NIH awards $36.6 million to SC CTSI

By Meg Aldrich

A team of research leaders from the Keck School of Medicine of USC and Children’s Hospital Los Angeles has been awarded a prestigious Clini cal and Translations Science Award (CTSA) from the National Institutes of Health. The award, the second in the history of these institutions, will provide $36.6 million over five years to support the Southern California Clinical and Translational Science Institute, the hub for clinical and translational research at USC and CHLA.

“This was a major team effort,” said Thomas Buchanan, MD, director of the SC-CTSI. “The SC-CTSI has been a driving force behind the development of a culture of clinical and translational research at USC and CHLA. When we created the Institute in 2008, many people were asking why we should develop translational programs. These days, they are asking how to translate more effectively. That is a major cultural change — one which reflects our work with more than 800 investigators at USC and CHLA, brought them about translation and helped them do it. As a result, they brought in more than $90 million in new extramural funding, published more than 500 scientific articles, generated more than 80 patent applications and three start-ups, and had tangible impact on the health practices of our communities. I am very proud of the SC-CTSI team that led this

Reaching the highest goal

By Claire Norman

After years of planning and several months of living on the mountain, Keck School physician assistant student Vanessa Blasic completed a feat that few people can boast: summiting Mount Everest.

More impressively, the accomplishment meant that she and her father Greg Blasic had joined an even more elite group: climbing the Seven Summits, or the highest peaks on all seven continents.

“Finally being up there and reaching that goal, which I have had for years, was a big accomplishment,” said the Primary Care Physician Assistant Program student, who hopes to specialize in high-altitude medicine. “Not many people get to do this and I don’t think at first I really realized what a positive impact it would have on me.”

Despite health concerns, weather and the perils of climbing, Blasic and her father reached Everest’s peak in Nepal at 5:41 a.m. May 21. Up at 29,029 feet above sea level, Blasic spent 30 minutes examining the horizon, fighting off the chilling temperatures and seeing what other peaks could possibly be in her climbing future.

Blasic’s road to climbing the highest mountain in the world had started with her tagging along with her father and brothers on a Boy Scout trip to climb Mount Whitney. In 2005, she climbed Mount Kilimanjaro, setting off the quest to reach the Seven Summits. More than a decade later, she and her father would spend two months traversing Everest and training to get to the top. Even though the group encountered dangerous conditions — including hearing distant avalanches — they persevered and accomplished their goal.

The hardest portion of the climb occurred two days before reaching the summit, when the climbers had to endure high altitude and extremely vertical portions of the mountain, Blasic said. But she was motivated by the support of her physician assistant classmates, who joined her in spirit via a “SC” patch on her jacket and motivational messages that she copied onto pink duct tape on her glove. “I can do it! Smile and keep going.”

NCI awards $12 million to genetics study

By Mary Dacuma

A large study headed by researchers from the Keck School of Medicine of USC and two other institutions received $12 million in funding to examine why African-American women die at a higher rate from breast cancer and have more aggressive breast tumors than white women.

The grant, awarded by the National Cancer Institute (NCI), part of the National Institutes of Health, is based on the premise that having a better understanding of the biology — and, in particular, the genetics — of breast cancer in African-American women will lead to better prevention and targeted treatments.

“The Breast Cancer Genetic Study in African-Ancestry Popula tions builds on previous work in this area spearheaded by USC,” said Chris Haiman, ScD, professor of preventive medicine at the Keck School. Haiman organized the African American Breast Cancer Consortium, which developed the network of scientists and body of research that will support this new study.

“We now have the knowledge and technology available to assess the whole genome, providing a more comprehensive look into the genetics of breast cancer in women of African ancestry,” he said. “I am confident that this will be a fruitful area of productive collaboration.”

Haiman will be leading the study.

New leader chosen for psychiatry department

Steven Siegel, MD, PhD, has joined the Keck School of Medicine of USC as chair of the Department of Psychiatry and the Behavioral Sciences.

