

# College of Medicine

ALUMNI MAGAZINE



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THE CAMPAIGN FOR DREXEL

**WINTER 2017/2018**

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**ON THE COVER:**

Brian Alper, MD, harnesses his passion for  
 information to help patients on a big scale.

Photo: Mark Garvin



**FEATURED**

**THE YEARS DISAPPEAR!**

Reunion weekend brings together  
 friends from across classes and  
 programs. Here, Ellie Cantor,  
 PhD, MCP '79, embraces  
 Melody Stancil, MD, MCP '71.

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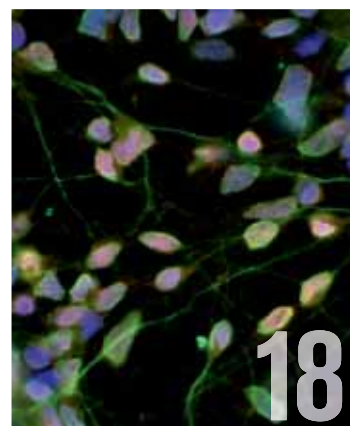
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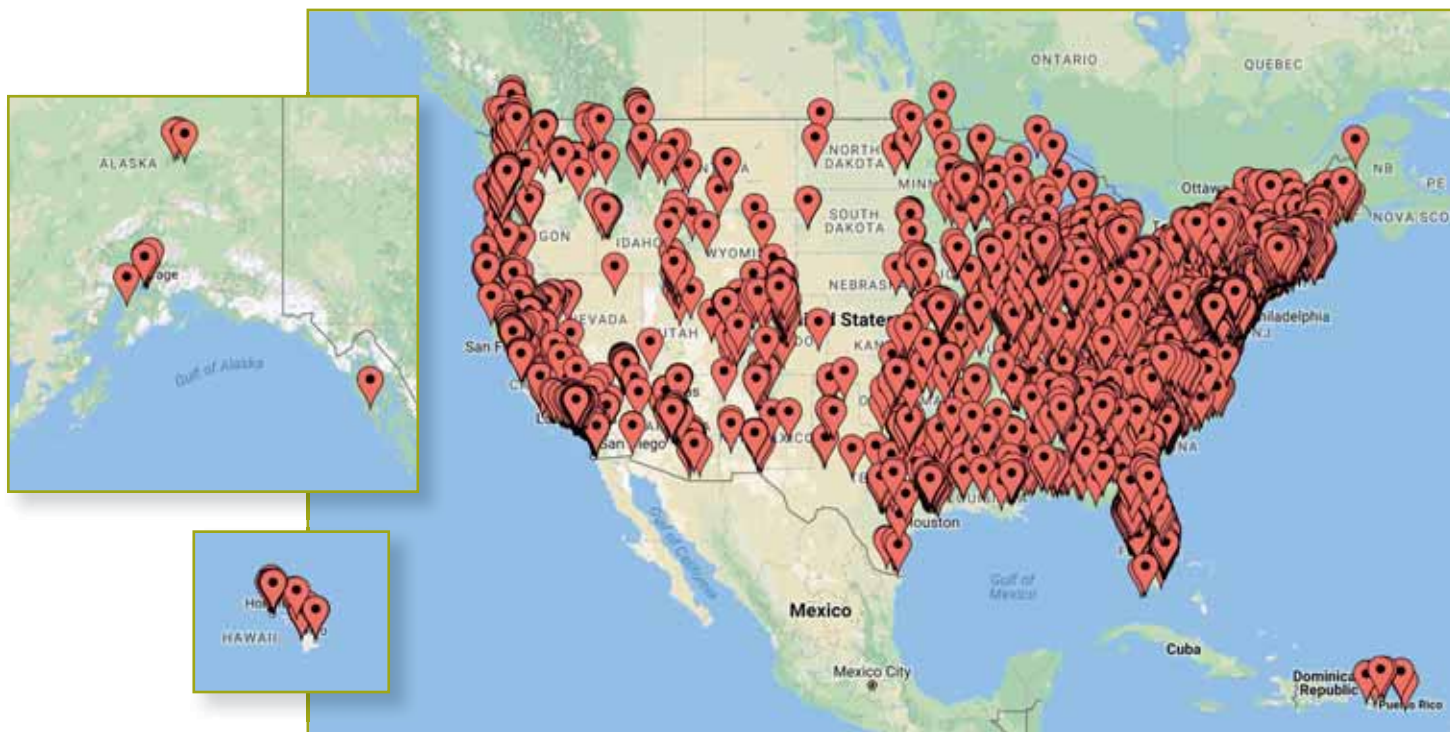
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## 23,425 MDs conferred over 169 years

12,334	Hahnemann	1848-1998
3,072	WMC	1850-1970
3,333	MCP	1971-1998
946	MCP/HU	1999-2002
3,740	Drexel	2003-present
<b>TOTAL</b>		<b>23,425</b>

## Alumni are everywhere

The pins represent nearly 16,600 physicians and scientists who graduated from the College of Medicine in the United States alone.



### WHERE ARE YOU?

Interested in telling your story? Fill out the online form, or refer a friend, at <https://goo.gl/BCzsFj>. Your profile may be featured on the alumni pages of the College's website (a staff member may contact you for more information). Looking to simply update your mailing address, phone number or email in order to receive the most up to date information about the College and alumni events? Email the new information directly to [medical.alumni@drexel.edu](mailto:medical.alumni@drexel.edu).

# Into the Future

Dear Fellow Alumni,

Welcome to the Winter 2017/18 edition of the *Alumni Magazine*. This issue features the topic of information in medicine, an area in which Drexel is leading the way. The University and the College of Medicine play a direct role in today's society and its future, as additional articles demonstrate.

From our time as Hahnemann Medical College and Woman's Medical College of Pennsylvania, our medical school has always been a school of opportunity. This was also A.J. Drexel's vision more than 125 years ago when he established his Institute of Art, Science and Industry in the heart of Philadelphia and opened its doors to people of all backgrounds. Today more than ever, the world needs Drexel University and the College of Medicine to continue to provide access to a diverse group of the best and brightest future physicians and researchers.

On November 11, 2017, Drexel University announced its most ambitious campaign to date, "The Future Is a Place We Make. The Campaign for Drexel," with a \$750M goal. I hope you will be able to support this campaign. Philanthropy keeps us competitive for the best talent through scholarships and professorships. It helps fuel innovation and accelerates our impact. It is the margin of excellence. The College of Medicine will play a crucial role in this campaign as we work to expand our alumni engagement and grow our next generation of alumni leaders.

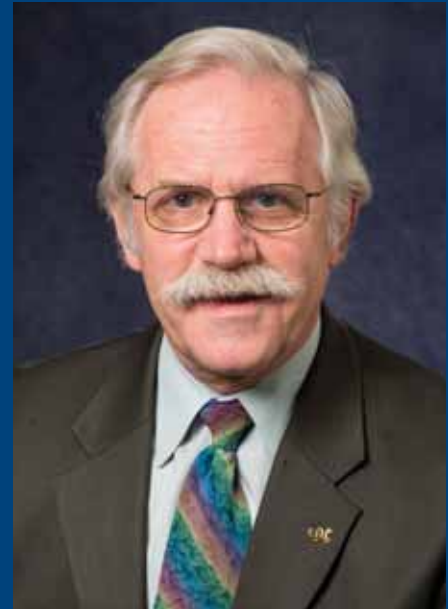
At the back of this magazine, you will find an invitation for you to have lunch with a member of Drexel's team. I encourage you to reach out to them to have a conversation about the state of our medical school today and to tell your own story.

Finally, we have many high-quality, interesting events planned throughout the coming year where I hope to see you. In particular, please save the date for Alumni Weekend: May 17-19, 2018.

