survey of the Century

How do you celebrate 100 years of lifesaving achievements? What are the priorities for the next 100? Send us your ideas for the Bloomberg School’s Centennial in 2016.

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Questions?
Contact Susan Sperry, Sr. Director of Communications and Marketing, at ssperry@jhsph.edu.

This is global health.

Why surgery is becoming the new low-cost lifesaver.

This summer 1,000 American Indian kids will descend on Shiprock, New Mexico, for the annual NativeVision camp. NFL players and Johns Hopkins coaches will lead sports clinics. And Martin Sheen will teach acting. Read our “postcard from camp” in the Fall 2013 issue.
A Different Future

Don’t give away the seed corn. It’s your future, as any good farmer will tell you.

Research is our 21st-century seed corn. Research delivers the new discoveries that propel our advances in science, technology and human health. It’s the engine of innovation and economic growth. One nonpartisan study found that government-funded research delivers an annual return of more than 25 percent.

There’s no free lunch, of course. This essential link to a prosperous and healthy future requires investment. Yet suddenly our leaders are not willing to invest in the future. The U.S. government’s budget sequestration (with its requisite 8.2 percent cut to biomedical research) is just the latest example of this perilous trend.

It’s time to ask: Is this the right thing for our country?

In low- and middle-income countries, there’s an incredible investment in research. Last year in China, for example, the research budget for schools of public health increased by more than 30 percent over the previous year. Countries all over the world are leaping into the knowledge-based economy. Whether it’s Singapore, the Gulf states or Brazil, everybody is investing in research. And they are increasing their investment while we are backing away from ours. This is not how we built the world’s largest economy. At a time when people are trying to be more like us, we’re trying to be less like us.

Sequestration, with its automatic, uniformly deployed spending cuts, manifests our government’s growing unwillingness to invest in the future. The problem with sequestration is it’s an across-the-board, dumb cut. It’s a haircut for everybody—even programs with proven effectiveness like Head Start. This kind of cut doesn’t allow you to trim the budget in ways that eliminate inefficiency or least hurt your mission. The result is predictable. Important programs suffer just as much as less important programs.

Here at the Bloomberg School, sequestration is already being felt. Let me rephrase that. “Felt” is not the right word. It’s more like a punch in the gut. The potential hit to our budget in the next federal fiscal year is $27 million.

The lab Sciences already have been hit especially hard by the cuts at NIH. Even for our most senior faculty, grant renewals have become nearly impossible or have been delayed for a year. This means downsizing teams and infrastructure. Recovering from a blow like this is not easy. It takes years to build up groups with the knowledge and expertise that can accumulate the insights that result in breakthroughs and new knowledge.

Our Department of Biochemistry and Molecular Biology (BMB), for example, recently lost a basic research training grant that had been funded for 25 years. It was a small grant for reproductive biology but it allowed for training doctoral students and supported a network of researchers throughout Johns Hopkins. Now it’s likely gone permanently.

That department’s remarkable momentum, built up in the last few years under the energetic leadership of Pierre Coulombe, is being jeopardized. As Pierre told me the other day, “We have been progressively switching from a growth, to a maintenance, to now a survival mode. Some of our newly recruited faculty worry about the future—and who could blame them? Despite all this, we continue to put out stellar science.”

This is just one example from one department but it’s happening throughout our School and across the nation. What does this say to a generation of prospective doctoral students who have the knowledge and the drive to contribute to science? It tells them, you need not apply. It says, don’t bank on scientific research as a stable career choice.

I don’t want to think about the future discoveries lost, the new knowledge that will never see the light of day because of the sequestration.

Sadly, this is not just about sequestration in the short term. Here’s what concerns me the most: Is this a paradigm shift? Do we, as a nation, truly want to retreat from investing in research? Do we want to say no to innovation? Do we want to back away from investing in our future?

