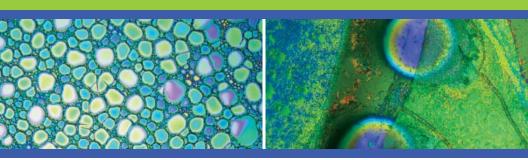
The Medical Research Foundation Investing in the Future of Biomedical Research in Oregon



2015 Awards Dinner

Discovery, Mentor and Richard T. Jones New Investigator

November 12, 2015
The Sentinel Hotel
Portland, Oregon



Medical Research Foundation History

The MRF was founded in 1942 by a group of businessmen and physicians for the purpose of stimulating medical research achievement in our state. That first year, the program awarded \$200.

When the MRF became an affiliate committee of the OHSU Foundation in 1994, it retained its own unique purpose in recognizing excellence in both scientific achievement and mentorship throughout Oregon. Today, through philanthropic support, the program awards more than \$1 million per year to support exceptional research projects throughout Oregon and to acknowledge the work of outstanding investigators and mentors. Past award winners include some of Oregon's most illustrious scientists and educators.

A gift designated to the MRF endowment is an investment in the future of world-class biomedical research in Oregon. Such gifts provide the MRF with financial resources in perpetuity to keep the quest for new treatments and new knowledge moving ever forward.

The **Richard T. Jones New Investigator Award** is intended to honor a new investigator who shows exceptional promise early in a career in biomedical research. Nominees are judged on the basis of independence, quality of science, national funding, and first or senior authored publications in peer-reviewed biomedical research journals. The culmination of the research must have been performed in Oregon.

The **Mentor Award** is given to an Oregonian who has provided outstanding leadership in support or development of health research, education or the advancement of health care.

The **Discovery Award** is given to an Oregon scientist who has made significant, original discoveries to health-related research while working in Oregon.

Nominations for all awards are sought from Oregon research, educational and health care institutions, individual researchers, educators and practitioners.

2015 Richard T. Jones New Investigator Award

5:30 p.m. Gathering

6:00 p.m. Welcome

M. Susan Smith, Ph.D. Chair, MRF Committee

Special Remarks

Markus Grompe, M.D.
Professor, Department of Pediatrics
Director and Ray Hickey Chair, Pape' Family Pediatric
Research Institute
Director, Oregon Stem Cell Center

Award Presentations

Richard T. Jones New Investigator Award

Michael S. Cohen, Ph.D.
Assistant Professor of Physiology and Pharmacology
Oregon Health & Science University
Award Presented By Beth Habecker, Ph.D.

Brad J. Nolen, Ph.D.
Associate Professor, Department of Chemistry and Biochemistry and Institute of Molecular Biology University of Oregon
Award Presented By Kenneth Prehoda, Ph.D.

Mentor Award

Peter Harmer, Ph.D., M.P.H., A.T.C. Professor, Department of Exercise Science Willamette University Award Presented By Mark Stewart, Ph.D.

Discovery Award

Judith S. Eisen, Ph.D.
Professor of Biology, Institute of Neuroscience
University of Oregon
Award Presented By Chris Q. Doe, Ph.D.



Michael S. Cohen, Ph.D.

Assistant Professor of
Physiology and Pharmacology
Oregon Health & Science University

The MRF Committee recognizes Michael S. Cohen, Ph.D. with the 2015 Richard T. Jones New Investigator Award. Dr. Cohen is an assistant professor of physiology and pharmacology at Oregon Health and Science University (OHSU). The longrange goal of his research program is to understand the role of nicotinamide adenine dinucleotide (NAD+) in cell signaling. In addition to its well-known role as a co-factor in redox metabolism, NAD+ is used as a substrate for post-translational modifications. One such post-translational modification is ADP-ribosylation, which is catalyzed by a family of 17 proteins known as ADP-ribosyltransferases (ARTDs). Progress in understanding the specific role of individual ARTDs in cells types has been limited by the lack of selective ARTD inhibitors and the inability to identify the direct targets for individual ARTDs in a cellular context. Using a combined chemical and genetic approach, his team has developed selective inhibitors of individual ARTD family members and NAD+ analogues that are specific substrates for engineered ARTDs and not used by wild-type ARTDs. These novel chemical tools have revealed new roles for ADPribosylation in cell signaling in the brain.

Dr. Cohen received a doctorate in chemical biology in 2006 from the University of California, San Francisco, where he worked with Dr. Jack Taunton. He continued his postdoctoral training in the laboratory of Dr. Samie Jaffrey at Weill Cornell Medical College, where he was a Life Sciences Research Foundation Amgen Fellow. Dr. Cohen is the recent recipient of a Pew Biomedical Scholars Award.