Take care,



Tim Manzone, MD, MCP '89, JD  
President, Alumni Association Board of Directors



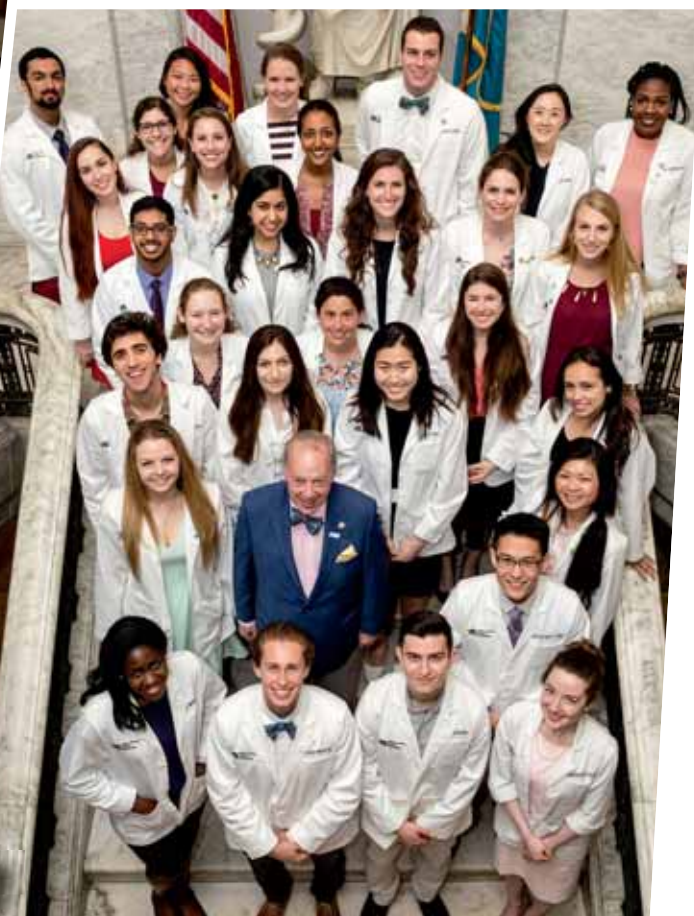
# Gifted:

## Medical Students Thank Their Benefactors

The generous donors whose gifts support our medical students were celebrated at the Benefactors Jazz Brunch held last spring at the College of Physicians of Philadelphia. Many students came to the event to meet and thank these alumni and friends who have become engaged in their medical education and helped to lighten their financial concerns. The fandom flowed both ways.



*Seated: Dean Daniel V. Schidlow, MD; Luke Pasick; Claire Reichlin; Chancellor Emeritus D. Walter Cohen, DDS.  
Standing: Hannah Gold, Stephanie Sisak, Sonja Eagle, William Foos.*



1. Seated: Christie Huddleston, MD, MCP '78; Claudia Plottel, MD, MCP '84; Lawrence Stam, MD, and Marlene Rackson, MD, MCP '82. Standing: Kelly Vitale, Kathleen Nelson, Ashley Huber. 2. Robert Abbott, MD, MCP '85, and Amy Caplan, MD, HU '81, with Preya Patel and Asit Patel, MD, MCP '88. 3. Seated: Lois Wildrick; Vice Dean Valerie Weber, MD; Micki Edelson; Robert Foust; Lanny Edelson, MD, HU '67. Standing: Kenneth Wildrick, MD, HU '69; Celeste Swain; Rita Akumuo. 4. Louise Sonnenberg, MD, WMC '67, Connie Tran, Ivonne Martinez. 5. Rachel LeMalefant and Yvonne Brockman. 6. Dean Schidlow and 29 grateful medical students.

# THE BIRTH OF EMERGENCY MEDICINE

By Nancy West

The emergency department where patients receive care today is dramatically different from the ER they would have visited before the 1970s. Back then, the emergency room was just that — one big room where patients came for care. There were no emergency medicine specialists. ERs were staffed by interns and residents who called attending physicians in various specialties when they needed help in treating a patient — a far cry from the sophisticated emergency departments of today.

The movement for a specialty in emergency medicine arose out of a trend in medicine toward specialization that started growing after World War II, according to David Wagner, MD, former chair of the College's Department of Emergency Medicine, who started one of the first emergency medicine residencies in the country at Drexel's predecessor school the Medical College of Pennsylvania. Wagner is widely recognized as one of the founding fathers of emergency medicine.

"As more doctors specialized, it became increasingly difficult for patients to find a general practitioner in the local neighborhood," Wagner explains. "Out of necessity, patients began going to the next level of care — the local hospital — and the entry point for service is the ER. Consequently, hospitals became inundated with patients arriving for care through emergency services. Emergency medicine was the first specialty that was patient driven and community centered."

## STAGE 1: MOONLIGHTING

Initially, hospitals tried to handle the influx by sending an attending physician to work in the ER. At Woman's Medical College (MCP's predecessor), they began to handle the situation in the 1960s by hiring a physician to work in what was then a very primitive ER for eight hours during the daytime. They soon realized that they needed coverage in the evening as well. Wagner, who had joined WMC in 1965 as a full-time faculty member in the Department of Surgery, became the evening ER physician.

"The hospital offered me \$5.63 an hour to work in the ER from 6 p.m. to 2 a.m., and

they said I could keep what I earned in addition to my salary of \$14,000 as a faculty member. So I jokingly tell people that I got into emergency medicine for the money," says Wagner. "I began working every other evening in the ER while at the same time fulfilling my responsibilities as a full-time pediatric surgeon and general surgeon."

Wagner became director of Emergency Services at Medical College of Pennsylvania, and went on in 1971 to establish the first emergency medicine internship and the second emergency medicine residency in the country (the first three-year residency nationwide).

A senior medical student, Pamela Bensen, MD, MCP '71, played a key role in these endeavors. In 1968, she was "bitten by the emergency medicine bug" when she took dinner to her roommate who was doing a shift in the ER.

"I loved that you went from patient to patient and you never knew what was coming in next," Bensen recalls. "I began hanging out in the ER whenever I could because I loved the environment. I'm an adrenaline junkie." As a result, she wanted an internship that was primarily located within the Emergency Department.

Serendipitously, she found herself in the MCP cafeteria one day sitting across the table from Wagner and Ethel Weinberg, MD (HU '61), who was an assistant dean of students. "They asked me what I wanted to do as a resident," she says. "I said that what I wanted to do didn't exist — an emergency medicine residency. Coincidentally, they had been sitting there talking about starting such a program."

Dean Weinberg was very supportive of the idea. She had joined WMC in 1968 to establish the Retraining Program for Women Physicians, for women who had been away from practice. As part of this role, she was also concerned with prevention — how to help women avoid leaving practice in the first place. "I identified emergency room medicine, with its flexible hours, as an area well suited to women with children," she says.

"With support from the Department of Surgery — and Dave Wagner as the respon-

sible surgeon — we were able to establish an acute care fellowship as part of the retraining program. Getting an internship accredited seemed like a natural next step."

Pam Bensen was recruited to fly to Chicago to testify at the AMA committee that was considering an acute care/emergency medicine residency program. Later, Weinberg also went to Chicago and met with the committee. Eventually, MCP received recognition and approval by the AMA Committee on Medical Education for an acute care internship. It was the only one in the country. Wagner became its program director, and Bensen became its first intern/resident.

## THE FIRST INTERNSHIP

The program started with four interns and two full-time faculty members, including Wagner. "In the beginning, the interns were teaching themselves," says Wagner. "I had taught myself," he adds. "We also used faculty from other departments to come in and give lectures, but gradually, as residents finished their emergency medicine residencies, we recruited them to become the faculty."

Bensen remembers, "There was no one in the Emergency Department responsible for me in my first year. There were morning rounds, but most of the time we were on our own. There were no residents above us. None of that was unusual back in 1971.

"The most common question I got was, 'Bensen, what the hell is an emergency physician?' I answered, 'You teach me how to take care of your patients between 2 a.m. and 8 a.m. so you can sleep. When you are ready to take care of the patients, they will have had the care you wanted.'

"In the beginning, we did the best with what we had. I felt I got a fantastic education because there is nothing like learning from your mistakes. Plus, back then I was able to follow my patients after they were admitted. I went to the clinic to see the patient when they came back in a week. I was able to think through and analyze what we had done and what could have been done better. That doesn't happen in today's current structure."



# EMERGENCY



The demand for emergency medicine physicians was intense. Hospitals wanted to have emergency-trained physicians running their emergency departments. Among the strongest supporters of emergency medicine residencies were hospital administrators. They wanted individuals who could do the job they wanted done, and this new breed — the emergency physician — was doing the job better than it had been done before.

“At one point, we had 16 to 18 residents per year, plus we started to spin off some subspecialties in emergency medicine such as the toxicology program, which became board recognized,” Wagner notes. “Pediatric emergency medicine grew out of activities at MCP, Children’s Hospital of Philadelphia and St. Christopher’s Hospital for Children, and that has become a subspecialty. We were also

developing an Emergency Medicine Services subspecialty, which just recently was formally recognized by the American Board of Medical Specialties.”

## **EVOLUTION AND OFFSPRING**

By the late 1970s, emergency medicine residencies were popping up all over the country. (Today there are some 180 programs nationwide.) The American College of Emergency Physicians organized the first Board of Emergency Physicians, on which Wagner served, but the specialty wasn’t officially recognized by the American Board of Medical Specialties until 1979. Bensen was the first woman to serve on the board of directors of the American College of Emergency Physicians and, fittingly, served on the committee

for graduate education. Also fittingly, MCP published the first emergency medicine textbook.

