers and medicine and the founding president of the American Medical Informatics Association. During his time at



In March 2015, health leaders from across the NIH and others honored Donald Lindberg as he retired as NLM director after more than three decades.

the NLM, the public, health providers, and scientists gained new or improved access to medical literature via PubMed and PubMed Central, to clinical trials and their results via ClinicalTrials.gov, and to consumer health information via MedlinePlus. Establishment of the National Center for Biotechnology Information to provide access to biomedical and genomic information has been called his crowning achievement.

Days before the March tribute, the NLM hosted its own farewell to Dr. and Mrs. Lindberg. "I've loved every day here," Don told the group assembled. "I think you'll continue to serve the country and the world well."

by **Benet Kolman**. A longtime Boston cardiologist, Benet has turned to fiction in retirement.

1969

James Reiffel retired from his fulltime position as a cardiologist at Columbia and NewYork-Presbyterian last July and became professor emeritus of medicine at P&S and emeritus attending at NYP. He continues to teach (at P&S, regionally, nationally, and internationally), do clinical research, publish, and consult for industry and several national medical organizations. His second children's book was published in 2015. "My Goose Got Loose" is a sequel to



James Reiffel'69

"Once Upon an Antigmule" and features illustrations by his grandchildren. Read more in Alumni in Print.

1970

Sally Kasparek Severino recently published a book that suggests ways to overcome one's own limitations to achieve comprehensive wellness. Sally, professor emeritus of psychiatry at the University of New Mexico Health Sciences Center, was the first woman to serve as president of the American College of Psychoanalysts. See Alumni in Print to read more about her latest book, "Wellness in Mind." Read more about Sally at her website: www.neurospirit.net



Mark Sherrid'73

1973

Mark Sherrid has moved to NYU Langone Medical Center, where he is now professor of medicine. He had been at Roosevelt Hospital since his graduation in 1973 except for a two-year cardiology fellowship at the Pacific Medical Center. Mark is director of the hypertrophic cardiomyopathy program in the Division of Cardiology at NYU.

1976

James V. Dunford has been honored by the American College of Emergency Physicians with the 2015 Award for Outstanding Contribution in EMS. The award, which is not limited to ACEP members, is presented to an individual who has made an outstanding contribution of national significance or application in emergency medical services. The award is just the latest Jim has received for teaching and service. He is now professor emeritus of emergency medicine at the University of California San Diego, where he joined the faculty in 1980. Jim founded the UC San Diego emergency medicine training program. He is EMS medical director for the city of San Diego.

1977

See Alumni in Print to read about Gene Kopelson's book on the hidden influences of Ronald Reagan's first presidential campaign. "The public perception of former Columbia University President Dwight Eisenhower's retirement years is that he played golf and then became ill," Gene told Columbia Medicine. "But the groundbreaking revelations in my new book show that Ike maintained a quite active 'hidden hand' in GOP politics in the 1960s by mentoring political novice Ronald Reagan." When Gene is not writing books about important moments in history, he is a cancer physician who has published more than 40 medical articles, contributed chapters in medical textbooks, and lectured in the United States and abroad on radiation oncology.

The American Society of Ophthalmic Plastic and Reconstructive Surgery Foundation presented a service award to Janet Roen at the foundation's November 2015 meeting.

1978

Jonathan Newmark received a master's degree in music composition in December from the University of Cincinnati's College-Conservatory of Music. The university surprised him with a special performance of part of the composition that earned him his graduate degree. The degree and 15 compositions he wrote in his two years at the conservatory represent



Jonathan Newmark'78

the fulfillment of his 40-year dream of becoming a serious composer. The New York native, now a retired U.S. Army colonel and expert in medical response to chemical warfare, began studying piano and viola in third grade and attended the preparatory divisions of the Juilliard School on weekends in high school. Jonathan lives outside Washington, D.C., where he works as a consultant for the Department of Homeland Security and plans to add freelance composer to his list of job titles.

1982

Terence S. Dermody has been named physician-in-chief and scientific



Terence S. Dermody'82

director of Children's Hospital of Pittsburgh and chair of pediatrics at the University of Pittsburgh medical school, effective June 1, 2016. He joins Pittsburgh from Vanderbilt, where he has been the Dorothy Overall Wells Professor of Pediatrics and director of the Division of Infectious Diseases, the Elizabeth B. Lamb Center for Pediatric Research, and the Medical Scientist Training Program.

1983

The second edition of **Robert Klapper**'s hip health guide, "Heal Your Hips: How to Prevent Hip Surgery and What to Do if You Need It," is out. The author, chief of orthopedic



surgery at Cedars-Sinai Medical Group, aims to keep as many of his patients out of the operating room as possible. See Alumni in Print to read more about his latest book.

1984

The Class of 1984 enjoyed a mini reunion in November at the Thyroid, Head and Neck Cancer Foundation gala at MOMA in New York City. From left in the photo below are **Ben Peng**, a urologist; **Beatriz Olson**, an endocrinologist; and tick-borne diseases. He focuses on persistent cognitive impairment, fatigue, and pain in patients with post-treatment Lyme disease syndrome and the effectiveness of repeated antibiotic therapy.

See Alumni in Print to read about the latest book in the popular evidencebased anti-aging series, "Younger Next Year," co-authored by Henry Lodge, the Robert L. Burch Family Professor of Medicine at CUMC and a specialist in geriatric medicine.



Eric Olson, an orthopedist and sports medicine specialist; Michael Clain, an orthopedist and foot and ankle specialist; and Michael's wife, Dr. Debbie Clain. They all practice in Connecticut and are part of the committee involved in fundraising for their P&S class. "We had a great time catching up," writes Beatriz. "All of us have at least one child seeking medicine as career."

1985

Brian Fallon was honored in April by the Global Lyme Alliance with the Lauren F. Brooks Hope Award. He received the award at the alliance's "Time for Lyme" gala in Old Greenwich, Conn. The award honors individuals who are making strides in research and treatment toward a Lyme disease cure. Brian, professor of clinical psychiatry at P&S, has been recognized internationally for his research on neuropsychiatric aspects of Lyme

1987

Vincent M. Figueredo was inaugurated in April as the eastern governor of the Pennsylvania chapter of the American College of Cardiology. He will serve until spring 2019. Vince completed an internal medicine residency at Presbyterian Hospital and a cardiology fellowship at the University of California, San Francisco. He is board-certified in cardiovascular



Vincent M. Figueredo'87

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Here are a few alumni news items you missed if you didn't see the past two issues of e-News for Alumni on the magazine's website:

Lewis Elias'49 was featured in a Miami newspaper when he turned 90. ... Henry Buchwald'57 was featured in a Columbia College magazine article about his work to promote healthy lifestyles and weight management for former professional football players. ... John Mulliken'64 was honored at the 2015 National Physician of the Year Awards for lifetime achievement. ... Jerome Groopman'76 wrote about last year's most notable findings in medicine and biology. ... A CNN video features Oheneba Boachie-Adjei'80 discussing the orthopedic hospital he opened in his native Ghana. ... Charles Prestigiacomo'93 was featured in a profile of the New Jersey Comprehensive Stroke Center. ... Architectural Digest wrote about a New York gallery ceramics installation by Christopher Adams'04, a Boston dermatologist. ... P.J. Lukac'12 was featured in a survivor profile in Cancer Today magazine. ... Jenna Otter'15 and her father were interviewed on an episode of an ABC program that re-enacted their face-to-face encounter with an angry mother grizzly bear. ... Loren Rabinowitz'15, a former ice dance champion, was featured in an article on the icenetwork website.

