

# IMPACT

The Schaeffer Center Report 2013/14 | Measurably improving value in health

**USC** Schaeffer  
Leonard D. Schaeffer Center  
for Health Policy & Economics

The Schaeffer Center is currently in year one of an intervention that expands the role of pharmacists in primary care settings which will lead to a three-year cost savings of more than

# \$30,000,000

[More on page 20]

There are 170 million people worldwide with hepatitis C. In a recent USC research study, only **1 in 4** of the hepatitis C patients in their study were willing to undergo treatment and only 16.4% achieved the minimum treatment response. [More on page 16]



USC is a partner in a collaborative grant to build a new network integrating health data from 21 million patients to study congestive heart failure, obesity, and Kawasaki disease.

[More on page 16]



**By asking doctors to make a public commitment to lowering unnecessary antibiotic prescriptions, USC researchers found a real way to decrease costs. Extending their findings nationwide, the researchers could help eliminate 2.6 million unnecessary antibiotic prescriptions and save more than \$70 million annually in drug costs.** [More on page 15]

A USC Schaeffer analysis of Medicare cuts under the ACA found that a reduction in payments **SAVED \$7.26 BILLION AT THE EXPENSE OF 39,477 LIVES LOST.**

[More on page 15]

## DIRECTOR'S LETTER

# What impact really looks like

PRODUCING RELEVANT RESEARCH is what drives us. This is distinct from—and conceptually different than—high-quality research. Often the latter entails a narrow focus on a small question, at the expense of applying its findings to current policy. From Day One, we knew at the Schaeffer Center that we wanted to produce research of consequence. “Relevant, rigorous, independent research” was the rallying call that brought us together and helped the Center ascend to prominence in just a few short years.



Ensuring we do work of both relevance and consequence requires continual vigilance. This year, we initiated a strategic planning process to help us focus moving forward. I am indebted to Leonard D. Schaeffer, our Advisory Board chair; our Advisory Board members; Jack Knott, the dean at the Sol Price School of Public Policy; Pete Vanderveen, the dean at the School of Pharmacy; and Center faculty and staff for contributing to this important process.

This annual report showcases the relevant, meaningful research conducted by the Schaeffer Center this past year, and exhibits how our mission sets us apart. As you will see, our dedication to assembling the nation's best researchers and developing a robust data infrastructure is what leads us to produce research with consequence for Los Angeles, California, and the nation. This dedication also attracts the most promising students, as highlighted in our section on the future generation of health policy leaders.

The premium we place on relevance and consequence is what will always distinguish us. Thank you for taking the time to learn more about our work.

Sincerely,  
Dana Goldman



# About the Schaeffer Center

The Leonard D. Schaeffer Center for Health Policy and Economics was established in 2009 at the University of Southern California with a generous gift from Leonard and Pamela Schaeffer. The Center reflects the Schaeffer's life-long commitment to solving health care issues and transforming the health care system.

Addressing health policy issues requires complex solutions, creative research methods, and expertise in a variety of fields—including medicine, economics and public policy. For this reason, the Schaeffer Center is based on the principle of interdisciplinary research. Resulting from a collaboration between the USC Sol Price School of Public Policy and the USC School of Pharmacy, the Center brings together health policy experts, a seasoned pharmacoeconomics team and other affiliated faculty and scholars from across USC and a number of other distinguished universities.

***The Schaeffer Center is based on the principle of interdisciplinary research.***

The Center is committed to developing exceptional capacity to conduct interdisciplinary research, policy analysis, and training. More than 20 distinguished scholars and faculty currently investigate a wide array of topics. Their work is supplemented by visiting scholars and collaborations with other universities, allowing outside researchers to take advantage of the Center's research infrastructure and data. The Center also is actively engaged in training new investigators with excellent research skills who can be the "innovators of the future." At the same time, the Center is helping the next generation of health care leaders develop strong management, team-building, and communication skills as part of this training.

With a vision to be the premier research and educational institution recognized for innovative, independent research and a significant contributor to policy and health improvement, the Center's mission is to measurably improve value in health through evidence based policy solutions, research excellence, transformative education, and private and public sector engagement.

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Artistic rendering of Verna and Peter Dauterive Hall, future home of the Schaeffer Center



# Meet the Staff and Faculty

**Back row, from left to right:**  
 Briana White, Jason Doctor,  
 Bryan Tysinger, Geoffrey Joyce,  
 Michael Menchine, Brian Harper,  
 Seth Seabury, Erin Trish,  
 Daniella Meeker, Jeremy Barofsky,  
 Steve Fox, Grant Lawless,  
 Sophie Terp, Sanjay Arora.  
**Middle row, from left to right:**  
 Sadena Thevarajah,  
 Oluwaninyo Aderibigbe,  
 Celina Ng, Joann Tusia,  
 Barbara Blaylock, Tara Knight,  
 Sarah Axeen, Daniel George,  
 John Romley, Duncan Leaf,  
 Cristina Wilson, Laura Gascue,  
 Jeffrey McCombs, Devin Stambler.  
**Front row, from left to right:**  
 Patricia St. Clair, Jing Wu,  
 Dana Goldman, Leonard D. Schaeffer,  
 Darius Lakdawalla,  
 Julie Zissimopoulos, Joanne Wu,  
 Alice Liu, Nicole Russo,  
 Lauren Scarpati.

## Core Leadership

**Dana Goldman**  
 Director

**Jason Doctor**  
 Director, Health Informatics

**Geoffrey Joyce**  
 Director, Health Policy

**Neeraj Sood**  
 Director, Research

**Sadena Thevarajah**  
 Director, External Affairs

**Julie Zissimopoulos**  
 Associate Director

## Staff

**Oluwaninyo Aderibigbe**  
 Sharepoint Administrator

**Alejandro Bugacov**  
 Programmer Analyst

**Laura Gascue**  
 Quantitative Analyst

**Etienne Gaudette**  
 Project Administrator

**Sara Geiger**  
 Administrative Assistant

**Daniel George**  
 MIS Manager

**Tara Knight**  
 Project Manager

**Duncan Leaf**  
 Research Programmer

**Alice Liu**  
 Program Specialist

**Jacklyn Mancilla**  
 Administrative Assistant

**Celina Ng**  
 Program Specialist

**Patricia St. Clair**  
 Senior Quantitative Analyst,  
 Programmer Manager

**Devin Stambler**  
 Assistant Director of  
 External Affairs

**Bryan Tysinger**  
 Research Programmer

**Briana White**  
 Program Manager,  
 Education and Training

**Cristina Wilson**  
 Contracts and Grants Manager

**Joanne Wu**  
 Programmer Analyst

## Faculty

**Jason Doctor, Ph.D.**  
 Associate Professor,  
 School of Pharmacy

**Steven Fox, M.D.**  
 Assistant Professor, School  
 of Pharmacy

**Dana Goldman, Ph.D.**  
 Leonard D. Schaeffer Chair  
 and Director of the USC  
 Schaeffer Center for Health  
 Policy and Economics

**Joel W. Hay, Ph.D.**  
 Professor, School of Pharmacy

**Marco D. Huesch, Ph.D.**  
 Assistant Professor, Sol Price  
 School of Public Policy

**Geoffrey F. Joyce, Ph.D.**  
 Associate Professor,  
 School of Pharmacy

**Darius Lakdawalla, Ph.D.**  
 Quintiles Chair in Pharmaceutical  
 Development and Regulatory  
 Innovation, School of Pharmacy;  
 Professor, Sol Price School of  
 Public Policy

**Grant Lawless, R.Ph., M.D.,  
 FACP**  
 Associate Professor, School  
 of Pharmacy

**Jeffrey S. McCombs, Ph.D.**  
 Associate Professor, School  
 of Pharmacy

**Daniel L. McFadden, Ph.D.**  
 Presidential Professor, Sol Price  
 School of Public Policy

**Glenn A. Melnick, Ph.D.**  
 Professor, Blue Cross of  
 California Chair in Health Care  
 Finance, Sol Price School of  
 Public Policy

**Michael B. Nichol, Ph.D.**  
 Director, Health Programs;  
 Professor, Sol Price School  
 of Public Policy

**John A. Romley, Ph.D.**  
 Research Assistant Professor  
 Economist, Sol Price School  
 of Public Policy

**Seth Seabury, Ph.D.**  
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 Research, Keck School of  
 Medicine

**Neeraj Sood, Ph.D.**  
 Associate Professor, School  
 of Pharmacy

**Vivian Wu, Ph.D.**  
 Assistant Professor, Sol Price  
 School of Public Policy

**Julie Zissimopoulos, Ph.D.**  
 Research Associate Professor,  
 School of Pharmacy

## Quintiles Senior Fellows

**David Agus, M.D.**  
 Director, USC Center for  
 Applied Molecular Medicine;  
 Professor, Keck School of  
 Medicine and Viterbi School  
 of Engineering, University of  
 Southern California

**Jay Bhattacharya, M.D., Ph.D.**  
 Associate Professor, Stanford  
 University School of Medicine

**Amitabh Chandra, Ph.D.**  
 Area Chair, Social and Urban  
 Policy; Professor, Public Policy,  
 Harvard Kennedy School  
 of Government

**Eileen Crimmins, Ph.D.**  
 Associate Dean, Edna M. Jones  
 Professor of Gerontology;  
 Director, USC/UCLA Center  
 on Biodemography and  
 Population Health Ethel Percy  
 Andrus Gerontology Center,  
 University of  
 Southern California

**Bob Kocher, M.D.**  
 Partner, Venrock

**Pat Levitt, Ph.D.**  
 Provost Professor, Keck School  
 of Medicine, University of  
 Southern California

**Anup Malani, Ph.D.**  
 Lee and Brena Freeman  
 Professor of Law, University  
 of Chicago

**Tomas Philipson, Ph.D.**  
 Daniel Levin Professor of Public  
 Policy, University of Chicago

**Scott Ramsey, M.D., Ph.D.**  
 Full Member, Division of  
 Public Health Sciences at Fred  
 Hutchinson Cancer Research  
 Center; Professor, University  
 of Washington School  
 of Medicine

**Nancy Staudt, Ph.D.**  
 Professor, Gould School  
 of Law, University of  
 Southern California

**Steven Teutsch, M.D., M.P.H.**  
 Chief Science Officer, Los  
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 Department; Adjunct Professor,  
 Emory University School of  
 Public Health and UNC School  
 of Public Health

## Quintiles Clinical Fellows

**Sanjay Arora, M.D.**  
 Associate Professor, University  
 of Southern California

**Steve Kim, M.D.**  
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 Angeles, Keck School of  
 Medicine, University of  
 Southern California

**Ashwini Lakshmanan, M.D.**  
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 Keck School of Medicine,  
 University of Southern California

**Michael Menchine, M.D.**  
 Research Director, Associate  
 Professor of Clinical, Keck  
 School of Medicine, University  
 of Southern California

**Karen Woo, M.D.**  
 Assistant Professor of Surgery,  
 Keck School of Medicine,  
 University of Southern California

## Merkin Fellow

**Daniella Meeker, Ph.D.**  
 Information Scientist, RAND  
 Corporation

## Visiting Fellow

**David Leonhardt**  
 Managing Editor, *New York  
 Times* Washington Bureau

## Post-Doctoral Scholars

**Jeremy Barofsky, Sc.D.**  
 Economics, Harvard University;  
 M.A. Economics, Boston  
 University; B.A. Economics,  
 Boston University

**María José Prados, Ph.D.**  
 Economics, Columbia University;  
 M.Phil. and M.A. Economics,  
 Columbia University; B.A.  
 Economics, Universidad  
 Nacional de Cuyo

**Erin Trish, Ph.D.**  
 Health Policy/Economics,  
 Johns Hopkins University; B.S.  
 Biomedical Engineering, Johns  
 Hopkins University

**SINCE 2009, THE  
 SCHAEFFER CENTER  
 HAS GROWN FROM  
 FOUR FACULTY  
 MEMBERS TO  
 SEVENTEEN.**

# Meet the Schaeffer Center Advisory Board

## Leonard D. Schaeffer, Chair

Leonard D. Schaeffer was the founding Chairman and CEO of WellPoint, Inc., and was Chairman and CEO of WellPoint's predecessor company, Blue Cross of California. He is currently a senior advisor to TPG Capital and is the Judge Robert Maclay Widney Chair and Professor at USC. He previously served as Administrator of the Health Care Financing Administration. He serves on the boards of Quintiles, the RAND Corporation, the Brookings Institution, USC, and Harvard Medical School (HMS), and is on the advisory boards of HMS's Department of Healthcare Policy and RAND Health. He chairs the advisory board for the Schaeffer Center for Health Policy and Economics at USC. He has endowed academic chairs at the Brookings Institution, the University of California (Berkeley), Institute of Medicine, and HMS.

