Dean’s Newsletter  
June 20, 2012

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Commencement 2012

The Stanford University School of Medicine was founded in 1908 when the Cooper Medical College became part of Stanford University – a topic I featured in my May 29, 2012 Dean’s Newsletter. Based on the history recorded by Dr. John Wilson (http://elane.stanford.edu/wilson/index.html), 1912 marked the last class to receive a degree from Cooper Medical College, and those graduating in 1913 were the first class of Stanford University’s Department of Medicine. A hundred years later, on Saturday, June 16\textsuperscript{th}, we celebrated the graduation of 212 students, 52 receiving Master of Science degrees, 85 Doctor of Philosophy degrees, 75 Doctor of Medicine (13 medical students also received a PhD degree and 2 received a MS degree). Although the temperature was truly “hot” during our Medical School Commencement ceremony under the large tent on Alumni Green, surrounded by the Clark Center, Fairchild Science Building, Li Ka Shing Center for Learning and Knowledge, and the Lorry Lokey Stem Cell Science Building, the celebratory feelings of our graduates and their families, colleagues and friends were even warmer. While the majority of students have spent about 5 years at Stanford, a few have been on their degree path for up to 10 years – giving new meaning to graduation!

The excitement of our graduates is inversely matched by the uncertainty of the times: a challenged economy both in the US and globally as well as uncertainty about the future of US healthcare (with the decision from the Supreme Court about the constitutional legality of the Affordable Care Act expected with the next couple of weeks and the political contest of healthcare reform likely to be among the center stage issues in the upcoming presidential debates and election this November). More certain but of deep concern is the flat to declining funding for research from the NIH and other federal agencies and the impact this might have on our investment and even prominence in being world leaders in the biosciences. Clearly our graduates will face new and uncharted waters, although it is our hope that they have been well educated and trained for a new world order. The wonderful thing about the Stanford community is that challenges are nearly always reframed as opportunities – and I am confident that this will be the case for our new graduates. Indeed, it is our hope that they will also lead the transformation of
healthcare and science into the future – both of which will have a positive impact on the economy of our nation as well.

I have made it a tradition to have the Newsletter following commencement include the names of our graduates as well as the texts of our student and commencement speakers. I am grateful to each of them for providing an important and unique perspective that was both personal and generalizable. Please also join me in thanking the many individuals who worked unstintingly to make this year’s commencement so successful – especially given the exceptionally hot weather conditions. As she has in each of the past 12 graduation ceremonies that I have had the pleasure to participate in, Ms. Zera Murphy, Director of Student Life, worked tirelessly and devotedly to make sure every detail was addressed and achieved. I also want to thank Ms. Char Hamada, Assistant Dean of Student Affairs and Director of Admissions, and the other wonderful professionals from the Office of Education Programs and Services and the Dean’s Office for their exceptional contributions to this year’s Medical School Commencement.

This year we also had the special privilege of sharing the commencement activities with Dr. Jose Sandoval and his family. As noted in Jonathan Rabinovitz’s report on graduation day (see: [http://med.stanford.edu/ism/2012/june/graduation-0617.html](http://med.stanford.edu/ism/2012/june/graduation-0617.html)), Dr. Sandoval’s family was unable to attend his graduation so he missed it entirely in 1977. He returned in 2012 to march with the class of 2012, which was also a wonderful thing to celebrate.

For those who missed it, I had the opportunity to present our candidates to President Hennessy for the granting of their degrees at the University Commencement on Sunday June 17th. The University Commencement Address was given by Cory Booker, currently Mayor of Newark, New Jersey and a Stanford alum (see: [http://news.stanford.edu/news/2012/june/commencement-cory-booker-061712.html](http://news.stanford.edu/news/2012/june/commencement-cory-booker-061712.html)). Without question Mayor Booker’s address was one of the most moving and meaningful commencement speeches I have ever heard and its message is deeply relevant. I would encourage you to watch it if you have not already done so (see [http://thenextweb.com/shareables/2012/06/18/watch-mayor-cory-bookers-stanford-commencement-speech-it-will-inspire-you/](http://thenextweb.com/shareables/2012/06/18/watch-mayor-cory-bookers-stanford-commencement-speech-it-will-inspire-you/)). It is quite special and truly inspiring.

**Student Speeches**

A tradition at the School of Medicine Commencement is to hear comments from a graduating PhD student and graduating MD student who have been elected by their classmates. I am pleased to share their comments with you:

**Remarks from Graduate Student Speaker - Moria Chambers, PhD Candidate in Microbiology and Immunology:** Moria is a graduate of MIT and did her PhD work in Dr. David Schneider’s Lab in the Department of Microbiology and Immunology. She is also the Past President and Mentorship Chair of the Stanford Biosciences Student Association (SBSA).

Thank you Dean Pizzo.

Graduates, I want each of you to look around and find someone who's supported you
during the adventure that is graduate school - maybe you’re looking at an academic adviser, a parent, an administrator or fellow student; and the people here today are probably just a small fraction of your support network. Collectively they refined our scientific thinking, took us out after an experiment flopped, and lent a listening ear. Take a moment and send them a silent thanks. They are so proud of you here today.

Now, some of you having been working for this and looking forward to this day for over five years, myself included. Not wanting to extend that by much more time today, I'll be brief. I have just two missions for you.

First - I’m asking for each of you to commit yourselves to being a life-long mentor. Some try to reserve the word "mentor" for those esteemed faculty that sponsor our dissertation research and sit on our committees; however, I believe that any motivated and caring person can mentor a graduate student. Let’s retake the word mentor; that includes those of you going into biotech start-ups or public policy - you’re not off the hook! The skills developed here at Stanford are launching us into a wide range of careers from improving water sanitation in Africa, to researching the next Lipitor, to rewriting science policy in DC. The education of future students will be greatly enhanced if we, as alums, lend our collective experience and support. Each of you have and will continue to have so much to share with future students.

So, make yourself accessible to current students online. If you're visiting the bay area, contact our student groups and offer to talk about your experiences! Believe me, they'll take you up on it. More broadly though, your responsibility isn't just to the wonderfully privileged students here at Stanford. Wherever you call home, think about reaching out to the local university, high schools and elementary schools. As a Stanford alum, you have the ability to both inspire and support the young scientists of this world. It is not enough to leave mentoring to others. In a world that demands high levels of efficiency and doesn't guarantee job stability, it may seem like a lot to ask, but future generations will thank you for this commitment. You might even find it personally rewarding.

Now onto my second and more immediate mission. I want each and every one of you to truly revel in what you've achieved. That's right - revel - celebrate the magnitude of what you've accomplished. Graduate school is a “choose your own adventure” and your adventure is unique and incomparable. Take the weekend off, take lots of pictures, party with family and friends and let yourself enjoy this finale. If you're like me, and still have papers waiting to be finished; forget about it for a couple of days. It’s not going anywhere. This is your graduation, and it is well earned.

Thank you.