See all issues of e-News for Alumni at columbiamedicinemagazine.org/webextras.

diseases, echocardiography, nuclear cardiology, and hypertension. He is chief of clinical cardiology and director of cardiovascular diseases fellowship programs at Einstein Medical Center Philadelphia. He also is professor of medicine at the Sidney Kimmel College of Medicine at Thomas Jefferson University. Before joining the Einstein faculty in January 2007, Vince held positions at Lovelace Health Systems in New Mexico, the University of New Mexico, UCSF, and San Francisco General Hospital. He has authored more than 130 peer-reviewed publications and chapters. As the eastern governor, Vince will serve on the Board of Governors of the American College of Cardiology.

1995

Judy Huang has been promoted to professor of neurosurgery at Johns Hopkins University.

1999

In February 2015 the Department of Surgery at Montefiore Hospital announced the appointment of Evan Garfein as division chief of plastic and reconstructive surgery. Evan has been a member of the Department of Surgery at Montefiore since 2008.

2008

Thomas B. Welch-Horan became the proud father of a daughter, Phoebe Grace, in August 2015. Grandparents are Martha Welch'71 and Anthony Horan'65.

2010

See Alumni in Print to read about the newest collection of poetry written by Jenna Le. Jenna, who was co-editor-in-chief of the literary magazine, Reflexions, while at P&S, has had her writing published in AGNI Online, Bellevue Literary Review, the Best of the Raintown Review, the Los Angeles Review, Massachusetts Review, the Village Voice, and elsewhere. Her latest book, "A History of the Cetacean American Diaspora," is a meditation on humanity, illness, and death through her unique, lyrical perspective.

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• ALUMNI PROFILE

Davida Coady'65: Protecting Imperiled Populations

By Peter Wortsman

A Career Devoted to the Care of Disadvantaged Children, Refugees, Addicts, and Lifers avida Coady'65 keeps a pin stuck to her bathroom mirror with a quote from Eleanor Roosevelt: "Do something every day that scares you." It is not the idle creed of a daredevil, but a challenge to break out of her comfort zone in fulfillment of her credo: "I believe in trying to make the world a better place and in relieving suffering."

For five decades and counting, the pediatrician turned international health activist turned substance-abuse specialist has traveled around the planet, often at considerable personal risk, aiding populations in dire need. In one instance, an American diplomat whisked her out of harm's way moments before she was about to be arrested by Nigerian troops who had been tipped off about her work with Biafran children. Another time, a bus driver in Honduras deliberately played dumb, calling her "just a stupid gringa" to save her from the clutches of soldiers who had swept her up in a dragnet on suspicion of caring for refugees from El Salvador. And despite a fear of flying, time and again she boarded flimsy aircraft flown by bush pilots under perilous conditions.

Returning to California in 1994, she recognized drugs and alcohol as key aggravating factors in child neglect and abuse and decided to switch gears from pediatrics to substance abuse to promote recovery among addicts on the street and among the incarcerated in California prisons.

Columbia Medicine spent three days in September 2015 shadowing Dr. Coady, from her home in the Berkeley Hills to halfway houses she helped create in Oakland and to the prison yard at Solano State, a maximum security prison in Vacaville, Calif., where in 2009 she and her husband, Thomas P. Gorham, established a program to train men serving life sentences to be certified substance abuse counselors in the prisons, a program that has turned lives around.

A Breath of Fresh Air in a Suffocating World

The sun beats down with a merciless intensity on the prison yard. It is 105 degrees Fahrenheit out in the open and only slightly less sweltering indoors. To Randy Carter, Darryl Poole, Kenneth Davis, Curtis Abron, James Ward, and many others, Davida Coady, or "Miss Davida," as



they prefer to call her, is a breath of fresh air in a suffocating world, a door that does not lock shut in their faces but opens outwards and inwards, and to which, as she has taught them, they themselves hold the key. All five men are serving life sentences. All are proud alumni of the Class of 2009, the first group of peer mentors Dr. Coady and her husband helped train.

"I'm used to being invisible," says Mr. Poole, age 46, a recovering addict with a record of arrests, locked up for more than 27 years, who has since devoted his life to "listening to other lost children like myself in the bodies of grown men."

In the words of Mr. Carter, age 52, incarcerated for 34 years and counting: "She taught us that we have the tools! Use your tools to help yourself and others!"

At age 66, Mr. Ward, who has been behind bars for some 33 years, calls himself the "elder statesman" of that first crop of counselors. "I am simply a raw human being trying to do as best as I can. It takes a special kind of person to work with someone like me, to look me in the eye and tell me there's still something worth saving, and then go ahead and teach me how."

Vandrick Towns, now pushing 40, is a graduate of the program who has since been released after 21 years in prison. He now serves as co-coordinator of the Oakland branch of Options Recovery Services, the self-help addiction recovery organization founded by Dr. Coady and Mr. Gorham. Says Mr. Towns: "She's got that look. She's the only person, aside from my mother, who can correct my behavior with just a look." It's a look, he adds with a chuckle, which he has since learned to turn on others as a quiet reminder to do the right thing.

Raul Higgins, age 56, incarcerated for 17 years and a recent transfer to Solano State, had long heard of Dr. Coady's work: "Look at the men that have been under her wing. They are the direct transformation of a miracle."

Early Role Models

"I believe I'm a lucky person," Dr. Coady reflects in the course of a conversation on the patio of her snug little house



in the Berkeley Hills. "Where else in the world can a coal miner's daughter grow up to go to Columbia University and get to become a doctor?" Her Scottish immigrant father left a perilous existence in underwater pits in the firths off the coast of Scotland to seek a better life in America. She was inspired to pursue the study of medicine after working a summer job at a camp for diabetic children run by two pediatricians, Drs. Mary Olney and Ellen Simpson. Among other early influences was the Rev. Laurance Cross, pastor of Northbrae Community Church and mayor of Berkeley, a man committed to civil rights and social justice, whose sermons first kindled her own desire to make a difference.

Earning her bachelor's degree from the University of the Pacific in Stockton, Calif., she applied and was admitted to several top medical schools. For her the primary appeal of P&S, in addition to its academic reputation, was a chance to learn about the health problems of the developing world from the revered parasitologist Dr. Harold Brown, who ran a fourth-year tropical medicine elective in Liberia. Dr. Brown remained her "mentor and hero," with whom she continued to correspond until his death in 1988. She and classmate Keith Brodie'65 honed their pedagogical and clinical skills tutoring nurses in pharmacology and other subjects and assisting with basic medical care at the Firestone Hospital in Harbel, Liberia. The two have remained fast friends. "The arc of her life is truly remarkable," says Dr. Brodie, a past president of Duke University. "Few people I know have contributed so much to the public good."

Davida Coady'65 and husband Thomas P. Gorham



Contemplating various specialties in the course of her P&S studies, including surgery and orthopedics, Dr. Coady ultimately opted for pediatrics and completed her residency at UCLA, where she was named chief resident in her second year. Eager to learn more about the role of nutrition in child health, she pursued, on Dr. Brown's advice, a certificate in international nutrition at the Institute of Nutrition of Central America and Panama in Guatemala.

At the Institute she came into contact with Dr. Thomas Weller, then chair of the Department of Tropical Public Health at the Harvard School of Public Health, a pediatrician by training and recipient of the 1954 Nobel Prize for Physiology or Medicine for his work in cultivating poliomyelitis virus in a test tube. Dr. Weller urged Dr. Coady to get a solid grounding in epidemiology at Harvard, where she earned an MPH in 1969. Dr. Weller also got her involved as a research associate in the Harvard TB Project with the Department of Community Medicine at the Hôpital Albert Schweitzer in Deschappelles, Haiti.