## Drew Altman, Ph.D.

Drew Altman is President and Chief Executive Officer of the Henry J. Kaiser Family Foundation, one of the nation's largest private foundations devoted to health. Dr. Altman is a former Commissioner of the New Jersey Department of Human Services. He was also Director of the Health and Human Services program at the Pew Charitable Trusts and Vice President of the Robert Wood Johnson Foundation. Dr. Altman is a member of the Council on Foreign Relations and the Institute of Medicine. He is an innovator in the world of foundations and a leading expert on national health policy.

## Lars Birgerson, M.D., Ph.D.

Lars Birgerson is Senior Vice President, Medical, and a member of the Bristol-Myers Squibb Research and Development (R&D) senior leadership team, the company's most senior leadership group in R&D. Dr. Lars is also a member of the Brand Development Operating Committee as well as a co-chair of the Medical Review Group and the Commercialization Excellence team. Dr. Lars has more than 20 years of biopharmaceutical industry experience in senior positions in Medical Affairs, Drug Development, Business Development and Licensing at Bristol-Myers Squibb,

Genentech, Roche, and Pharmacia. Prior to joining BMS, Dr. Lars served as the Vice President of Medical Affairs at Genentech. Dr. Lars received his M.D., Ph.D. and completed residencies at Uppsala University in Sweden.

## Robert Bradway

Robert Bradway is the Chairman and Chief Executive Officer of Amgen. Mr. Bradway became chairman in January 2013 and Chief Executive Officer in May 2012. He served as the company's President and Chief Operating Officer from May 2010 to May 2012 and was appointed to the Amgen Board of Directors in October 2011. He joined the company in 2006 as Vice President, Operations Strategy, and served as Executive Vice President and Chief Financial Officer from April 2007 to May 2010. Prior to joining Amgen, he was a Managing Director at Morgan Stanley in London where he had responsibility for the firm's banking department and corporate finance activities in Europe.

## John D. Diekman, Ph.D.

John D. Diekman, Ph.D. is a Founder and Managing Partner of 5AM Ventures, a life sciences investment firm. Previously Dr. Diekman was Chairman and CEO of Affymetrix, and Chairman and Managing Director of Affymax. He is a Charter Trustee of Princeton University and former Trustee of The California Institute of Technology and also of The Scripps Research Institute, where he served as Chairman. He is an Honorary Officer of the Order of Australia. Dr. Diekman received a B.A. in Chemistry from Princeton University and a Ph.D. in Chemistry from Stanford University. Dr. Diekman holds an Honorary Degree of Doctor of Laws from Monash University.

## Joaquin Duato

Joaquin Duato is Worldwide Chairman, Pharmaceuticals, Johnson & Johnson, a position he assumed in January 2011. A member of the Johnson & Johnson Management Committee, he is responsible for the global pharmaceutical commercial businesses of the Janssen Pharmaceutical Companies of Johnson & Johnson. In this role, Mr. Joaquin also oversees the Operations, Quality, and Compliance functional groups supporting the pharmaceutical commercial and research and development organizations. A native of Valencia, Spain, Mr. Joaquin holds an undergraduate degree in Economics and two Master's degrees—one in Business Administration from ESADE Business School in Barcelona; the other in International Management from Thunderbird School of Global Management in Phoenix, Arizona.

## Dennis Gillings, CBE, Ph.D.

Dennis Gillings is the Executive Chairman and former Chief Executive Officer of Quintiles. He began providing statistical consulting and data management service

to pharmaceutical clients in 1974 during his tenure as a professor of biostatistics at the University of North Carolina at Chapel Hill. Quintiles arose from his consulting activities and was incorporated in 1982 with 10 employees. Dr. Gillings was born and educated in the United Kingdom. Today he serves on several boards and councils. He was honored by the Queen as Commander of the Most Excellent Order of the British Empire in 2004 for services to the Pharmaceutical Industry.

## Robert Ingram

Robert Ingram is General Partner of Hatteras Venture Partners, a venture capital firm. Mr. Ingram was the Chairman and CEO of GlaxoWellcome and co-led the merger that formed GlaxoSmithKline. He currently serves as Lead Director of VALEANT Pharmaceuticals International and Chairman of Elan Corporation. He also serves on the boards of Allergan Inc., Cree Inc., Edwards Lifesciences Corporation, Pharmaceutical Products Development Inc., and PhaseBio Pharmaceuticals, Inc. Mr. Ingram also serves on the boards of the James B. Hunt Jr. Institute for Educational Leadership and Policy, Research Triangle Foundation, H. Lee Moffitt Cancer Center, National Board for Professional Teaching Standards, President's CEO Roundtable on Cancer, and GlaxoSmithKline Foundation.

## Pam Kehaly

Pam Kehaly is Senior Vice President of Wellpoint West Region & Specialty Business, as well as President of Anthem Blue Cross, the largest health benefits company in California. Previously, Ms. Kehaly was president of national accounts for Aetna. There she had responsibility for the division's profit and loss performance, and managed sales, underwriting, account management and operation teams. Ms. Kehaly received a B.A. in Business Administration from California State University, Stanislaus. She is on the board of the California Association of Health Plans, the California Chamber of Commerce, and LA Adaptive Business Leaders. She is an active member of the Los Angeles Division of the Susan G. Komen Foundation.

## Bob Kocher, M.D.

Bob Kocher is a Partner at Venrock, focusing on healthcare IT and services investments. Previously he was a Partner at McKinsey & Company, served in the Obama Administration as Special Assistant to the President for Healthcare and Economic Policy, and was a member of the National Economic Council. Dr. Kocher currently serves on the boards of Castlight and Hope Street Group and the advisory boards of the National Institute of Healthcare Management, Harvard Medical School Health Care Policy Department, and ChildObesity180. He is also a non-resident senior fellow at the Brookings Institution and co-chair of the Health Data Initiative.



Leonard D. Schaeffer



Drew Altman, Ph.D.



Lars Birgerson, M.D., Ph.D.



Robert Bradway



John Diekman, Ph.D.



Joaquin Duato



Dennis Gillings, CBE, Ph.D.



Robert Ingram



Pam Kehaly



Bob Kocher, M.D.



Robert Margolis, M.D.



Michael A. Mussallem



Norman C. Payson, M.D.



Thomas M. Priselac



Robert D. Reischauer, Ph.D.



Judith A. Salerno, M.D., M.S.



David Schlotterbeck



Timothy M. Wright, M.D.

## Robert Margolis, M.D.

Robert Margolis is the Chief Executive Officer of HealthCare Partners, Incorporated. He was a founding and managing partner of HealthCare Partners' predecessor, California Primary Physicians Medical Group. Dr. Margolis serves as a member of the HealthCare Policy Advisory Council for Harvard Medical School and the Executive Management School Advisory Committee of the School of Public Health at the University of California, Los Angeles. He is also on the boards of the National Committee for Quality Assurance, the California Association of Physician Groups, California Hospital Medical Center, Los Angeles, the Council of Accountable Physician Practices, and Martin Luther King, Jr., Hospital.

## Michael A. Mussallem

Michael A. Mussallem is Chairman and Chief Executive Officer of Edwards Lifesciences Corporation. Mr. Mussallem has been Chairman and Chief Executive Officer since 2000 when the company spun-off from Baxter International. Prior to his current position, Mr. Mussallem held a variety of positions with increasing responsibility in engineering, product development and senior management at Baxter. Mr. Mussallem is the former Chairman of the Board of Directors of the Advanced Medical Technology Association (AdvaMed). He is currently on the boards and executive committees of AdvaMed, California Healthcare Institute, and OCTANE, and is a trustee of the University of California, Irvine Foundation.

## Norman C. Payson, M.D.

Norman C. Payson is President of NCP, Incorporated and former Chairman and Chief Executive Officer of Apria Healthcare Group. Dr. Payson was Chairman of Viant Holdings and its predecessor company, Concentra, Inc., Chief Executive Officer of Oxford Health Plans, co-founder and Chief Executive Officer of Healthsource, Inc., and CEO of a 120 physician multispecialty group practice. Dr. Payson is a graduate student lecturer at the Tuck School at Dartmouth, the Columbia University School of Public Health, and the University of Chicago Graduate School of Business. Dr. Payson is a graduate of the Massachusetts Institute of Technology and received his M.D. at Dartmouth Medical School.

## Thomas M. Priselac

Thomas M. Priselac has served as President and Chief Executive Officer of the Cedars-Sinai Health System since January 1994 and has been associated with the organization since 1979. Mr. Priselac currently serves on the California Healthcare Foundation Board. He is a past Chair of the American Hospital Association Board of Trustees, the Association of American Medical Colleges, and the California Hospital Association. The holder of the Warsaw/Law Endowed Chair in Healthcare Leadership at Cedars-Sinai Medical Center, Mr. Priselac also serves as an adjunct professor at the UCLA School of Public Health and is an author and invited speaker on a variety of healthcare issues.

## Robert D. Reischauer, Ph.D.

Robert D. Reischauer is a Distinguished Institute Fellow and former President of the Urban Institute. Between 1989 and 1995, he served as the Director of the Congressional Budget Office. He was also a Senior Fellow at the Brookings Institution. A nationally recognized economist, he frequently contributes to the opinion pages of the nation's major newspapers, comments on public policy developments on radio and television, and testifies before congressional committees. Dr. Reischauer is the Senior Fellow of the Harvard Corporation, one of two public trustees of the Social Security and Medicare trust funds. He was Vice Chair of the Medicare Payment Advisory Commission.

## Judith A. Salerno, M.D., M.S.

Judith A. Salerno is the President and Chief Executive Officer of Susan G. Komen. Before joining Komen, she was the Leonard D. Schaeffer Executive Officer of the Institute of Medicine (IOM) of the National Academies, serving as Executive Director and Chief Operating Officer of the Institute. In that role, she oversaw the National Cancer Policy Forum—a consortium of government, industry, academic, consumer, and other representatives that identifies and examines emerging high-priority policy issues in cancer. Dr. Salerno was Deputy Director of the National Institute on Aging (NIA), directed the continuum of Geriatrics and Extended Care programs for the U.S. Department of Veterans Affairs (VA), and was Associate Chief of Staff at the VA Medical Center in Washington, D.C.

## David Schlotterbeck

David Schlotterbeck is the Independent Director of Juniper Networks & Maxwell Technologies, as well as the retired Chairman and Chief Executive Officer of CareFusion. Mr. Schlotterbeck has been in the medical device industry for the past 22 years. Starting in 1999 he began a focus on improving the safe delivery of intravenous drugs while President and CEO of Alaris Medical Systems. After being acquired by Cardinal Health in 2004, as Vice Chairman, he expanded his focus on hospital medication safety and preventing hospital acquired infections. Mr. Schlotterbeck served as Chairman and Chief Executive Officer of CareFusion, the fifth largest global medical technology company spun-out from Cardinal Health, until his retirement in February 2011.

## Timothy M. Wright, M.D.

Timothy M. Wright is the Global Head of Development at Novartis Pharmaceuticals. He is a member of the Pharmaceutical Executive Committee and the Innovation Management Board at Novartis. Prior to his current appointment, Dr. Wright served as Senior Vice President and Global Head of Translational Sciences at the Novartis Institutes for BioMedical Research for four years. He joined Novartis in 2004 as Deputy Head of Exploratory Clinical Development for Translational Research. Previously, Dr. Wright was the Exploratory Therapy Area Leader for Inflammation at Pfizer Global Research and Development in the United States. He served as Chief of the Division of Rheumatology and Clinical Immunology at the University of Pittsburgh where he was awarded an endowed professorship in 1998.

# Economic Report of the President

The 2013 Economic Report of the President is the Obama Administration’s annual overview of the country’s economic progress and policies. Featured in the section on the administration’s health care agenda was a Schaeffer Center study on cancer costs.

The study, led by **Tomas Philipson** alongside **Dana Goldman** and **Darius Lakdawalla**, compared life expectancy and treatment costs between cancer patients in the United States and the European Union. From 1983 to 1999, spending per cancer patient rose \$16,700 more than European spending. In the same period, the life expectancy of cancer patients rose .4 years over European patients. By 1999, cancer patients in the United States had a life expectancy 1.8 years longer than European patients.

The Economic Report used the findings to elaborate on medical productivity in the United States and to demonstrate how sizable gains in spending have the potential to improve specific health outcomes.