He was selected after a rigorous national search and joined the Keck School on July 1, according to Keck School Internal Dean Rohit Varma.

Steven Siegel, MD, MPH, and Keck Medicine of USC Senior Vice President and CEO Thomas Jackiewicz, MPH.

Siegel is a practicing psychiatrist specializing in the treatment of schizophrenia and psychosis. He has authored more than 150 SC-CTSI. See PSI CHI ART, page 4

USC Norris hosts satellite Cancer Moonshot Summit

By Mary Dacuma

The USC Norris Comprehensive Cancer Center recently hosted a satellite Cancer Moonshot Summit in conjunction with the Washington, D.C., summit hosted June 29 by U.S. Vice President Joe Biden. The event was one of many held nationwide that day, as the country unites to double the rate of progress in cancer prevention, diagnosis, treatment and cure through the next five years.

More than 200 people attended the USC Norris satellite summit, held in Avery Auditorium, with thousands more tuning in via satellite during the National Cancer Moonshot Summit.
By Cristy Lytal

The International Society has named Qi-Ling Young, MD, PhD, as the winner of the 2016 McEwen Award for Innovation, the highest honor bestowed by the International Society for Stem Cell Research (ISSCR). Supported by the McEwen Centre for Regenerative Medicine at the Keck School of Medicine of USC, the award recognizes outstanding excellence in research, the advancement of regenerative medicine and the improvement of human health and well-being. Young is an associate professor at the Keck School of Medicine of USC and founding director of the Centre for Stem Cell Research.

Young and his team, who manage prior authorizations from start to finish, and ensure that patient care is integrated by close monitoring for medication safety and efficacy, leading to optimal patient outcomes, have been instrumental in developing a new specialty pharmacy exclusively to provide medications that previously required prior authorization, counseling, follow-up, and monitoring by clinical pharmacists, as well as refrigeration and other special handling.

New to both stem cells and the English language, Young began trying to “rewind” mouse neural stem cells into embryonic stem (ES) cells — and thought he had succeeded. Months later, he realized that the neural stem cells had spontaneously fused with ES cells in the same petri dish, producing abnormally large ES cells. It was the first proof of spontaneous fusion, and it earned him and Smith a publication in the journal Nature in 2002. Still under Smith’s mentorship, he found a more efficient way to turn ES cells into neurons, published in Nature Biotechnology in 2003. Next, he and Smith made the landmark breakthrough that would eventually earn the 2016 McEwen Award for Innovation. They discovered that they could inhibit ES cells from differentiating into specialized cells by exposing them to two proteins — called leukemia inhibitory factor (LIF) and bone morphogenetic protein (BMP) — and published the results in Cell in 2003. Subsequently, in a 2008 paper in Nature, they used these inhibitory molecules — dubbed 2i — to mimic this effect.

“We can use embryonic stem cells to generate different cell types,” Young said. “And these cell types can be used for cell replacement therapy, for drug screening and for many other purposes.”

By Douglas Morino

Protecting the elderly is an issue close to Judith Tamkin’s heart. The noted philanthropist has made it a top priority to tackle elder abuse, an increasingly important issue as America’s older adult population grows.

“I want to make sure others have a chance,” Tamkin said. “When they feel helpless, I want them to know they have somewhere to turn, someone to talk to and somewhere to go.”

A generous gift from Tamkin to the Keck School of Medicine of USC will establish an annual international symposium on elder abuse and provide scholarships for a group of Keck School students — the Tamkin Scholars — and others to attend the conference. A website (http://eldermistreatment.usc.edu) has been created to provide resources and information for researchers and those caring for older adults.

“The Tamkin gift will close gaps on elder abuse research and move the field forward through education, awareness and strong community partnerships,” Young said.

“Such generous gifts will launch USC as a leader of research and education,” said Laura Mosqueda, MD, chair of the Department of Family Medicine and Geriatrics, and the director of the USC Davis School of Gerontology.