Remarks from Medical Student Speaker – Krishnan Subrahmanian did his undergraduate studies at Harvard and also received a MPhil in education from Cambridge University as a Gates Scholar. With his graduation he will begin a training program in Global Pediatrics at the Texas Children’s Hospital and the Baylor International Pediatric AIDS Initiative.
Dean Pizzo, Dean Prober, Esteemed guest Dr. Hamburg, Dr. Salvatierra, Dr. Knox, Dr. Blaschke, Dr. Gesunheit, Dr. Scholl’s, Dr. Seuss, Dr. Pepper, Dr. Phil, Dr. Zaius, Dr. Octopus, Dr. Oz, Dr. J, Dr. Drew, Dr. Dre. Dr. Quinn...Medicine Woman, ladies, gentlemen, friends, family and the newest doctors. The Stanford School of Medicine Class of 2012.

I stand before you with more debt than Greece, unable to afford redundant luxuries like pants underneath an expensive graduation robe, yet so grateful to bear witness to a transformation. For many of you this has been a long haul. Decades of study. Mike Mancuso and Matt Goldstein have been students here since the Ford Administration. It is a big day for them and many of our physician-scientists because not only do they get an MD and a PhD today, they also get to enroll in Medicare and collect social security.

Whatever decade we started, we were asked to go into a room and interview a patient for the first time about a serious medical complaint. We were humbled by the tears and pain in that room and when it was over, the patient stood up, gave us a hug and said "Please stop crying. You're going to be a fine doctor...one day". Unsure of what to do, many of us spent our fifteen minutes in idle banter, where are you from? What do you do for a living? Do you come here often? Men, women or both?” All things you would hear at any local single's bar. Because we are all medical students, I assure you this was thoroughly awkward.

Years later, a lot has changed. You know, back when we started medical school we used a substance called paper and now, the kids use their fancy iPads and Angry Birds. When we started medical school, the building was made of cardboard, asbestos and lead and now it is made of platinum and powered by the strength of unicorns. In the spirit of student feedback and animal experimentation our class was guinea-pig to a new grading system. Over the years this has been tweaked and I’m excited to introduce to you today, the newest grading system at this distinguished institution.

The top grade is now a smiley face representing “pass-with distinction but stay away from the patients.” Next is a face that can neither smile nor frown. This means the student self-injected too much Botox. Finally, frowny face means “Your doctor does not play nice with others. Consider a career in pathology. At Harvard.”

The greatest transformation of course, has been in the people gathered here, soon to be minted physicians and scientists. My classmates are an incredible group. We have published authors, and produced professional athletes. Last year seven Stanford medical students founded companies, three founded their own medical schools and four founded their own religions. Incredibly, two students last year learned how to take a blood pressure.

What makes my classmates incredible is not their accomplishments, it is their choice to care day after day. Graduations rarely celebrate the choice of compassion. From preschool to college we’ve been praised for talent and work. In medicine however, everyday we bring our talents, work hard and yet we often, along with our patients, bow down
in front of luck. A horrible accident, an aberrant cell. And we realize that while we may be talented, we are just really blessed. With the good health to be here. With the resources and support to be here. Lucky to be educated people in the most influential country in the most connected world ever. Nobody has had greater choice in the great and horrible things they could do. Talented people after all chose to start the sub-prime crisis and MTV’s “Jersey Shore.” The talents we possess are rather arbitrary. The choices we make are not. What we choose to make our lives about. How we treat others.

Our politicians, society and even alma mater will grant us access and privilege based on our proximity to capital. Yet in the tradition of great caregivers from mothers to teachers to nurses to good friends who listen, you have chosen, instead proximity to people. You researched and knew everything about a disease for rounds but in moments and gestures no one will ever know about, you showed your patients that this disease was the least interesting thing about them. Your hands welcomed new life into the world and held on through last breathes. Your choice to spend your lives in service, caring for my parents. Our sisters and brothers. Today we celebrate your decision to confront suffering and especially celebrate those people who have chosen to spend their lives showing us how to care.

Administration, Faculty, Staff. The good news for you is that according to the original Hippocratic Oath, you as our teachers are entitled to a sum of our earnings from here on and I am to regard you and your children as family. The bad news for you is that I will now regard you and your children as family. Dear Uncle Dean Pizzo, I will be sleeping on your couch starting Tuesday. Dear Uncle Dean Prober, I need two-hundred thousand dollars and a pair of pants. We thank you for in your role as caregivers, in your role as educators and in your role as people, you always exemplified a life of care and love. You were there and caught us when we fell. Seriously, one of my classmates was in the operating room and just after the nine-hour surgery wrapped up, she began to feel light-headed and fell backwards into the arms of world famous surgeon Dr. Jeffrey Norton. With the efficiency of a surgeon he declared "Give her some room, get her some juice." When she went to apologize for the incident he promptly told her "You’re an angel, you retracted perfectly.” Again and again, this staff and faculty chose to care for us.

Our families, defined by blood, experience and love have cared for us, even when we didn’t earn it. I learned in medical school that I owe a lot to my parents, namely a very bad lipid profile and nightmares about male patterned baldness. My mom once left me a voicemail and because I was a ‘very busy’ med student, it sat unlistened to for days. I proceeded to work a 30 hour shift and and had a great post-call nap. I woke up to a loud knock at the door and found a very friendly Stanford police officer who had received a call from a very angry Indian woman. It is truly an act of care when your family will call the police on you. Worried hours by the phone and extra jobs so we could afford school. Gift baskets full of Twizzlers and journeys across the oceans more opportunities. Families, we thank you and we hope to honor your sacrifices by allowing a fraction of the love and grace you have shown us to be regifted to those in their moment of need.

That this community has transformed awkward medical students into equally awkward physicians is remarkable. As we embark on a life of caregiving, we ask you to remind us,
and I remind myself that in order to care for others, we must care for ourselves. Unconditionally. We have all seen doctors, even predecessors from these seats, who were sad, frustrated. We work in a world and live in a field that, that sometimes tells us that we are good and valuable mostly due to a title, a rank, an honor or a Stanford degree. Let us not celebrate our accomplishment alone today for what when the accomplishments end or when they fail to satisfy? When we don’t get this fellowship or grant? When everyone on Facebook has a bigger house, prettier baby, and a Nobel Prize. Our faith and this community remind us that it isn’t our successes that make us great or construct our identity. Let us celebrate us today and every day, instead for reasons celebrate this work. The reasons we celebrate every patient. Our relationships. Our humanity. Our presence in this brief moment.

Classmates I hope we do continue to cure disease, solve problems and help create a world of deeper knowledge, greater justice and better health. But more importantly, I wish for us lives filled with care, joy and great relationships. Not as an abdication of the responsibility to improve the world, but as a recognition that maybe improving the world begins right there with care, joy and great relationships. I hope you have terrific conversations with patients, mentors and colleagues. I hope you have enough time with your family, friends and loved ones to enjoy them. And more time, such that you find them boring. And still more time such that you find them annoying. I hope you have great conversations with yourself. But not so loud that other people get scared. I mostly hope you live out the moments and the life for yourself that you will fight so deeply to preserve for others. To the graduates and to this community of Care. I’m humbled by you and your ridiculous good looks. I thank you. I wish you all wonderfully mediocre careers and phenomenal, joyful lives.