“Faster growth in spending on cancer treatment in the United States than in Europe over this period is sometimes mistakenly taken to indicate the inefficiency of medical care, but it is also the case that the improvement in life expectancy for cancer patients was greater in the United States than in Europe,” the administration wrote of Philipson’s research.

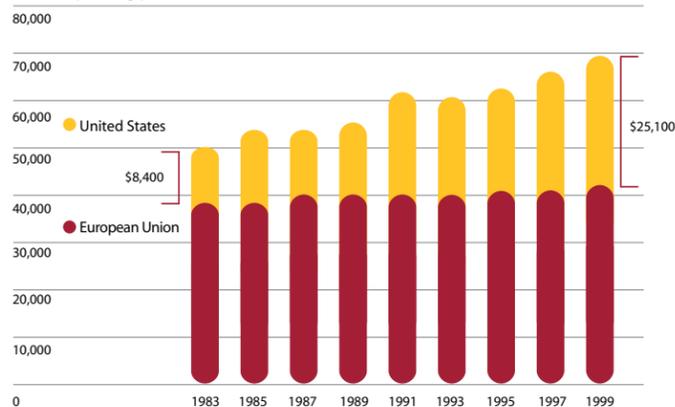
While Philipson’s study suggests cancer treatments are an area where high spending can have high value, the report also cites a study by Dana Goldman concerning high costs with low value. In his research, Goldman points to the overuse of expensive medical technologies with low medical value including coronary artery bypass graft surgery, hysterectomy, and cataract surgery.

The report elaborates that inefficiencies, including the type of overuse Goldman’s study investigated, account for 13 to 26 percent of national health expenditures, and that understanding and eliminating them would allow for huge opportunities in improving quality of care.

*“...the improvement in life expectancy for cancer patients was greater in the United States than in Europe”*

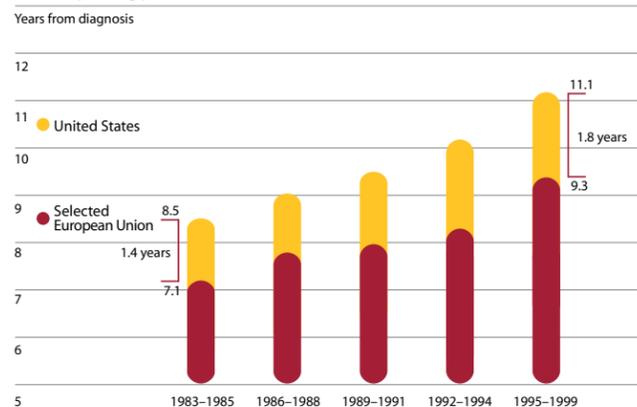


Cancer Spending per New Cancer Case, 1983–1999



Source: Philipson et. al. (2012), updated data provided by the authors.

Cancer Spending per New Cancer Case, 1983–1999



Note: European countries included are Finland, France, Germany, Iceland, Norway, Slovakia, Slovenia, Sweden, Scotland, and Wales. Source: Philipson et al. (2012), updated data provided by the authors; Epidemiology and End Results (SEER); European Cancer Registry (EUROCARE).

**WE HAVE ALL** heard the saying “Age is just a number,” and now researchers are finding that the numbers don’t mean what they used to. As more people stay healthy and live longer, experts say chronological age may not be as relevant.

At the Schaeffer Center, **Dana Goldman** and others are working to learn more about how it is that many people function mentally and physically as if they were younger than their chronological age. They found that nearly one-third of Americans older than 85 have not been diagnosed with any major chronic disease.

“Some employers force their employees to retire at a certain age and all Americans are eligible for Medicare at 65,” Goldman said. “These findings tell us that we may need to take a closer look at these policies that presume that age, health decline, and dependency all go hand in hand.”

Researchers have also found that delaying the aging process would extend life more than separate advances in treatments for cancer or heart disease, and that it would bring better economic returns. Their study was the first to examine the costs and health returns on developing therapies for delayed aging.

“If we can age more slowly, we can delay the onset and progression of many disabling diseases simultaneously,” Goldman said. “Shifting the focus of medical investment to delayed aging instead of targeting diseases individually would lead to significant gains in physical health and social engagement.

“We see extremely large population health benefits, and the benefits will extend to future generations. There are major fiscal challenges, but these are manageable with reasonable policy changes, and the economic value of such a shift is too large to ignore,” Goldman said.

# Aging More Slowly

*“We may need to take a closer look at these policies that presume that age, health decline, and dependency all go hand-in-hand.”*

Dana Goldman

## Securing the Future for Older Adults

**SCHAEFFER CENTER ASSOCIATE DIRECTOR PRESENTS  
FINDINGS ABOUT OLDER ADULTS’ FINANCIAL SECURITY  
TO THE FEDERAL RESERVE**

**RETIREMENT MAY** never be the same again. The Great Recession decimated the retirement savings for many, and older workers in particular struggle to recover. As a result, working longer will become a necessity. The financial security of a large segment of society is only now beginning to come into focus. Last July, the Federal Reserve sought to better understand the unique position of older adults in a post-crisis economy by hosting a Forum on Financial Experiences of Older Adults.

**Julie Zissimopoulos** moderated and participated in two panels on older adults’ financial status.

“The Federal Reserve generally deals with very macro problems,” said Zissimopoulos. “But everything they do impacts individuals. The panelists and I were bringing it to the individual level. How are older individuals doing? What are the challenges they will face in securing their financial future?”

Zissimopoulos’ research has delved into specific facets of older Americans’ financial lives. As she told the Federal Reserve audience, the number of workers over age 65 in the workforce has been steadily rising since 1990. Along with an aging workforce comes a rising rate of self-employment as well, as older individuals may step back from their original careers to start others based on different interests or other changes in their lives.

“Self-employment can better accommodate any work-limiting health condition. So those with disabilities seem to be able to find a better work environment as their own boss,” she said.

Rather than taking jobs away from the young or creating a drain on resources, as many believe, older workers contribute both to economic growth and the financial stability of Social Security. Policy, says Zissimopoulos, plays a significant role in encouraging longer work lives and reducing the disincentives to working longer.

“What I wanted to bring out were some of the challenges and constraints, and more importantly, highlight where good policy might be able to help,” Zissimopoulos said.

*“What I wanted to bring out were some of the challenges and constraints, and more importantly, highlight where good policy might be able to help.”*

Julie Zissimopoulos

# An Affordable Care Act Alternative

## SCHOLARS DESIGN A NEW AND IMPROVED HEALTH CARE INSURANCE SYSTEM

Staying true to the Schaeffer Center mission of conducting innovative research, scholars dared to imagine what a completely new health care system could look like. The policy proposal that emerged from their work has fueled a conversation about the values that underlie health care decisions.

**Darius Lakdawalla** and **Dana Goldman** were members of a team of researchers that released a report sponsored by the American Enterprise Institute (AEI) titled “Best of Both Worlds: Uniting Universal Coverage and Personal Choice in Health Care.”

“We think that what Americans are looking for is a solution that combines choice and market opportunities with a concern and compassion for poorer and more disadvantaged groups,” said

Lakdawalla, lead author of the report.

The proposal is not a revision of the Affordable Care Act (ACA) but a “start-from-scratch” approach that describes the ideal health care system in which the government provides basic coverage but private insurers are able to set prices that cover their costs.

*“A path to universal coverage without mandates feels to me like more of an American solution than the one we have in place”*

Darius Lakdawalla

“That feels to me like more of an American solution than the one we have in place,” Lakdawalla said.

“We don’t want to live in a world where people can’t get access to care. But in general we find that private companies do a lot better job of targeting care that works for patients who need it and avoiding wasteful types of medical care,” he said.

The report charts a path to universal coverage without mandates. It removes the income tax exemption for employer-based health insurance, which would unbundle health insurance from employment. It also would remove barriers to long-term insurance contracts to protect Americans from rate increases that could occur after a major illness.

Only those who use the most health services and have the highest incomes would pay more than they do now.

“The heart of the policy issue is how we deal with costs,” Lakdawalla said. “Exchanges in principle are a good idea. The ACA takes some good steps but it doesn’t go nearly far enough in a number of directions.”

AEI is a private, nonpartisan, not-for-profit institution dedicated to research and education on issues of government, politics, economics, and social welfare.

# Congressional Testimony on FECA

## CONGRESS SOLICITS ADVICE FROM SCHAEFFER FACULTY ON WORKERS’ COMPENSATION

In July 2013, the Department of Labor proposed reforms to the Federal Employees Compensation Act (FECA) which provides federal employees injured at work with workers’ compensation benefits. The Department proposed a flat rate of 70 percent of a worker’s wages (adjusted for inflation) before they were injured, regardless if the worker has dependents.

**Seth Seabury** testified to a subcommittee of the U.S. Congress that the proposed reforms made FECA benefits both less adequate and equitable.

He testified that, as an example, a flat rate as proposed does not adjust when workers have dependents, and those workers with families would receive far fewer benefits proportionally. Nor did the proposed changes factor in lost career growth and the accompanying salary increases.

“If you fail to account for lost career growth, if you don’t consider the impact a worker’s injury has not just today but on the rest of their working life,” Seabury said, “you can really understate the long-term consequences of the injury.”

*“If you fail to account for lost career growth... you can really understate the long-term consequences of the injury.”*

Seth Seabury

“The point of my testimony,” he said, “was really to describe the best way to evaluate the adequacy of worker’s compensation benefits.”

Seabury has spent much of his career evaluating the economic impacts of disabling injuries and considering how well the worker’s compensation system serves disabled workers. The proposed reforms were tied in with the 2013 Postal Reform Act, which is currently stalled in Congress.

“I’m hopeful that in the long run, when agencies try to make changes to their workers’ compensation benefits, this testimony and this body of work in general helps clarify there’s a right way to do it—and that’s to incorporate the full potential effects of a workplace injury.”



Seth Seabury (far right), testifying in front of the U.S. House of Representatives.

# Understanding the Impact of ACA Medicare Cuts

## Does the Medicare “Donut Hole” Affect Seniors?

“...the donut hole leads seniors to pare back on their prescription drugs”

A Schaeffer Center study finds that seniors’ prescription drug use falls slightly because of a gap in insurance coverage.

More than two million Americans fall into the so-called “Donut Hole” in Medicare, a calculation that leaves a gap in coverage for prescription drugs. At a certain cost threshold, a senior must pay out of pocket for half of a brand-name drug’s cost until the expenses reach another threshold.

**Geoffrey Joyce**, along with the Schaeffer Center’s **Julie Zissimopoulos** and **Dana Goldman**, find that the donut hole leads seniors to pare back on their prescription drugs. In the *Journal of Health Economics*, the authors report that, for diabetics, the declines in use were modest

and concentrated among higher cost, brand-name medications. Demand for high-cost medications such as antipsychotics, anti-asthmatics, and drugs of the central nervous system declined by up to 18 percent. Less costly drugs such as generic beta blockers, ACE inhibitors, and antidepressants declined by up to 5 percent. Despite lower use, there was no apparent increase in other medical services.

DEMAND DECLINED BY UP TO **18%** FOR HIGH-COST MEDICATIONS

DEMAND DECLINED BY UP TO **5%** FOR LOW-COST MEDICATIONS



### POLICYMAKERS MUST WEIGH HEALTH EFFECTS

#### AGAINST COST SAVINGS

Policymakers face a difficult set of decisions as the impact of Medicare payment cuts enacted as part of the Patient Protection and Affordable Care Act (ACA) take hold. As Schaeffer Center work shows, they will be weighing cost savings against lives lost.

“In our analysis, a reduction in Medicare payments saved \$7.26 billion, at the expense of 39,477 lives, or about \$184,000 per life lost,” **Vivian Wu** said. “Some may argue that it’s a costly intervention while others may think it’s worth it. Regardless of what one might think, we need to bring

these numbers to the table and be transparent about the tradeoffs we are making.”

Wu and a colleague designed a study to better understand the impact of the cuts using data from 1997 when similar permanent reductions were made. The results showed that mortality rates differed between hospitals that experienced smaller cuts and those hit with larger cuts, suggesting that reductions can lead to poorer health outcomes.

“Inefficiency is not a universal phenomenon,” Wu said. “This type of broad payment cut could contribute to widening gaps in quality between health care organizations.”

## Nudging Doctors to Not Overprescribe Antibiotics

### RESEARCHERS USE BEHAVIORAL ECONOMICS TO IMPROVE

#### TREATMENT OF ACUTE RESPIRATORY INFECTIONS

Overprescribing antibiotics for acute respiratory infections caused by viruses can be dangerous and costly. Yet, efforts to educate physicians on prescription guidelines have had little impact.