About one-in-10 of the country’s older adult will be a victim of abuse, said Mosqueda, a widely respected authority on geriatric and family medicine, elder abuse, and care of the elderly and underserved.

“The Tamkin gift will bring experts together to find answers to questions surrounding elder abuse that have been asked for 30 years,” Mosqueda added.

“Together we will solve the thorny issues surrounding elder abuse,” Mosqueda said. “We’ll do it in Mrs. Tamkin’s confidence in us and help make the world a better place.”

By Michele Keller

U SC School of Pharmacy and Keck Medicine of USC have partnered to create a new specialty pharmacy focusing on “high touch, high cost” medication therapy for hepatitis, cancer, multiple sclerosis, rheumatoid arthritis and other conditions.

Open in Alhambra since January, the specialty pharmacy exclusively provides medications that require prior authorization, counseling, follow-up and monitoring by clinical pharmacists, as well as refrigeration and other special handling.

Unlike a retail pharmacy that services walk-in customers, USC Specialty Pharmacy is a “closedit-door” pharmacy primarily serving physicians and patients at Keck Hospital of USC, USC Norris Cancer Hospital and other sites across the USC family of health care organizations, notes Krist Azizian, PharmD, chief pharmacy officer and associate dean for academic medical center programs, Keck Medicine of USC.

The 7,000-square-foot facility is staffed by a growing team of clinical pharmacists, managed-care pharmacy technicians and reimbursement specialists.
Health Sciences Campus getting major revamp

By Joanna Clay

USC’s Health Sciences Campus — home of the university’s two hospitals and medical school, nearly 4,000 staff and faculty and 1,200 students — is undergoing a lot of change.

The 79-acre campus in Boyle Heights, about seven miles from the University Park Campus, has 70 construction projects under its belt — the most since it opened in 1952.

The overall goal, envisioned by USC President C. L. Max Nikias and the school’s master plan, is to give the campus more of a “university feel” to match University Park, with enhanced entrances, wider sidewalks, new lampposts and lusher landscaping, not to mention state-of-the-art resources.

“This was the vision of our president to unite the two campuses, making the Health Sciences Campus identifiable as part of the USC whole,” said Joe Buck, associate executive director of Campus Development and Facilities Management.

Since 70 is a big number, we’ve highlighted seven of the most noticeable changes coming to HSC.

New buildings: Norris Healthcare Consultation Center, at the corner of Alvarado and San Pablo streets, will house medical offices adjacent to USC Norris Cancer Hospital, similarly focused on cancer treatment. It’s the first building of its kind in more than a decade, offering the region’s first comprehensive multiple sclerosis clinic, infusion therapy, outpatient surgery center and a women’s cancer program. The building is ready to go.

New lampposts and lusher landscaping, not to mention state-of-the-art resources. See more calendar entries at

"Preventing and treating cancer is reaching a new frontier in precision oncology," said Stephen Gruber MD, PhD, chair, director of the USC Norris Comprehensive Cancer Center. "Identifying susceptible genetic regions and risk factors can help us better assess risks in our patients and the larger population. I am thrilled at the potential clinical applications that will arise from focused attention on women of African ancestry to determine whether genetic variants may be associated with increased risk.

Additionally, experts from five other institutions will gather information and biospecimens from 20,000 breast cancer cases.

"CTSI: We want to make a real difference in the community" Continued from page 1

change. This new CTSI will allow us to continue this important work in support of our research teams, health systems, patients and communities.

Jonathan Samet, MD, principal investigator of the Institutional Career Development component of the new NIH award, explained, “The award provides crucial resources that will support a new Workforce Development in clinical and translational research. It also supports general career development for junior faculty members as part of the SC CTSI KL2 program. They will also offer a broad range of workshops, lectures and courses in clinical and translational research for faculty, staff, students and trainees throughout USC and CHLA.

The SC CTSI Digital Innovation and Communication platforms, led by Katja Reuter, PhD, will develop new approaches to participant recruiting based on social media and other platforms like Twitter and Facebook.