Commencement Address by Dr. Margaret Hamburg, Commissioner of Food and Drug Administration.

Dr. Margaret Hamburg literally grew up on the Stanford campus. Her parents, David and Beatrix Hamburg, were pioneers in Psychiatry and Mental Health. David Hamburg was the first chair of Psychiatry when Stanford Medical School relocated to Palo Alto, and he also played a founding role in the Human Biology Program. Margaret Hamburg left Stanford after high school to attend the “Stanford of the East,” doing her undergraduate work and medical school education at Harvard University. Following Residency in Internal Medicine at New York Hospital and the Weill-Cornell School of Medicine, she did research in neurosciences at the Rockefeller University. With the onset of HIV/AIDS she joined the National Institute of Allergy and Infectious Diseases at NIH as Assistant Director. Her work in public service continued when she was named the Commissioner of Health for New York City, where her impact on transmission of HIV infection and the control of multi-resistant tuberculosis won national acclaim. She was appointed by President Clinton as Assistant Secretary for Planning and Evaluation, a position she held through the end of the Clinton Presidency. She then served as the Vice President for the Biological Program at the Nuclear Threat Initiative until she was tapped by President Barack Obama on May 18, 2007 to become the 21st Commissioner of the Food and Drug Administration. She is the second woman to serve as Commissioner of the FDA. I have had the honor and privilege of knowing Dr. Hamburg for over 20 years and stand in awe of her incredible accomplishments and leadership. We are proud to have her as our 2012 Commencement Speaker.
Dean Pizzo, trustees, distinguished faculty, parents, families, and friends – thank you for inviting me to participate in this wonderful celebration. I join all of you in congratulating the outstanding 2012 graduates of the Stanford University School of Medicine.

Whether you are receiving an MD, Ph.D, Master’s Degree, or a combined degree – you are graduating from an extraordinary institution…and you are poised to do extraordinary things.

As a daughter of Stanford, I admit to some bias, but there are few medical schools, anywhere, that offer the education and training that you have received. The dedication of Stanford’s faculty, the caliber of the teaching, the importance of its research, the quality of patient care and the effectiveness of its leadership have earned Stanford Medical School enormous respect and admiration, and secured its position as one of the leading medical institutions in the world.

And for the Class of 2012, you too deserve respect and admiration. You have clearly succeeded—even excelled-- in this exceptionally dynamic and demanding academic environment. As I look out from this podium, I know that for decades to come you will save lives, solve medical mysteries, and invent technological wonders – building on what you have learned and accomplished here.

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There is an old saying that it is better to be lucky than good. True or not, there is certainly a lot of serendipity in life. But Louis Pasteur had a different take. He said, “Chance favors the prepared mind.” I was reminded of this every day while serving as New York City Health Commissioner because the quote was inscribed on a wall in our lobby.

But you don’t need a reminder. You are already far better prepared than most. And you now belong to a very elite group that has the tools and training to improve the lives of so many… whether it is through research, or medicine, or public service. What you do will matter.

So on behalf of those whose lives you have already touched with your medical and research skills – and will touch in the years ahead – I say: Thank you for working so hard – and preparing so well!

And now I’d like to suggest that you also say – thank you.

First and foremost, thank your families. They’ve stood by you. They’ve supported you. And today they share your joy, excitement and pride.

Thank your professors – the faculty and staff who put so much time and effort into teaching you, guiding you, inspiring you, and sometimes prodding you.
And thank each other too – because you never would have reached this auspicious day without the friendship, support, and collaboration of your colleagues.

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For many years, Stanford was my home. I lived right on campus where both of my parents were on the Medical School Faculty. Growing up, I was immersed in medicine and science. My parents were physicians and researchers. So were most of my friends’ parents. It was the life I saw every day – and it looked fun, exciting and rewarding.

I went to college wanting to be a doctor, but when I got there, I discovered that premed courses weren’t so fun and there were plenty of other interesting things to do in life. I got involved with the school newspaper, and for a while considered a career in journalism.

My father now refers to this as the period when I was “drifting.” But eventually the “prodigal daughter” saw the light and came around. And when I was admitted to medical school, my Great Aunt Winnie – who was like a grandmother to me – exclaimed “Oh sweetie, I’m so happy – now finally you can marry a doctor!” I did not.

And back then, I was absolutely not planning on a career in government or public service…I wanted to be an academic physician engaged in research, teaching and clinical practice. But that old Yiddish saying is true: People plan and God laughs.

For me, my path took a dramatic turn as I watched the HIV/AIDS epidemic emerge. As first year medical school students, we had been told that with the advent of antibiotics and vaccines, medicine was on the verge of ending the era of infectious diseases.

How wrong that was. Soon cases of a mysterious immune deficiency syndrome began to present. No one knew what caused it. No one knew how to care for it. No one even knew what to call it. But it was AIDS.

By the time I was an intern in New York City, I was taking care of a great many AIDS patients. Even one of my fellow interns was lost to this devastating disease. But we had no effective treatments and no medicine on the horizon. We could offer neither a cure nor hope. For a newly-minted, idealistic doctor like me – that was humbling.

Those early days of AIDS brought many lessons. The AIDS epidemic opened my eyes to the importance of research and global health. It opened my eyes to the need for strategic thinking – and an integrated health care system that harnesses the full continuum of science, medicine and public health. And it opened my eyes to the fact that some of the greatest challenges in medicine exist at the interface of a broader set of social, ethical, political and legal concerns.

The AIDS crisis propelled me into the world of public health and health policy. And yes, this terrible disease opened my eyes, but it also opened a door – the unexpected opportunity to become the New York City Health Commissioner.
My first reaction was: “This crazy! I’m not qualified.” Frankly, I was scared. My Aunt Winnie was not altogether happy either. “You will be throwing away the chance – after so many years of training – to be a ‘real doctor’,” she admonished. My father tried to calm her down, explaining that I would still be a real doctor – but instead of having one patient at time, I would have 8 million. Now, as FDA Commissioner, I guess I have more than 300 million.

I am telling you this because when I sat where you are sitting today, I had no idea that I would one day end up in any of these jobs. Your future will definitely hold many opportunities. You’ve guaranteed that with the degree you are getting and all your hard work. But what path you choose will be neither obvious nor easy, nor without risk.

So be open to and enthusiastically seize new opportunities, wherever and however you find them. Let chance favor your prepared minds…and make sure that you translate your ideas and opportunities into real world action. Even when the path is hard.

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When I began as New York City Health Commissioner, the City was facing a fiscal crisis and budgets were being slashed. New York City was not only an epicenter for HIV/AIDS, but we were struggling to deal with the resurgence of tuberculosis in epidemic proportions, and now in a more dangerous and harder-to-treat drug-resistant form. Communities in the city had health statistics that looked more like those of developing countries, and we faced a new threat—domestic terrorism—that required that us to think in new ways about what it means to protect health.