While at Harvard she also came under the influence of nutritionist Dr. Jean Mayer, the individual responsible for, among other major public health initiatives, the introduction of food stamps to supplement the diet of American households that fall below the poverty line.

Saving Biafran Children and Other Emergency Aid Efforts

In 1968 the Igbo Tribe in Eastern Nigeria declared independence and established the short-lived nation of Biafra, an enclave promptly surrounded by Nigerian troops and threatened with starvation. Dr. Mayer and another new acquaintance, American journalist and peace activist Norman Cousins, led emergency aid efforts. From June 1969 to January 1970, Dr. Coady served as field director of Aid to Biafran Children, the organization founded by Cousins. Flying into Biafra, she worked in tandem with the Irish Holy Ghost Fathers, in her view the most effective group involved in the relief effort. She collaborated with Concern for Biafra, an organization that would later evolve into Concern Worldwide, to this day a powerhouse for good in some of the world's most disadvantaged countries.

At the urging of Dr. Mayer, at the time a member of the White House Conference on Food, Nutrition and Health and a special adviser to President Richard Nixon, Dr. Coady reported on the dire situation and the imminent risk of mass starvation in Biafra to then National Security Advisor Dr. Henry Kissinger and to Under Secretary of State Elliot Richardson, documenting the condition of close to a million children with famine edema. Pushing for immediate emergency airlifts of food, medicine, and other necessities, she ultimately helped avert a human catastrophe. Once the Biafran crisis subsided, Dr. Coady joined the Peace Corps, first as acting medical director, then as health program specialist, in which capacity she coordinated assistance programs in Africa and Asia. "My only regret in life is that I didn't stay with the Peace Corps," she says. But as much as she relished the involvement with cadres of young volunteers and the chance to help direct effective health initiatives, the whirlwind travel schedule got to her. "Waking up every day not knowing what country I was in, I'd start talking about one project and realize I was someplace else."

Returning to her native California, she accepted a joint appointment in pediatrics and preventive and social medicine at the medical school at UCLA, where she also later taught for many years in the School of Public Health's epidemiology division. "I have always told my students: Stop asking, 'What's going to make me happy?' and look to the needs of the community!"

While at UCLA, she helped to kick-start the fledgling Venice Family Clinic, a free clinic serving low income families, at which she officiated for many years as the head of the pediatric service. The largest free clinic in the country today, it has 10 sites in the greater Los Angeles metropolitan area, serving a patient pool of close to 25,000 people.

In her work, she has always sought to balance the pressing immediate needs of medicine and the long-term imperatives of public health. "Our society," she argues, "puts emphasis on curative medicine, rather than preventive medicine. Public health has always been the stepchild. When you're a doctor, people say: 'Oh thank you for curing me or for my surgery.' But nobody thanks the public health professional for saving them from smallpox or for their clean water. So you have to be very far-sighted to go into public health, because there's no instant gratification." At the same time, she points out, "most of the people who have made real public health advances also happen to be MDs. I see myself as both. I always try to do some curative medicine along with the prevention."

Cesar Chavez, Mother Teresa, and Other Formidable Forces for Good

While at UCLA, Dr. Coady was approached by representatives of the United Farm Workers Union. Union founder and legendary civil rights activist Cesar Chavez sought her help in creating clinics. She still vividly recalls their first meeting. "He was a totally focused, totally committed individual. 'Okay, Doctor, look,' he told me, 'I want you to understand that the health of farmworkers is not going to be markedly improved by your clinics. But your clinics will increase union membership and that will bring us better health conditions, toilets in the fields, better housing, sanitation, and laws to protect us.' That totally changed my thinking," she adds. "I realized that curative medicine is a political tool to bring about better health all around."

Then in 1971, Bangladesh declared independence from West Pakistan, war broke out, and Dr. Coady was off again, taking a temporary leave of absence from teaching to help the Irish Ghost Fathers with the refugee rescue effort. In the field she crossed paths with members of the World Health Organization Smallpox Eradication Program in India. They asked her, once she had completed her mission in Bangladesh, to help in a short-term epidemiological effort that took her through rural India and the slums of Calcutta, hunting down every last case. Her team succeeded in eradicating the disease there. "Whenever I look at photographs of people in India today, I am happy to see no smallpox scars."

It was in the course of that work that she met Mother Teresa, one of the other formative influences in her life. Dr. Coady and her colleagues sought her assistance and that of the 1,500 nuns under her tutelage in helping to locate the last cases of smallpox in impoverished neighborhoods of Calcutta. "Mother Teresa was a master organizer and a master manipulator," Dr. Coady still recalls with a note of awe in her voice. "She dealt with every person seated around a big round table one at a time. She was totally focused on whoever she was talking to. And as I sat there waiting my turn, I realized that everybody came to her asking for something and went away having promised her something. She

"She's one of the most inspirational people I know, always risking her life, her medical license, and her career to save and better the lives of others." – *Martin Sheen*

agreed to help us and we promised, in turn, to vaccinate all the people in her feeding lines. And when we were done with our work, Mother Teresa said: 'Oh now, Lady Doctor, can you come work for us? Don't write!' she said. 'Just come!'"

Some years later, following Dr. Coady's divorce from her first husband, friends recommended that she take a break at Club Med. Her preferred remedy to get herself out of the funk she was in was to return to Mother Teresa, as a Missionaries of Charity volunteer, and help organize the group's health program, including family planning, in the slums of Calcutta.

Other notable occasional partners in her efforts included the late Sen. Ted Kennedy, a staunch supporter of her work with refugees, and a local parish priest, the late Father Bill O'Donnell, affiliated with St. Joseph the Worker Church in Berkeley, whose commitment to civil rights and social justice once earned him the moniker "The High Priest of Protest." Lifelong friends, Dr. Coady and Father Bill marched together in defense of the rights of migrant farmworkers, boycotted



Nestlé for promoting its newborn formula over breastfeeding in the Third World, and protested the training of Central American death squads at the School of the Americas (since renamed the Western Hemisphere Institute for Security Cooperation) at Fort Benning, Ga., among other causes.

Father Bill was also a collaborator in a number of Dr. Coady's public health initiatives, notably the Hesperian Foundation, a nonprofit health education publisher devoted to making health guides and other materials available at little or no cost to populations in need, and the San Carlos Foundation, an organization she created and still runs as unpaid president, to "provide health and educational assistance to refugees and other people living in extreme poverty in the developing world."

Another lifelong friend is the actor Martin Sheen. In a telephone interview he fondly recalled a defining moment in their friendship. "Davida was over for dinner one night at our place and another guest who did not know her asked what she did. 'I'm a doctor, a pediatrician,' she said. 'Where do you practice?' he inquired. 'Primarily in the Third World,' she replied. 'Why's that?' he asked. To which she replied: 'Because I think it's immoral to make money off other people's misfortunes, sickness, and suffering.'" Sheen has put his money where his mouth is in support of her work. "She's one of the most inspirational people I know," he says, "always risking her life, her medical license, and her career to save and better the lives of others."

Thomas P. Gorham, Davida Coady'65, Susan Champion (chair of Options Recovery Services), and actor Martin Sheen

Aiding Refugees in Asia and Central America

Back in the States again, shortly after she completed her work in India, another crisis beckoned. In 1978 the Viet-



namese army invaded Cambodia, then under the oppressive rule of Pol Pot and the Khmer Rouge. Tens of thousands of panicked Cambodian refugees fled into neighboring Thailand, where they faced harsh conditions and severe shortages of food and medical supplies. Dr. Coady once again joined forces with Concern, in support of the efforts of the UN to direct the various aid groups. "Somebody needed to direct the training of these volunteers who were pouring in from all over the world, many of whom didn't know a thing about what they were doing."