The Clinical Research Informatixs group, led by Daniella Meeker, PhD, is creating a robust electronic platform for clinical research, including a research data warehouse and a new clinical trials management system.

April Armstrong, MD, MPH, Wendy Mack, PhD, and Zuong Patek, MD, are leading the Clinical Research Support group, which is developing a comprehensive set of services for clinical trials.

Sarah Hamm-Alvarez, PhD, leadet of the Research Development group, is creating new resources to help team science that will include pilot grants and consultations in team building.

In keeping with a major emphasis of the National CTSI program, all of the SC CTSI and many supported folks by this new award will emphasize efficiency in the processes involved in clinical and translational research.

Katrina Kubieck, PhD, leads the Evaluation and Improvement program that will focus on efficiency.

The new award also secures a place for USC and CHLA in the national CTSI consortium, where faculty members can participate in multisite clinical trials and compete for additional awards open only to CTSI institutions.

Senior leaders from USC and CHLA were quick to praise this significant accomplishment.

“Receiving this award is a hallmark of a leading research university,” said Michael Quick, PhD, USC’s provost and senior vice president for academic affairs. “This is exactly the kind of work we want to be doing: creating significant advances in scientific research and patient care across our diverse research programs.”

Keck School of Medicine Interim Dean Robert Valman, MD, MPH, stated, “Translation of research into better health care is a top priority for us. This major NIH award, while highlighting the strength of our faculty, will also be an important catalyst for our faculty in driving translational research.”

CEO of Keck Medicine of USC, Thomas Jackiewicz MPH, added, “A hallmark of a top-level academic medical center is its ability to integrate outstanding clinical care with research discovery. The new CTSI will be a very strong resource to drive this integration.”

Paul Vriends, president and CEO of CHLA, commented, “The SC CTSI is a wonderful example of the strong collaboration between USC and CHLA. This renewed support will enable us to strengthen our efforts to accelerate the pace with which research discoveries from both campuses can be translated into benefits for patient and community health, especially for diverse and underserved populations.”

The Clinical and Translational Science Award program was established by the National Institutes of Health in 2006. The program provides funding to more than 60 major research universities to support the development, conduct and improvement of clinical and translational research.

STUDY: Biospecimens, data will be shared

Continued from page 1

alongside Wei Zheng, MD, PhD, of Vanderbilt University in Nashville, and Julie Palmer, ScD, of Boston University. Investigators will pool data, biospecimens and expertise from 18 previous studies to develop a new cancer among women of African ancestry to determine whether genetic variants may be associated with increased risk.

Additionally, experts from five other institutions will gather information and biospecimens from 20,000 breast cancer cases.

“Preventing and treating cancer is reaching a new frontier in precision oncology,” said Stephen Gruber MD, PhD, chair, director of the USC Norris Comprehensive Cancer Center. “Identifying susceptible genetic regions and risk factors can help us better assess risks in our patients and the larger population. I am thrilled at the potential clinical applications that will arise from focused attention on women of African ancestry.”

Notice: Calendar items are due at least two weeks before submission date. Timely submission does not guarantee publication in print. See more calendar entries at hscnews.usc.edu/calendars of-events. Submit items at tinyurl.com/calendar-hsc. Include day, date, time, title of talk, first and last name of speaker, affiliation of speaker, location and a phone number/email address.

Chris Hanrahan
Second cohort of clinical research fellows named

By Cristy Lytal

The second cohort of Broad Clinical Research Fellows is making strides toward finding stem cell-based therapies for lymphedema in cancer patients, large bone fractures and slow bowel syndrome.

To support full-time research related to stem cell biology and regenerative medicine, each fellowship provides $65,000 of salary support, $7,500 for supplies, $12,000 for meeting allowance, and is potentially renewable for a second year. A general surgery resident at the Keck School of Medicine of USC, Gene K. Lee, MD, PhD, is pursuing a stem cell-based treatment for lymphedema, a painful swelling of the limbs that can result from the surgical removal of cancerous lymph nodes.