I felt unprepared for so many problems, big and small. Whether it was how to ensure that thousands of TB patients scattered around the city—many of whom were homeless, drug-addicted, or had multiple concurrent medical and social maladies—took their medications reliably for months on end so that they would be adequately treated and in order to prevent further development of drug resistant strains… or how, after a young boy had been bitten by a possibly rapid raccoon, to transport the raccoon’s brain up to the only rabies testing lab which was up in Albany when the only employees authorized to transport biological materials were out on strike.

Nothing in my medical school curriculum prepared me with the answers. But we found them: For TB, we sent healthcare workers into homes and under bridges or wherever needed, to make sure that patients took their medicine until cured; and for the raccoon brain, an igloo cooler, a car service, and a willingness to skirt a few rules did the job…and possibly saved a boy’s life.

My experience as health commissioner was perhaps the best preparation for my job at the FDA. I entered this role in the midst of similar challenging circumstances. Economic uncertainty, budget constraints, mistrust in regulation, and concern about the future of health care overall.

But to be honest, when I agreed to lead this enormous agency, I did not fully appreciate the scope of the job. As you may or may not know, the FDA regulates drugs,
medical devices, vaccines and biologics, the safety of our nation’s food supply, blood supply, cosmetics, dietary supplements, and most recently tobacco. FDA regulated products account for over 20-cents of every dollar that consumers spend on products, and they represent things that people really care about—often in life-saving ways.

As an agency, we have to make hard decisions every day – and almost every decision leaves many people unhappy. But as I have learned, especially in the face of complex scientific and sociopolitical challenges, the only way for the FDA to stay on course is to be open, responsive and accountable; have a clear and consistent framework for decision making; weigh risks and benefits carefully; and – above all – ground our decisions in the best-available science.

No matter what you do, I think this is good advice for all.

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As future doctors, scientists, and public health officials – much will be expected of you. I urge you to recognize that with your training –and your new titles--comes a broader responsibility.

The poet William Butler Yeats wrote, “Though the leaves are many, the root is one.” I hope each of you will always remember that while the leaves of medicine are many, the root is one . . .and that is the imperative to advance human health for all.

Whether you are treating individual patients as a practicing physician; delving into the mysteries of life as a bench scientist; learning which therapies work best for which diseases as a clinical researcher; or addressing the broader issues of public health and health policy as a government official-- you have the opportunity and responsibility to be part of a whole that’s greater than yourselves.

Be willing to work across disciplines, across sectors, across borders. Be willing to work with all those who have a stake in what you are doing or a perspective to offer. I know that this philosophy of productive collaboration is embedded in Stanford’s education, research and patient care mission. I hope that you have embraced it and that you will live it in earnest. And why? Because the complexity and urgency of the problems before us demands it.

AIDS is now a chronic, manageable disease—not a life-sentence-- because the entire system worked together…from patients and their loved ones who advocated for their needs, to AIDS workers who walked the streets giving out accurate information and urging people to be tested, to doctors in clinics and hospitals who provided care and studied the disease, to dedicated and brilliant researchers in academic, government and private labs who made crucial discoveries about the nature of the disease and how to treat it.

The practice of medicine – and biomedical research – has never been more promising, more exciting, and more fulfilling. From sequencing the human genome, to eradicating small pox, to curing some deadly cancers, to effectively treating HIV infection, much of
what is possible today was only a hope when I began medical school. Huge progress has been made. But there is so much more to be done.

So never stop learning; never stop asking questions; and never forget that medicine is an art as well as a science practiced by doctors and researchers who bring to the bedside – and to the bench – not only technology and training, but also their humanity, caring, and concern.

Patients do not put their trust in machines or devices. They put their trust in you. You have already spent years studying, training, doing research and seeing patients. And you likely have many more years of education before you.

But please remember that the more skilled you become, the more specialized you become, and the more dependent on technology you become – the easier it becomes to lose your humanity, forget your compassion, and ignore your instincts.

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I have one last piece of advice: never, ever lose your moral compass.

AIDS was a crucible event that changed my career path – and my life’s mission. Watching AIDS destroy so many led me to public service where I have had the opportunity to treat not just individual patients, but whole neighborhoods, communities, and populations.

You came of age under the shadow of a different crucible of events: 9/11; a bioterrorist attack; two wars; a flu pandemic; the worst recession since the 1930s; a widening gap between rich and poor; and the specter of everything from unsustainable growth in health care costs, to a widening gap between rich and poor, an aging population, growing conflict in many parts of the world, newly emerging biological threats—both naturally occurring and deliberately caused, global warming… and I’m afraid the list goes on.

I hope you will take advantage of these challenging times to strengthen your moral compass – by directing your energies and talents to doing good, not just doing well; that you will combine the knowledge and skills you’ve gained here at Stanford with the courage of your convictions….to be great doctors and scientists, to speak for those in need or underserved; to advance science in the service of humanity, and to make sure you hand the next generation of doctors and scientists an even more innovative, responsive, curative and preventive health care system than the one that was handed to you.

But all of that is about tomorrow. Today is about you – your joy, your pride, your achievements, and your well-deserved celebration. I offer you all my best wishes for your success and happiness.

Congratulations Class of 2012 – and good luck.
Teaching Awards to Faculty and Residents

The Arthur L Bloomfield Award In Recognition of Excellence in the Teaching of Clinical Medicine
- Maha Mahadevan, MD, Associate Professor, Emergency Medicine
- Keith Posley, MD, Clinical Assistant Professor, Medicine
- Roland Torres, MD, Clinical Associate Professor, Neurosurgery

The Alwin C Rambar-James B D Mark Award for Excellence in Patient Care
- Paul Mohabir, MD – Clinical Associate Professor, Medicine – Pulmonary and Critical Care Medicine

The Franklin G Ebaugh, Jr. Award for Advising Medical Students
- Erika Schillinger, MD, Clinical Associate Professor, Internal Medicine

The Henry J Kaiser Family Foundation Award for Outstanding and Innovative Contributions to Medical Education
- Madelyn Kahana, MD, Professor, Pediatrics and Anesthesia

The Henry J Kaiser Family Foundation Award for Excellence in Preclinical Teaching
- Vivek Bhalla MD, Assistant Professor, Nephrology
- Jeffrey Chi, MD, Clinical Assistant Professor, Internal Medicine
- Mark Krasnow, PhD, Professor, Biochemistry

The Henry J Kaiser Family Foundation Award for Excellence in Clinical Teaching
- Jay Jernick MD, Clinical Associate Professor, Internal Medicine
- Kevin Keet, MD, Internal Medicine
- Gordon Lee, MD, Assistant Professor, Plastic Surgery

The Arnold P Gold Foundation Award for Humanism and Excellence in Teaching
- Monica Dua, Vascular Surgery
- David Iberri, Medicine
- Michelle Jonelis, Neurology
- Sid Mahapatra, Pediatrics
- Mariam Naqvi, Obstetrics and Gynecology
- Anand Veeravagu, Neurosurgery