One of the future emergency physicians who was attracted to MCP’s program and, according to Wagner, became key to the specialty was Robert McNamara, MD, who completed his residency in 1985. “He was committed to the idea that you must be certified to be recognized as an emergency physician,” explains Wagner. McNamara started the American Academy of Emergency Medicine, which required certification for membership.

Richard Hamilton, MD, HU ’87, joined the medical school’s Emergency Medicine faculty in 1997 and has led the department since 2006, a period of great growth. His admiration for Wagner knows no bounds. “We owe such a debt of gratitude to Dave Wagner for all his guidance, teaching and example of what an exemplary emergency physician should be,” says Hamilton. “Today our department includes emergency medicine specialists and subspecialists in medical toxicology, occupational and environmental medicine, and emergency bedside ultrasound. We also recently appointed Ted Corbin [MD, MCPHU ’97] as the department’s first vice chair for research.”

Emergency medicine continues to grow and change. “We are in an era where baby boomers are retiring every 10 or 15 seconds, creating an older population that will have a need for emergency medicine,” says Wagner. “These folks will be living in home care or assisted care or continuing care and will have acute care needs for chronic conditions. With telemedicine, we can do some amazing things at the bedside now in assisted living with a combination of ultrasound and Skyping,” he continues. “Someone is always on duty for these calls. That was the genesis of emergency medicine in the beginning and continues to support its growth by managing the patient at the point of the problem rather than transferring them to the emergency department.

“Still,” Wagner concludes, “as long as hospitals are part of the health care system, the emergency department will be the hub.”

Management of non-valvular Atrial Fibrillation Some Game Changers in New AFib Guidelines. Management of acute atrial fibrillation and atrial flutter...presenting with irregular pulse, chest pain, dyspnea, syncope... Obtain neurology consult...Practice Implications of the Atrial Fibrillation Guidelines. The New STS Atrial Fibrillation Guidelines. 2016 Guidelines for the Management of Atrial Fibrillation Following the European Society of Cardiology Guidelines. Pharmacologic Management of Newly Detected Atrial Fibrillation: An Updated Clinical Guideline. New Treatment Guidelines: Atrial Fibrillation. New-onset atrial fibrillation. Atrial Fibrillation Guidelines. Guideline for the Management of Patients With Atrial Fibrillation A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Consensus Statement on Catheter and Surgical Ablation of Atrial Fibrillation. Antithrombotic Therapy for Atrial Fibrillation. ESC Guidelines for the Management of Atrial Fibrillation

# SMARTER HEALING

## USING INFORMATICS TO HELP PHYSICIANS AND PATIENTS MAKE BETTER DECISIONS

By Elisa Ludwig

As a physician and the founder of DynaMed, Brian Alper, class of 1996, knows that the right data set, used in the right way at the right time, can hold the answers to most of health care's problems.

"When was the last time you used a paper map to take you from Point A to Point B?" Alper asks. "Today I expect my iPhone to tell me how to walk three blocks and see what restaurants are available in whatever city I happen to be in. Navigating health care is more complex than navigating city streets, but as we apply functional solutions and current technology to support

such navigation, the power of medical informatics becomes the power to share information in real time."

Alper's passion for computers began when he taught himself basic programming in elementary school and he quickly found that data was a valuable asset. "My father was a roofer and a truck driver. Despite limited resources, he bought and sold some low-cost real estate properties and set up personal loans to help people who could not get traditional mortgages. When I was in sixth grade, I used programming to create an amortization schedule for him so he could track his mortgages."

Later, he applied to medical school with the idea that he would practice in a rural area and help those who had limited access to care. While he was at Hahnemann, in the pre-internet era, he wanted to maximize his time getting hands-on experience in patient care settings and spend less time memorizing facts. He saw that he needed a systematic way to organize and consume the information he was getting in his classes.

Again, he turned to his computer and unknowingly began developing the foundation for a medical informatics hub. "I started creating what was essentially a database of my learning. At the time, I had a WordPerfect file for each topic — how to diagnose and treat each disease or condition. Since each file name could only have eight characters or letters, I made a table of contents that went on for 60 pages. Ultimately, these notes were more useful to me than textbooks because they were focused on patient care and because they were something I could bring with me wherever I went and easily reference."

During his fourth-year rotation in rural Tennessee, Alper used his notes often. He found that they made a big difference for patients, some of whom had been diagnosed incorrectly, and they made a difference for the doctors in practice every day. Alper set up the notes on their computer so they could be used after he left. "I realized that in 1995 in rural America, real doctors needed to have access to this information. I was going to figure out a way to make it available."

By December of that year, Dynamic Medical Information System, or DynaMed for short, was born. "My mission then, and for more than 20 years, was to provide the most useful information for health care professionals at the point of care," he says.

Fibrillation Treatment & Management. These 2016 Atrial Fibrillation Guidelines are based on the current state-of-the-art evidence in 2016. Atrial Fibrillation Guideline Summary. Management of atrial fibrillation...AHA clinical performance and quality measures for adults with atrial fibrillation or atrial flutter. New ACC/AHA/ESC Guidelines for the Management of Atrial Fibrillation: Highlighting Stroke Prevention and Ca... and atrial flutter...presenting with irregular pulse, chest pain, dyspnea, syncope...Atrial fibrillation: Anticoagulant therapy to prevent embolization...2016 ESC Guidelines for the management of atrial fib... 2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration...Guideline for the Management of Patients With Valvular He

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...2016 ACC/AHA clinical performance and quality measures for adults with atrial fibrillation or atrial flutter. New ACC/AHA/ESC Guidelines for the Management of Atrial Fibrillation: Highlighting Stroke Prev

## INFORMATION MEETS INTEREST

Alper spent the next several years — as he simultaneously worked through his family medicine residency and a faculty development/research fellowship — creating a network of physicians to help generate and review content. He worked with programmers to build a database so that the information could be easily shared, updated and accessed. Word spread quickly and the product grew at a powerful clip as Alper’s concept dovetailed with a growing interest in evidence-based medicine.

“At that point, I had never heard the term evidence-based medicine, but I found that many physicians were looking for this information and wanted support in their clinical decision making,” he says. “For most of them, the reality was that they spent all day with patients, and there was no time for the constant learning required to stay on top of the latest research.”

In 2005, EBSCO Health acquired DynaMed, and Alper’s product was rebuilt with more content, mobile capabilities and new features. It was relaunched in 2014 as DynaMed Plus. Today, DynaMed Plus covers more than 5,000 topics, with hundreds of contributors providing and reviewing information and thousands of physicians using it daily, linking directly from patients’ electronic medical records. Millions have access to it through subscriptions at their hospitals, health care systems or professional societies.

The basic concept that Alper developed remains the same — a service that provides the best answer to real-time questions physicians must answer during patient encounters. The biggest change is that recommendations are now labeled as “strong” if they are supported by a high degree of confidence and independent verification, and “weak” if they are not. “It’s no longer enough to just have the facts. Doctors today are also looking for value judgments but still need to know the trustworthiness of those value judgments,” Alper says.

## A PATIENT APPROACH

Informatics also now helps answer questions that could not be handled well by summarizing facts and recommendations alone, such as patient care scenarios requiring individual attention. One example is the problem of atrial fibrillation, a common cardiac condition for which there

are at least 11 different treatments that help prevent a stroke. Yet each patient, depending on their risk of stroke or bleeding, medical history and medications, will require a different approach.

Physicians have come to rely on informatics in the consultation room as they’ve moved from what Alper calls “just in case” learning to “just in time” learning. Now, Alper says, physicians are looking for “just for me” learning that takes into account patient diagnoses, medications, lab values, insurance plans and personal desires.



Mark Garvin

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Indeed, a generation of health care providers only knows the practice of medicine with these aids. "It's become critically important to have evidence-based information in the order set. We have all this data now that we can be using, not only to support decision making but to educate health care professionals in real time, which would be impossible to do otherwise," says Baber Ghauri, MD, MBA, class of 2004, chief medical information officer of St. Mary Medical Center and the East Division of Trinity Health system (see "Following the Data to Better Care").

Alper is currently working on a new project: patient decision aids that promote greater participation in shared decision making. "We have started seeing the mission as applying not just to doctors but to patients themselves," he says. "The new system we're developing is designed to address the questions patients will have. Doctors can pull decision aids from the system that offer option grids to compare a manageable number of treatment possibilities and help patients conduct their own risk-benefit analysis through the filter of their individual values. The conversation could be put into the medical record and the patient portal, and it could show the cost for the treatment in a generic way."

He's also been using informatics to help shape health guidelines, which can differ across organizations, professional bodies and nations. In 2011, he worked with the Costa Rican government to create comprehensive national guidelines for the treatment of breast cancer, adapting the recommendations from DynaMed's vast body of data. He's now working with international leaders to map out better ways to develop guidelines and convey that information to physicians and patients.