So a team of researchers that includes the Schaeffer Center’s **Jason Doctor**, **Tara Knight**, and **Daniella Meeker** are taking a different approach. They’re testing three new interventions based on behavioral economics, an evolving body of research that recognizes that people don’t always make rational decisions and need to be nudged in the right direction with various incentives.

In this experiment, the team periodically relays to clinicians how their rate of inappropriate antibiotic prescriptions compares with that of their peers. Social standing is a strong motivator, behavioral economists have found. Another intervention prompts the physicians to write down his or her justification for prescribing an antibiotic; commitments like these are effective in changing behavior. The final effort provides doctors with a list of treatment alternatives and materials to give to patients.

This study is innovative because the tested interventions are designed to take advantage of predictable, irrational behavior patterns that have been observed in humans within their larger social settings; the hope is that the design will lead to greater change in provider behavior. This study is ongoing through 2014.

“Most quality improvement efforts have used audits or pay-for-performance incentives to try to change what providers do, but they ignore social influences that affect all people, including physicians.”

Jason Doctor

## JAMA and Treating Hep C

In a study of Veterans Affairs (VA) patients with hepatitis C (HCV) led by Schaeffer Center’s **Jeffrey McCombs**, and published by *JAMA Internal Medicine*, only a minority of patients were willing to start treatment and fewer still achieved the undetectable viral loads that appear to be associated with decreased rates of illness and death.

HCV is estimated to affect as many as 170 million people worldwide and an estimated 3.2 million people in the United States. Patients with HCV are at risk of developing liver-related complications such as cirrhosis, liver failure, and the cancer hepatocellular carcinoma (HCC), according to the study. However, sometimes patients with HCV go untreated because of adverse effects from available treatments.

McCombs, of the Schaeffer Center, and colleagues sought to describe the progression of HCV in clinical practice by examining the time to liver-related clinical events and death in a group of 28,769 patients from the VA HCV clinical registry.

Of the patients, only 24.3 percent were willing to start treatment, and 16.4 percent of treated patients achieved an undetectable viral load. The study reports that death rates were 6.8 per 1,000 person-years for patients who achieved viral suppression vs. 21.8 per 1,000 person-years in patients who did not meet that goal. Patients who achieved undetectable viral loads also reduced their risk of liver-related events by 27 percent, according to the results.

“While antiviral therapy can lead to viral eradication and reduced event risk, its effectiveness under real-world clinical conditions is limited by adverse effects and other factors. In this study, only 1 in 4 patients with HCV and a detectable viral load were willing to initiate treatment. Once treated, only a fraction of patients achieved the minimum treatment response of a single undetectable viral load test,” said McCombs.

*“While antiviral therapy can lead to viral eradication and reduced event risk, its effectiveness under real-world clinical conditions is limited.”*

Jeffrey McCombs

## New Grant Leverages Patient Data

Researchers in Southern California, including the Schaeffer Center’s **Jason Doctor**, have been awarded funding to create a stakeholder-governed network that will integrate data from more than 21 million patients. The Schaeffer Center and their partners were selected for this grant by the Patient-Centered Outcomes Research Institute (PCORI), an independent nonprofit organization authorized by Congress in 2010 to conduct research aimed at helping both patients and healthcare providers make informed decisions.

The newly created network called the patient-centered SCALable National Network for Effectiveness Research (pSCANNER) will integrate data from numerous robust data bases. Tapping into these existing data bases will allow for advances in the research capabilities of scholars, as well as improvements in outcomes for patients.

Researchers will utilize the network’s capabilities to study congestive heart failure, Kawasaki disease, and obesity. Patients, patient advocates, domain experts, health services researchers, clinicians, and administrators from across the country have agreed to contribute to the governance of pSCANNER, as well as the prioritization of research questions.

By forming this network and allowing secure access of patient information to researchers across the country, strides can be made in these important fields. PCORI, the Schaeffer Center, and their many partners are focused on providing high-quality data, research, and analysis that will be translated into better practices and outcomes for clinicians and patients alike.

## SCHAEFFER CENTER RESEARCH UNCOVERS HOW HEALTH WEBSITES USE PERSONAL SEARCH DATA

Imagine you’re in need of some basic information about a sensitive health topic. Your first stop is likely the Internet, and you’re probably visiting with the assumption your search stays private. But do health sites really keep your information out of third parties’ hands?

The Schaeffer Center’s **Marco Huesch** conducted his own experiment to find out. Using privacy and interception software, he sampled 20 popular health websites to determine whether searches about cancer, depression, and herpes were tracked or leaked to third parties. He found every site had at least one third party element, and usually more. Thirteen sites had at least one tracking element. Furthermore, seven provided search information to third party tracking groups.

Clearly, there are major holes in current regulation and policy to protect privacy, which could have major consequences.

“The ramifications could be simple embarrassment to discrimination

in the labor market. Marketers could also make a deliberate decision to not advertise particular goods and services to an individual based solely on the privately gathered information,” Huesch said.

Huesch published his research in the *Journal of the American Medical Association*. His work garnered media attention worldwide and he appeared in both the *New York Times* and on National Public Radio. Following the publication of his work, Illinois Attorney General **Lisa Madigan** wrote a letter to eight executives at major health sites asking them to disclose how much information they capture, whether they share it with third parties, and if so, who the parties are.

“Health-related information, which would be protected from disclosure when said in a doctor’s office, can be captured, shared, and sold when entered into a website,” Madigan wrote. “These concerns are likely to be overlooked by consumers, as the disclosures about capturing and sharing their information are often buried in privacy policies not found on websites’ main pages.”

In the still-evolving field of online privacy regulation and legislation, Huesch’s research has already caused ripples.

Think Before You Google It:

# Online Privacy and Health

*“Health-related information, which would be protected from disclosure when said in a doctor’s office, can be captured, shared, and sold when entered into a website”*

Lisa Madigan  
Illinois Attorney General

# Helping Californians Understand the Affordable Care Act

## SCHAEFFER CENTER OFFERS UNBIASED, OBJECTIVE INFORMATION FOR THE STATE'S NEW HEALTH EXCHANGE

California is facing unprecedented times. With the launch of Covered California, the state's health benefit marketplace created under the Patient Protection and Affordable Care Act (ACA), Californians are getting health insurance in fundamentally new ways.

"There is probably no greater health policy challenge facing California than implementing the Affordable Care Act," said **Dana Goldman**. Covered California provides a way for people to shop for health insurance and apply tax credits that lower the cost of premiums.

"It's vital that we construct a marketplace for the uninsured, because California leads the nation in the number of uninsured," added Goldman.

Goldman sits on Covered California's Plan Management and Delivery System Reform Advisory Group and has been integral in helping build in consumer choice functions that let people more easily shop for their insurance. As a nationally recognized health economist, Goldman also plays an important role as an objective expert.

"Most members have a stake in the system. But we're taking a very independent and objective view from a health policy perspective," he said.

In February 2013, USC's Sol Price School of Public Policy and the Schaeffer Center hosted a panel in Sacramento to examine the health care exchange. The panel included Peter Lee, the executive director of Covered California, the California Health Benefit Exchange; Schaeffer Center Senior Fellow **Bob Kocher**, former Special Assistant to President Obama for Healthcare and Economic Policy; Jay Hansen, Chief Strategy Officer for the California Medical Association; and Goldman.

In the forum, Goldman presented the Schaeffer Center's research on consumer uncertainty about health plans. When one study asked employees about their insurance deductible, only about one-half could identify it correctly. He also pointed to his research into the Medicare Part D prescription drug coverage plan, in which he found that few people chose the best plan for their needs and often didn't choose the most generous plan.

Goldman cautioned that if California consumers, and the 6 million uninsured, do not fully understand their options, the consequences could hurt them. "You may see generous plans eroding over time in the exchange," he said, because consumers aren't optimally choosing the best plans. "We have to be careful about monitoring what's going on."



Photo credit: Martin Vo

Jay Hansen, Dana Goldman, Bob Kocher, and Peter Lee discuss Covered California.

# Evaluating Hospital Pricing Policies

## STUDY FINDS THAT CALIFORNIA'S LAW MEETS GOAL TO PROVIDE AFFORDABLE CARE

**CALIFORNIA HOSPITALS** have met and exceeded the requirements of the 2006 "fair pricing" law designed to protect uninsured patients from high medical bills, **Glenn Melnick** has found.

"The law should be a model for other states enacting similar legislation," wrote Melnick in a recently published study. By 2011, most hospitals had adopted financial assistance policies to make care more affordable for the state's 6.8 million uninsured residents.

"Although hospitals may collect less revenue as a result of these policies, they will also incur reduced collection costs and improve their reputations in their local communities," Melnick and University of Southern California USC colleague Katya Fonkych shared in their article published in *Health Affairs*.

Many uninsured residents rely on hospital emergency departments for their medical care. Because they did not have insurance, hospitals typically billed the uninsured at a rate four times higher than that paid by insured patients.

Most California hospitals reported that they now offer free care to uninsured patients who have incomes at or below 100 percent of the federal poverty level, Melnick's study found.

"The administrative structure and costs of complying with the law do not appear overly burdensome, and it seems that once hospitals began to explicitly evaluate their prices to uninsured patients, as required by the law, they offered more affordable prices—especially to the lowest income groups," Melnick and Fonkych wrote.



*"The law should be a model for other states enacting similar legislation."*

Glenn Melnick

# Better Quality and Lower Costs Through Clinical Pharmacy Integration



## Helping the LA County Department of Public Health Reduce Health Disparities

### RESEARCHERS INTEGRATE PHARMACISTS INTO SAFETY-NET CLINICS TO INCREASE MEDICATION SAFETY AND REDUCE HEALTHCARE COSTS

A 58-year-old woman with Type 2 diabetes arrives at a safety-net clinic in Los Angeles with medications in hand. Meeting with the resident pharmacist, she admits that she doesn't know what several of the drugs are for because no one has ever explained them to her in Spanish. The pharmacist, who is new to the clinic under a grant testing whether integrating pharmacists into clinics can help improve medication adherence and lower costs, explains in Spanish what each medication is for and teaches her the proper way to use her syringes for the first time.

Over three years, interventions like these are estimated to save \$31.7 million by preventing hospitalization and emergency room visits.

In October 2012, the Centers for Medicare and Medicaid Services awarded USC researchers \$12 million for a project that places pharmacy teams into 10 clinics in underserved neighborhoods of Los Angeles. The pharmacists, the majority of whom are bilingual, interview new patients to identify any problems, consult with their primary care physicians, order labs, and provide education and follow-up care.

Early results have been positive coming in from the project this year. "Let alone the medication aspect, just having someone spend time with patients, to sit down and talk to them about their disease makes a huge difference," said **Geoffrey Joyce**. "We'll probably see some impact just from that."

The program is still in an early stage, but researchers have already seen reductions in average levels of blood sugar in patients with Type 2 diabetes as well as lower blood pressure.

*"...having someone spend time with patients, to sit down and talk to them about their disease makes a huge difference."*

Geoffrey Joyce

Minorities and low-income individuals die earlier and have poorer health than Caucasians and higher-income individuals. Understanding these health disparities, especially among aging minorities, is a critical first step in closing the significant health gap.

The Schaeffer Center's center-within-a-center, the Minority Aging Health Economics Research Center, has partnered with **Ricardo Basurto-Dávila**, a health economist at the Los Angeles County Department of Public Health, to investigate how policy can improve the health of Los Angeles' minority aging population.

By using a microsimulation model of health and economic outcomes that looks deeply into data about the population of Los Angeles County, the research predicts how specific policies will affect long-term health outcomes and health care costs. In particular, the project is exploring the potential benefits of policies aimed at reducing the risk of diabetes and cardiovascular disease in older adults, two diseases that are more prevalent in Los Angeles' low-income and minority communities.

"We're working with the Department of Public Health to develop a tool that policymakers at the local level can use to understand the impact on health and economic outcomes of different policies," said **Julie Zissimopoulos** who leads the Minority Aging

Health Economics Research Center along with **Dana Goldman**.

Zissimopoulos added that Los Angeles is a critical place to study health disparities because the current makeup of its population reflects the future population. Looking forward, the Center plans to expand both the collaboration and the tool to consider age groups beyond older adults.