Lee will regrow rat skin cells into stem cells, which he will implant onto a special scaffold in the limbs of rats suffering from lymphedema. The hope is that these stem cells will form new lymph nodes and repair the swelling by completely blocking the excess fluid out of the lymphodefective limbs.

“The current standard treatment for lymphedema mainly revolves around conservative decongestive therapies and surgery in select patients,” Lee said. “The objective of our current proposal is to push the frontiers of stem cell and tissue engineering technologies to develop an advanced lymphedema therapy that is clinically transplantable to post-lymphadenectomy cancer patients suffering from lymphedema.”

Lee will perform this work under the mentorship of two faculty members in the Keck School’s Department of Surgery: Young Kim, MD, PhD, and Alex Wong, MD, PhD. Orthopedic surgery resident R. Kiran Alluri, MD, will focus on ways to use genetically manipulated stem cells to treat critical sized bone defects, or fractures that are too large to heal on their own. The stem cells will produce a protein, called bone morphogenetic protein, that induces new bone to grow in place of the old bone.

“Allu will conduct this research under the mentorship of Jay R. Lieberman, MD, professor and chairman of the Department of Orthopaedic Surgery at the Keck School, and professor of biomedical engineering at the USC Viterbi School of Engineering, who is a pioneer in the field of tissue engineering for bone repair.”

In the laboratory of Tanya C. Gruskiewicz, MD, at Children’s Hospital Los Angeles, surgeon-scientist Christopher Schlieve, MD, will use bone-derived tissue-engineered small intestine (TESI) in mice. However, this TESI lacks the nerves that contract the intestines and move food through the system. Schlieve’s goal is not only to add nerves to the stem cell-derived TESI, but also to do so in a pig — so that the intestines will be the correct size to transplant into a human newborn baby with SBS.

“As a Broad Clinical Research Fellow, I hope to build upon my previous experiences to help advance the field of regenerative medicine and provide a better quality of life for my patients,” Schlieve said. “If successful, this method may provide a novel approach to treat devastating inherited and acquired gastrointestinal diseases.”

The Eli and Edythe Broad Foundation also funds clinical fellowships at the University of California, Los Angeles (UCLA) and the University of California, San Francisco (UCSF) — which, like USC, have stem cell research centers established with support from Eli and Edythe Broad and the California Institute for Regenerative Medicine (CIRM).

“Physician-investigators play a critical role in translating laboratory discoveries into patient care,” said Andy McMahon, PhD, director of USC’s stem cell research center. “We are grateful to Eli and Edythe Broad for their vision in supporting these transformative and dedicated members of our stem cell research community.”

PSYCHIATRY: Siegel specializes in treating schizophrenia, psychosis

Continued from page 1

manuscripts on a variety of topics relating to schizo- phrenia and autism and is a physician-scientist, contrib- uting to the investigation of the basic neurobiology of schizophrenia, autism, drug abuse and nicotine depen- dence.

Siegel previously spent 20 years at the University of Pennsylvania (Penn), where he was a professor of psychiatry, behavioral neurology, and chief of the Translational Neuroscience Program in the Department of Psychiatry, director of the Clinical Neurosciences Training Program and as an associate director of the CTSA education programs. He held faculty positions at the University of Pennsylvania School of Medicine, served as associate physician at the University of Pennsylvania Hospital, and was director of the Clinical Neuroscience Training Program.

Siegel has received numer- ous awards, including being named one of the nation’s outstanding clinicians by the National Association for Mental Illness; the Leonard Berry Wilson Memorial Teach- ing Award, which is among Penn’s highest awards for the teaching of translational research, and the Martin P. Nathan Award for Excellence in Clinical Teaching and Research by the Department of Psychiatry at Penn. He holds MD and PhD degrees in neurobiology from Mount Sinai School of Medicine and a bachelor’s degree in neuroscience from Colgate University.