Such a course will unalterably change the future of the Bloomberg School and our nation. About two-thirds of the School’s funding comes from government research grants, with NIH being the top funder. Significant cuts in the government’s research budget will lead to stagnating knowledge about how to save lives and a diminished selection of future tools to make meaningful differences in the health of millions. Ultimately it means ceding scientific leadership—and thus the future—to other countries.

I am so proud of the vital work this School does, and at the core of what we do is research. It drives our advances in education and in the field. Our School is 98 years old, and during that long history, research has been the foundation of our contributions, whether in making discoveries, producing new leaders or advancing public health practice.

Our long track record of accomplishment is at risk, not so much now but in the years ahead as we lose the leaders of tomorrow. We need to let our elected officials know to be judicious in meeting their fiscal responsibilities. And we need, as never before, philanthropic support for our mission of saving lives, millions at a time.
Transformer Man

DAVID CHIN IS OPTIMISTIC ABOUT U.S. HEALTH CARE—
IF IT FOLLOWS THE NEW PRESCRIPTION FOR AFFORDABLE CARE
There’s no Richter scale for measuring tectonic shifts in American health care, but that’s okay: Seismic changes will soon be apparent to all. When the dust settles, the fee-for-service model (which pays physicians more for doing more) will be a much smaller part of the landscape, says David Chin, MD, MBA, a former senior national partner with PricewaterhouseCoopers. Soaring health care costs and estimates that 20 to 50 percent of expenditures are wasted have made change essential, says Chin. One new model that is challenging fee for service is called the accountable care organization (ACO). Part of President Obama’s Affordable Care Act, ACOs are basically networks of hospitals and doctors that are rewarded for keeping patients healthy rather than for racking up office visits, angioplasties and tests.

Chin, now a Bloomberg School Distinguished Scholar, is leading an executive education program for transforming health systems to the accountable care model. The first cohort of doctors, nurses, managers and pharmacists is from the Johns Hopkins Health System and is learning from a similarly diverse group of educators from the schools of Public Health, Medicine, Nursing and Business. Their goal: lead ACO transformation. In a March interview with Johns Hopkins Public Health editor Brian W. Simpson, Chin explained how U.S. health care is changing and why he’s optimistic about its future.

Should we, as some argue, let the U.S. health care system collapse and rebuild it from scratch?

That’s the Alcoholics Anonymous model, right? You’ve got to crash and burn first. And then you’ll be willing to change. I think the system is too big to ever want that to happen. Too many people would get hurt. Until this point, the pain hasn’t been great enough in terms of cost to really drive change. But I think we’re getting there at 18 percent of GDP. Since the states cannot run deficits and they are on the hook for ever-increasing retiree health and benefits costs, they must come up with creative solutions. Otherwise, they go bankrupt. They have the most motivation to find a solution. That’s why I think the states will lead with innovation. I can imagine that ... different states will come up with some model that will work, and then we’ll say, OK, if it works there, then we’re willing to adopt it nationally.

Is fee for service really going away?

It’s funny. I think fee for service will be always with us, but maybe moderated some. You could make the argument that you might pay primary care physicians fee for service so you incentivize them to bring in patients at the primary care level, but then you might put specialists on some kind of global payment so there is an incentive for them to be more cost-effective.

How are ACOs incentivized to keep their population healthy?

[As a physician] in the current fee-for-service system, I only get paid if the patient comes in to see me. I do not get paid to keep a patient healthy or to keep a patient out of the system. The more I do, the more I make. Under an ACO model, I’m given almost a lump sum, a set amount of budget to take care of a population. And I know that a certain proportion of patients who are very, very sick and could use a lot of expensive therapy and in-patient days the next year aren’t necessarily the patients coming in to see me. It incentivizes me to go looking for patients [with] whom I can intervene earlier and reduce their costs. It also incentivizes me to use services more cost-effectively for those patients who do come and see me.

How does this affect physicians?