Lawrence H Mathers Award for Exceptional Commitment to Teaching and Active Involvement in Medical Student Education
▪ John Gosling, MD, Professor, Surgery - Anatomy

School of Medicine Award for Graduate Teaching
▪ Nigam Shah, PhD, Biomedical Informatics

School of Medicine Award for Outstanding Service to Graduate Students
▪ Daniel Herschlag, PhD, Professor, Biochemistry

Best Lecture or Presentation 2012
▪ Lisa Chamberlain, MD, Assistant Professor, Pediatrics

Outstanding Teaching Assistant
▪ Daniel Roberts, SMS III

Community Preceptor (Clinical) 2012
▪ Erick Miranda, MD, Clinical Instructor, Emergency Medicine
▪ Scott Klein, Internal Medicine

The 2012 Graduates

Masters of Science

Nicole Clarke
Medicine

Aarin Celeste Ables
Human Genetics

Mucio Delgado, MD
Health Services Research

Tomer Altman
Biomedical Informatics

Catherine Amalia Del Vecchio
Medicine

Robert Thomas Arrigo
Biomedical Informatics

Kevin Furman Erickson
Health Services Research

Monica Bhargava, MDck
Health Services Research

Jian Yu Fung
Biophysics

Stuart Logan Blair
Biomedical Informatics

Meghan Elizabeth Grove
Human Genetics

Robert Vernon Bruggner, Jr.
Biomedical Informatics

Ming Guo
Biomedical Informatics

Cynthia Jane Campen
Epidemiology

Anita Honkanen, MD
Health Services Research

Shuai Chen

Emily Clare Hurford
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<td>Human Genetics</td>
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<td>Michael Hurley</td>
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<td>Hyunseok Peter Kang, MD</td>
<td>Biomedical Informatics</td>
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<td>Medicine</td>
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<td>Health Services Research</td>
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<td>Immunology</td>
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<td>Mark A. Smith</td>
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<td>Brendan Stubbs</td>
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<td>Nicholas Pierino Tatonetti</td>
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<tr>
<td>Vivian Tien</td>
<td>Chemical and Systems Biology</td>
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</table>
Vivien Tsai  
Health Services Research

Jason Ruben Wheeler  
Biomedical Informatics

Sandra Win  
Epidemiology

Daniel Eric Winetsky  
Health services Research

Scott Robert Woody  
Biophysics

DOCTOR OF PHILOSOPHY

Sarah Joann Aerni  
Biomedical Informatics  
*Single-Cell Gene Expression Analysis in C. Elegans*

Michael Nathaniel Alonso  
Immunology  
*CD4+ T Cells Regulate the Formation and Function of Inflammatory Dendritic Cells*

Mohammed Nazar AlQuraishi  
Genetics  
*Non-parametric Energy Potentials: A Compressed Sensing Approach*

Samuel Bandara  
Chemical and Systems Biology  
*Parameter Extraction from Single Cell Dynamics Using Numerical Optimization Techniques*

Max Ryan Banko  
Genetics  
*Chemical Genetic Screen for Novel AMPKalpha2 Substrates Reveals a Role for AMPK in Regulating a Network of Proteins Involved in Mitosis, Cytokinesis and Cytoskeletal Reorganization*

Monique Theresa Barakat  
Neurosciences  
*Hedgehog Signaling: The Role of Cilia in Developing, Adult and Neoplastic Cells*

Odmara Liz Barreto-Chang  
Neurosciences  
*Regulation of Neuronal Survival and CREB-Dependent Transcription by CaV1.2 L-Type Calcium Channels*

Matthew Strecke Burriesci  
Genetics  
*Developing Aiptasia Pallida as a Tractable Model System for Cnidarian-dinoflagellate Symbiosis: Identifying Transferred Metabolites and Designing Tools for Analysis of Ultra-high-throughput-sequencing Data*

Brad Lee Busse  
Biophysics  
*Proteomic Single-Synapse Analysis with Array Tomography*

Amanda Morgan Casto  
Genetics  
*The Evolution and Demography of X-linked and GWAS SNPs*

Moria Cairns Chambers  
Microbiology & Immunology  
*Building a Robust Immune Response*

David Pei-Ann Chen  
Biomedical Informatics  
*Integration of Electronic Health Records and Public Biological Repositories Illuminates Human Pathophysiology and Underlying Molecular Relationships*

Jia-Yun Chen  
Chemical and Systems Biology  
*Systems-level Understanding of Signaling Regulation on the Cell Fate Decision Between Proliferation and Differentiation*
Regina Kar-Wuen Cheung
Immunology
Identification of pDC Subsets by Cytokine Secretion

Pohhui Chia
Neurosciences
Building a Synapse: From Extracellular Cues to Intracellular Proteins

Sok Hyon Choi
Immunology
Mechanisms of Oncogene Addiction and Tumor Recurrence in MYC-induced Lymphomas

Peiying Chuan
Biochemistry
From Single Molecules to Single Cells: Mechanistic Studies of Myosin VI and Cardiac Myosin

Kelsey Lynne Clark
Neurosciences
The Role of the Frontal Eye Field in Gating and Maintaining Object Signals in Short-term Memory

Branden John Cord
Neurosciences
Modeling Midbrain Dopaminergic Neurobiology and Neuropathology Using Human ES and iPS Cells

Erik Corona
Biomedical Informatics
Effects of Recent Evolution on the Genetic Basis of Human Disease

Matthew Davidson
Immunology
Activated T-Helper Cells Promote the Formation of Distinct Monocyte-Derived Dendritic Cells

Catherine Amalia Del Vecchio
Cancer Biology
Defining Novel Functions for the Oncogenic Variant EGFRvlll in Tumor Initiation

Daniel James Dickinson
Cancer Biology
The Origin and Evolution of Alpha-catenin in Epithelial Cell Polarity

Zaoqing “Ching” Ding
Immunology
The Regulation of Neuroinflammation by the Modulation of Myeloid Cells

Badreddin Edris
Genetics
Novel Therapeutic Targets in Soft-tissue Sarcomas

Emily Lawson Egeler
Chemical and Systems Biology
Monitoring How Mammalian Cells Recognize and Degrade Unfolded Proteins

Laura Elizabeth Edgington
Cancer Biology
Functional Imaging of Cysteine Proteases in Cancer Using Novel Activity-based Probes

John Warner Fathman
Immunology
Purification and Characterization of the In Vivo Behaviors of Natural Killer Cell Progenitors and Hematopoietic Stem Cells

Ari Joseph Firestone
Chemical and Systems Biology
Identification and Characterization of Small Molecule Inhibitors of the Hedgehog Pathway Acting Downstream of Smoothened

Lynette Caizhen Foo
Neurosciences
Development of a Novel Method to Purify and Culture Mature Rat Astrocytes

Kirsten Linnea Frieda
Biophysics
Lin Gan  
Chemical and Systems Biology  
Genoe-wide siRNA Screen Identifies Novel Regulators of Amino Acid Signaling to mTOR