Yanna and Jackieziewicz thanked David Baron, OD, for serving as interim chair in the Department of Psy- chiatry and the Behavioral Sciences since July 1. They also described Baron’s leadership of the department’s clinical, research and educational missions and his work on faculty development as exemplary and invaluable.

MOONSHOT: Summit aired online

Continued from page 1

to the Facebook live stream. Participants included physi- cians, scientists, patients, patient advocates, pharma- thropists, elected officials and survivors. Hilda Solis, Los Angeles County First District Supervisor, wel- come guests to the event and expressed gratitude at having a National Cancer Institute-designated cancer center in her district.

In the spirit of the Cancer Moonshot Summit, the USC Norris Comprehensive Cancer Center featured moonshot priorities at USC Norris, including the development of a national tissue bank and biorepository and increased investment in precision oncology in underserved populations.

Dana Donarske, USC Trustee and founder of the Lazarus Cancer Foundation, also spoke about her organi- zation’s work in improving equ- itable access and increased participation in clinical trials. While USC Norris is a national leader in clinical trials and has an established record of publication in high- impact journals, Dr. Donarske said the center is focused on the Adult and Young Adult Cancer Program at USC, clinical trials and community outreach or survivorship.

“Today was a remarkable ex- perience to have such a wide spectrum of community members collaborate and ad- dress obstacles in prevention and treatment with unique perspective,” said Stephen Gruler, MD, PhD, MPH, director of the USC Norris Comprehensive Cancer Center. “The Vice President set aggressive milestones to end cancer as we know it, and by working together, we will make progress toward this goal.”

The Eli and Edythe Broad Comprehensive Cancer Center was a satellite host to the National Cancer Moonshot Summit, held June 29 in Washington, D.C.

In Memoriam: Gunther Dennert, PhD

Gunther Dennert, PhD

In Memoriam: Gunther Dennert, PhD

Former chair of the Department of Molecular Neuroscience and Biology at the Keck School of Medicine of USC, Gunther Dennert, PhD, passed away on June 5, after a long battle with pancreatic cancer.

Dennert was widely known and respected for his work as an original and creative immunologist. In his work, he focused on immune regulation by cell surface receptors for ADP-ribosylation, elucidating induction of various T-cell responses, and how the immune system influences alcohol induced liver injury. Under his leadership, Dennert’s laboratory also discovered tumor-infiltrating lymphocytes in mice bearing tumors, a con- cept that was later applied to human cancer immunology.

Over the course of Dennert’s career, he authored more than 150 publications in high impact immunology and virology journals. His highly influential body of work was cited more than 8,000 times, with many individual papers cited hundreds of times.

After completing undergraduate studies at the Universities of Bonn and Munich, he performed graduate work in the area of phage genetics and the regulation of expression of the genes in the primate dehydrogenase complex in E. coli with Wulf Henning at the University of Cologne, where he received his PhD.

Dennert was recruited to USC from the Salk Institute in San Diego in 1984 as an associate professor, and was promoted to professor in 1996. He served as chair of the Department of Molecular Microbiology and Immunology from 1997 to 2007.

Dennert is survived by his wife, Eileen, and three children.

The Eli and Edythe Broad Foundation is a private, non-profit organization that supports high-impact, long-term initiatives, and is a matchmaker of major donors, organizations and government agencies to U.S. and foreign causes.

On June 3, the Eli and Edythe Broad Foundation announced that it would join the National Cancer Moonshot, an initiative launched by Vice President Joe Biden.

The Eli and Edythe Broad Foundation is a member of the National Cancer Policy Forum, a discuss group of experts convened by National Cancer Institute Director Dr. Harold Varmus.

“New cancer drugs that go beyond the current standard of care of surgery, radiation and chemotherapy are desperately needed,” said Stephen Gruler, MD, PhD, MPH, director of the USC Norris Comprehensive Cancer Center.