**A NEW TOOL HELPS DECISION MAKERS UNDERSTAND POLICY'S AFFECT ON LONG-TERM HEALTH OUTCOMES**

**In 2012, the Schaeffer Center was awarded a prestigious grant by the National Institutes of Health to establish a Resource Center for Minority Aging Research. The center created by this grant is called the Minority Aging Health Economics Research Center. The LA County collaboration is one of the initial projects of the Center.**



# High Hospital Costs, Better Care?

## HIGHER-COST HOSPITALS LEAD TO BETTER OUTCOMES FOR CHILDREN WITH SERIOUS HEART DISEASE

Does expensive treatment lead to healthier children? That was the question **John Romley** and **Dana Goldman**, along with researchers from the Children’s Hospital of Los Angeles, posed in their study of child cardiac care.

The team examined costs for children treated for a serious heart condition at hospitals around the country and found that patients treated at high-cost hospitals fared better. Their work contributes to a growing body of evidence on how costs and quality of care are linked.

Previous studies, done mostly among adults, have found that higher medical spending does not necessarily translate into better quality of care and better health. But not many studies have been done among children. Romley and his team thought it would be

interesting to focus this question in a pediatric context.

The researchers studied hospital records for children with congenital heart disease (CHD), a rare condition that requires surgery. The disease is expensive to treat, and can affect a child’s health into adulthood, thus affecting quality of life.

The researchers found that if all CHD patients were treated at a hospital where costs were at the 75th percentile instead of the 25th percentile, risk-adjusted mortality rates would drop by 13.6 percent.

The next step is to find out more about why the children fared better.

“A key question is, ‘What is it about higher costs that may be translating into better outcomes?’” Romley said. “Understanding those mechanisms is important. Just putting a dollar sign up doesn’t tell you much. Moving forward, it’s really important for us to examine and understand what’s going on under the hood.”

*“Just putting a dollar sign up doesn’t tell you much. Moving forward, it’s really important for us to examine and understand what’s going on under the hood.”*

John Romley

# Challenging the Status Quo on HIV/AIDS Treatment

## RESEARCHERS FIND EVIDENCE OF GROWING DRUG-RESISTANCE AND ARGUE TO PROCEED WITH CAUTION WHEN SCALING UP “TEST AND TREAT” STRATEGIES

In Los Angeles County, where the number of people diagnosed with HIV/AIDS continues to grow, finding ways to stop the spread of the infection is a public health priority. Schaeffer Center scholars collaborated with the RAND Corporation to fast forward 10 years to predict the effectiveness of a current treatment strategy.

“Test and treat” is a new strategy that starts antiretroviral therapy early, even if HIV-positive individuals have no symptoms. Research has shown that early therapy boosts cell counts and can help prevent the spread of the virus to uninfected partners. However, **Neeraj Sood** and Zachary Wagner found that while “test and treat” reduced the rate of new infections and the number of deaths, it had a downside. It also nearly doubled the rate of drug resistance.

“We’re not saying that testing everybody and treating everybody is bad,” Sood said. “We’re saying that we should proceed with caution and closely monitor the prevalence of multi-drug-resistant HIV as we scale up the test and treat model.”



*“We should proceed with caution... as we scale up the test and treat model.”*

Neeraj Sood

# Can Cell Phones Improve Health Outcomes?

## TEXTING DIABETES PATIENTS WITH MESSAGES RELATED TO DISEASE CARE MAY HELP THEM CONTROL THEIR DISEASE

Approximately one in ten adults in the United States has Type 2 diabetes. Many live in underserved communities with few outpatient facilities, where they could receive education and support for managing the disease.

**Drs. Sanjay Arora** and **Michael Menchine**, Associate Professors of Emergency Medicine at the Keck School of Medicine, knew the importance of adhering to medications and controlling diet as a way

to manage the disease. They also knew that the most vulnerable patients were often doing neither well. What was needed was a low-cost support and education program that could scale easily. Arora and Menchine tapped into the ubiquity of cell phones and designed a program to text patients twice daily with motivating messages.

One message read, “Having diabetes can lead to a heart attack or stroke—but it doesn’t have to.” Another reminded patients to eat more fruits and vegetables. Every week, it also sent three medication reminders, two healthy living challenges, and two trivia questions.

Compared with a control group, those receiving texts were better at adhering to medication and fewer visited the emergency room. The group also had lower average blood sugar levels. All participants said they would recommend the program to a family member or friend with diabetes. Results were particularly striking for Spanish-speaking Latinos, who are twice as likely as non-Latinos to develop diabetes.

“Our goal is to transition our patients from crisis management to long-term diabetes management,” said Arora. “In the absence of other health care options, reaching our patients by text message makes us partners in handling their disease and improves their quality of life.”

# PBS NewsHour Talks with Schaeffer Center Faculty

## SCHAEFFER CENTER RESEARCH DISPELS MYTHS ABOUT OLDER WORKERS

When PBS NewsHour needed an expert to explain the phenomenon of people working decades past traditional retirement age, they turned to **Julie Zissimopoulos**. With a special interest in the economics of aging, her insight proved to be a valuable contribution to several reports.

Older workers contribute to the economy at a time when the government needs more tax revenue to support existing programs, she said.

“How are we going to keep Social Security solvent? How are we going to keep Medicare beneficiaries receiving the benefits that they have received in the past? In order to fund these, we need workers. We need people paying taxes,” she said.

Many older workers contribute to the economy by starting their own businesses. Zissimopoulos said they bring a lot to these ventures. “They’re more educated. They have higher income and wealth. They are more willing to take on risks. They have had lots of on-the-job training, lots of work force experience,” she said.

But, if older workers want a more traditional job, it may be harder for them to get hired.

“About half of unemployed, middle-aged and older workers are still unemployed two years after losing their job. If you are near retirement and an employer wants to hire you, there’s fixed costs involved. They have to invest in you, and their investment is only going to be spread over a few years compared to a younger worker where that investment might be spread over many more years,” she said.



# Forward Focus

## SCHAEFFER CENTER LEADERS SHARE IDEAS AT TEDMED

The Schaeffer Center has been well represented at TEDMED, an annual conference in Washington, D.C. where experts take the stage to share innovative ideas about the worlds of medicine and wellness.

**David B. Agus**, a Quintiles Senior Fellow who has spoken at the conference numerous times, recounted how a conversation there led to a National Institutes of Health grant to improve treatments for colon cancer.

Agus, an oncologist, and Anthony Atala, a surgeon from Wake Forest University, met at a reception. “I heard his talk, and he heard mine. But when the two of us got together, we were talking about not just where the technology is today, but where could it go in the future,” Agus was quoted as saying in a TEDMED blog.

Agus is professor of Medicine and Engineering at the Keck School of Medicine and Viterbi School of Engineering.

HBO was also on hand to show a documentary on obesity. **Judith A. Salerno**, Schaeffer Center Advisory Board member, and John Hoffman of HBO Documentary Films, showcased “The Weight of the Nation.”

“Fat is the new normal,” Salerno said. “Obesity is killing us. It’s causing us to be at risk for serious chronic illnesses. This is your wake-up call.”

**Tomas J. Philipson** participated in a panel discussion about continued progress in the fight against cancer. The panel, hosted by *Scientific American* and moderated by journalist and NPR host David Brancaccio, was titled “The Value of Medical Innovation: A World Free from Cancer.”



David Agus presenting at TEDMED.

*“Fat is the new normal.”*

Judith A. Salerno

# Impact: Academic Programs



Schaeffer pre-doctoral students discussing research with **Daniel McFadden**, **Dana Goldman** and senior analyst **Patricia St. Clair**.

## Ph.D. in Health Economics

USC's Ph.D. program in Health Economics is housed at the Schaeffer Center for Health Policy and Economics, one of the leading health policy centers in the nation. The program integrates the curricula from the Departments of Economics, Preventative Medicine, and Pharmaceutical Economics and Policy. Students receive training in microeconomics, econometrics, cost effectiveness analysis, health economics, public finance, epidemiology, and health status measurement.

Graduates of this program are highly sought for their interdisciplinary background in theoretical and empirical research, and often assume teaching and research positions at universities, in industry, and elsewhere. Competitive fellowships, teaching, and research assistantships are available to students.

This program offers two distinct Ph.D. tracks:

**(1) Microeconomics:** Students in Microeconomics complete the Microeconomic Theory and Economic sequence and take two advanced courses in Health Economics. They receive focused training

and mentoring in health economics through collaboration on research projects led by distinguished health economists at the Schaeffer Center. Upon completion of the Ph.D., students will be well prepared for a research career in academia, think tanks, and other research organizations.

**(2) Pharmaceutical Economics and Policy:** Students in Pharmaceutical Economics and Policy specialize in areas such as cost-effectiveness, comparative effectiveness, and health outcomes research. They collaborate on projects with notable faculty with expertise in Pharmaceutical Economics and Policy.

The Schaeffer Center provides support to students who are in Master's programs through the USC Sol Price School of Policy and the USC School of Pharmacy.

## Master of Science in Pharmaceutical Economics and Policy

The USC Pharmaceutical Economics and Policy master's program is conducted collaboratively with the Department of Economics, the Department of Preventive Medicine, and the Public Policy program of the USC Price School of Policy. Master's students are trained to use pharmacoeconomics and assessment techniques in practical decision-making environments such as hospital pharmacies, managed-care pharmacies, third-party payers, and government agencies.

A distinguishing characteristic of the USC Pharmaceutical Economics and Policy Master's program is the degree to which students are actively engaged in publishable research, either as the lead

author or as a secondary author in collaboration with a faculty member.

## Master of Health Administration Program

The USC Master of Health Administration (MHA) program has been training leaders in health management and policy for more than 35 years. The MHA is a focused health management and policy degree that offers students breadth and depth in areas of specialization. By enrolling for this degree, students gain access to MHA faculty who are renowned experts in their field, develop strong ties to the healthcare community and gain access to numerous employment opportunities. The program includes a 1,000-hour administrative residency and is accredited by the Commission on Accreditation of Healthcare Management Education (CAHME).

*“Graduates of this program are highly sought for their interdisciplinary background in theoretical and empirical research, and often assume teaching and research positions at universities, in industry, and elsewhere.”*

**GRADUATE STUDIES DIRECTORS**

**Michael Nichol,**  
*Director of Graduate Health Programs, USC Sol Price School of Public Policy*

Nichol received his Ph.D. degree from the University of Southern California, and his M.S. from the University of Oregon. He served as associate director and executive director of a regional health planning organization prior to completing his doctorate. He serves on several journal editorial boards, and on the boards of several health care policy and research organizations. Currently, he is a professor of Pharmaceutical Economics and Policy (USC School of Pharmacy), with joint appointments in the Andrus School of Gerontology and the Price School.

**Jeffrey McCombs,**  
*Director of Graduate Studies, Titus Family Department of Clinical Pharmacy and Pharmaceutical Economics & Policy, USC School of Pharmacy*

McCombs received his Ph.D. degree from the University of California-San Diego. His research interests are in Health Economics, technology assessment, competitive pricing systems, retrospective analyses using administrative data, and mental health economics. As a former government official in the Centers for Medicare and Medicaid Services (when it was formerly known as the Health Care Financing Administration), McCombs is often asked to comment on government programs.

# What's New in Schaeffer Education?

**Merkin Brain and Health Policy Fellowship**

In 2012, Richard Merkin, Founder, President, and CEO of the Heritage Provider Network, initiated a new fellowship in collaboration with the Keck School of Medicine and the Schaeffer Center. Dr. Merkin, has more than 30 years of experience in health care with specific expertise in the development and administration of integrated delivery systems. His leadership has inspired the formation of more than 28 group model and IPA structures in California, New York, and Arizona.

The program is the response to the need for greater synergy between advances in neuroscience and the devising of policies that improve life outcomes for children, adolescents, and adults experiencing significant risk or adversity due to brain diseases. Housed at the Leonard D. Schaeffer Center for Health Policy and Economics, Center Director Dana Goldman and Senior Fellow Pat Levitt direct the program. Levitt is Provost Professor of Neuroscience, Pharmacy, Psychiatry, Pediatrics, and Psychology at the Keck School of Medicine of USC.

**Healthcare Decision Analysis Master's Program**

The Master's Program in Healthcare Decision Analysis (HCDA) is an intensive, interdisciplinary program designed to attract and train graduates from across the globe seeking to improve their technical skills and analytical abilities related to product value, access, and reimbursement. Healthcare Decision Analysis is a newly emerging branch of applied healthcare research

that focuses on the intersection of health economics, applied international health policy and insurance design, and competitive business intelligence and pricing. The program provides an opportunity for mid-career working professionals, and new graduates to enter a field in which current managed markets payers, the pharmaceutical and devices industry, healthcare systems and government cannot find sufficient qualified individuals and technically skilled leaders to meet demand. **Grant D. Lawless** directs this program, which is housed at the Leonard D. Schaeffer Center for Health Policy and Economics

**Post-doctoral Fellow Highlights**

**Maria Jose Prados** is a post-doctoral research scholar at the Schaeffer Center for Health Policy and Economics at the University of Southern California. She finished her Ph.D. in Economics at Columbia University in 2013. Before coming to the US, she studied Economics in Argentina, where she did postgraduate studies at Universidad Torcuato Di Tella, and Her fields of specialization are Macroeconomics and Labor. Her dissertation research analyzes different aspects of economic inequality. She studied the impact of health care on earnings inequality, and she has also studied gender inequality in labor market outcomes. Her current research focuses on the macroeconomic effects of different aspects of the health care system and the health care reform.