Saeed Hassanpour Ghady  
Biomedical Informatics  
Semantic-Based Information Extraction of Biomedical Definitions

Yun Pei Sharon Goh  
Immunology  
Innate Immune Control of Liver Regeneration and Metabolism

Matthew Jordan Goldstein  
Immunology  
CpG Vaccine Strategies Induce Tumor-reactive T Cells for Adoptive Therapy of Lymphoma

Jacqueline Leigh Grant  
Neurosciences  
Unexpected Therapeutic Benefit from Peripheral Administration of Amyloid-β in Th1- and Th17-Versions of Experimental Autoimmune Encephalomyelitis

Ethan Joseph Greenblatt  
Biophysics  
Derlin-1 Is a Rhomboid Pseudoprotease Required for the Dislocation of Misfolded Proteins from the Endoplasmic Reticulum

Calvin Tyi Hang  
Cancer Biology  
Cardiac Development, Growth, and Disease Through Chromatin Remodeling

Megan Amanda Hartman  
Biochemistry

Studying the Functions of Drosophila Myosin VI Through Identification of Multiple Cargo-binding Proteins

Andrea Elisa Hartsock  
Molecular and Cellular Physiology  
Regulation Mechanism of E-cadherin: Competitive Regulation of E-cadherin Juxtamembrane Domain Degradation by p120-catenin Binding and Hakai Mediated Ubiquitination

Olivia Louise Hatton  
Immunology  
Syk Survival Signals in Epstein-Barr Virus (EBV) + B Cell Lymphomas

Robert Tyler Hillman  
Genetics  
Neuropilins are Positive Regulators of Hedgehog Signal Transduction

Dustin Hite  
Biochemistry  
Systematic Studies of Genome-wide Translation in Saccharomyces Cerevisiae

Wen Qi Ho  
Immunology  
Opposition of Calcineurin/NFAT Signaling by the Nuclear Kinase Dyrk1a

Zuocheng Lewis Hong  
Genetics  
Genetics and Genomics of Mammalian Pigment Patterning

Paul James Hoover  
Molecular and Cellular Physiology  
Activation of the Calcium Release-activated Calcium Channel by STIM1

Emmy Evangeline Hoy  
Microbiology and Immunology  
Community Dynamics and Variation of the Murine Intestinal Microbiota in Health and Disease
Tiffany Hung
Cancer Biology
*Discovery and Characterization of Noncoding RNAs in the DNA Damage Response*

Jennifer Hwa
Neurosciences
*Dissecting the Cellular and Molecular Mechanisms Underpinning Two Aspects of Photoreceptor Morphology*

Jamie Francine Conklin Imam
Genetics
*From Stem Cells to Cancer: The Role of the RB Family in Cell Cycle Control and Differentiation*

Katherine LaRoque Jameson
Cancer Biology
*Tumor Selective Targeting of a Conserved Scaffold Domain*

Max Jan
Cancer Biology
*Pre-leukemic Hematopoietic Stem Cells Are Clonal Antecedents of Human Acute Myeloid Leukemia*

Jeremy Te-Hsun Juang
Microbiology and Immunology
*Peptide-MHC Heterodimers Reveal Differential Contribution of Weak Self-peptides to Positive and Negative Selection*

Cigall Kodoch
Cancer Biology
*ATP-Dependent Chromatin Remodeling in Human Malignancy: Identification and Characterization of Novel Subunits of the mSWI/SNF-like BAF Complex*

Jonathan Karr
Biophysics
*Development and Application of Whole-cell Models of Bacteria*

Matthew Kaufman
Neurosciences
*Neural Mechanisms and Dynamics Underlying Reaching and Decision Making*

Daniel M Klass
Biochemistry
*Global Mapping and Characterization of RNA-Protein Interactions Reveals New RNA Binding Proteins and Potential Novel Modes of Regulation and Specificity*

Holbrook Kohrt
Cancer Biology
*Strategies to Enhance Anti-tumor Immunity: Translating Preclinical Models*

Josephine Yuenming Lee
Microbiology and Immunology
*Host and Microbial Factors Influence Helicobacter Pylori Localization and Disease Progression*

Peter Leader Lee
Chemical and Systems Biology
*Localization and Movement: The Yin and Yang of Membrane Trafficking*

Wei-Nchih Lee, MD
Biomedical Informatics
*Evaluating Clinical Practice Patterns with a Knowledge-based Temporal Sequence Alignment Method*

Hwei-Xian Leong
Immunology
*Retinoic Acid Deficiency Reprograms Lamina Propria Dendritic Cells to Drive Inflammation and Tumor Growth in Spontaneous Intestinal Neoplasia*

Xinhong Lim
Developmental Biology
*Identification of Wnt-responding Stem Cells and Wnt-producing Niche Cells in Skin Homeostasis, Injury and Cancer*
Audrie Lin
Microbiology and Immunology
The Association of Gut Microbiota and Gut Function with Health and Disease in Bangladeshi Children

Jia-Ren Lin
Chemical and Systems Biology
Investigating the Molecular Mechanism of DNA Replication Associated Mutagenesis in Human Cells

Ray Lin
Biomedical Informatics
A Stochastic Model of Cancer Progression and Screening

Linda Yang Liu
Biomedical Informatics
Multi-scale Data-driven Analysis of Sex Differences in Human Disease

Manuel Eduardo Lopez, Jr
Developmental Biology
Regulable and Cell-type-specific Rescue of Niemann-Pick Disease Type C, a Neurodegenerative Lysosomal Storage Disorder

Michael Robert Mancuso
Cancer Biology
Novel Regulators of Angiogenesis and Cerebrovascular Integrity

Michelle R Marques
Cancer Biology
Elucidating the Mechanism of EWS-Fli1 Induced Oncogenesis

Sonia R Mayoral
Neurosciences
Sex Differences in a Mouse Model of Neonatal Brain Injury Associated with Preterm Birth

Mark Allan McElwain
Developmental Biology
An Analysis of the WntD Signaling Pathway in Inhibition of Dorsal Activity and Embryonic Primordial Germ Cell Guidance

Carissa Bove Meyer
Biochemistry
An In Vitro CENP-A Assembly Assay Reveals a Role for CENP-C in CENP-A Deposition

Christina Meyer
Biochemistry
Recognition of a Hapten Molecule by Gamma Delta T Cell Receptors

Christopher Jason Moore
Genetics
Genetic and Biochemical Analysis of the Ribonuclease E Family of Proteins and Escherichia Coli

Alexander Anthony Morgan
Biomedical Informatics
Methods of Study Integration in Multiplex Molecular Medicine

Thuy-Duong Barbara Nguyen-Vu
Molecular and Cellular Physiology
Neural Mechanisms of Cerebellum-dependent Learning: Error Signals and Enhanced Plasticity

Irene Adaugo Onyeneho
Molecular and Cellular Physiology
The Role of Map6-like Proteins in Cilium and Centrosome Function; and Microtubule Stability

Scott Fraser Owen
Molecular and Cellular Physiology
Oxytocin Enhances Signal-to-noise in Hippocampal Feed-forward Transmission by Selective Action on Targeted Interneuron Subtypes