At around the same time, the Nicaraguan Revolution broke out in an effort to topple the brutal dictatorship of Anastasio Somoza DeBayle. Having maintained a strong emotional tie to Central America ever since her days as a student in Guatemala, Dr. Coady connected with the exiled Nicaraguan Sandinista rebels living in the Bay Area.

When the Sandinistas overthrew the dictator in 1979, Dr. Coady pitched in to help rebuild the country's public health infrastructure. Working with the Nicaraguan Ministry of Agriculture, in an effort to address the lack of doctors and other health professionals in rural areas, among other initiatives, she helped distribute Spanish editions of a manual of basic medical advice, "Where There is No Doctor: A Village Healthcare Handbook," published by the Hesperian Foundation, a book since translated into more than 100 languages.

When Civil War broke out that same year in El Salvador, and refugees went pouring into neighboring Honduras, she once again pitched in, working under the auspices of the UN High Commissioner of Refugees to help organize the relief effort. "By this time I saw myself and was known as an authority on refugee health care." She subsequently became involved in refugee aid in the wake of an armed struggle in Guatemala and thereafter in Mexico at the time of the Zapatista-led rebellion of indigenous peoples in the southern state of Chiapas.

Her home in Berkeley became a depot for the relief effort. "Hundreds of thousands of dollars worth of medicine went through this house on the way to Central America."

The following year found her shuttling between Uganda and neighboring Kenya, directing famine relief among the Karamajong minority in northeast Uganda in the wake of the fall of Ugandan dictator Idi Amin.

Coming Up for Air and Considering the Needs of Her Own Community

"I thought I'd spend two years helping out and ended up spending the better part of a decade. When I paused to catch my breath, I figured out that I had gone on somewhere between 45 and 50 trips to Central America and elsewhere. I decided it was time to come back home and do something in my own community."



Working part time several nights a week as a pediatrician in the emergency department of Children's Hospital of the East Bay in Oakland, she saw countless cases of battered or neglected children of substance abusing and alcoholic parents. Her first husband had had a drinking problem. And reflecting on her itinerant existence leaping about from crisis to crisis, acknowledging that she thrived on crisis, she was forced to face and address her own occasional binge drinking and the sometimes ill-advised personal decisions she made under the influence. After a period of soul-searching she decided to switch specialties from pediatrics to addiction medicine.

"It's not a subject this society likes to address. When I'd tell people early on that I was no longer a pediatrician, and that I was going into addiction medicine, they'd say: 'That's really sad, you were such a good pediatrician!'"

On the advice of a lawyer friend, she began working as a coordinator of the Berkeley Drug and Alcohol Treatment Court, conferring with convicted addicts and offering the option of entering a recovery program as an alternative to doing time in prison.

In 1997 she founded Options Recovery Services to assist substance and alcohol abusers, many homeless and/or in and out of jail, to engage in effective recovery. Housed in an old Veterans Administration building in downtown Berkeley, the program is free and accessible to all. A full-service provider, Options Recovery Services offers counseling, a supervised site for Alcoholics Anonymous and Narcotics Anonymous meetings, and practical support such as driving individuals to the Department of Motor Vehicles to get IDs needed to enter a residential treatment program. The organization operates on a strict model of clean and sober. Many current and former clients work for the program in various capacities, fortifying their own efforts at recovery by helping others follow suit.

Dr. Coady joined forces with her second husband, himself in recovery and serving as president of the Addiction Professionals Association for California. Together they built Options Recovery Services into a powerful and productive force in the Bay Area.

Peer Mentoring in Prison

In 2005, prisoners serving life sentences at San Quentin State Prison in Marin County just north of San Francisco initiated a prisoner peer-mentoring substance abuse program. A consultant, Sol Irving, a former correctional officer turned correctional counselor with more than 30 years of experience as a peace officer, decided to set up a similar program at Solano State Prison, where he was employed at the time. Having heard of the effectiveness of Options Recovery Services, Mr. Irving approached Dr. Coady and Mr. Gorham to help design the program with a focus on addressing issues of substance abuse.

The three teamed up in 2009, interviewing and selecting a core group of 50 inmates, many serving life sentences for violent crimes committed under the influence while they were young, to go through the rigorous curriculum of the Offender Mentor Certification Program. Of those first 50, 47 proudly marched in cap and gown at the first graduation ceremony held in the prison gym some six months later, cheered on by their fellow inmates as officially certified drug and alcohol counselors skilled at working with their peers. A life-affirming purpose for those still serving time, it has proved a precious and marketable skill which those later released on parole have applied to building a clean life on the outside.

The curriculum is grounded in a parallel process of working on oneself while learning the skills needed to help others. As Mr. Gorham puts it: "Many of these guys

counselor Sol Irving, right, and members of the first class of the Offender Mentor Certification Program at Solano State Prison, in Vacaville, Calif., from left, Kenneth Davis, Darryl Poole, James Ward, Kurt Abron, Raul Higgins, Eric Wickliffe,

and Randy Carter

Davida Coady'65 with

retired correctional

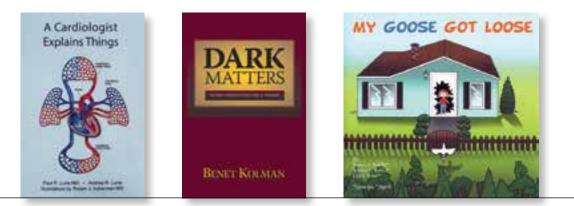
"I'm their doctor first and foremost, which is why they won't call me by my first name. I'm a role model. I'm the one that makes them think twice."

made dumb decisions as young men under the influence that cost somebody's life. We demand that they grow into that adult body and start making adult decisions."

Mr. Irving says Dr. Coady is "the glue that holds it all together." His first clue that things were working was when, in an environment in which the demonstration of raw emotion is taboo, he heard that trainees came out of sessions crying. Compelling prisoners to face and confront their own early trauma which in many cases they had kept a deep dark secret, as Mr. Irving puts it, "she broke them down to build them up." Dr. Coady also teaches the pharmacology component of the curriculum, the physiological effects of alcohol and various controlled substances.

Many prisoners transfer a filial devotion, but Dr. Coady keeps a cool head about her work. "If I'm a mother figure for them, fine, great," she says. "But I'm their doctor first and foremost, which is why they won't call me by my first name. I'm a role model. I'm the one that makes them think twice."





alumni in print By Bonita Ed

By Bonita Eaton Enochs, Editor, and Bayan Adileh

A Cardiologist Explains Things: Basic Information for the Layperson Paul Lurie'42

Amazon.com/CreateSpace Independent Publishing, 2015

In his new book, Dr. Lurie breaks down complex cardiology processes and procedures in a simple, streamlined way. After enjoying Lifetime Learning Institute courses, Dr. Lurie decided to teach his own eight-session course on his area of expertise, and the course attracted an enthusiastic following. The success of his lecture series led to "A Cardiologist Explains Things." Dr. Lurie, a pioneer in the subspecialty of modern pediatric cardiology, takes the skill of elucidation honed by years of medical practice and teaching and presents it to a broader audience of patients and parents.

Dark Matters: Seven Variations on a Theme

Benet Kolman'67 Damianos Publishing, 2015

Dr. Kolman's debut collection of short stories depicts seven diverse characters in diverse times and situations united by a common motif: the power of illusion. The stories explore the power of illusion to drive human striving, the persistence of striving in the face of recurrent disillusion, the "dark matters" of human nature, the struggle, in an ambiguous world, between good and evil, and the necessity, in such a world, for belief.