Not only is it a different reimbursement model, it’s a different mindset. Physicians aren’t classically equipped to deal with thinking about population health, number one. But also, number two, [there is] the notion of practicing in teams, like a patient-centered medical home. Many medical schools don’t have a curriculum around what’s the role of a physician inside a system of care. Classically, that’s a public health kind of discipline. I think that’s another potential source of discomfort for the docs. Not only is the money, the reimbursement thing, different, but now you’re moving into an area where you’re no longer the expert.

Are ACOs something that physicians welcome or dread?

I suspect you probably know the answer to that question. Most doctors grew up under fee for service, and that’s worked very well. Whenever you start changing the rules, particularly about money, people get kind of upset. But people do know that the current trajectory is not sustainable. Physicians are rapidly offering themselves up for employment with hospitals and health systems trying to get shelter. They can see the handwriting on the wall that the fee-for-service model is broken and that the inexorable rise in fees is no longer inexorable.

What’s the most important thing you teach in the executive program?

We actually spend a big chunk of the curriculum focusing on change management, how you work on teams, how you negotiate. Because we recognize that if you’re going to transform your system for accountable care—you can have a great idea, but if you can’t get the people, the docs, the managers and the nurses to buy it, it’s not going to happen.

Are you optimistic about U.S. health care?

Yeah. I tend to be inherently optimistic. I do think, given our pluralistic model and our penchant for experimentation, that we’ve got some potential to fundamentally change the system. But I don’t think it’s going to happen right away. I think a 10-year horizon is probably the right horizon.

Training health care executives sounds like business school. Why is this public health?

“Accountable care” really means a structure and a set of incentives to care for a population of people. To do that, there needs to be a set of measurements, incentives, structures and processes. That’s the public health focus. Accountable care starts by saying, I’ve got a whole population of people I am responsible for. Not only the people I see face to face in the office, but also the people who are out there as part of my population, that I’m going to be responsible for next year, and if I don’t get a handle on them, I’m going to be in trouble. That’s the public health twist to this thing.
Lawrence J. Appel, MD, MPH ’89, professor, Medicine, Epidemiology and International Health (IH), and director of the Welch Center for Prevention, Epidemiology and Clinical Research, was elected to the Institute of Medicine.

Abdullah Baqui, MBBS, DrPH ’90, MPH ’85, professor, IH, received the 2012 CORE Group Dory Storms Child Survival Recognition Award, and was honored by the Bangladesh Medical Association of North America.

Dan Barnett, MD, MPH ’01, assistant professor, Environmental Health Sciences (EHS), received the International Critical Incident Stress Foundation’s Cofounders Award.

Colleen Barry, PhD, MPP, associate professor, Health Policy and Management (HPM), was elected to the Policy Council of the Association for Public Policy Analysis and Management.

Robert Black, MD, MPH, Edgar Berman Professor and chair, IH, was appointed to Vitamin Angels’ Board of Directors.

Sara Bleich, PhD, associate professor, HPM, was recognized recently by the Obesity Society for best research manuscript in the journal Obesity.


Two projects co-produced by Johns Hopkins Health and Education in South Africa with USAID/PEPFAR funding—the Brothers For Life campaign and Intersexions, the HIV drama series—won Best Intervention awards at the AfricomNet Awards for Excellence in Health Communication.

Joanna Cohen, PhD, MHSc, Bloomberg Associate Professor of Disease Prevention in Health, Behavior and Society (HBS) and director of the Institute for Global Tobacco Control, was appointed to the Tobacco Products Scientific Advisory Committee, U.S. Food and Drug Administration.

Karen Davis, PhD, the Eugene and Mildred Lipitz Professor and Chair, W. Harry Feinstone Department of Molecular Microbiology and Immunology (MMI), was elected vice president of the National Academy of Sciences.

Robert H. Gilman, MD, professor, IH, was made an honorary professor at the Universidad Catolica in Santa Cruz, Bolivia.