**Informatics also has great potential in population health management, with the data scaled in any direction to help a larger swath of patients.**

## THE BIGGER PICTURE

Informatics also has great potential in population health management, with the data scaled in any direction, across multiple platforms to help a larger swath of patients, Alper says. "If you have limited resources — and who doesn't? — you can use informatics or data analysis to identify the most common and important problems to address with your resources. You may discover a problem is common enough that you develop innovative mass solutions. You may discover 'unpredicted health' and find a subgroup of the population with fewer problems than expected, and perhaps learn something that could be beneficial for others. I remember a drug warning that a diabetes medication common at the time caused liver failure. Before computer-based records, I had to wait until each of my patients with diabetes came back for a scheduled visit to recognize, first, which of my patients had diabetes and, then, which ones were taking the drug so I could warn them and switch medicines. Today, we can find those patients quickly across the population and let them know immediately."

Alper envisions informatics playing a role in fundamentally reshaping the way health care is delivered, particularly with regard to Medicare. "We still count the number of things we document while examining the patient to determine how much we get paid for providing health care services. The electronic medical record has largely grown to document this for payment. Imagine if your doctor was paying more attention to you and less to typing into the computer during a visit.

"The change I would like to see in Medicare is to make the payment rules no longer based on documenting so many observations but to shift toward measures of volume and complexity of decision making, perhaps simply documenting the number of decisions made with the patient. The result would be medical records that are more meaningful and greater engagement between physician and patient. If we can find the better interplay between informatics and how we pay for health care, we can get much better value in what we get out of health care. I have suggested such changes, and I'm hoping that this will ultimately be one of the most influential changes I can be part of."

Alper no longer sees patients, as DynaMed and his leadership role is more than a full-time job, he says. While he misses practicing medicine, the personal rewards of his work in informatics, given their potential to positively effect change

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on a much larger scale, have been great. "I like solving problems and making an impact. I may not get the many instant gratification reactions that I got when I was seeing patients, but I still get [positive feedback] indirectly when physicians using the tool tell me stories about how it makes a difference. I didn't know 20 years ago that the bigger picture was so much bigger."

## FOLLOWING THE DATA TO BETTER CARE

As chief medical information officer of St. Mary Medical Center and the East Division of the Trinity Health system, Baber Ghauri, MD, class of 2004, deploys informatics for decision making across many aspects of management. "My role is to collect data and use it to create meaningful changes in the hospital and health system. Most recently, our hospital leadership has been engaged in conversations about improving communication, and making sure that doctors and nurses check in with each other about each patient, every day. We had discovered that nurses and doctors weren't always having these check-ins, which was an important part of the care process."

Data points provide a clear picture of problems and solutions, but they also serve as a universal language that doctors, nurses, administrators and staff respond to. "It's easy to talk about improving this or that practice, but when you can show people how they are actually performing in a graph or with statistics, that changes the conversation," he says.

In another recent example, Ghauri is helping to improve patient readmission rates by deploying HealthShare Exchange, the regional Health Information Exchange platform for hospitals. "If someone is discharged from St. Mary, and then goes to another emergency department a few days or weeks later, their care manager [at St. Mary] will get a notification. The care manager will call the emergency department doctor to share information they might not have at their fingertips.

In most cases, the patient can be safely brought back to a private care doctor or specialist who can treat them, without having to be readmitted."

Ghauri sees that the scope of his work has evolved in tandem with the health care industry's use of informatics. "The CMIO role has really changed in recent years," Ghauri says. "At first, we were largely just implementation specialists for electronic medical records systems, but now we are more involved with analytics and using data to help drive patient outcomes."

Sometimes that requires questioning the work flow of a given process — often, how things have "always been done." "Recently, we were talking about colonoscopy screenings and how patients need to be referred to a GI specialist to get a colonoscopy. We questioned why we couldn't just send the patient to get a colonoscopy and eliminate the often unnecessary step of initial consultation with the gastroenterologist. Many times it's about leadership and challenging our processes, using the data as a starting point."

As both physician and administrator, Ghauri has witnessed firsthand how health care safety, efficiency and quality have evolved through advances in informatics. The adoption of electronic health records, guided by the objectives of Meaningful Use created by the U.S. HITECH Act, has ensured better treatment and lower costs — a process that is still evolving. "Without a doubt, Meaningful Use has helped us improve patient care," he says. "As we move toward Stage Three [advanced use of



health technology] in the coming months and improving health outcomes, we are looking at better ways to leverage that data to benefit population health."

Ghauri, who still practices internal medicine, has also recently been certified in integrative medicine, and he finds its systemic approach useful both for improving patient health and for thinking about what conventional medicine could be doing better.

"Some people find it odd that I am interested in informatics and also talking about non-conventional treatments. To me, it's not a contradiction. Integrative medicine is 'root cause' medicine, and it has opened my eyes to a lot of issues in health care. Why, for example, do patients that have back pain get a prescription for a painkiller that only masks their symptoms when they could get a \$100 inversion table and a few massage treatments that will address the root cause of the problem? We need to be using more of the information we have and making it more widely available so that physicians and patients can make better decisions."



*HU '67: Drs. (front) Bernard Pekala, Herbert Cohen, Malcolm Galen, Lanny Edelson, Steven Gurland, David Soowal, and (back) John Simmons, James Murphy, Joseph Leone, Stephen Risen, Lawrence Lazarus*



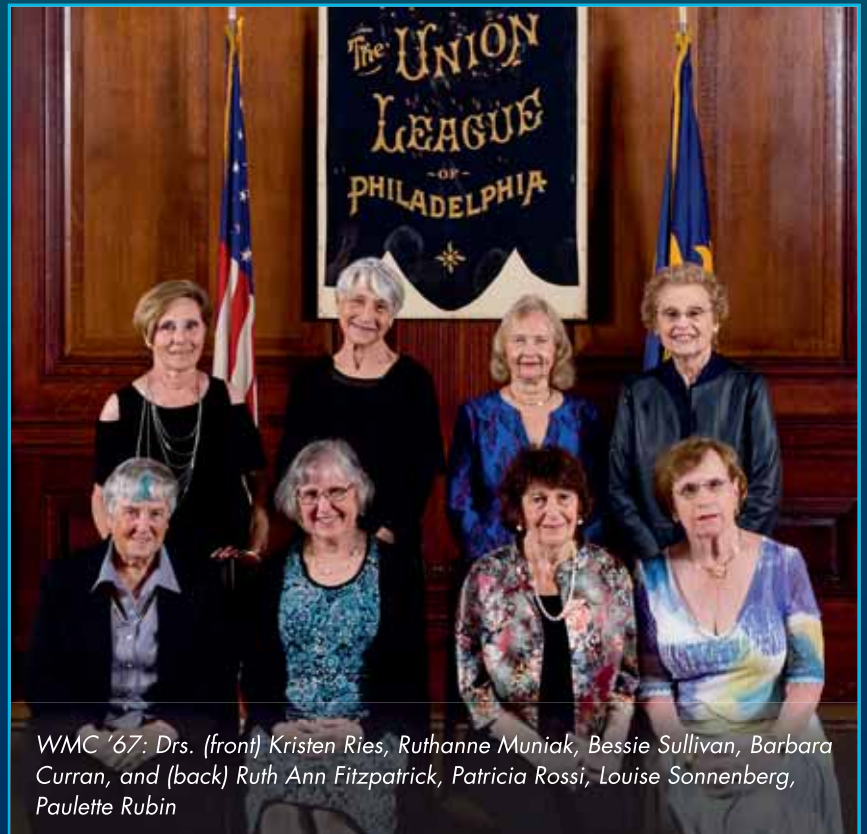
# ALUMNI WEEKEND: THE YEARS DISAPPEAR



*Drs. Patricia Rossi and Ruthanne Muniak*



*Drs. Stephen Risen, Joseph Leone, and Lawrence Lazarus*



*WMC '67: Drs. (front) Kristen Ries, Ruthanne Muniak, Bessie Sullivan, Barbara Curran, and (back) Ruth Ann Fitzpatrick, Patricia Rossi, Louise Sonnenberg, Paulette Rubin*



*Paulette Rubin, Ruth Ann Fitzpatrick, Patricia Rossi, Ruthanne Muniak*



*Members of WMC '67 and their guests gathered before dinner at the Union League.*

## THE GOLDEN DRAGONS

The Classes of 1967 of Hahnemann Medical College and Woman's Medical College of Pennsylvania started their Alumni Weekend early with dinner at the Union League of Philadelphia on Thursday, May 18.