My Goose Got Loose James Reiffel'69 Authorhouse, 2015

Roseanna Ellaby lives with an extraordinary collection of animals. When a thunderstorm spooks a moose into crashing through her home's front door, Roseanna's most beloved roommate, a baby goose, decides it is a good time to set out on an adventure of its own. In "My Goose Got Loose," readers follow the goose as it takes its first taste of freedom while the family fearfully awaits its return home. While all children, human and animal, are meant to grow up and go out on their own, "My Goose Got Loose," illustrated by Dr. Reiffel's granddaughters, tells the story of what happens when a child leaves home too soon.

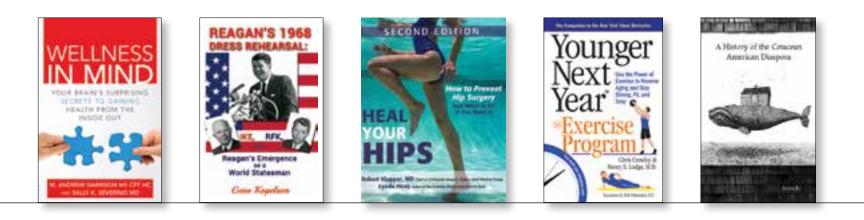
Wellness in Mind: Your Brain's Surprising Secrets to Gaining Health from the Inside Out Sally Kasparek Severino'70 Lulu Publishing Services, 2016

Dr. Severino's latest book offers new strategies for individuals who desire to master relationships with themselves, food, exercise, and even other people in the quest to achieve

Send books (published within the past two years) to:

Bonita Eaton Enochs, Editor Columbia Medicine College of Physicians & Surgeons 630 W. 168th St., P&S Box 27 New York, NY 10032

Send inquiries about books to columbiamedicine@columbia.edu



comprehensive wellness. These strategies guide readers to focus on *being image*, a concept described as the total experience of being in collaboration with and through others to cocreate a world of wellness. Taking a three-part approach, "Wellness in Mind" strives to transform the way people feel about themselves and their health by identifying the power of the brain to rewire itself and build new connections that support healing of the total being.

Reagan's 1968 Dress Rehearsal: Ike, RFK, and Reagan's Emergence as a World Statesman

Gene Kopelson'77 University of Southern California

Figueroa Press, 2016

In his latest book, P&S physician-turned-historian Dr. Kopelson explores what made Ronald Reagan decide to run for the presidency in 1968, despite growing anti-war sentiments. In his research of Reagan's campaign process, Dr. Kopelson uncovered the hidden influence of President Dwight Eisenhower, who acted as a mentor to then GOP-novice Reagan. As a historian, Dr. Kopelson has published works on Theodore Roosevelt, Ronald Reagan, and Republican politics at large. His research on Reagan and Eisenhower in particular was featured at the 125th commemoration of the birth of Eisenhower at the Dwight Eisenhower Presidential Library.

Heal Your Hips: How to Prevent Hip Surgery and What to Do if You Need It Robert Klapper'83

Wiley, 2015

Dr. Klapper's best-selling comprehensive guide to hip health now has a second edition that includes more content about preventive medicine. This new edition, coauthored by aquatic therapist Lynda Huey, provides illustrated step-by-step exercises for preventive and rehabilitative measures and discusses cutting-edge advances in orthopedics, including techniques he uses. Dr. Klapper combines his love of art and medicine to explain complex scientific processes in understandable ways by using everyday objects and images to relate them to relevant anatomical structures. This updated version maintains the vision of the original with the goal of preventing hip surgery altogether.

Younger Next Year: The Exercise Program: Use the Power of Exercise to Reverse Aging and Stay Strong, Fit, and Sexy

Henry S. Lodge'85

Workman Publishing Company, 2015

Dr. Lodge's latest book in his "Younger Next Year" series provides evidence-based advice on how to work out effectively, safely, and smartly to reverse aging through the power of aerobics and strength fitness. Dr. Lodge has co-authored the series with Chris Crowley, a longtime patient and living proof of his theories. The most recent edition includes an illustrated step-by-step exercise guide with an explanation of the underlying scientific theory of aging and exercise.

A History of the Cetacean American Diaspora Jenna Le'10

Anchor & Plume Press, 2016

Dr. Le's second book of poetry was praised by poet Kim Bridgford as "both clever and poignant...magical and original." In this collection, Dr. Le examines the similarities between land and sea creatures. particularly in the way they are defined by their predecessors' immigrant narratives. The poems draw inspiration from a wide variety of sources, including Dr. Le's secondgeneration Vietnamese-American upbringing, her interest in animals and ecology, and her encounters with humanity, illness, and death working as an intern and resident in the outer boroughs of New York City. Dr. Le's first book, "Six Rivers," made the poetry bestsellers list compiled by Small Press Distribution, a nonprofit that distributes literature published by more than 400 small and independent presses.

inmemoriam



Frederic Herter



FACULTY

Frederic P. Herter, MD, the Auchincloss Professor Emeritus of Surgery, died Nov. 7, 2015. He joined Columbia as an intern in 1944 and rose through the ranks during his 40 years of active service. He was acting chairman of the Department of Surgery for two years, director of surgery at the Francis Delafield Hospital, a consultant to Harlem and Goldwater Memorial hospitals, and a consultant at St. Luke's-Roosevelt Hospital Center. After his Columbia tenure, he served as president of the American University of Beirut for eight years and later was an AUB trustee emeritus. The son of a Massachusetts governor who later served as U.S. Secretary of State, Dr. Herter grew up in a powerful family, but he was praised at a memorial service for being an egalitarian and humanitarian who believed in service. Though he was the product of a life of privilege, one speaker said, "You wouldn't know it without being told."

Other Faculty Deaths

Michael Bernstein, MD, professor emeritus of medicine, died Feb. 21, 2016.

Ira Snow Jones, MD, clinical professor emeritus of ophthalmology, died Feb. 9, 2016.

Donald Meyers, MD, clinical professor of psychiatry, died Jan. 13, 2016.

Mary H. Samuels, MD, former member of the pediatrics faculty, died May 31, 2015.

Fred Sander, MD,

adjunct associate clinical professor of psychiatry, died March 25, 2015.

Carolyn Denning Scaglione,

MD, former director of the cystic fibrosis and pediatric pulmonary disease centers at Babies Hospital, died Jan. 10, 2016.

Anneliese L. Sitarz, MD,

professor emeritus of clinical pediatrics, died Oct. 3, 2015. See more in Alumni In Memoriam, Class of 1954.

Robert L. Spitzer, MD, professor emeritus of psychiatry, died Dec. 20, 2015. **Eleanor Townsend**, MD, retired member of the psychiatry faculty, died Dec. 2, 2015. See more in Alumni In Memoriam, Class of 1961.

ALUMNI 1940

Hugh B. Lynn, a retired pediatric surgeon, died Nov. 10, 2015, at age 101. Dr. Lynn served in the U.S. Army during World War II, attaining the rank of major. A member of the first generation of surgeons to specialize in pediatric surgery, he pioneered several experimental surgeries for children born with severe birth defects and developed techniques geared to childhood needs, many still in use today. He was at various points in his career professor of surgery at the University of Alabama School of Medicine, surgeon-in-chief at Louisville Children's Hospital, and head of the Department of Pediatric Surgery at Mayo Clinic in Rochester, Minn. Preceded in death by a son, he is survived by his wife, Lillian, a daughter, a son,



Edwin Wortham'43M

two grandchildren, and two great-grandchildren.