Holly Grason, MA, associate professor, Population, Family and Reproductive Health (PFRH), received the Maternal and Child Health Section Award for Distinguished Service to the Profession from the American Public Health Association.

Diane Griffin, MD, PhD, Alfred and Jill Sommer Professor and Chair, W. Harry Feinstone Department of Molecular Microbiology and Immunology (MMI), was elected vice president of the National Academy of Sciences.

Ruth Karron, MD, professor, IH, and director of the Center for Immunization Research, was appointed to the CDC Advisory Committee on Immunization Practices.

Alain Labrique, PhD ’07, MHS ’99, MS, assistant professor, IH, was elected chair of the mHealth Technical Advisory Group at WHO.

Thomas LaVeist, PhD, William C. and Nancy F. Richardson Professor in Health Policy, HPM, was honored by the American Journal of Public Health with the 2012 Article of the Year award.

Paul A. Locke, DrPH ’98, MPH, JD, associate professor, EHS, was appointed to the Veterans’ Advisory Board on Dose Reconstruction.
The video recently won a prestigious bronze Telly Award, which honors outstanding film and video productions in the U.S.

Some 20 million Americans have damaged kidneys, placing them at risk of kidney failure, which affects 600,000. But many lack information about the pros and cons of the treatment options, which include transplantation, traditional hemodialysis in a center, and hemodialysis or PD at home, says Boulware, an associate professor of Medicine with a joint appointment in Epidemiology at the Bloomberg School. Minorities are four times more likely to develop kidney failure, and are also more likely to feel unprepared.

The four patients’ stories bring to life answers to the questions that researchers learned patients and their families have about the treatment options. Ella says she sometimes experiences an upset stomach but appreciates the convenience of the at-home treatment.

The materials, which Boulware hopes to distribute to physicians’ offices and patients across the nation, are meant to encourage patients to talk with their physicians and families and make a choice in line with their specific situation and values. Without advance preparation, Boulware says patients may experience unnecessary complications, or receive care they don’t want.

“It seems so innocuous just to provide education, [but] it’s probably quite powerful, especially when you think about what life is going to be like when you start treatment,” Boulware says. —Rachel Wallach

Thomas A. Louis, PhD, professor, Biostatistics, was named associate director for research and methodology, and chief scientist with the U.S. Census Bureau.

Vicente Navarro, MD, DrPH ’68, PhD, DMSA, professor, HPM, received a Doctor Honoris Causa from Lleida University of Catalonia in Spain.

Ana Navas-Acien, MD, MPH, PhD ’05, associate professor, EHS, was appointed to the National Academy of Sciences Committee on Inorganic Arsenic.

Sandra Newman, PhD, MUP, professor, HPM, Institute for Policy Studies, was appointed to the U.S. Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations.

Douglas Norris, PhD, MS, associate professor, MMI, is president-elect of the Society for Vector Ecology.

Kate O’Brien, MD, MPH ’94, professor, IH, was appointed to the WHO Strategic Advisory Group of Experts (SAGE) on Immunizations.

Felix E. Rivera-Mariani, PhD, postdoctoral student, EHS, received a 2012 LUSH Young Researcher Award for alternative research in toxicology.

Debra Roter, DrPH ’77, MPH ’75, MS, professor, HBS, was named a University Distinguished Service Professor.

Dean Honored with Bruce Award

Michael J. Klag, MD, MPH ’87, dean of the Bloomberg School, received the 2013 James D. Bruce Memorial Award for Distinguished Contributions in Preventive Medicine from the American College of Physicians. The award is named in honor of the national medical organization’s late former leader. Dean Klag was selected for his work and research in the prevention of cardiovascular and kidney disease.

Lester Salamon, PhD, professor, HPM, and Political Science, received the Aaron Wildavsky Enduring Contribution Award from the American Political Science Association for his book, Partners in Public Service: Government-Nonprofit Relations in the Modern Welfare State.