2015 Richard T. Jones New Investigator Award

University of Oregon



Brad J. Nolen, Ph.D.

Associate Professor
Department of Chemistry and Biochemistry and
Institute of Molecular Biology

The Richards T. Jones New Investigator Award recognizes Dr. Brad Nolen for his sophisticated biochemical and biophysical techniques to answer fundamental questions about cytoskeleton regulation. His research has significantly advanced knowledge about how living cells move and change shape, which is a fundamentally important problem in biology and biochemistry. Dr. Nolen hopes to provide the framework for new advances in treating cancers and infectious diseases.

Dr. Nolen's research group studies the actin cytoskeleton. This cellular machine is composed of dynamically assembling filaments that generate the forces necessary for cell movement and shape change. A dramatic example of this machine in action is the movement of immune cells toward invading pathogens followed by their engulfment. Dr. Nolen studies how the filaments that make up the cytoskeleton are formed at the right place and time to mediate processes like these. Because of the importance of this problem, it has been a very active area of research, but a number of fundamental problems have dogged the field over the past decade. Remarkably, it has not been known how cells start the process of building filaments. In his short time at the university, Dr. Nolen has published papers in very-high impact research journals that have addressed mechanistic questions of fundamental importance.

Dr. Nolen has established a productive and well-supported research program and is the only University of Oregon researcher to be named as a Pew Scholar as part of the Pew Scholars Program in the Biomedical Sciences.

He earned his B.S. in chemistry at Missouri State University, and a M.S. and Ph.D. in Biochemistry at University of California, San Diego.

2015 Mentor Award



Peter Harmer, Ph.D., M.P.H., A.T.C.

Professor,
Department of Exercise Science
Willamette University
Associate Research Scientist, Oregon Research Institute

The MRF Committee recognizes Peter Harmer, Ph.D., M.P.H., A.T.C., with the 2015 Mentor Award for his exemplary work as a student role model and mentor. His genuine passion for teaching has inspired countless students from diverse backgrounds to challenge their assumptions, hold themselves to high standards and develop skills in rigorous scientific inquiry. He is widely admired for his ability to carry out his responsibilities as a full professor while also acting as a certified athletic trainer, medical advisor, frequently published author and investigator on numerous research projects. Students and colleagues alike consider him not only a mentor, but an inspiration and a friend.

Professor Harmer is currently the Chair of the Department of Exercise Science at Willamette University and an Associate Research Scientist at Oregon Research Institute, where, in collaboration with Dr. Fuzhong Li, his primary research focus is on fall prevention in older adults. His secondary research interest is in epidemiology of sports injuries. He established the Sports Medicine program for the U.S. Fencing Association in 2000 after 10 years as the sports medicine provider to the national team and was the Chief Medical Officer for the USFA until 2013. He has been a member of the 10-person Medical Commission of the Fédération Internationale d'Escrime since 2000, the only non-physician ever elected to this group.

Professor Harmer is a highly productive scholar and exceptional academic. He has received multiple awards and honors from American and international fencing and sports medicine institutes and organizations. He has published numerous articles and is a frequent presenter at conferences in the U.S. and abroad.

He received his undergraduate training at the Riverina College of Advanced Education in Australia before completing his PhD in Human Movement Studies at the University of Oregon and his MPH at Oregon Health & Science University.



Judith S. Eisen, Ph.D.
Professor of Biology
Institute of Neuroscience
University of Oregon

The MRF Committee recognizes Judith Eisen, Ph.D., with the 2015 Discovery Award for her seminal work in transforming the aquatic vertebrate model, the zebrafish, into a groundbreaking research model for biomedical science. Through her creative approaches to scientific inquiry and clear-sighted leadership, she has been instrumental in establishing this model as one used by hundreds of laboratories around the world. Her work was critical in propelling zebrafish from a local model used only by a handful of University of Oregon research laboratories to becoming one of the premiere models for studying the mechanisms underlying vertebrate development, homeostasis and diseases in hundreds of laboratories in more than 30 countries around the world.

Dr. Eisen has been a scientific innovator throughout her career. Her curiosity led her into the emerging field of microbiome research and the exploration of host-associated microbes as part of the local environment that can shape neuronal fates and functions. In addition to her significant scientific contributions in the field of zebrafish research, Dr. Eisen has been instrumental in procuring major grants from both federal and private foundations that have helped build the zebrafish research infrastructure.

Her community-minded outlook is evident in her leadership of the University of Oregon Science Literacy Program, designed to use the best practices in modern science pedagogy to establish a curriculum of engaging science classes for non-science majors. Dr. Eisen also has authored over 100 journal articles and book chapters and has served on the editorial boards of several publications.