**Erin Trish** is a post-doctoral fellow at the Schaeffer Center for Health Policy and Economics at the University of Southern California and the Fielding School of Public Health at the University of California Los Angeles. She graduated from the Johns Hopkins Bloomberg School of Public Health in 2013 with a doctorate in Health Policy and Economics. She also holds a B.S. in Biomedical Engineering from Johns Hopkins University and worked as a research assistant in a stem cell research lab at Harvard University prior to starting graduate school.

Her research focuses on private health insurance markets in the US, including how the Patient Protection and Affordable Care Act (ACA) may affect how these markets function. Her dissertation work focused on the offsetting effects of the level of competition among insurers on health insurance premiums and on how insurance market regulations affect employers' decisions about the health benefits they offer. Additionally, she has worked on several other research projects related to the ACA including simulations of the population expected to obtain coverage through the exchanges as well as the risk adjustment programs included in the law.

**New with RCMAR**

Along with Ricardo Basurta-Davila (see page 21), two new scholars have joined the USC-RCMAR, Minority Aging Health Economics Research Center: **Leandro Carvalho** and **Juan Saavedra**, research scientists at the USC Dornsife College of Letters, Arts, and Sciences. Carvalho's project is to investigate the question; does financial stress affect the minority population's decision-making? Saavedra's project is on limited English proficiency and fettered financial capabilities among immigrants. Now finishing the second year of the NIH funded center the Minority Aging Health Economics Research Center, will host the 2014 Annual Investigators Meeting in Los Angeles. In attendance will be six RCMAR centers and their scholars and faculty.

**Ricardo Basurta-Davila,**  
 USC-RCMAR Scholar, presenting his LA County Pilot Project at the Annual Investigators meeting.

"I chose to work at the Schaeffer Center because I felt that it was an excellent opportunity to further develop my research agenda in an environment surrounded by great collaborators and mentors. I am particularly excited about the chance to work on timely projects related to critical components of health reform and to learn from experts spanning the fields of health policy and economics. I believe that this experience will enable me to continue to develop my research skills and help me be successful in achieving my future research and career goals" **Erin Trish**

## Sacramento Policy Luncheon

February 6, 2013

USC's Sol Price School of Public Policy and the Leonard D. Schaeffer Center on Health Policy and Economics sponsored a panel which included **Peter Lee**, Executive Director of Covered California; **Dana Goldman**, Director of the Schaeffer Center; **Bob Kocher**, former Special Assistant to President Obama on Healthcare Policy and Economics, and moderated by **Jay Hansen**, California Medical Association.

According to Lee, 2.6 million Californians will qualify for subsidies on the exchange. About 2.7 million Californians won't qualify, but will be able to buy unsubsidized insurance on the exchange or outside of it. All of them, he said, will benefit from monumental changes to the insurance market that are part of Obamacare.

"But for this market to work, consumers must make good choices", said Dana Goldman.

Goldman has studied decision-making among Medicare users purchasing prescription drug coverage, also known as Medicare Part D. He found that many consumers don't understand basic differences between the available plans and costs. And over time, the

number of plans and their benefits has decreased, he said.

To read more, see page 18.

## Quintiles Seminar Series

January-December, 2013

The Quintiles Seminar Series is a biweekly series that features prominent academics, researchers, policy makers, and industry leaders to discuss prevalent and current themes in health, policy, and economics. The seminars are topical, relevant presentations of the speakers' choosing that lead to intimate discussions with the audience.

This past year's speakers have included academics such as **Dr. Ashish Jha**, Professor at the Harvard School of Public Health; regulators such as **Sir Ian Kennedy**, Chair of the Independent Parliamentary Standards Authority in the UK; and former administration officials such as **Dr. Bob Kocher**, former Special Assistant to the President for Healthcare and Economics Policy.

## Affordable Care Act: What Does it Mean for Young People?

October 2, 2013

The Schaeffer Center, in conjunction with the Unruh Institute and the Schwarzenegger Institute,

participated in a panel that discussed the impact of the Patient Protection and Affordable Care Act (ACA). The panel, part of a lecture series titled Students Talk Back, consisted of **Dana Goldman** and Schaeffer Center Pre-Doctoral Fellow **Sarah Axeen**.

The USC Dornsife College of Letters, Arts and Sciences' Jesse M. Unruh Institute of Politics in conjunction with the Schwarzenegger Institute hosts this weekly discussion of political events that allows the audience to gain valuable insight into each topic.

"The question is: Are the benefits too generous? Will they grow over time?" Goldman asked the audience. "I don't think we have to modify the act. If everyone said, 'Can we make this law work?' the answer is that actually yes, we just need to figure out maybe we should be less generous and have more penalties."

## 2014 Events Optimizing Medication Safety and Healthcare Quality

February 20-21, 2014

This conference, co-hosted by the USC School of Pharmacy and the Schaeffer Center, in collaboration



Sarah Axeen (far left) and Dana Goldman (second from left) on a panel discussing the Affordable Care Act.

*"The question with the ACA is: Are the benefits too generous?"*

with the U.S. Department of Health Human Services' Center for Medicaid and Medicare Innovation. It will bring together a broad cross-section of national healthcare experts and stakeholders for a robust discussion on healthcare quality improvements. Healthcare providers, industry leaders, and government officials are all encouraged to attend.

Topics to be discussed include: Understanding Value-Based Payment Models; Addressing High-Cost, High-Risk Populations; Reaching Patients Where They Live; and Examining Different Perspectives. The purpose of the conference is to help attendees identify quality and safety gaps in the U.S. healthcare system; compare methods of measuring healthcare value; list core components of a highly reliable medication use system; describe proven solutions for achieving the Triple Aim of healthcare reform; explain the alignment between Accountable Care Organizations,

commercial health plans to achieve comprehensive medication management programs; and describe proven strategies for reducing readmissions through medication-focused services.

## American Society for Health Economics (ASHEcon)

June 22-25, 2014

The Schaeffer Center was selected to host the 2014 American Society for Health Economists (ASHEcon), the premiere conference in health economics. ASHEcon is a professional organization dedicated to promoting excellence in health economics research in the United States. They provide a forum for emerging ideas and empirical results of health economics research. With 1000 attendees expected, ASHEcon is dedicated to promoting excellence in health economics research through a set of professional activities.

ASHEcon aims to advance health economics research in the United States, to achieve widespread recognition for the field of health economics, and to enhance individual and societal health by providing evidence and expertise for the development of private and public policies.

This four-day event will include plenary events, including Nobel Laureate **Daniel McFadden**. There will be sixteen concurrent sessions over the course of the conference, with session themes ranging in topic from Healthcare to Cost Effectiveness to Medicare Part D.

**THE SCHAEFFER CENTER MEASURABLY IMPROVES VALUE IN HEALTH BY FOCUSING ITS RESEARCH EFFORTS IN THREE KEY AREAS OF HEALTH POLICY: INCREASING VALUE IN HEALTH CARE MARKETS AND DELIVERY; IMPROVING HEALTH OUTCOMES FOR AN AGING SOCIETY; AND FOSTERING BETTER PHARMACEUTICAL POLICY AND EVALUATION. BELOW IS A SAMPLING OF THE RESEARCH FACULTY HAVE PUBLISHED THIS PAST YEAR TO FURTHER THE CENTER'S GOALS.**

**Increasing value in health care markets and delivery**

**Affordable Care Act**

Bhattacharya, Jay, Amitabh Chandra, Michael Chernew, **Dana Goldman**, Anupam B. Jena, **Darius Lakdawalla**, Anup Malani, and Tomas Philipson. "Best of Both Worlds: Uniting Universal Coverage and Personal Choice in Health Care." *American Enterprise Institute*. (2013).

**Hay, Joel W.** "Letter to the Editor: Baicker et al. The Oregon Experiment -Effects of Medicaid on Clinical Outcomes." *New England Journal of Medicine*. 369.6 (2013): p. 581-582.

**Global health**

**Sood, Neeraj**, and Zachary Wagner. "Private Sector Provision of Oral Rehydration Therapy for Child Diarrhea in Sub-Saharan Africa." *American Journal of Tropical Medicine and Hygiene*. (2013).

**Hospital value**

**Huesch, Marco**, Elizabeth Currid-Halkett, and **Jason Doctor**. "Measurement and Risk-Adjustment of Pre-labor Cesarean Rates in a Large Sample of California Hospitals." *American Journal of Obstetrics and Gynecology*. (2013).

**Huesch, Marco**, Michael Ong, and Gregg Fonarow. "Measuring 30 day Readmission: Rethinking the Quality of the Outcome Quality Measures." *American Heart Journal*. (2013).

Jena, Anupam B., **John Romley**, and Eric Sun. "Mortality among High Risk Patients with Acute Myocardial Infarction Admitted to U.S. Teaching-Intensive Hospitals in July: A Retrospective Observational Study." (2013).

Turakhia, Mintu, Matthew Solomon,

Mehul Jhaveri, Pamela Davis, Michael Eber, Ryan Conrad, Nicholas Summers, and **Darius Lakdawalla**. "Burden, Timing, and Association of Cardiovascular Hospitalization to Mortality among Medicare Beneficiaries with Newly Diagnosed Atrial Fibrillation." *American Heart Journal*. (2013).

**Huesch, Marco**, Michael Ong, Gregg Fonarow. "The C-Statistic and Model Accuracy - Comment." *Medical Care*. Forthcoming.(2013). <http://www.ncbi.nlm.nih.gov/pubmed/23685404>

**Huesch, Marco**. "Forgetting? Impact of Breaks in Surgery on Californian Cardiac Surgeons." *Journal for Healthcare Quality*. (2013).

**Romley, John**, Anupam B. Jena, Jeff O'Leary, and **Dana Goldman**. "Spending and Mortality in US Acute Care Hospitals." *American Journal of Managed Care*. 19.2 (2013): p. 46-54.

**Romley, John**, Alex Chen, **Dana Goldman**, and Roberta Williams. "Hospital Costs and Inpatient Mortality among Children Undergoing Surgery for Congenital Heart Disease." *Health Services Research*. (2013).

Philipson, Tomas, Julia Thornton-Snider, **Darius Lakdawalla**, Benoit Stryckman, and **Dana Goldman**. "Impact of Oral Nutritional Supplementation on Hospital Outcomes." *American Journal of Managed Care*. 19.2 (2013): p. 121-128.

An, Jae Jin, and **Mike Nichol**. "Multiple Medication Adherence and its Effect on Clinical Outcomes Among Patients with Type 2 Diabetes and Comorbid Hypertension." *Medical Care*. (2013).

Wallner, Lauren, Stanley Frencher, Jin-Win Hsu, Chun Chao, **Mike Nichol**, Ronald Loo, and Steven Jacobsen. "Changes in Serum Prostate-Specific Antigen Levels and the Identification of

Prostate Cancer in a Large, Managed Care Population." *British Journal of Urology*. 111.8 (2013): p.1245-1252.

Chu, Li-Hao, Cecilia Portugal, Aniket Kawatkar, William Stohl, and **Mike Nichol**. "Racial/Ethnic Differences in the use of Biologic Disease-Modifying Antirheumatic Drugs Among California Medicaid Rheumatoid Arthritis Patients." *Arthritis Care & Research*. 65.2 (2013): p. 299-303.

**Primary care**

Bollu, Vamsi, Flavia Ejzykowicz, Krithika Rajagopalan, John Karafilidis, and **Joel W. Hay**. "Risk of All-Cause Hospitalization in COPD Patients Initiating Long-Acting or Short-Acting Beta Agonist Therapy." *Journal of Medical Economics*. (2013).

**Goldman, Dana**, John Fastenau, Riad Dirani, Eric Helland, **Geoffrey Joyce**, Ryan Conrad, and **Darius Lakdawalla**. "Do Medicaid Prior Authorization Policies Lead to Increased Imprisonment Among Schizophrenia Patients?" *American Journal of Managed Care*. (2013).