1941

William B. MacGuire Jr., a retired internist, died July 11, 2015, at age 99. Dr. MacGuire served in the U.S. Air Force during World War II, first as a group flight surgeon for the Reconnaissance Command in Meridian, Miss., then as flight surgeon for the Troop Carrier Command in the South Pacific. He was awarded the Philippine Liberation Medal with Bronze Star and several combat unit citations. Early in his career he was one of the first physicians to perform diagnostic transdermal needle biopsies of the liver and lung. A member of the Chattanooga Hamilton County Medical Society, the American Medical Association, and the American College of Physicians, he was co-founder of the Diagnostic Center of Chattanooga, Tenn. He also served on the board of directors of the American Red Cross. A man of great energy, at the age



Michael S. Bruno'45

of 97 he was still playing his beloved game, golf, walking the course and carrying his own bag of clubs. Preceded in death by his wives, Mae, Muriel, and Velma, he is survived by a daughter, three sons, 12 grandchildren, and 18 great-grandchildren.

1943M

Edwin Wortham IV, a retired ophthalmologist, died Jan. 2, 2016. He was 98. Dr. Wortham served as a doctor in the U.S. Navy during World War II, taking part in and treating the wounded on D-Day in Normandy. He pursued a private ophthalmology practice for more than 40 years in San Leandro, Calif. One of the co-founders of Laurel Grove Hospital in Castro Valley, he served on the staff of Memorial Hospital and Doctors' Hospital in San Leandro and Eden Hospital in Castro Valley. Preceded in death by his first wife, Georgene, he is survived by his second wife, Dorothy, and her six children. Dr. Wortham was a generous supporter of P&S, where he established



Walter Ogilvie'45





Alan Frank'49



Howard Kantor'49



Arthur Malin'49

the Marion H. and Edward Wortham III Memorial Scholarship Fund.

1945

Michael S. Bruno, professor emeritus of clinical medicine at New York University and longtime chair of the Department of Medicine at Lenox Hill Hospital, died Nov. 16, 2015. Dr. Bruno was Lenox Hill's chair of medicine for 35 years, president of the hospital's medical board for four terms, and a member of the board of trustees and joint conference committee for 24 years. He also served as associate dean for education and as a member of the Lenox Hill Corporation. He is credited with helping build Lenox Hill into the teaching hospital and tertiary care center it is today. In 1978 Dr. Bruno gave approval for Dr. Simon Stertzer to perform the first balloon angioplasty in the United States. He served in the U.S. Army, stationed in Japan following World War II. He was a loyal supporter of his medical alma mater. Preceded in death by his wife, Ida, he

is survived by his partner, Maria Goode Schwartz, two daughters, a son, four grandchildren, and one great-grandchild.

Walter E. "Terry" Ogilvie,

a retired internist, died Nov. 29, 2015. Dr. Ogilvie served in the U.S. Navy. He pursued a private medical practice for more than 30 years in Asheville, N.C., where he was affiliated with Mission and St. Joseph's hospitals. Upon his retirement he played a key role in establishing the College for Seniors at the University of North Carolina. An accomplished photographer, he maintained his own darkroom and was one of the co-founders of the f/32 Gallery devoted to photography. He is survived by three nieces.

1947

Retired internist **Robert Stragnell** died Oct. 22,

2015. Dr. Stragnell pursued a private medical practice, first in Arcadia, Calif., then in Prescott, Ariz., where in addition to his activity in local medical organizations he served a term as president of the Phippen Museum of Western Art and curated and wrote gallery guides to several exhibitions. He served in the U.S. Navy. Survivors include his wife, Elizabeth, three daughters, three sons, 12 grandchildren, and 10 great-grandchildren.

1949

Arik Brissenden, a retired psychiatrist, died Jan. 6, 2016, from complications of Parkinson's disease. He was 89. Dr. Brissenden served in the U.S. Army during the Korean conflict. Later pursuing a private practice in psychiatry on Long Island, he served as head of the Department of Psychiatry at Brooklyn Hospital and Stony Brook University. Dr. Brissenden retired to Boulder, Colo. He is survived by his wife, Sally, three children, and five grandchildren.

Alan Frank, a retired psychiatrist who specialized in treating college students, died June 16, 2015. A member of the faculty in the Department of Psychiatry at the University of Colorado, he served as head of the psychiatric division of the Student Health Service. Upon his retirement he volunteered as a consultant to Family Counseling Services, Job Corps, and the Peace Corps Training Site in Bozeman, Mont. He is survived by his wife, Anita, two daughters, a son, and a grandson.

Milford Fulop, the Gertrude and David Feinson Professor of Medicine Emeritus and the longest serving faculty member at Albert Einstein College of Medicine, where an annual lecture has been established in his name, died Nov. 26, 2015. He served as a medical officer in the U.S. Air Force during the Korean conflict. Dr. Fulop helped to develop the residency program in the Department of Medicine at Bronx Municipal Hospital Center (now Jacobi Medical Center), where he later served as acting chair of medicine. He pursued whole-animal studies on the renal excretion of bilirubin and phosphate and clinical research on acidbase disturbances in patients with pulmonary edema and patients with alcoholic and diabetic ketoacidosis. Survivors include his wife,

Christine Lawrence'56, the Distinguished University Professor Emerita at Albert Einstein College of Medicine. He is also survived by a daughter and a son, both physicians, and four grandchildren.

Howard L. Kantor died suddenly Aug. 13, 2015, of a stroke. Dr. Kantor served as a private in the U.S. Army during World War II and as a captain in the U.S. Air Force during the Korean conflict. Pursuing a private pediatrics practice in Syosset, N.Y., he later moved to Huntington, N.Y., where he specialized in allergy-immunology. Dr. Kantor served a term as president of the Nassau Suffolk Allergy Society of New York. A sculptor, painter, and gardener in his free time, he is survived by his wife, Gloria, two daughters (including Lauren Gorman'77), a son, and seven grandchildren (including Rachel Lisa Berkowitz'09).

Arthur Malin, a retired clinical professor of psychiatry at UCLA, died Oct. 26, 2015. He was 90. He served in the U.S. Air Force. A former member of the Beverly Hills





Munro Proctor'52



Vincent P. Perna'53



Anneliese L. Sitarz'54

Board of Education, he also served on the board of directors of Vista del Mar Child and Family Services. He is survived by his wife, Naomi, a son, Barnet Malin'80, and two grandchildren.

1952

Munro H. Proctor, a retired cardiologist, died Sept. 14, 2015. He served as an Army medic in Europe during World War II. One of New Hampshire's first board-certified cardiologists, Dr. Proctor was a co-founder of the Concord Clinic (now Dartmouth Hitchcock Clinic-Concord). He also served as president of the staff at Concord Hospital, co-director of the cardiology and cardiac rehabilitation service, and co-founder of the New Hampshire Society of Cardiac Rehabilitation. Later in his career he committed considerable time and effort to pro bono health care at home and abroad, working with Project Hope and at Sage Memorial Hospital on the Navajo Nation Reservation in Ganado, Ariz., where he helped train medical staff. Upon retiring from his clinical practice

the World Health Organization in Geneva, serving on a traveling team of doctors addressing various health care needs in the Third World. At age 65 he enrolled in the Boston University School of Public Health, where he earned an MPH in 1992, then devoted several months of each year for 15 consecutive years as a volunteer physician, running a maternal/child health clinic and in various preventive medicine initiatives in Cameroon. In 1997, he and a colleague initiated a micro-credit program, KWIHEED/WINHEEDCAM, now run by endPoverty.org, which provides small loans to families in the developing world. In an alumni questionnaire, he referred to this as his proudest achievement. Considering that the average family in sub-Saharan Africa has five children, he estimated that the program had benefited about 375,000 people. At Boston University, where he joined the faculty as associate professor of medicine, he co-founded a consor-

tium of medical schools to

in 1989, Dr. Proctor joined

facilitate overseas course electives. He also was active with Physicians for Human Rights. Preceded in death by his wife, Julia, he is survived by his partner, Patty Irish.