Steven L. Salzberg, PhD, professor, Biostatistics, Medicine, and Computer Science, won the 2013 Benjamin Franklin Award for Promoting Open Access in the Life Sciences.

Ellen Silbergeld, PhD ’72, professor, EHS, was named to the advisory board of the Zorig Foundation in Mongolia.

Alfred Sommer, MD, MHS ’73, University Distinguished Service Professor, Ophthalmology, Epidemiology, IH, and dean emeritus of the Bloomberg School, was named a Dan David Laureate.

Martin Stephens, PhD, senior research associate, EHS, Center for Alternatives to Animal Testing, received the Society of Toxicology Enhancement of Animal Welfare Award.

Stephen Teret, JD, MPH ’79, professor, HPM, and director, Center for Law and the Public’s Health, received the U.S. Consumer Product Safety Commission Chairman’s Commendation Circle Award; and presented the Dean’s Distinguished Lecture at the University of Colorado School of Medicine.

Michael Trush, PhD, MS, professor, EHS, was appointed to the CDC Safety and Occupational Health Study Section.

Cheri Wilson, MHS ’10, MA, research associate, HPM, was appointed co-chair of the Public Policy and Advocacy Committee of the National Association of Health Services Executives and elected an at-large member of the Steering Committee of the American Medical Association Commission to End Health Care Disparities.
Although more and more doctors are insisting that adolescent girls and boys should be immunized with the HPV vaccine prior to sexual debut, parents in the U.S. aren’t listening. An April 2013 Pediatrics article reveals that the number of parents who worry about the safety of the HPV vaccine and don’t intend to get their teens vaccinated rose dramatically (from 4.5 percent to 16.4 percent) from 2008 to 2010. In fact, only about 30 percent of teens have been immunized with the HPV vaccine, according to the American Cancer Society.

“It’s a tragedy the rates in the U.S. are so low,” D’Souza says, citing countries such as Australia and England where school-based vaccination programs have resulted in compliance rates as high as 90 percent. “It’s going to protect the younger generation [from cancer] if we can improve our uptake of the vaccine.”

The situation is even worse in developing countries. Worldwide, the numbers of women developing cervical cancer and dying from it annually remain unnecessarily high. Cervical cancer death rates are not dropping in places where screening is limited and the cost of preventive vaccines, prohibitive; in Shah’s native India, for instance, as well as in Taiwan.

T.C. Wu set out from Taiwan in 1984 and has been a Shah protégé ever since. “The whole story of me has 100 percent to do with Keerti,” Wu says.

With a new medical degree and new wife, Wu was 27 when he left home on an extended honeymoon trip that involved his bagging a master’s degree in public health from Johns Hopkins. That’s where his life plan of becoming a surgeon bumped up against Shah, and promptly derailed.

“I attended a lecture given by Keerti who was talking about a new virus that was found to be associated with cervical cancer,” Wu recalls. “All the textbooks said it was herpes, but here he was talking about the human papillomavirus. Because of that lecture, I spent the next five years [at Johns Hopkins] studying molecular biology related to a tiny virus.”

Wu, MD, PhD ’89, MPH ’85, is a professor of Pathology, Oncology, Obstetrics and Gynecology, and Molecular Microbiology and Immunology who now directs a long-term Hopkins-based project to develop vaccine strategies for the prevention and treatment of diseases caused by HPV.

During his graduate studies here, Wu became intrigued by the idea of using immunotherapy to target HPV-associated cancers. At the time, Shah had in place an HPV program that allowed Wu to accomplish an ambitious first step toward that goal: He created a mouse model of cervical cancer on which therapeutic vaccines could be developed and tested.

“We called it TC1,” Wu says, adding that the mouse name refers to “Tissue Culture 1” and not himself.