**Hay, Joel W.** (Section Chair). "Statistical Approaches for Evaluating Disease and Health Management Data." in Esposito D, Migliaccio-Walle K, Molsen E., Editors. "Reliability and Validity of Data For Outcomes Research & Disease And Health Management Programs." *ISPOR Outcomes Good Practices Series*, ISPOR, Princeton, NJ, 2013. Chapter 29, p. 343-346.

**Hay, Joel W.** "Statistical Methods for Randomized Controlled Trials: Nonparametric Statistical Methods," in Esposito D, Migliaccio-Walle K, Molsen E., Editors. "Reliability and Validity of Data For Outcomes Research & Disease And Health Management Programs", *ISPOR Outcomes Good Practices Series*, ISPOR, Princeton, NJ, 2013. Chapter

45, p. 427-432.

**Hay, Joel W.** "Letter to the Editor: Economic Model of the Benefits of Male Circumcision is Highly Flawed." *JAMA Pediatrics*. 167.2 (2013): p. 198.

**Huesch, Marco**, and Jason Doctor. "Cesarean request on maternal demand - comment." *JAMA*. 310.9. (2013): p. 978.

**Huesch, Marco**. "Confounding by Indication and Selection Effects in Stent Treatment." *Health Services Research*. 48.3 (2013): p.1991-1214.

**Huesch, Marco**. "Patient Privacy Risks When Seeking Online Health Information: Analysis of 20 Popular Websites." *JAMA Internal Medicine*. (2013).

**Huesch, Marco**, Greg Ver Steeg, and Aram Galstyan. "Analyzing Vaccine Skepticism in Social Media." *Proceedings of the Association for the Advancement of Artificial Intelligence-13 Workshop on Expanding the Boundaries of Health Informatics using AI*. Forthcoming. (2013).

**Huesch, Marco**. "Impact of the Olmsted County Workplace Smoking Ban - Comment." *JAMA Internal Medicine*. 173.9 (2013): p. 836-837.

**Huesch, Marco**, Michael Ong, and **Jason Doctor**. "Using Helical Chest CT Scans for Coronary Artery Calcium Screening - Comment." *JAMA*. 309.7 (2013): p. 655-656.

Jain, Rahul, **Joel W. Hay**. "Statistical Methods for Randomized Controlled Trials: Discrete Outcomes," in Esposito D, Migliaccio-Walle K, Molsen E., Editors. "Reliability and Validity of Data For Outcomes Research & Disease And Health Management Programs", *ISPOR Outcomes Good Practices Series*, ISPOR, Princeton, NJ, 2013. Chapter 34, p. 365-373.

**Huesch, Marco**. "Are there Always Synergies between Productive Resources and Resource Deployment Capabilities?" *Strategic Management Journal*. 34.11 (2013): p.1288-1313.

**Huesch, Marco**, Michael Ong, and **Jason Doctor**. "Evaluating other Diseases with Computed Tomographic Screening for Lung Cancer." *Journal*

*of the American Medical Association*. 309.7 (2013): p. 655-656.

Jena, Anupam B., Pinar Karaca-Mandic, Lesley Weaver, and **Seth A. Seabury**. "Predicting New Diagnoses of Human Immunodeficiency Virus Infection Using Internet Search Engine Data." *Clinical Infectious Diseases*. 56.9 (2013): p. 1352-1353.

**Melnick, Glenn**, and Katya Fonkych. "Fair Pricing Law Prompts Most California Hospitals to Adopt Policies to Protect Uninsured Patients from High Charges." *Health Affairs*. 32.6 (2013):1101-1108.

**McCombs, Jeff**, Tara Matsuda, Ivey Mihara, Sammy Saab, Patricia Hines P, Gilbert L'Italien, Timothy Juday, and Yong Yuan. "The Risk of Long Term Morbidity and Mortality in Chronic Hepatitis C Patients: Results from an Analysis of Data from the Veterans Administration HCV Clinical Registry." *JAMA Inter Med*. (2013).

Petersen, Hans, and **Joel W. Hay**. "Statistical Methods for Randomized Controlled Trials: Propensity Scores," in Esposito D, Migliaccio-Walle K, Molsen E., Editors. "Reliability and Validity of Data For Outcomes Research & Disease And Health Management Programs", *ISPOR Outcomes Good Practices Series*, ISPOR, Princeton, NJ, 2013. Chapter 40, p. 405-408.

**Seabury, Seth A.**, Anupam B. Jena, and Amitabh Chandra. "Trends in the Earnings of Male and Female Health Care Professionals in the United States, 1987 to 2010." *JAMA Internal Medicine*. 173.18 (2013): p. 1748-1750.

**Sood, Neeraj**, Peter Huckfeldt, Jose Escarce, David Grabowski, and Joseph Newhouse. "The Effect of Prospective Payment on Admission and Treatment Policy: Evidence from Inpatient Rehabilitation Facilities." *Journal of Health Economics*. 32.5 (2013). p. 965-979.

**Sood, Neeraj**, Zachary Wagner, Emmanuel Drabo, Amber Jaycocks, and Raffaello Vardavas. "Test and Treat in Los Angeles: A Mathematical Model of the Effects of Test and Treat on the MSM Population in Los Angeles County." *Clinical Infectious Diseases*. 56.12 (2013): p. 1789-1796.

**Sood, Neeraj**, Zachary Wagner, Emmanuel Drabo, Amber Jaycocks, and Raffaello Vardavas. "Reply to Gonzalez-Serna et al.," *Clinical Infectious Disease*. 57.3 (2013): p. 479-480.

Szczerba, Robert, and **Marco Huesch**. "Dealing with Healthcare Waste, Fraud and Abuse." *Health Affairs*. (2013). <http://healthaffairs.org/blog/2013/05/23/how-ideas-from-private-industry-help-combat-medicare-fraud-waste-and-abuse/>

**Wu, Vivian Y.**, Yu-Chu Shen, and **Glenn Melnick**. "Competitive Market Forces and Trends in US Hospital Spending, 2001-2007." *Health*. 5.7 (2013): p. 1950-1200.

**Private insurance markets**

Haviland, Amelia M., Laura Laudenberger, Matthew Eisenberg, **Neeraj Sood**, Roland D. McDevitt, Ryan Lore. "Risk Selection into Consumer-Directed Health Plans: An Analysis of Family Choices within Large Employers." *Health Services Research*.

**Sood, Neeraj**, Zachary Wagner, Peter Huckfeldt, and Amelia Haviland. "Price Shopping in Consumer Directed Health Plans." *Forum for Health Economics and Policy*. 16.1 (2013): p. 1-19.

**Lakdawalla, Darius**, and **Neeraj Sood**. "Health Insurance as a Two-Part Pricing Contract." *Journal of Public Economics*. 102 (2013): p. 1-12

**Tort reform**

Chandra, Amitabh, Anupam B. Jena, and **Seth A. Seabury**. "Defensive Medicine May Be Costlier Than It Seems." *Wall Street Journal* (US Edition). February 8, 2013: page A13.

Helland, Eric, and **Seth A. Seabury**. "Contingent Fee Contracts in Litigation: A Survey and Assessment." *Research Handbook on the Economic Analysis of Torts*. Edward Elgar Publishing Co, 2013.

Jena, Anupam B., Amitabh Chandra, and **Seth A. Seabury**. "Malpractice Risk Among US Pediatricians." *Pediatrics*. 131.6. (2013): p. 1-7.

Jena, Anupam B., Amitabh Chandra, **Darius Lakdawalla**, and **Seth A. Seabury**. "Outcomes of Medical Malpractice Litigation Against U.S. Physicians." *Archives of Internal Medicine*. (2013).

**Seabury, Seth A.**, Amitabh Chandra, **Darius Lakdawalla**, and Anupam B. Jena. "On Average, Physicians Spend Nearly 11 Percent of Their 40-Year Careers with an Open, Unresolved Malpractice Claim." *Health Affairs*. 32.1 (2013): p. 111-119.

**Seabury, Seth A.** "Jury Verdicts, Settlement Behavior and Expected Trial Outcomes." *International Review of Law and Economics*. 30.2 (2013): p. 15-22.

### Improving health outcomes for an aging society

#### Economics of aging / Retirement economics\*

Aguila, Emma, and **Julie Zissimopoulos**.

"Going Home: The Retirement of Mexicans Returning from the" *International Social Security Review*. 66.2 (2013). p. 1-134.

Gans, Daphna, Ariela Lowenstein, Ruth Katz, and **Julie Zissimopoulos**. "Is There a Trade-Off Between Caring for Children and Caring for Parents?" *The Nexus of Informal and Formal care for Older Adults, Journal of Comparative Family Studies*. 44.4 (2013).

**Zissimopoulos, Julie**, Benjamin Karney, and Amy Rauer. "Marriage and Economic Well Being At Older Ages." *Review of Economics of the Household*. (2013).

**Zissimopoulos, Julie**. "Gain and Loss: Marriage and Wealth Changes at Older Ages." Editors, Mary Daly, Kenneth Couch, Julie Zissimopoulos in *Unexpected Lifecycle Events and Economic Security: The Roles of Job Loss, Disability and Changing Family Structure*. Stanford University Press. (2013).

#### Disability

**Seabury, Seth A.**, Frank Neuhauser and Teryl Nuckols. "American Medical Association Impairment Ratings and Earnings Losses Due to Disability." *Journal of Occupational and Environmental Medicine*. 55.3 (2013): p. 286-291.

**Seabury, Seth. A.** "Linking Workers' Compensation Data and Earnings Data to Estimate the Economic Consequences of Workplace Injuries."

*Use of Workers' Compensation Data for Occupational Safety and Health: Proceedings from June*

2012 Workshop; National Institute for Occupational Safety and Health (NIOSH); Cincinnati, OH; DF Utterback and TM Schnorr, eds.; DHHS (NIOSH) Publication No. 2013. 147 (2013).

**Seabury, Seth A.**, Frank Neuhauser and Teryl Nuckols. "American Medical Association Impairment Ratings and Earnings Losses Due to Disability." *AMA Guides Newsletter*. (2013): p. 1-6.

#### Disease-specific projections\*

**Lakdawalla, Darius N.**, Michael R. Eber, Felicia M. Forma, Jeffrey Sullivan, Pierre-Carl Michaud, Lily A. Bradley, and **Dana P. Goldman**. "Measuring the Value of Better Diabetes Management." *American Journal of Managed Care: Evidence-Based Diabetes*. (2013).

Lin, Chun-Yuan, Hsien-Yuan Lane, Tsi-Ting Chen, Yu-Hsin Wu, Chun-Ying Wu, and **Vivian Wu**. "Inverse Association between Cancer Risks and Age in Schizophrenic Patients: A 12-year Nationwide Cohort Study." *Cancer Science*. 104.3 (2013): p. 383-390.

Michaud, Pierre-Carl, **Dana Goldman, Darius N. Lakdawalla**, Yuhui Zheng, and Adam Gailey. "The Value of Medical and Pharmaceutical Interventions for Reducing Obesity." *Journal of Health Economics*. (2013).

Solomon, Matthew, Sandeep Vijan, Felicia M. Forma, Ryan Conrad, Nicholas T. Summers, and **Darius N. Lakdawalla**. "The Impact of Insulin Type on Severe Hypoglycaemia Events Requiring Inpatient and Emergency Department Care in Patients with Type 2 Diabetes." *Diabetes Research and Clinical Practice*. (2013).

**Zissimopoulos, Julie**. "Alzheimer's is on the Rise: What are the Long-term Costs?" *Aging Today*. 34.4 (2013).

#### Fiscal and macroeconomic consequences\*

**Goldman, Dana**, David Cutler, John Rowe, Pierre-Carl Michaud, Jeffery Sullivan, Desi Peneva, and S. Jay Olshansky. "Substantial Health and Economic Returns From Delayed Aging May Warrant a New Focus For Medical Research." *Health Affairs*.

32.10 (2013): p.1698-1705.

Lowsky, David S., Jay Olshansky, Jay Bhattacharya, and **Dana Goldman**.

"Heterogeneity in Healthy Aging." *Journal of Gerontology*. (2013).

#### Medicare reform

Eibner, Christine, **Dana Goldman**, Jeffery Sullivan, and Allan Garber. "Three Large-Scale Changes to the Medicare Program Could Curb its Costs but Also Reduce Enrollment." *Health Affairs*. 32.5 (2013): p. 891-899.

Heiss, Florian, Adam Leive, **Daniel McFadden**, and Joachim Winter. "Plan Section in Medicare Part D: Evidence from Administrative Data." *Journal of Health Economics*. 32.6(2013): p. 1325-1344.