1953

Vincent P. Perna, a retired pathologist, died Oct. 28, 2015. Dr. Perna served in the U.S. Navy during World War II and as an Army medical officer during the Korean conflict. He was a former instructor in the Department of Pathology at P&S and at the University of Missouri. He worked for some years at Clinical Laboratories in St. Louis then at SmithKline Clinical Laboratories, where he served as national medical director and director of research and development. Survivors include his wife, Jane, two daughters, and a grandchild.

1954

Alfred A. Azzoni, a retired general and thoracic surgeon, died Oct. 23, 2015. Dr. Azzoni served during World War II in the U.S. Marines as a member of Company B, 5th Medical Battalion of the 5th Marine Division FMF on Iwo Jima. He was awarded two Purple Hearts, a Bronze Star, and a presidential citation. He is survived by his wife, Janet, two daughters, and a son.

John Lunt, a retired general surgeon, died Nov. 18, 2015, at age 87. He served as a physician in the U.S. Army, stationed in Berlin. Dr. Lunt served for many years as chief of surgery at Swedish and Porters Hospital (now Porter Adventist) in Denver, Colo., and as president of the Arapahoe County Medical Society. After he moved to Saratoga, Wyo., he became a family practitioner and founded the Platte Valley Regional Health Care Center. In 2012 he was named the Wyoming Medical Society Physician of the Year. Also active in nature conservancy and wildlife preservation, he was the 2009 recipient of the Kurt **Bucholz** Conservation Award. Survivors include his wife, Susannah, a daughter, four sons (including John Lunt'86), and numerous grandchildren.

Anneliese L. Sitarz, professor emeritus of clinical pediatrics at P&S and one of the founding investigators of the Children's Cancer Group at the NIH, died Oct. 3, 2015. A pioneering clinical oncologist, Dr. Sitarz trained at Babies Hospital (now NewYork-Presbyterian Morgan Stanley Children's Hospital), where she later joined the staff. In a landmark paper published in 1965, of which she was the lead author, Dr. Sitarz documented that patients with solid tumors could benefit from chemotherapy that had been used to treat leukemia. A compassionate clinician attuned to the suffering of children as well as the science of the field, she ran a program for many years called "Parents Caring for Children with Cancer," at which a pediatric oncologist and a psychologist met once a month for a question and answer session with patients' parents. Among many other accomplishments, she computerized a pediatric tumor registry running from 1948 to the mid-1980s, the oldest in the country. Reflect-



Michael Bryson'57



Joseph C. Dreyfus Ill'68



Russell N. DeJong'71

ing on her career, she once wrote: "I can think of nothing more rewarding than to have been able to play a decisive role in increasing the survival of the many children with these terrible diseases." At an event organized in her honor upon her retirement, P. Roy Vagelos'54 saluted his classmate as "an allaround great doctor: a wonderful pediatric oncologist, loved by patients and their parents and grandparents, a great investigator, an important educator." Retired pediatric surgeon John Schullinger'55, a friend and longtime colleague, recalled her "dedication to a specialty which by its very nature attracts few physicians, and those it does attract must have those exceptional qualities of empathy, courage, and the emotional stamina to endure and persevere." Dr. Schullinger cited her "caring approach to patients, her meticulous attention to detail, and her interest in everything that had to do with pediatric oncology, including surgery. Anneliese," he concluded, "you have been the

good doctor in every sense of the word." Dr. Sitarz was among the women honored in 2005 in an exhibition at the National Library of Medicine titled "Changing the Face of Medicine: Celebrating America's Women Physicians."

1956

Retired surgeon Howard R. "Skip" Nay died Oct. 6, 2015, following a stroke.

2015, following a stroke. He served in the U.S. Air Force Medical Corps, stationed in Ankara, Turkey. A former member of the clinical faculty in the Department of Surgery at P&CS, he served for many years as senior attending surgeon and chief of the surgery "A" service at St. Luke's Hospital in New York. Preceded in death by his wife, Geraldine, he is survived by three daughters and four grandchildren.

1957

Michael F. Bryson, a

retired pediatrician, died Nov. 22, 2015. He served in the U.S. Air Force and continued in the reserves, retiring with the rank of colonel. A longtime member of the clinical faculty in the Department of Pediatrics at the University of Rochester/Strong Memorial Hospital in Rochester, N.Y., he later practiced occupational medicine as a physician at the Eastman Kodak Company. After moving to Bronxville, N.Y., he served as a member of the volunteer teaching staff at the Westchester Medical Center. Preceded in death by his first wife, Barbara, he is survived by his second wife, Laura, a daughter, six sons, and 15 grandchildren.

Harvey Zarem, a noted retired plastic surgeon, died Nov. 1, 2015, at age 83. Professor of surgery emeritus and chairman emeritus of plastic surgery at St. John's Hospital, an affiliate of UCLA School of Medicine, he was cited in 1999 in Town and Country Magazine's directory of top cosmetic surgeons in the United States. Following many years of private practice in Santa Monica, Dr. Zarem shifted his home and base of operations to his native Savannah, Ga. He is credited with helping pioneer many surgical

techniques in common use today, including liposuction and reconstructive postcancer surgery of the breast. He also was known for his innovative approaches to eyelid surgery and treatment of vascular malformations in infants and children. He is survived by his wife, Beth, three daughters, and three sons.

1961

Eleanor M. Townsend died Dec. 2, 2015. A retired member of the clinical faculty in the Department of Psychiatry at P&S, she served for many years as director of the Harlem Center for Child Study. Dr. Townsend also served as a psychiatry consultant to Prisoners' Legal Services. Survivors include her husband, Monroe Chasson, two daughters, and three grandchildren.

1968

Joseph C. Dreyfus III, an internist specializing in endocrinology, died Sept. 26, 2015. Dr. Dreyfus was a member of the clinical faculty in the Department of Medicine at Weill Cornell Medical College. He is survived by his wife, Susan, two daughters, two sons, and four grandchildren.

1971

Russell N. DeJong Jr., an obstetrician/gynecologist who taught at the Maine Dartmouth Family Practice Residency Program, died Jan. 30, 2016. He previously taught at the University of Washington, where he promoted innovative programs to deliver women's health care to the underserved. He also served as medical director of the Family Planning Association of Maine and worked with the Maine Medical Association on projects concerning quality of care, safety, and justice in medical care. He received, among many honors, a citation from the National Abortion Federation, saluting his commitment to reproductive freedom and meeting the needs of women from all backgrounds. His is survived by his wife, Janetha, a daughter, and a son.

Other Alumni Deaths

Ira Snow Jones'43 Robert L. Spitzer'66



Clyde Y.C. Wu'56, 1931-2015 By Peter Wortsman

Clyde Y.C. Wu, Columbia University's longest-serving trustee, a longstanding member of the Columbia-Presbyterian Health Sciences Advisory Council, and one of the most generous and farsighted alumni in the history of P&S, died Oct. 7, 2015.

Dr. Wu, clinical professor of medicine emeritus at the Wayne State University School of Medicine in Detroit, was also a respected cardiopulmonary specialist at Oakwood Hospital in Dearborn, Mich. He served as a member of the Board of Trustees of Columbia University for 13 years, 10 of which he chaired the Health Sciences Committee, overseeing the affairs of the medical center. He also served on the CUMC Board of Advisors.