Dr. Eisen received her B.S. in Botany and M.S. in Cell and Development Biology from Utah State University. She earned her Ph.D. from Brandeis University.

2014

Joshi J. Alumkal, M.D. Oregon Health & Science University

2013

Jennifer E. DeVoe, M.D. Oregon Health & Science University

2012

Bonnie Nagel, Ph.D.

Oregon Health & Science University

2011

Hui Zong, Ph.D.
University of Oregon

2010

Kevin L. Winthrop, M.D.

Oregon Health & Science University

2009

Joseph W. Thornton, Ph.D. Center for Ecology & Evolutionary Biology, University of Oregon

2008

Rosalie C. Sears, Ph.D.

Oregon Health & Science University

Former Discovery Award Recipients

2014

Fay B. Horak, Ph.D.

Oregon Health & Science University

2013

Saturday Academy Portland, Oregon

2012

Christopher Minson, Ph.D. *University of Oregon*

2011

J. Gary Tallman Ph.D. Willamette University

2010

Richard H. Goodman, M.D., Ph.D. *Oregon Health & Science University*

Christine A. Tanner, Ph.D., R.N., F.A.A.N. *Oregon Health & Science University*

2009

David and Lynn Frohnmayer Fanconi Anemia Research Fund

2008

Stephen W. Arch, Ph.D. *Reed College*

2007

Kevin G. Ahern, Ph.D. *Oregon State University*

2006

Thomas M. Becker, M.D., Ph.D. *Oregon Health & Science University*

M. Susan Smith, Ph.D.

Oregon Health & Science University

2005

Lesley M. Hallick, Ph.D.

Oregon Health & Science University

2004

Cynthia Morris, Ph.D., M.P.H. Oregon Health & Science University

2003

Christopher L. Cunningham, Ph.D. *Oregon Health & Science University*

2002

Kathleen Potempa, R.N., D.N.Sc., F.A.A.N. *Oregon Health & Science University*

Laurens N. Ruben, Ph.D. *Reed College*

2001

Thomas G. Cooney, M.D., F.A.C.P. *Oregon Health & Science University*

2000

John A. Benson, Jr., M.D. Oregon Health & Science University Kent L. Thornburg, Ph.D. Oregon Health & Science University

1999

Joseph D. Bloom, M.D.

Oregon Health & Science University

1998

Carol A. Lindeman, Ph.D., R.N., F.A.A.N. *Oregon Health & Science University*

1997

J. S. Reinschmidt, M.D.

Oregon Health & Science University

1996

Kenneth Swan, M.D.

Oregon Health & Science University

1995

J. David Bristow, M.D.

Oregon Health & Science University

1994

Peter O. Kohler, M.D.

Oregon Health & Science University

1993

John Raaf, M.D. Good Samaritan Hospital

1992

John W. Kendall, M.D.

Oregon Health & Science University

199

Robert D. Koler, M.D.

Oregon Health & Science University

1990

Edward H. Cooley

Medical Research Foundation of Oregon

1988

Leonard Laster, M.D.

Oregon Health & Science University

1987

Edward Herbert, Ph.D.

Oregon Health & Science University

1986

Senator Mark O. Hatfield

2014

George S. Bailey, Ph.D. *Oregon State University*

2013

P. Andrew Karplus, Ph.D. *Oregon State University*

Eric Orwoll, M.D.

Oregon Health & Science University

201

Joseph S. Beckman, Ph.D. Oregon State University

2011

Chris Q. Doe, Ph.D. *University of Oregon*

Gail Mandel, Ph.D.

Oregon Health & Science University

2010

Shoukhrat M. Mitalipov, Ph.D. Oregon Health & Science University

2009

J. Eric Gouaux, Ph.D. Vollum Institute Oregon Health & Science University

2008

Lynn Y. Sakai, Ph.D. Shriners Hospitals for Children and Oregon Health & Science University

2007

Markus Grompe, M.D.

Oregon Health & Science University

John H. Postlethwait, Ph.D. *University of Oregon*

2006

Susan J. Hayflick, M.D.

Oregon Health & Science University

2005

Balz Frei, Ph.D.

Oregon State University

David Kabat, Ph.D.

Oregon Health & Science University

2004

P. Michael Conn, Ph.D.
Oregon Health & Science University

James D. White, Ph.D. *Oregon State University*

2003

*James R. Bunzow, M.S. *David K. Grandy, Ph.D., Oregon Health & Science University

John D. Scott, Ph.D.