For the past nine years, he has headed up research efforts for a program that relies on extensive teamwork among the Hopkins community and receives the largest translational research funding for cervical cancer vaccine research provided by the National Cancer Institute, amounting to $14.4 million per five-year cycle.

The program, called the Cervical Cancer SPORE, is associated with several ongoing clinical trials of a new generation of relatively inexpensive vaccines that could protect women against more than 90 percent of all cervical cancers.

Everybody, including Shah, thought a therapeutic vaccine would be the quick and easy bow on top of the neatly tied-up HPV success story. Unlike the prophylactic HPV vaccines that produce antibodies to prevent viruses from growing, a therapeutic vaccine would work by looking for antigens in cancer tissue and attacking them. In the case of HPV, a viral antigen is present in every single tumor cell, so success seemed cut-cut, Shah says.

Therapeutic vaccines in development have cured thousands of mice seeded with cancer cells. None has yet cured humans. However, with continued efforts, the therapeutic HPV vaccine may soon become available.

When surveying the whole of HPV research—its past and future—Shah alludes to a paragraph in Lewis Thomas’ Lives of a Cell that describes scientific activity. For a long time, nothing makes sense. There are many false leads as people buzz about; bits of information fly here and there, as if somebody had disturbed a beehive.

And then, Shah recites this passage: “There suddenly emerges, with the purity of a slow phrase of music, a single new piece of truth about nature.”

“The whole story of me has 100 percent to do with Keerti.”

—T.C. Wu
Letters to the Editor

An End in Sight?

With all the efforts to fight malaria, described in “End Game,” “Blowin’ in the Wind” and “Voices Against Malaria” [Spring 2012], and “Malarial Gut Check” [Fall 2012], as well as other numerous efforts, the actual elimination of the disease may be nearer than is thought. I am optimistic that these efforts against the disease will continue to yield significant results and the many lives lost or damaged—especially in sub-Saharan Africa and many other resource-poor developing parts of our world—will be saved or improved.

Ransford P.S. Sefenu, MBChB, MPH
Sogakope, Ghana

A Prescription for Helping Seniors

I am a licensed clinical social worker who works as a staff therapist in a community mental health center. Many of my therapy clients are older adults who take a host of pain medications and other prescription drugs for their various health problems [“Rx for Survival,” Special Issue 2013]. It is a real problem and there are few available strategies to help them. Any suggestions?

Jennifer Kinsey
New Hampshire

Encouraging Research

It is very encouraging to see this important research being done by Dr. Holly Wilcox [“Illuminating Insights,” Special Issue 2013]. Understanding the epidemiology, and the who, when and how of suicides is the first step toward prevention. Thank you for all the good work!

Feihmida Visnegarwala
India

Editor’s Note—G. Caleb Alexander, MD, MS, co-director of the Bloomberg School’s Center for Drug Safety and Effectiveness, responds: Primary care physicians not only have a vital role to play in helping to curb the epidemic of opioid addiction and misuse, but also in working closely with patients and their families to ensure that patients’ prescription regimens are as clinically sensible and judicious as possible. And don’t discount the potential influence you can have by encouraging patients to “check up on their prescriptions” by carefully and critically reviewing their prescription regimens with their primary care provider.

A Compassionate Ending

I think the point of “A Sip of Water” [Special Issue 2013] was right on about having someone who genuinely cares and can stop the extraordinary and useless [medical] tests that do nothing but extend the suffering a little longer, but not the quality of life.

Barbara Wright, MS
Roanoke, Virginia

Share and Share Again

Whenever there is a loss, we have a sense of guilt, regardless of the circumstances [“Since Her Death,” Special Issue 2013]. It is particularly important to seek out friends, peers and colleagues to share our feelings. Share, share and share again. It is our humanity that helps to heal the wounded soul. Never hesitate to ask a colleague: “Are you OK?”

Richard Charlat, MD, MPH
VA Salt Lake City Health Care System

Captivated? Disenchanted? Send us your comments: editor@jhsph.edu.