Chirag Jagdish Patel
Biomedical Informatics
Environment-wide Associations to Disease and Disease-Related Phenotypes

Samuel Mark Pearlman
Biomedical Informatics
A Mechanism for the Evolution of Phosphorylation Sites

Julie Rebecca Perlin
Developmental Biology
Schwann Cell Migration and Myelination in Zebrafish Peripheral Nerves

Soren Joseph Peterson
Biochemistry
Molecular and Cellular Mechanisms of Tracheal Invasion of Polarized Muscle Networks in Drosophila

Lori Katherine Phillips
Immunology
Innate and Adaptive Immune Responses to Neural Progenitor Cell Allografts

Justine Michelle Pompey
Microbiology and Immunology
Characterization of an Rnaselll Protein and its Potential Roles in the RNA Interference Pathway of the Protozoan Parasite, Entamoeba Histolytica

Laura Marie Prolo
Neurosciences
Impaired Myelination in a Mouse Model of the Free Sialic Acid Storage Disorders

Paul George Rack
Chemical and Systems Biology
Genetic and Chemical Studies Towards the Understanding of Gli Regulation

Kavya Rakhra
Immunology
An Essential Role of the Immune System in Remodeling the Tumor Microenvironment Upon Oncogene Inactivation

Victoria Antonina Rafalski
Neurosciences
The SIRT1 Deacetylase in Neural Stem Cell Function and Oligodendrocyte Generation in Adults

Andreas Maximilian Rauschecker
Neurosciences
Visual Cortica Circuitry of Building Word Representations

Alexander Robert Red Eagle
Genetics
The IL-4/STAT6 Signaling Pathway in the Development of Obesity Induced Insulin Resistance

Simona Rosu
Genetics
Regulation of Meiotic Recombination: DNA Double-strand Break Formation and Repair in C. Elegans

Kacey Layn Sachen
Immunology
Self-antigen Recognition in the Pathogenesis of Follicular Lymphoma

Louis Alexander Saddic, III
Cancer Biology
Methylation of the Retinoblastoma Tumor Suppressor by SMYD2 & Functional Interactions Between Retinoblastoma and C-MYC in a Mouse Model of Hepatocellular Carcinoma

Keyan Salari
Genetics
Exploring Cancer Biology Using Integrative Genomics

Johanna Roberta Schaub
Cancer Biology
RILP-like Proteins and Ciliary Protein Trafficking
Mark Anthony Sellmyer  
Chemical and Systems Biology  
Chemical Tools to Observe and Perturb Complex Biology

Alan Hunter Shain  
Cancer Biology  
Using Integrative Genomic Approaches to Understand the Biology of Pancreatic Cancer

Erin Forbes Simonds  
Microbiology and Immunology  
Single-cell Deep Profiling of Immune Signaling and Drug Responses in Normal and Malignant Human Hematopoiesis

Alfred Sun  
Cancer Biology  
Direct Conversion of Human Fibroblasts to Neurons: A Tale of Recapitulation of a MicroRNA/chromatin Switch During Mammalian Neural Development

Christina D’Aura Swanson  
Immunology  
The Role of Epidermal Growth Factor Receptor in Autoimmune Arthritis

Nicholas Pierino Tatonetti  
Biomedical Informatics  
Data-driven Detection, Prediction, and Validation of Drug-drug Interactions

Ruth Ilana Tennen  
Cancer Biology  
To the Telomeres and Beyond: Chromatin Regulation by the Mammalian Sirtuin SIRT6

Feng-Chiao Tsai  
Cancer Biology  
Temporal and Spatial Coordination of Ca2+ Signaling in Cell Migration

Mark Akira Tsuchida  
Biochemistry

Dynamics and Mechanics of the Actin Cytoskeleton Ex Vivo

Nikoleta Georgieva Tsvetanova  
Biochemistry  
Characterization of Novel RNA-protein Regulatory Interactions in Saccharomyces Cerevisiae

Eric L Van Nostrand  
Genetics  
Genomics-driven Insights into Links Between Development and Aging in C. Elegans

Adrianne Elizabeth Vasey  
Immunology  
Immune Cell Trafficking and Function in Allogenic Responses

Saul Abraham Villeda  
Neurosciences  
Regulation of Neurogenesis and Cognitive Function by the Aging Systemic Milieu

Yue Wan  
Cancer Biology  
Understanding Transcriptomes Through RNA Structure

Stephanie Crane Weber  
Biochemistry  
Macromolecular Motion In Vivo: Anomalous Diffusion Through an "Active" Viscoelastic Medium

Jared William Wenger  
Genetics  
Natural Variation and Evolved Trade-offs in Yeast Carbon Metabolism

Nathaniel Shattuck Woodling  
Neurosciences  
Molecular Mechanisms of Inflammation in Models of Alzheimer's Disease

Guanglei Xiong
Biomedical Informatics
Computational Methods of Modeling
Vascular Geometry and Tracking
Pulmonary Motion from Medical Images

Xiao Xu
Cancer Biology
A GATA Transcription Factor, Egl-27, Promotes Stress Response and Longevity in C. Elegans

Alper Yetil
Cancer Biology
Role of P19ARF in MYC Inactivation Induced Senescence and Sustained Tumor Regression and Generation of Inducible BMI1 Transgenic Model

Rayka Yokoo
Genetics
COSA-1, a Meiotic Crossover Site Associated Protein

Fouad Zakharia
Genetics
Efficient Methods for the Study of Subcontinental Structure in Admixed Populations

Huibin Zhang
Genetics
In the Right Place at the Right Time: Understanding Basic MicroRNA Biology Through the Control of Developmental Timing by Lin-4 and Let-7 in C. Elegans

Weibin Zhang
Genetics
Regulation and Coordination of Homologous Pairing and Synapsis During Caenorhabditis Elegans Meiosis

Junaid Ziauddin
Microbiology and Immunology
Priming by Streptococcus Pneumoniae Causes Changes in Gene Expression in Drosophila Melanogaster

Noah Zimmerman
Biomedical Informatics
A Computational Approach to Identification and Comparison of Cell Subsets in Flow Cytometry Data

Doctor of Medicine

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New York, NY

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Palo Alto, CA • Pediatrics

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San Jose, CA • Family Medicine

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Palo Alto, CA • Pediatrics

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Palo Alto, CA • Emergency Medicine

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Palo Alto, CA • Pediatrics

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New Haven, CT • Neurological Surgery

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San Mateo, CA • Psychiatry

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Palo Alto, CA • Internal Medicine

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Stanford Hospital and Clinics  
Palo Alto, CA • Diagnostic Radiology

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Palo Alto, CA • Neurological Surgery

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Boston, MA • Anesthesiology

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Oregon Health & Science University  
Portland, OR • Internal Medicine

Ian Corcoran-Schwartz  
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Palo Alto, CA • Orthopaedic Surgery

Branden John Cord  
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New Haven, CT • Neurological Surgery