Oregon Health & Science University

2002

Monte Westerfield, Ph.D. *University of Oregon*

2001

P. Shing Ho, Ph.D.

Oregon State University

James T. Rosenbaum, M.D. Oregon Health & Science University

2000

David A. Lieberman, M.D.

Oregon Health & Science University

1999

Brian J. Druker, M.D.

Oregon Health & Science University

Roger D. Cone, Ph.D.

Oregon Health & Science University

1998

Dennis E. Hruby, Ph.D.

Oregon State University

Charles B. Kimmel, Ph.D. *University of Oregon*

1997

J. David Bristow, M.D.

Oregon Health & Science University

Tom H. Stevens, Ph.D. *University of Oregon*

1996

Scott H. Goodnight, M.D.

Oregon Health & Science University

R. Michael Liskay, Ph.D.

Oregon Health & Science University

Former Discovery Award Recipients

1995

John C. Crabbe, Jr., Ph.D. Oregon Health & Science University

Edward A. Neuwelt, M.D. Oregon Health & Science University

1994

John M. Barry, M.D.

Oregon Health & Science University

*Alfred J. Lewy, M.D., Ph.D. *Robert L. Sack, M.D. Oregon Health & Science University

1993

Richard H. Goodman, M.D., Ph.D. *Oregon Health & Science University*

R. Ellen Magenis, M.D.

Oregon Health & Science University

1992

M. René Malinow, M.D. Oregon Regional Primate Research Center

Josef Rosch, M.D.

Oregon Health & Science University

199

William M. Bennett, M.D. Oregon Health & Science University

Frederick W. Dahlquist, Ph.D. *University of Oregon*

1990

Grover C. Bagby, Jr., M.D., VAMC Oregon Health & Science University

Roderick A. Capaldi, D.Phil. *University of Oregon*

1989

Richard T. Jones, M.D., Ph.D. Oregon Health & Science University

Kensal E. van Holde, Ph.D. *Oregon State University*

1988

Robert S. Dow, M.D.

Dow Institute, Good Samaritan Hospital

Donald J. Reed, Ph.D. *Oregon State University*

1987

William E. Connor, M.D.

Oregon Health & Science University

Brian W. Matthews, Ph.D. Institute of Molecular Biology, University of Oregon

1986

Christopher K. Mathews, Ph.D. *Oregon State University*

Peter H. von Hippel, Ph.D. Institute of Molecular Biology, University of Oregon

1985

Monte Greer, M.D.

Oregon Health & Science University

Barbara Iglewski, Ph.D.

Oregon Health & Science University

1984

Howard S. Mason, Ph.D. Oregon Health & Science University

James Metcalfe, M.D.

Oregon Health & Science University

* joint award

About the Grants

For half a century, the Medical Research Foundation of Oregon has enhanced the quality and quantity of life-science research carried out at Oregon's leading research institutions. Through research grants, early clinical investigator awards and other programs, the MRF each year invests more than \$1 million in innovative biomedical research in the state of Oregon.

By encouraging Oregon scientists to pursue their most innovative ideas, and by fostering a statewide culture of mentorship and lifelong learning, the MRF contributes to the idea that Oregon's total value in the biosciences is worth far more than just the sum of its individual parts.

To learn more about how you can support the MRF's mission to promote innovation and discovery in Oregon, please contact the OHSU Foundation at 503 228-1730. To give online, go to www.ohsufoundation.org.

Research Foundation Committee

The Medical Research Foundation (MRF) supports promising biomedical exploration and the development of research careers in clinical investigation in Oregon through a program of competitively awarded research grants in excess of \$1 million annually.

New Investigator: Quarterly grants of up to \$40,000 are intended for physicians and scientists who are new to research and are currently without major funding resources.

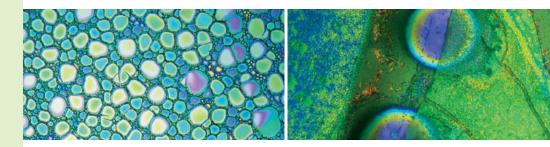
Emergency Interim Support for Established Investigator: Quarterly grants of up to \$40,000 may be made to support ongoing research when an investigator is between grants and a hiatus would jeopardize the program.

Early Clinical Investigator (ECI): Quarterly grants of up to \$20,000 are intended to further the development of young investigators who interact with human subjects and who are interested in a career in clinical research.

The Oregon Scientist Development Award: One annual grant of up to \$75,000 may be made to support exceptional, but not yet fully independent young investigators who are making the transition from an intermediate rank to scientific independence.

For more information about Medical Research Foundation Awards and Grants or to make a gift in support of the MRF, visit www.mrf-oregon.org.

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