*Robert Ruggiero, Melvyn Greberman, Joseph Leone*



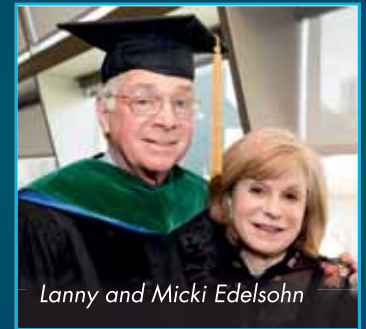
*HU '67: Drs. (front) John Simmons, Robert Ruggiero, Bernard Pekala, and (back) Herbert Cohen, Malcolm Bremer, Steven Gurland, David Soowal, Stephen Risen, James Murphy*

## COMMENCEMENT AT THE KIMMEL CENTER

Members of the Classes of 1967 were invited to robe and were seated in a special place of honor. During the program, the 50-year graduates were acknowledged by Drexel University President John A. Fry.



*Drs. Gurland and Cohen*



*Lanny and Micki Edelsohn*



*Drs. Pekala and Murphy*



*Drs. Bessie Sullivan, Ruthanne Muniak, Kristen Ries and Ruth Ann Fitzpatrick*



*Dr. Bessie Sullivan and Dan Schidlow*



*Liz Comiskey and Malcolm Bremer, MD, HU '67*



*Dr. John Simmons and Schidlow*



*Ruth Ann Fitzpatrick, MD '67, and Alex Nanchanatt, class of 2020*

## 50 YEAR AND GRAND CLASSES CELEBRATION

After Commencement, members of the Grand Classes (graduates of more than 50 years' standing) joined the 50 Year Classes for a gala luncheon at Le Méridien hotel. The alumni of 1967 were inducted into the Golden Dragon Society by Dean Daniel V. Schidlow, MD, and Sucha Asbell, MD, WMC '66.



*Dr. David Soowal and Lanny Edelson, and Micki Edelson*



*The Rev. Harry Johnson; Jamie Johnson; and WMC alumnae Drs. Dorothea Johnson, '56; Sucha Asbell, '66; and Mary Côté, '59*



*Dr. Lawrence Lazarus and Schidlow*



*Melvyn Greberman, MD, HU '67, and friends*



*Dr. Malcolm Galen and Schidlow*





1992 classmates celebrating their 25th Reunion



Drs. Schidlow and Arjun Vikram Kaji

## CLASSES OF 1992 SILVER DRAGON INDUCTION

The Classes of 1992 were inducted into the Silver Dragon Society at a ceremony held at the Franklin Institute before the All-Alumni Reception on Friday evening. They received certificates and a commemorative pin.



Drs. Erin O'Sullivan and Jo-Ann Haney-Tilton



Drs. Schidlow and Abha Amin



Dean Schidlow and Har Chi Lau, MD, MCP '92



Drs. Lisa Marie Rock, Kelly Anne Foley, Deepak Gupta



2012 alumni celebrating 5 years since graduation



1972 alumni and guests



1992: Drs. Cary Dash, Bernadette Davis, Margaret Harbison, Jo-ann Haney-Tilton, Deborah Ann Bankster



1992: Drs. Daniel Clark Fisher, Peter Van Eerden, John Michael Wengryn



Drs. Phyllis and Stephen Baer, both HU '72



Donald Girard, MD, HU '82; Marie Bilello; Joseph Capo, MD, MCP '82; Timothy Manzone, MD, MCP '89, and his daughter, Marcia

## ALL THE CLASSES

An all-alumni reception at the Franklin Institute was the official kickoff of the College of Medicine's Alumni Weekend.



Archivist Matt Herbison shares his wares.



Anne Louise Peters, MD, MCP '72, tries her skills with Kimberly Wasko, CVT, Department of Surgery.

## QUEEN LANE FIELD TRIP

Saturday morning, College of Medicine alumni could tour the Legacy Center: Archives and Special Collections or watch and participate in medical simulations.



Front: Caroline Gurland; Steven Gurland, MD, HU '67; Heather Clauss, MD, MCPHU '02; Lindsay Long; Amy Kaplan, MD, HU '81; back: Morton Rubinstein, MD, HU '61, and Shirley Rubinstein; Dean Schidlow; Timothy Manzone, MD, MCP '89; Robert Abbott, MD, MCP '85



Drs. Ted Corbin, MCPHU '97, and John Rich



Drs. Cary Dash and Vivian Miller, both MCP '92

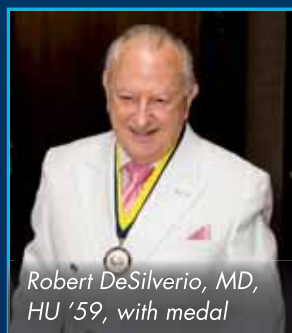
## ALUMNI AWARDS BRUNCH

Following a reunion of their own, past and present Alumni Board members were honored for their service with the first presentations of the Dean's Heritage Award medal, which each received during the Alumni Awards Brunch at The Logan hotel.

Alumni Association President Timothy Manzone, MD, MCP '89, JD, and Awards Committee Chair Richard Shusterman, MD, MCP '83, recognized the Alumni Association Award recipients. The late Robert Ashton Jr., MD, MCP '92, was named Outstanding Alumnus for Professional Contributions. The Emerging Leader Award was presented to Heather Clauss, MD, MCPHU '02; the MCPHU Distinguished Alumnus Award to Theodore Corbin, MD, MCPHU '97, MPP; and the HU Distinguished Alumnus Award to Steven Gurland, MD, HU '67.



Susan Schneider, MCP '92



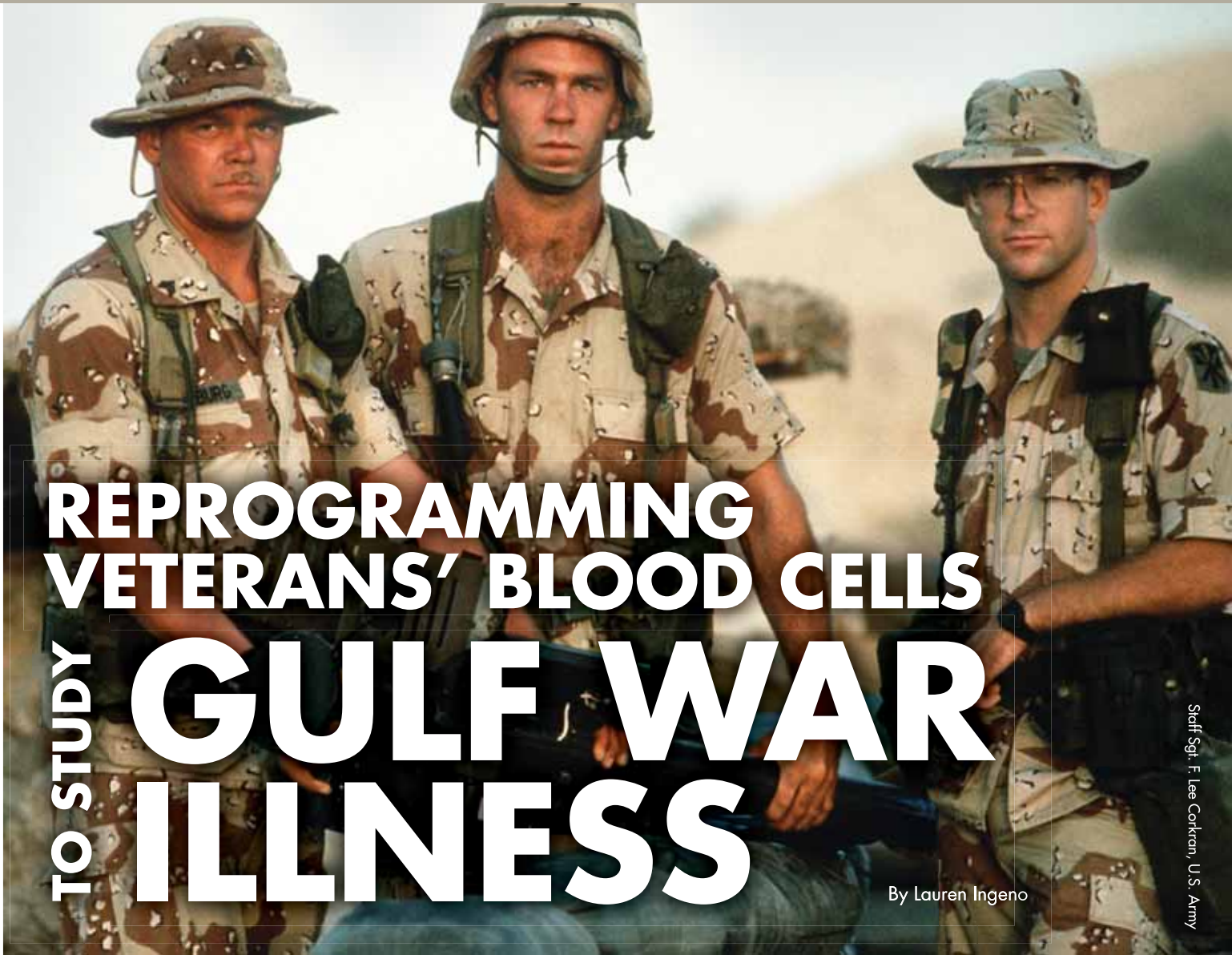
Robert DeSilverio, MD, HU '59, with medal



Drs. Catherine and Mark Codella, both HU '84



Drs. Richard (MCP '83) and Denise (MCP '85) Shusterman



# REPROGRAMMING VETERANS' BLOOD CELLS

# TO STUDY GULF WAR ILLNESS

By Lauren Ingeno

Staff Sgt. F. Lee Corkran, U.S. Army

More than a quarter of the 700,000 veterans who served in the 1991 Gulf War are still suffering from chronic fatigue, memory loss, joint pain, insomnia and stomach problems. This cluster of unexplained symptoms is characteristic of Gulf War illness, now an official diagnosis recognized by the Veterans Administration, but one that still vexes doctors and researchers alike.