“T iconic drugs like pertuzumab, which are included in this year’s budget, will make progress toward new cancer drugs that go beyond the current standard of care of surgery, radiation and chemotherapy,” said Gruler.

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Eli and Edythe Broad Foundation is a private, non-profit organization that supports high-impact, long-term initiatives, and is a matchmaker of major donors, organizations and government agencies to U.S. and foreign causes.
The main goal of the Innovation Lab attendees is to form new, multi-disciplinary teams. This year’s theme is “Big Data,” as advances in data science are needed to make sense of the vast amounts of information generated by modern medicine. The grand piano was placed in the Keck School of Medicine of USC, and the event also featured a panel discussion on the future of primary care and a keynote address by David Asch, vice chief for research and associate professor of neurology at the University of Texas at Austin, who is the principal investigator of the BD2K TCC project.

The event also featured a panel discussion with Rebecca Trottzy-Sirr, MD, assistant professor of emergency medicine and Wetmdot Kirsten van Deen, MD, PhD, assistant professor of research medicine. The panelists discussed a pilot program recently implemented at Los Angeles County-USC Medical Center that allows health care professionals to identify patients for opiate addiction treatment. A video of the event is available at http://gehrcenter.usc.edu/programs/speaker-series.

The series is made possible thanks to a gift from Norbert Gehr, the founder and chairman of The Gehr Group who supported the start of the USC Gehr Family Center for Implementation Science. The gift was made to Gehr’s long-time primary care physician, David Goldstein, MD, vice chair for clinical affairs in the Department of Medicine, who founded the Center under Hochman’s leadership.

The mission of the Gehr Center is to advance the science of health care delivery in real-world health systems.
Reflections on a storied career

By Melissa Masatani

One of the transformative leaders of neurosciences at the Keck School of Medicine of USC has taken his last bow. Leslie Weiner, MD, retired June 30 after spending 41 years at the university, including 23 as chair of the Department of Neurology. HSJ News sat down with the self-described “neurologist, physician, scientist and teacher” recently to talk about how the school has changed and his plans after retirement. The conversation has been edited for length and clarity.

Question: How has the Keck School changed since you’ve been here?
Answer: It’s a totally different place. When I came here in 1975, the university hospital didn’t exist and outpatient practice didn’t exist.

Q: Tell me about your research career. What projects were most exciting for you?
A: I developed a vaccine for multiple sclerosis (MS), which we tested and failed. That was a six- or seven-year endeavor, and that was a very exciting time — but disappointing. We’ve been involved in a number of clinical trials for MS in recent years, which have been fun. My biggest clinical observation is that in 1997, there were no treatments for MS. Now there are 14 licensed treatments, so MS is a treatable disease in the sense that you can prevent progression and attacks and so forth. It’s not a cure, but it’s such a different world for those patients now.

Q: Tell me about why you chose to retire now.
A: I just turned 80, and it was time for me to go. It’s been a good 41 years. But I’m in good health and there are lots of things I think I would like to do. I tell everybody that the reason I’m retiring is so I can watch Netflix all day. My wife originally was not in favor of this, but she’s warmed to the idea.

Q: How would you like to be remembered?
A: I don’t care how I’m remembered. Well, I have an endowed chair with my name on it, the neurology clinic has my name on it. I think that you’re always remembered by your students and your patients, but I just don’t care. My feeling is that you do the best if you’re remembered as someone who took care of patients and taught.

Q: Do you have any advice to share from your career?
A: I think the only advice I have is for the clinicians. They have to try to recognize their individual patients and their patients’ needs, and they frequently don’t have time to do that. That’s a difficulty. My only regret is that more people know how medicine has changed. I think that it is a technologically driven phenomenon, which has its benefits, but I think that when the clinician sits in front of the computer instead of talking to his patient, that just galls me. But overall, I’m pretty good at neurology and the medical school. This is a good place, it’s got a good heart and I think it’s important that its message not be lost. It still considers the training of physicians who care for its primary goal.

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