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Boston, MA • Pediatrics

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Palo Alto, CA • Surgery – Preliminary  
University of California Los Angeles Harbor Medical Center  
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David Paul Feliciano  
Residency to Begin in 2013

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Santa Clara Valley Medical Center  
Santa Clara, CA • Medicine – Preliminary

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Palo Alto, CA • Neurology

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La Jolla, CA • Obstetrics & Gynecology

Paul Hoover  
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Boston, MA • Internal Medicine

Ryan Huss
Megan Leigh Inso
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La Jolla, CA • Medicine – Preliminary
University of California San Diego
Medical Center
La Jolla, CA • Diagnostic Radiology

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Boston, MA • Otolaryngology

Thomas Michael Johnson
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Portland, OR • Emergency Medicine

Richard Hayden Jones
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Minneapolis, MN • Diagnostic Radiology

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University of California Los Angeles
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Honolulu, HI • Psychiatry

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Palo Alto, CA • Internal Medicine

Michael Robert Mancuso
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Palo Alto, CA • Internal Medicine

Eleanor Marshall
Georgetown University Hospital
Washington, DC • Transitional
University of Texas MD Anderson Cancer Center
Houston, TX • Radiation Oncology

Marlene Martin
University of California San Francisco
San Francisco, CA • Internal Medicine

Mary Kathryn McClellan
University of California San Francisco
San Francisco, CA • Family Medicine

Juan Carlos Montoy
University of California San Francisco
San Francisco, CA • Emergency Medicine

Nathaniel James Myall
Stanford Hospital and Clinics
Palo Alto, CA • Internal Medicine

David-Huy Nhu Nguyen
University of California San Francisco
San Francisco, CA • Internal Medicine

Wendy Pang
Stanford Hospital and Clinics
Palo Alto, CA • Internal Medicine

Jennifer Janell Parker
Rush University Medical Center
Chicago, IL • Medicine – Preliminary
Yale University – New Haven Hospital
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Jeremy Pearl
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San Francisco, CA • Medicine – Preliminary
University of California San Francisco
San Francisco, CA • Anesthesiology

**Brian Craig Pridgen**
Stanford Hospital and Clinics
Palo Alto, CA • Plastic Surgery (Integrated)

**Laura Marie Prolo**
Stanford Hospital and Clinics
Palo Alto, CA • Neurological Surgery

**Shyam Sampath Raghavan**
University of California San Francisco
San Francisco, CA • Surgery – Preliminary
University of California San Francisco
San Francisco, CA • Plastic Surgery

**Alexander Robert Red Eagle**
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Palo Alto, CA • Internal Medicine

**Christopher Hunt Renninger**
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**Louis Alexander Saddic, III**
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Brigham & Women’s Hospital
Boston, MA • Anesthesiology

**Hersh Sagreiya**
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Abington, PA • Medicine – Preliminary
University of Pennsylvania Medical Center
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**Keyan Salari**
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Boston, MA • Surgery – Preliminary
Massachusetts General Hospital
Boston, MA • Urology

**Michael Scahill**
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San Francisco, CA • Pediatrics – Primary

**Judith Amanda Schwartz**
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San Francisco, CA • Pediatrics

**Sarah Jane Selig**
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**Mark Athony Sellmyer**
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**Elena Sherman**
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Stanford Hospital and Clinics
Palo Alto, CA • Neurology

**Luz Maria Silverio**
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San Francisco, CA • Emergency Medicine

**Christina Stachur**
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Palo Alto, CA • Anesthesiology

**Krishnan N Subrahmanian**
Baylor College of Medicine
Houston, TX • Pediatrics / Global Health

**Michael Andrew Sundberg**
Brigham & Women’s Hospital
Children’s Hospital
Boston, MA • Medicine – Pediatrics

**Chad Tang**
University of Texas Medical School
Houston, TX • Medicine – Preliminary
University of Texas MD Anderson Cancer Center
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Santa Clara, CA • Transitional
Hospital of the University of Pennsylvania
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**Cassia Anne Wells**  
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New York, NY • Internal Medicine

**Jane Whitney**  
Children’s Hospital  
Boston, MA • Pediatrics

**Daniel Eric Winetsky**  
Hospital of the University of Pennsylvania  
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**Victoria Gah Hay Woo**  
University of California San Francisco  
San Francisco, CA • Obstetrics & Gynecology

**Judy Y Yeh**  
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Cleveland, OH • Obstetrics & Gynecology

**Ruo Peng Zhu**  
University of Michigan Hospitals  
Ann Arbor, MI • Internal Medicine

**Special Acknowledgement**

**Jose T Sandoval, MD**  
Class of 1977  
Donna, TX • Family Medicine
Other Awards and Honors

- **Dr. Steve Quake**, Lee Otterson Professor in the School of Engineering and Professor of Applied Physics and, by courtesy, of Physics, has been awarded the 2012 Lemelson-MIT Prize in recognition of his inventions. Quake invented a chip, similar to those in electronic devices, that lets scientists take nearly 10,000 different measurements at once. Through his work, called microfluidic large-scale integration, companies and research organizations are able to use the rubber chip technology in developing cancer drugs. The Lemelson-MIT Prize is known as the “Oscar for inventors” and recognizes people who translate ideas into innovations that improve the world.

- **Dr. Fernando Mendoza**, Professor of Pediatrics at Lucile Salter Packard Children’s Hospital, has received the President’s Award for Excellence through Diversity.

- **Dr. Ware Kuschner**, Associate Professor of Medicine (Pulmonary and Critical Care Medicine), has been named as the recipient of this year’s William A. Nelson Award for Excellence in Health Care Ethics. This award was established to recognize a Veterans Health Administration employee and is based on the nominee’s contributions that demonstrate long-term commitment and achievement in the area of ethics education, consultation, policy, scholarship, or leadership.

- **Dr. Robert Tibshirani**, Professor of Health Research and Policy (Biostatistics), has won the 2012 Gold Medal of the Statistical Society of Canada (SSC). This award is the highest distinction bestowed by the SSC. It is given annually to a Canadian statistician or probabilist who has made outstanding research contributions to statistical sciences and is intended to honor a leader in the field.

- **Information Resources and Technology (IRT)** has been awarded the 2012 AMX Innovation Award for Automation & Control. It was selected from over 500 applications from universities across the globe.

  Congratulations to all!

Appointments and Promotions
Alexander Butwick has been appointed to Assistant Professor of Anesthesia, effective 5/01/2012.

Andrew D. Endy has been reappointed to Assistant Professor of Bioengineering, effective 6/01/2012.

Nayer H. Khazeni has been appointed to Assistant Professor of Medicine, effective 6/01/2012.

Michaela Liedtke has been reappointed to Assistant Professor of Medicine, effective 9/01/2012.

Mark Pegram has been appointed to Professor of Medicine, effective 5/01/2012.

Eila Skinner has been appointed to Professor of Urology, effective 5/01/2012.

Edda Spiekerkoetter has been appointed to Assistant Professor of Medicine, effective 6/01/2012.