Now, with funding from the U.S. Department of Defense, scientists from Drexel University College of Medicine and Boston University are applying the most cutting-edge stem cell technology to solve this 25-year-old medical mystery.

Using blood cells obtained from 300 veterans in the Gulf War Illness Consortium [[sites.bu.edu/gwic](http://sites.bu.edu/gwic)], Drexel College of Medicine researchers have genetically modified the cells into human induced pluripotent stem cell (hiPSC) lines. This means the cells behave like embryonic stem cells; once treated with various growth factors, they have the

ability to form practically any other type of adult cell, from a kidney cell to a neuron.

Since these pluripotent cell lines continue to divide, the researchers were able to create a stem cell biorepository, which can be made available to any interested researcher to study the mechanisms of Gulf War illness and to test potential treatments. The cell lines will be especially groundbreaking for studying Gulf War illness, because they preserve the genetic and possibly epigenetic factors specific to disease susceptibility.

This paradigm shift in the study of Gulf War illness was the subject of a paper published by the researchers in the journal *Neurology*.<sup>1</sup>

"The GWI research community does not have very good model systems in which to test hypotheses and potential therapeutics. These cell lines represent an important shift toward an experimental model that will be much more useful for understanding this disease," says Peter Baas, PhD, a professor in the Department of Neurobiology & Anatomy at Drexel University College of Medicine. "We see this as an urgent situation. These veterans are not getting any younger."

Baas and his team will be the first group in the world to use hiPSC lines derived directly from Gulf War veterans, comparing those who did or did not get sick after serving.

The cell lines will be used to identify how alterations in axonal transport, microtubule functioning and neuroinflammation may contribute to GWI symptoms. For instance, Baas's research group found that microtubules — cylinder structures that give shape to cells and power their movements — could be a prime target for treating this disease in a study published in the journal *Traffic*.<sup>2</sup> "In addition to being an architectural element that helps to shape the cell, the microtubule also acts as a railway, which transports organelles throughout the cytoplasm," says Baas. "We hypothesized that toxins would change the typical way microtubules are chemically modified in neurons, and that a drug like tubacin could restore the modifications to normal, thereby treating the disease."

The study's results suggest that dopamine alterations after toxin exposure are in part due to changes in microtubules, and restoring microtubule function to a more normal state could help to alleviate symptoms.

Baas hopes that the GWI stem cell biorepository will help his team refine their results and better understand this connection. He says that studying the illness could also provide insight into other neurodegenerative diseases. The use of organophosphate pesticides is widespread around the world, and growing evidence indicates a link between the pesticides and disorders such as Parkinson's disease.

"We're living in an increasingly toxic world," says Baas. "It's likely that this kind of disease is going to repeat itself if we don't educate ourselves as to its causes, as well as how to prevent and treat it."

1. Liang Qiang, MD, PhD; Anand N. Rao, PhD; Peter W. Baas, PhD; and colleagues at Boston University published "Reprogramming Cells From Gulf War Veterans Into Neurons to Study Gulf War Illness" in *Neurology*, May 16, 2017.

2. Anand Rao, PhD, and Ankita Patil (co-first authors); Zachary Brodник, doctoral student; Liang Qiang, PhD; Rodrigo España, PhD; Peter Baas, PhD; and colleagues published "Pharmacologically Increasing Microtubule Acetylation Corrects Stress-exacerbated Effects of Organophosphates on Neurons" in *Traffic*, July 2017.

## DEVELOPING A CRITICAL TOOL

After earning his PhD at Drexel University College of Medicine, Liang Qiang spent four years at Columbia University, converting adult tissue cells into neurons to study debilitating diseases like Alzheimer's and Parkinson's.

The innovative research caught the attention of Peter Baas, PhD, a professor in the Department of Neurobiology & Anatomy, who believed Qiang's expertise could be beneficial for investigating other neurological conditions.

Qiang has returned to his alma mater, now a research assistant professor using cutting-edge research to study Gulf War illness. Studying patient-derived cells offers a number of major advantages to understanding the origins of this disease, according to Qiang.

Japanese researcher Shinya Yamanaka, who won the Nobel Prize for his work in 2012, pioneered the extraordinary process of reprogramming adult cells to an embryonic-like state.

Although hiPSC lines were originally intended for clinical application, using them to cure sick patients has proved challenging. However, these cells have become a critical tool for investigating human disease and testing new treatments. In diseases ranging from Parkinson's to amyotrophic lateral sclerosis, hiPSC lines offer an invaluable method for studying illness, without the ethical concerns of cells derived from embryos.

Since hiPSC are human cells, they have human proteins and pathways that may not be reflected in animal models. And most importantly, Qiang says, these cells are derived from the patients themselves, which means they harbor the wide array of genetic factors that may contribute to the disease.

"The big advantage of using patient-derived cells is that many diseases cannot be traced to just one gene being mutated, but rather are due to the complex interactions of genes. Susceptibility to these diseases may also be based on epigenetic factors, which cannot be looked at in animal models," Qiang says. "These cell lines preserve the complete genetic composition of those affected by the disease."

Because pluripotent cell lines are essentially immortal, they can be used for study an unlimited number of times, including for comparison against results of parallel studies on other neurodegenerative diseases.

*Human induced pluripotent stem cells (hiPSCs) were differentiated into mature neurons in order to study how Gulf War neurotoxins alter microtubule behaviors in human neurons. In the magnified image used here as background, blue is DAPI, a nuclear stain; green is MAP2, a neuron specific marker enriched in dendrites and the cell body; and red is TBR1, a forebrain cortical neuronal specific transcription factor. After validation, the neurons can be used to model Gulf War illness in the culture dish.*

# A WORLD OF LEARNING

INTERNATIONAL EXPERIENCES HELP STUDENTS DEVELOP CULTURAL COMPETENCY AND A DEEPER UNDERSTANDING OF HEALTH DISPARITIES.

In an increasingly connected world, physicians cannot practice medicine in a vacuum. That's why Drexel University College of Medicine promotes medical student participation in programs for education, research and service in underserved communities both in the United States and abroad.

"Medicine should not be taught or practiced in a silo," says Nielufar Varjavand, MD, director of the College's Office of Global Health Education. "We need to be aware of the endemic diseases and health conditions in other areas of the world so we can respond to those needs. When we talk about global medicine, we're talking about political, environmental, social and economic issues that all come to bear on health and health care."

Students at the College of Medicine have long undertaken volunteer missions during the summer after their first year in school. Varjavand's office opened in late 2015 in response to student requests and the College's desire to make those experiences safer and more structured. The office also guides fourth-year students who want to choose an international rotation as an elective.

"When we started the office, we had three students who were doing an international rotation for their fourth year," Varjavand says. "Now we're up to 10." Participation by first-year students in summer programs has also grown, from 13 students to 19 this year, in addition to those who set up independent trips.

In fact, students are seeking out opportunities earlier and earlier. "I even have undergraduate students writing to me before they start medical school here," Varjavand says.

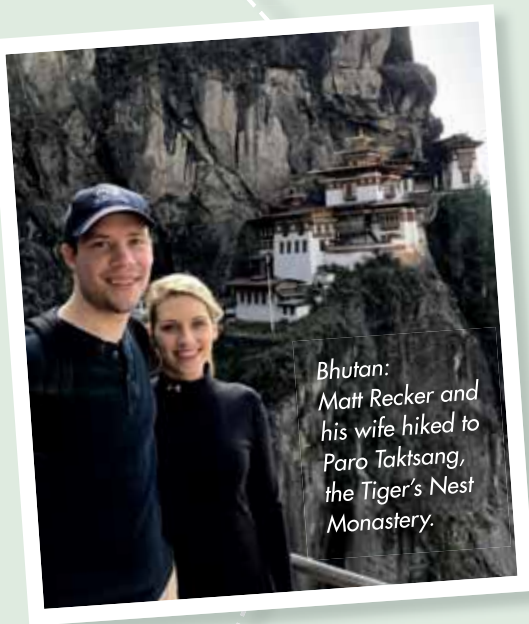
Students are encouraged to take part in established summer programs such as those offered by Child Family Health International or Unite for Site. They are also welcome to find other programs to join or create their own. The possibilities are numerous, Varjavand says.