Huckfeldt, Peter, **Neeraj Sood**, Alessandro Malchiodi, **John Romley**, and Jose Escarce. "Medicare Payment Reform and Provider Entry and Exit." *Health Services Research*. (2013).

Huckfeldt, Peter, **Neeraj Sood**, Jose Escarce, David Grabowski, and Joseph Newhouse. "Effects of Medicare Payment Reform: Evidence from the Home Health Interim and Prospective Payment Systems." *Journal of Health Economics*. (2013).

**Joyce, Geoffrey, Julie Zissimopoulos, and Dana Goldman**. "Digesting the Doughnut Hole." *Journal of Health Economics*. 32.6 (2013): p. 1345-1355.

Shen, Yu-Chu, and **Vivian Wu**. "Reductions in Medicare Payments and Patient Outcomes: An Analysis of Five Leading Medicare Conditions." *Medical Care*. (2013).

White, Chapin, and **Vivian Wu**. "How Do Hospitals Cope with Sustained Slow Growth in Medicare Prices?" *Health Services Research*. (2013).

#### Fostering better pharmaceutical policy and evaluation

##### Advertising

**Lakdawalla, Darius N., Neeraj Sood**, and Qian Gu. "Pharmaceutical Advertising and Medicare Part D." *Journal of Health Economics*. 32.6 (2013): p. 1356-1367.

##### Comparative effectiveness

Chernew, Michael, Rick McKellar, Wade Aubry, Roy Beck, Joshua Benner, Jan Berger, A. Mark Fendrick, Felicia Forma, **Dana Goldman**, Anne Peters, Rebecca Killion, **Darius N.**

**Lakdawalla**, Douglass Owens, and Joe Stahl. "Comparative Effectiveness Research and Formulary Placement: The Case of Diabetes." *American Journal of Managed Care*. 19.2 (2013): p. 93-96.

Jena, Anupam B., Eric Sun, and **Dana Goldman**. "Confounding in the Association of Proton Pump Inhibitor Use With Risk of Community-Acquired Pneumonia." *Journal of General Internal Medicine*. 28.2 (2013): p. 223-230.

Johnson, Megan, **Joel W. Hay**, Jurgen Unutzer, Carolina Apesoa-Varano, and Ladson Hinton. "Depression Treatment Preferences of Older White and Mexican American Men." *General Hospital Psychiatry*. 35.1 (2013): p. 59-65. <http://dx.doi.org/10.1016/j.genhosppsy.2012.08.003>.

Kawatkar, Aniket, **Joel W. Hay**, William Stohl, and **Mike B. Nichol**. "Incremental Expenditure of Biologic Disease Modifying Anti-Rheumatic Treatment Using Instrumental Variables in Panel Data." *Health Economics*. 22.7 (2013): p.807-823.

Le, Quang, **Jason Doctor**, Lori Zoellner, and Nora Feeny. "Minimal clinically important differences for the EQ-5D and QWB-SA in posttraumatic stress disorder (PTSD): Results from a doubly randomized preference trial (DRPT)." *Health Quality Life Outcomes*. 11.59 (2013).

Pritchard, David E., Mike Eber, **Marco Huesch**, Robert W. Dubois, and **Darius N. Lakdawalla**. "Impact of comparative effectiveness research on biomedical innovation and population health." *Value in Health*. 16.3 (2013): p. A266

##### Cost-effectiveness

Aponte-González, Johanna, Louisa Fajardo-Bernal, Jorge Diaz, Javier Eslava-Schmalbach, Oscar Gamboa, and **Joel W. Hay**. "Cost-Effectiveness Analysis of the Bivalent and Quadrivalent Human Papillomavirus Vaccines from a Societal Perspective in Colombia." *PLOS One*. 8.11 (2013).

Ding Yao, Sylvia Yeh, Kenneth Zangwill, Norma Allred, and **Joel W. Hay**. "Cost-benefit Analysis of In-hospital Tdap Vaccination of Postpartum Women." *Vaccine*. 2013; <http://dx.doi.org/10.1016/j.vaccine.2013.03.053>.

**Hay, Joel W.** "Commentary: Cost-effectiveness of Recombinant Activated Factor VII vs. Plasma-derived Activated Prothrombin Complex Concentrate in the Treatment of Mild-to-moderate Bleeding Episodes in Patients with Severe Hemophilia A and Inhibitors in Spain." *Haemophilia*. (2013).

Messali, Andrew, **Joel W. Hay**, and Reginald Villacorta. "The Cost-Effectiveness of Temozolomide in the Adjuvant Treatment of Newly Diagnosed Glioblastoma in the United States: A Literature Review and Markov Model." *Neuro-Oncology*. (2013).

Villacorta, Reginald, **Joel W. Hay**, and Andrew Messali. "Cost Effectiveness of Moderate to Severe Psoriasis Therapy with Etanercept and Ustekinumab in the United States." *PharmacoEconomics*. 31 (2013): p. 823-839.

##### Innovation

**Goldman, Dana, and Darius N. Lakdawalla**. "Intellectual Property." Handbook of Health Economics, Chapter 13, New York: Elsevier Science. *Forthcoming*. (2013).

**Goldman, Dana**, Charu Gupta, Eshan Vasudeva, Kostas Trakas, Ralph Riley, **Darius N. Lakdawalla**, David Agus, **Neeraj Sood**, Anupam B. Jena, and Tomas Philipson. "The Value of Diagnostic Testing in Personalized Medicine." *Forum for Health Policy and Economics*. 16.20 (2013): p. 121-133.

**Lakdawalla, Darius N., and Neeraj Sood**. "Incentives to Innovate." *Oxford Handbook of the Economics of the BioPharmaceutical Industry*. New York: Oxford, forthcoming.

**Sood, Neeraj**, Peter Huckfeldt, and Tomas Philipson. "Quantifying the Value of Personalized Medicines: Evidence from COX-2 Inhibitors." *Forum for Health Economics and Policy*. 16.1 (2013). p. 1-22.

##### Pharmaceutical markets

Blume-Kohout, Margaret, and **Neeraj Sood**. "Health Insurance Expansions and Pharmaceutical Markets." *Harvard Health Policy Review*. 14.1 (2013). p. 17-19.

Blume-Kohout, Margaret E., and **Neeraj Sood**. "Market Size and Innovation: Effects of Medicare Part

D on Pharmaceuticals Research and Development." *Journal of Public Economics*. 97 (2013): p. 327-336.

Ganapathy, **Vaidyanathan, Joel W. Hay**, Jay Kim, Martin Lee, and David Rechtman. "Healthcare Costs Among Survivors of Neonatal Necrotizing Enterocolitis in a Medicaid Cohort." *BMC Pediatrics*. 13.127 (2013).

**Goldman, Dana**, Adam Leive, **Darius N. Lakdawalla**. "Want More Value from Prescription Drugs? We Need to Let Prices Rise and Fall." *The Economists' Voice*. (2013).

**Hay, Joel W.** "Competition, Market Power and Pricing in Brand Name Pharmaceutical Markets." *Harvard Health Policy Review*. 14.1 (2013): p. 8-9.

**Hay, Joel W.**, SC Chaugule, and Guy Young. "Bypass Therapy Assay Testing as a Strategy to Reduce Costs for Treatment of Hemophilia Patients with Inhibitors." *Haemophilia*. (2013): p. 1-9.

**Seabury, Seth A., Dana Goldman and Darius N. Lakdawalla**, "The Role of Specialty Drugs in Private Sector Healthcare Spending." *American Journal of Pharmacy Benefits*. 5 (2013): p. 23-28.

Stomberg, Chris, Tomas Philipson, Margaret Albaugh, and **Neeraj Sood**. "Utilization Effects of Rx-OTC Switches and Implications for Future Switches." *Health*. 5.10 (2013): p.1667-1680.

##### Provider behavior

**Huesch, Marco, and Jason Doctor**. "Cesarean delivery on maternal request." *Journal of the American Medical Association*. 310.9 (2013): p. 978.

Persell, Stephen, Mark Friedberg, **Daniella Meeker**, Jeffery Linder, Craig Fox, Noah Goldstein, Parth Shah, **Tara Knight**, and **Jason Doctor**. "Use of Behavioral Economics and Social Psychology to Improve Treatment of Acute Respiratory Infections (BEARI): Rationale and Design of a Cluster Randomized Controlled Trial." *BioMedCentral Infectious Diseases*.(2013).

*\*Uses the Future Elderly Model, a demographic and economic simulation model.*

# Leonard D. Schaeffer Elected to USC Board of Trustees

Leonard D. Schaeffer, founding Chairman and CEO of WellPoint, current senior adviser to TPG Capital, a private equity firm, and a prominent policy expert in health care financing and delivery whose career spans both the public and private sectors, was elected to the USC Board of Trustees on April 7.

Recognizing the need to bridge the gap between the academic and policymaking communities in order to effectively shape health care reform, Schaeffer and his wife, Pamela, made a gift to establish the USC Leonard D. Schaeffer Center for Health Policy and Economics in 2009. Housed jointly at the USC Sol Price School of Public Policy and the USC School of Pharmacy, the center conducts rigorous interdisciplinary research that is necessary to develop and evaluate solutions for controlling health care costs and improving patient outcomes in the United States and worldwide.

In 2012, Schaeffer made an additional gift of \$25 million to endow and support the Center, which is recognized as one of the country's premier policy institutions. With more than \$52 million in external grant funding, the USC Schaeffer Center has responded to the demand for independent information and analysis in many significant policy areas, including aging and Medicare, medical innovation, insurance and pharmaceutical markets, and prevention and value promotion in health care delivery. The Center's research results and conclusions are routinely communicated in peer-reviewed journals, leading media outlets and directly to policymakers through congressional and legislative testimony and private meetings.

"Leonard Schaeffer has been a driving force in USC's emergence as a global leader in generating relevant, uniquely interdisciplinary

research to inform and influence the health policy debate," said USC President C. L. Max Nikias. "His leadership and expertise will be invaluable to our Board of Trustees as USC's medical enterprise—encompassing its schools of medicine, policy and pharmacy—assumes an increasingly central role in addressing the health care challenges facing the university, the United States, and the world."

At USC, Schaeffer holds the Judge Robert Maclay Widney Chair, a select executive-in-residence appointment accorded by the university president and named for one of USC's founders. In that capacity, Schaeffer teaches a graduate seminar in health care leadership and management, and he lectures in undergraduate courses. He also chairs the advisory board for the USC Schaeffer Center and is a longtime member of the Board of Councilors for the USC Price School.



*Excerpted from an article originally written by Annette Moore on news.usc.edu.*

***"Leonard Schaeffer has been a driving force in USC's emergence as a global leader in generating relevant, uniquely interdisciplinary research to inform and influence the health policy debate."***

USC President C. L. Max Nikias



## About the USC Sol Price School of Public Policy

Now in its 85th year, the USC Sol Price School of Public Policy defines excellence and innovation in public affairs education. Ranked 6th nationwide among 266 schools of public affairs, the Price School is dedicated to teaching and research that advances society through better democratic governance, more effective social policy, and sustainable urban development. Price faculty tackle critical societal issues involving health policy, collaborative governance, the environment and sustainability, housing policy, nonprofits and philanthropy, mass emergencies and terrorism, economic development, inequality and equity, transportation, immigration, and globalization, among others. Price graduates shape the world as leaders in government, nonprofit agencies, and the private sector. Through a time-honored commitment to public service, a legacy of strong connections to professional leaders, and a dozen world-renowned research centers the Price School's mission is to improve the quality of life for people and their communities, here and abroad.



## About the School of Pharmacy

Ranked by *US News* and *World Report* as a top ten pharmacy school nationwide and first among private schools, the USC School of Pharmacy is recognized for its century-old reputation for innovation in pharmaceutical education. The School uniquely spans the entire spectrum of pharmaceutical development and clinical care—from drug discovery and regulatory approaches that promote safety and innovation, to delivery of patient care services and evaluating the impact of care on patient outcomes and costs. With a history of "firsts" that include the nation's first PharmD program (1950), first clinical clerkship program (1968), first PhD in pharmaceutical economics (1990), and first professional doctorate in regulatory science (2008), the School is a leader in shaping the pharmaceutical profession to meet the needs of a changing world. In 2013, Dean R. Pete Vanderveen was named Dean of the Year by the American Pharmacists Association. It is also the only school of pharmacy in the nation to have won three Pinnacle Awards, one of pharmacy's highest honors. Also, Associate Professor Steven Chen was recognized with an American Pharmacists Association Foundation Pinnacle Award, making USC the only school in the nation to have won three Pinnacle Awards, one of pharmacy's highest honors.

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## USC Schaeffer

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