He and his late wife, Helen, endowed the Clyde and Helen Wu Center for Molecular Cardiology, five professorships, and two assistant professorships. In addition, they sponsored the Clyde and Helen Wu Distinguished Lecture Series and supported many aspects of medical student life, including musical, theatrical, and social activities, and installed a music room in their names at Bard Hall. Their proudest accomplishment was the reestablishment of the relationship between P&S and Peking Union Medical College in Beijing and, through their support of the Sino-American Exchange Program, the fostering of a vigorous exchange of clinical knowledge and expertise between P&S and major medical schools in China, culminating in the endowment of the Wu Family China Center for Health Initiatives.

Born in Hong Kong in 1931, one of nine children, Dr. Wu had a personal and medical odyssey that took him from the hardships and challenges of rural life in the Chinese heartland, where the family fled the Japanese occupation during World War II and where, as a young man, he first felt the calling to medicine, to P&S, where, as one of only two Asian students in his class he fulfilled his boyhood dream of becoming a doctor. His P&S admissions interview with the dean of students, Dr. Aura Severinghaus, made a profound impression on both the interviewee and the interviewer. As a young man, Dr. Severinghaus had been one of a select group of promising medical academics to teach and pursue research on the faculty at PUMC in Beijing. The school was founded in 1921 by the China Medical Board of the Rockefeller Foundation. Dr. Severinghaus warmly welcomed the young applicant, and Dr. Wu never forgot the kindness.

"First putting the stethoscope to my ear," as he recalled in an alumni profile, "the thump of the human heart was music to my ears, oh my!"

Dr. Wu interned at the University of Rochester and pursued a medical residency and a fellowship in cardiology at Boston City Hospital, where he engaged in research on the biochemical changes caused by cardiac failure, dividing his time between the clinic and the lab. In 1961 he returned to Hong Kong as a lecturer in cardiology at Hong Kong University Medical School, where he helped start up one of the first cardiac catheterization labs. (As a medical student he had rotated through Bellevue, where Dr. André Cournand and Dickinson Richards'23, who shared a Nobel Prize for their development of heart catheterization, were prominent faculty members.) Returning to the States, he joined the faculty in the Department of Medicine at Wayne State University, where he taught and pursued research on cardiac metabolism under Dr. Richard Bing. He also joined and subsequently became chief of the pulmonary division at Oakwood Hospital and served as a principal member of the cardiac catheterization unit at Detroit General Hospital. Following several years of teaching and research, he decided to devote himself to clinical practice full time. In 1973 he became a fellow of the American College of Cardiology and in 1981 achieved the distinction of fellowship in the Royal College of Physicians.

In 1992 the China Medical Board discontinued support for postdoc fellows from Beijing and Hong Kong who wanted to pursue advanced training in America. At the urging of the dean of Hong Kong University Medical School, Dr. Wu's sister-in-law, Lady Ivy Wu, agreed to step in and lend her support but only if Dr. Wu would act as an adviser. Dr. and Mrs. Wu enthusiastically participated in the selection process. He later decided to select fellows from the ranks of junior faculty in the Department of Medicine at PUMC and other Chinese medical schools and support their training for a year at P&S.

As the culmination of their commitment to P&S and China, Dr. and Mrs. Wu bequeathed a considerable sum to the endowment of the Wu Family China Center for Health Initiatives. Other Wu family members, including Dr. Wu's brother, Sir Gordon Wu, have likewise lent their support. "Whether our efforts have done any good in the long run, only history will tell," Dr. Wu once reflected, "but both sides, Columbia and China, have benefited, and this has brought Helen and myself great joy. You cannot do everything in life, but if you choose the things that you like, and do the things that you like, and do the things that have meaning for you, and know that you have done your best, you can be happy."

Preceded in death by his wife, Helen, Dr. Wu is survived by two sons, both physicians, Roger, a child psychiatrist, and David, a chest specialist, and four grandchildren. He also is survived by a niece, June Wu'96, a member of the P&S faculty.

PSclub corner

New Clinic: Q Clinic

The Q Clinic is the school's newest student-run free clinic, dedicated to serving homeless lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI) youth. Clinic organizers say this is the first student-run free clinic in New York City to serve this demographic.

Studies have shown that while LGBTQI youth are at an especially high risk for a variety of medical and psychiatric problems, they are hesitant to seek health care out of fear of discrimination. Providers themselves often do not feel prepared or trained to address the specific needs of this group. The clinic's mission is to provide free, LGBTQI-friendly medical care to this underserved and vulnerable population while teaching future doctors to practice medicine in a humanistic and sensitive way.

At Q Clinic, students are trained in the specific health needs of the LGBTQI population. Under the supervision of attending physicians, students at the pre-clinical and clinical stages of medical education work in pairs to take histories, perform physical exams, and generate assessments and treatment plans for their patients, including prescriptions and referrals. Q Clinic also takes an active interest in promoting awareness of LGBTQI issues on campus through activities and panel discussions. The clinic operates Wednesday evenings out of the Metropolitan Community Church of New York in downtown Manhattan. More information is available by sending email to qclinic@columbia.edu.

— Yichun Fu'19



Dígame Mas: Expanding the Spanish Experience

Dígame Mas is one of the newest P&S Clubs, stemming from the Dígame summer experience in which students become immersed in the culture



of Washington Heights while doing a communitybased summer research project and taking Spanish classes.

Now, students can engage in the same mission—to learn about Washington Heights and connect with the neighborhood and its residents throughout the entire academic year via language, service, and cultural activities and health education programming. Students can work on their Spanish by participating in our popular "Familias" program, where they are grouped with other students of varying Spanish-speaking abilities into a "family" and learn/practice new medical Spanish vocabulary. We also offer opportunities to participate in a Spanish mock patient interview, tutor and/or mentor adolescents from the community (many of whom are learning English as a second language), and go on cultural outings (such as seeing exhibits and shows at El Museo del Barrio), among other activities.

This club is open to any interested student on the CUMC campus, and our current board has students from almost all of the CUMC schools, as well as the Graduate School of Arts and Sciences. Our board meetings take place every other week on Friday evenings, and we aim to plan at least one event a month for the CUMC community, in addition to the ongoing programming we offer. For more information or to join our list serv, students may contact Tina Roa, tr2468@ columbia.edu, or Emma Marquez, egm2133@ columbia.edu, or visit our website, www.digame mas.wordpress.com, to learn more.



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quotable columbians

"I take pictures like a writer writes. Each negative is a note in the manuscript. After all, what photography is, is to write with light."

— Elizabeth "Libby" Wilcox

Libby Wilcox, a prolific photographer at Columbia's medical center from 1957 to 1991, used her camera to capture the medical center during the late 20th century. As the wife of P&S alum and faculty member Herbert "Bud" Wilcox Jr.'34, Mrs. Wilcox was given unimpeded access to the workings of the medical center. Her camera captured the daily routines and extraordinary events of a great academic medical center during a period of tremendous change for American medicine. She photographed medical legends Virginia Apgar, Dana Atchley, and Robert Loeb; such clinical scenes as pediatric open-heart surgery in 1958; and long-vanished medical center landmarks, including Maxwell Hall and the Fort Washington Avenue greenhouses. Dr. and Mrs. Wilcox donated her archive of more than 100,000 images (most in negative form) to Columbia in 1991.



Libby Wilcox took this photo in February 1964 of students in the former medical library, located in the Presbyterian Hospital. The Faculty Club now occupies part of the former library space.

A digital exhibit of Wilcox photos is available online at http://library-archives.cumc.columbia.edu/reflected-moments.