"We have a health and ethics class at Ben-Gurion University of the Negev with field work in Israel. We have students working in Ghana, Honduras and India, partnering with local sites in those countries. We are also developing a health education project in Cuba with Drexel's School of Public Health."

Fourth-year students also can join established programs or find their own opportunities for an elective rotation. "One student created a trauma surgery elective in Nigeria," Varjavand says. "Another worked on a Navajo reservation."

Typically, students fund their own trips. Students who participate in an approved program are eligible to apply for a competitive partial scholarship. The office is looking to provide more funded programs, like one it currently offers for maternal/child health in Uganda. Some students find financial support through Fulbright scholarships and other national programs.

As students travel and see health care from another perspective, they not only develop their empathy and their skills, Varjavand says, "they tell me that they're now dedicated to improving health systems in a new way. The experiences are often life-changing."



Bhutan:  
Matt Recker and  
his wife hiked to  
Paro Taktsang,  
the Tiger's Nest  
Monastery.



## SURGERY IN BHUTAN



When he started medical school, Matt Recker knew he would get involved with global medicine, and he joined the Global Health Interest Group at the College.

"The group has been a great way to spread awareness about international medicine to medical students, and we also give student scholarships of \$1,000 to help students do this type of work," he says.

As a fourth-year student, Recker signed on to a Surgicorps International mission to Bhutan, led by Surgicorps' founder Jack Demos, MD, a plastic surgeon in Pittsburgh. "The medical team consisted of Dr. Demos and three other plastic surgeons as well as me and my wife, who is a nurse. When we first arrived in Paro, we screened about 150 patients a day for the first two days. I would record the interviews with patients and find out what they needed and discuss their options with them."

Patients who heard about the mission on radio and television often traveled three or four days to consult with the doctors, which in itself was eye-opening to Recker. "Health care there is nothing like it is here. To say that infrastructure is lacking is an understatement," he says.

Team members were at the hospital from 7 a.m. until 5 or 6 p.m. providing care. About 50 to 60 percent of the patients had cleft palates. The others needed facial reconstruction or skin grafts for burns. "We also gave out reading glasses and offered knee injections for those with pain," Recker says. "The patients are so grateful for our assistance — it makes you gain an appreciation for what people have to endure and how much health care means to them."

For Recker, who just began his neurosurgery residency at the University at Buffalo, the trip to Bhutan was only the beginning of what he hopes will be a career-long dedication to global medicine. "I have a passion for this type of work, and it's something I want to be involved with for the rest of my career," he says.

## IMPROVING PUBLIC HEALTH IN ECUADOR



In 2016, Margaret Butchy, Hiral Lathia and Anna Golkowski — then rising second-year students — joined a summer trip to Ecuador sponsored by Child

Family Health International. For Butchy, her first impression of the country and its health care system was powerful: "The chaos of the early morning traffic stood in stark contrast to the serenity of the quiet rice paddies framed by misty, blue mountains. When we arrived at the clinic, a huge crowd of people stood chanting and pounding on the chain-link fence of the small building," she says.

Inequity and a lack of access to medical resources became a

## LESSONS FROM HONDURAS



Her weatherworn skin, an indication of age and exposure to the brutal Honduran sun, was not what I noticed first. My patient's ankles were grotesquely swollen. She had the characteristic edema of heart failure, and when I took her blood pressure, it all made sense: the numbers were as high as readings I had seen only in textbooks. Listening intently to her story, I examined her dirt-caked feet and was moved by her sweetness and overwhelming gratitude.



After spending a year absorbed in the basic sciences that define the preclinical years, I found myself faced with the decision of how to spend my one "free" summer between the first two years of medical school. Should I find a new research project? Apply for an internship? As I thought about the options, I realized I sought something deeper, a project that would allow me to delve into one of my passions: global health. That realization took me 2,000 miles into the mountains of Honduras, where I encountered this elderly patient and so many others like her.

I served in a dual medical–public health brigade [through Global Medical Brigades] made up of physicians, dentists, students and local volunteers. The first leg of our mission was to provide health care to the extremely remote community of El Rosario. Our mobile medical clinic was set in a simple cement building with four rooms and a latrine. It was actually a primary school. Many of the patients had never come into contact with a medical professional, and on the first day of our clinic, the long line wrapped around the building.

I began interviewing patients to gather medical histories and take vital signs. As the morning progressed, I saw the pride with which each mother presented her children to me. Dressed in their best, the children were excited to be getting measured, and the mothers were grateful to be able to provide them with this basic form of medical care. It was remarkable to witness such an outpouring of appreciation.

As the week progressed, I noticed a pattern in the conditions that needed treatment: fungal infections, upper respiratory tract irritation, diarrhea, parasitic infections and rotted teeth, which stemmed from poor living conditions and a lack of sanitation. Without clean water, mothers can't protect their children from parasites. Without a toothbrush and toothpaste, oral hygiene is unattainable.

When clinic concluded, we had seen more than 700 patients in five days. As we departed, tearful community members told us that we would always be welcome, and that our work was a blessing.

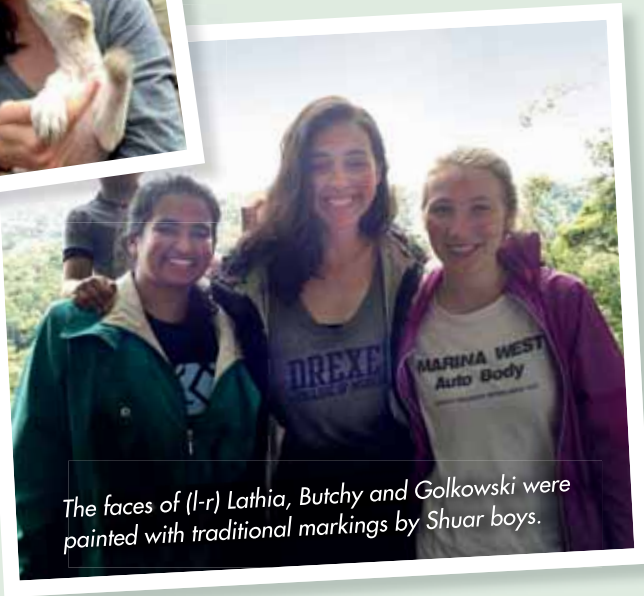
It was time to move on to Buena Vista, another remote community, where we put our efforts into improving the living conditions of several families. The pathogenesis of many of the diseases we treated in clinic was clear when we arrived.

Over the course of several days, we provided health care by replacing a dirt floor with a cement floor for the family to sleep on, building a private latrine and sanitation station, and retrofitting a stove to route the smoke outside, rather than trap it in the dwelling. Every family member living in the home, from the 6-year-old girl to the elderly grandmother, was eager to assist us.

While in Honduras, a phrase kept rolling through my mind. "A little for a lot, and a lot for a little." Regardless of how small I perceived our efforts to be, the impact on those we encountered seemed enormous. When it was time to leave Honduras, I realized that my time there would never leave me.

— Genevieve Fasano, Class of 2018

*Continued on next page*



The faces of (l-r) Lathia, Butchy and Golkowski were painted with traditional markings by Shuar boys.

dominant theme of the trip. “Our experiences in Ecuador largely took place in public clinics where quality of care suffered from the lack of funding: doctors limited annual examinations to quick verbal interviews, clinical supplies were shared or simply unavailable, and health care professionals were overworked and underpaid,” Butchy says.

The students’ first assignment was to work with a vector-control brigade from the Ministry of Public Health. Going door to door, the students would inspect the homeowners’ water tanks for mosquito larvae, distribute larvicide, and provide education. Lathia explains: “I would talk to the residents about the symptoms of dengue, zika, and chikungunya, and what to do if any members of the family exhibited those symptoms.”

The students also made home visits with obstetricians who travel through the community to register pregnancies and conduct checkups. Then the trio had the opportunity to shadow doctors in the rural area of Puyo. Here, the differences in care and access were stark, Golkowski says. “For example, one clinic, only 40 minutes away from a small city, was supplied with almost all medications needed to treat the population. However, a clinic about an hour and a half away from the same city did not even have multivitamins for children.”

The culmination of the trip was a week spent with the Shuar tribe in the Amazon studying traditional medicine. During the nearly six-hour hike to the site, both Lathia and Golkowski suffered injuries, and on arrival, they experienced the benefits of traditional treatment firsthand. The chief manipulated Lathia’s shoulder and Golkowski’s arm and then wrapped the injured area in a medicinal plant that had been burned or smoked, lessening the pain significantly. “While I was skeptical at first, the effects of the plants were extraordinary,” Lathia says.



Golkowski takes a clinic patient’s blood pressure.

## MATERNAL MEDICINE IN MOROCCO



In seeking a global health experience, first-year student Anya Venezia wanted to go to an Islamic country specifically to look at women’s health care and how it might be different from here. She served a six-week internship at Maternité des Orangers in Rabat, Morocco, a public hospital that provides only obstetrics and gynecology. “I found the program through an international organization called Love Volunteers, which connected me to the Rabat-based Moroccan Center for Arabic Studies, and set me up with my internship,” Venezia says.

Each day, Venezia attended a staff meeting held to review cases and then joined doctors on service, observing cesarean sections, changing bandages and helping monitor contractions in the birthing suite — a rewarding opportunity for her because she was directly involved in care. “No visitors were allowed in the birthing suites, so I would often be the only person to stay with a woman through her whole labor,” she says.

At the same time, the program gave Venezia a broader perspective about health care around the world. “This internship in Morocco was the first time I ever saw a really under-resourced medical environment,” she says. “There were not enough doctors to serve the patient population and not enough materials to go around.”

Venezia came away with a better understanding of how she might improve health outcomes, and even a more defined vision for her career. “This experience helped me understand the roles I could play going forward in addition to practicing medicine. Looking at how I could contribute to affecting health outcomes, I realized that on an individual level I’m passionate about observing cultural differences and doing statistical research, but I also saw how important larger organizations are for implementing sustainable improvements,” she says. “I think a global health experience is indispensable for anyone planning on a career in medicine.”



If you are interested in making a contribution to students’ global health experiences, please contact Andrea Pesce at [adp77@drexel.edu](mailto:adp77@drexel.edu) or 215.432.7934.



# 13 Body Parts

By Candice Mazon

Inspired by "13 Ways of Looking at a Blackbird" by Wallace Stevens

I.

Caterpillars have made  
a home in my stomach,  
but they never quite make it out of their cocoons.

II.

My neck is a history book;  
it has a tendency to look back.

III.

My eyes are two moths  
always circling another person's light,  
hypnotized by their glow.  
Sometimes, I forget that I can close them.

IV.

My skin is Ellis Island—  
everyone I meet  
has left their fingerprints.  
Do I only serve as a transition?

V.

In the middle of the night,  
my lungs become a jukebox,  
inhaling  
and exhaling  
to the rhythm of songs  
no one listens to anymore.

VI.

I carved every curve  
of my body  
from an olive branch.

When I showed it to people,  
some hit the ground running  
because they confused it for a weapon.

VII.

But these bones are made of clay;  
an unfinished statue.  
I still have my flaws  
but I'm getting closer  
to who I'm supposed to be.

VIII.

My scars are renovations.  
They only add value to the home.

IX.

My back is a match,  
ready to burn bridges  
of broken promises.

I'm not afraid to walk away  
anymore.

X.

My head is a soldier,  
knee-deep in the trenches.

Fighting for some dream.  
Fighting for survival.

XI.

My mouth is a freight train.  
I'm sorry if I'm not silent  
but I have places to go.

XII.

My hands are open wide  
like doors on its hinges.

If you want to come in,  
you can.

XIII.

My heart is the North Star.  
Every beat is a step forward—  
I have been following it for miles  
hoping it'll lead me to some heaven.

I am lost.

But I refuse to stop walking.

Candice Mazon, class of 2019, won second place in the 35th annual William Carlos Williams Poetry Competition, sponsored by the Department of Family & Community Medicine at Northeast Ohio Medical University, and was invited to read her poem at the awards ceremony.

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# Q&A



Jim Greipp

## Edgar Y. Chou, MD, MS

Edgar Y. Chou, MD, MS, was appointed last year to the newly created position of chief value officer of the College of Medicine and the Drexel University Physicians practice plan. This role extends his responsibilities as chief medical informatics officer. He was the lead physician champion for the implementation of electronic medical records at the College of Medicine.

Chief Value Officer and Chief Medical Informatics Officer  
Associate Professor of Medicine, Division of Internal Medicine

### WHAT ARE YOUR PRIMARY responsibilities as chief value officer?

We are now working in a value-based environment in health care. Under the Affordable Care Act, the federal government adopted a concept known as the Triple Aim of Medicine — to improve patient care quality, improve patient satisfaction and decrease costs. My responsibilities encompass those three areas. I also function as chief quality officer, looking at how to improve care primarily in the outpatient setting. In addition, continuing in the role of chief medical informatics officer, I am responsible for our electronic health record and the implementation of technologies with the goals of improving patient care, minimizing patient safety issues, and improving efficiencies.

### WHAT ARE your goals?

A key goal is to leverage our wealth of health care data to improve the care of our patients. We need to incorporate the cost equation more in our day-to-day activities as part of regulatory agency requirements. We're working to implement greater clinical decision support within our system, to provide reminders for preventive screenings and for the management of chronic diseases, and to aid in treatment decisions. We've been collaborating with our colleagues in Drexel's College of Computing & Informatics to achieve this.

We are working with Drexel's School of

Public Health to identify social determinants of health that impact patient populations, such as socioeconomic status, access to healthy food and transportation challenges. It's exciting to think that if we do find links between those factors and certain disease states, we could use that data to improve care.

The College of Medicine is one of four key participants in The Philly Difference: Connections for Better Chronic Care, a research initiative (funded by a grant from the CDC to the Philadelphia Department of Public Health) to improve population health in the city by focusing on improving care for chronic conditions, including diabetes, obesity and hypertension. We are able to query our system for patients with different disease states and can determine correlations with the different signs and symptoms associated with the development of these conditions. The goal is to develop predictive models with these risk factors to allow for earlier diagnoses or earlier interventions in the management of these diseases.

For another federal research effort, the Precision Medicine Initiative, we will incorporate gene testing to provide additional data to help physicians in decision making about patient care.

### WHAT ARE THE BIGGEST challenges to meeting your goals?

Our biggest challenge is working with today's electronic health record systems.

They have created many additional tasks for physicians and medical staff that are very time consuming. Last fall, a study showed that every one hour of activity a clinician had in the clinical setting resulted in two hours of documentation within that setting, plus two more hours of work at home. This has led to frustration and burnout. We are working to minimize these tasks while still fulfilling federal regulatory requirements. Following the Triple Aim concept mentioned earlier, the term Quadruple Aim was coined: The fourth aim is maintaining the health of the physician and their staff.

### WHAT OTHER INITIATIVES are you working on?

I chair the College of Medicine's Quality Metric and Performance improvement committee, which provides quarterly updates regarding performance and progress with respect to our multiple regulatory programs and efforts on improving how the electronic health record (Allscripts) functions. I also provide monthly educational sessions for government-sponsored quality and value-based programs for the Drexel University Physicians Clinical Advisory Board, and as senior associate director of the Internal Medicine Residency program, I share this information with our residents. In addition, we have started a clinical informatics elective for our medical students.

*Interview by Nancy West*

# LET'S HAVE LUNCH!

Did you know that we travel throughout the country to spend time connecting with our alumni in different regions? We'd enjoy the chance to treat you to lunch, to learn more about your experience in medical school and your career, and to update you on happenings at the College of Medicine. We'd welcome a conversation with you!



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# Alumni Calendar

# 2018

**JAN 20**

**25th Annual Pediatric  
AIDS Benefit Concert**

Main Building, University City Campus  
[drexelmed.wixsite.com/pabc](http://drexelmed.wixsite.com/pabc)

**20th Annual "A Day  
With the Newborn"**

St. Christopher's Hospital for Children  
[stchristophershospital.com/newborn](http://stchristophershospital.com/newborn)

**FEB 1**

**Alumni Career Panel for MD Students**  
Queen Lane Campus

**MAR 8**

**Sex & Gender Research Forum**

Presented by the Institute for  
Women's Health and Leadership  
[drexel.edu/medicine/sgrf](http://drexel.edu/medicine/sgrf)

**13**

**DUCOM Classical Concert  
and Alumni Reception**

Anthony J. Drexel Picture Gallery  
University City Campus

**MAY 17-19**

**Alumni Weekend**

**18**

**Commencement**

Details: Email [medical.alumni@drexel.edu](mailto:medical.alumni@drexel.edu), or call 888.DU.GRADS (toll-free)