

PRESS RELEASE | SEPTEMBER 1, 2011

2011 ERNST SCHERING PRIZE GOES TO A PIONEER OF MOLECULAR ENDOCRINOLOGY

The Ernst Schering Foundation, Berlin, honors Professor Bert W. O'Malley for his pioneering work on the actions of steroid hormones and nuclear receptors



On **September 20, 2011**, the Ernst Schering Foundation in Berlin will **award the 2011 Ernst Schering Prize** for international excellence in basic medical, biological, and chemical research to **Professor Bert W. O'Malley**, the Tom Thompson Distinguished Service Professor and Chair of Molecular and Cellular Biology at Baylor College of Medicine in Houston, Texas.

Professor O'Malley will receive the award, which carries a prize of €50,000, for his pioneering work on the actions of steroid hormones and nuclear receptors and his outstanding achievements in the area of gene regulation, steroid receptors, and transcriptional coactivators. Furthermore, he will be honored for his contributions to the concept of "team science," as he has graduated over 250 students and postdoctoral fellows, who now serve as professors, chief executive officers, and deans of their own institutions around the world.

About Bert W. O'Malley's Research on Hormone Action and Gene Expression

Professor O'Malley's laboratory has been a leader in uncovering the mode of action of the female sex steroids (progesterone and estrogen) and in determining the fundamental mechanisms for regulation of eukaryotic gene expression. By virtue of O'Malley's pioneering work, we now understand that the primary actions of sex steroid hormones and nuclear receptors occur at the level of gene transcription to regulate synthesis of messenger RNAs. He described the pathways of molecular events that lead from hormones to genes to proteins, then went on to discover the "missing link regulators" (coactivators/corepressors) that decipher the transcriptional instructions of the receptors. Coactivators function as "master regulators" for physiology and disease and have immense influence on tissue development and physiology. They activate subfamilies of genes which coordinately regulate growth and metabolism. The role of coactivators for metabolic genes is expanding greatly, indicating control of carbohydrate, lipid, and protein metabolism. Dysfunctions in the coactivators (or corepressors) lead to serious consequences. Such inherited dysfunction has been demonstrated to be causal in reproductive tissue differentiation, embryonic lethality and growth retardation, mental retardation, metabolic regulation, and numerous cancers. This work also led to our molecular understanding of how hormonal antagonists work and has had major importance to the fields of endocrinology, reproduction, genetic disease, and endocrine cancers of the breast and prostate.

About Bert O'Malley

O'Malley has often been called a pioneer of molecular endocrinology, a field he has championed, advocating for the first professional journal in the field. A native of Pittsburgh, he graduated from the University of Pittsburgh School of Medicine in 1963. After his clinical residency at Duke University Medical Center he spent a short time at the National Institutes of Health (NIH) where he was a Molecular Biology Section Head at the National Institute of Child Health and Human Development (NICHD) and then relocated to Vanderbilt University, as the Lucius Birch Professor and Director of the Reproductive Biology Center. In 1973, he moved to Baylor College of Medicine where he since resides as the Tom Thompson Professor and Chair of Molecular and Cellular Biology. This department was one of the first of a new generation of departments which combined the emerging disciplines of cell structure, cell signaling, molecular biology, and developmental biology into a unified Department of Molecular and Cellular Biology.

O'Malley's science has garnered him much recognition as he is the recipient of numerous honorary degrees and many awards, among them the 2007 National Medal of Science Award. O'Malley has been elected to membership in the National Academy of Sciences and the Institute of Medicine. He is a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science (AAAS), and the American Academy of Microbiology. He has published more than 650 papers and holds 22 patents in the fields of gene regulation, molecular endocrinology and steroid receptor action. As he continues to participate as an award-winning teacher in multiple yearly courses, he is also valued for his administrative skills and contributions to education.

The Ernst Schering Foundation

Established in 2002 by Schering AG, Berlin, the independent non-profit Ernst Schering Foundation aims to promote science and art with a special focus on the natural sciences and contemporary art. In addition, the Foundation promotes the scientific and cultural education of children and youth and the dialogue between science and society. Particular emphasis lies on projects in frontier areas, especially at the interface of art and science. The Foundation has an endowment of €35 million.

The **Ernst Schering Prize** is one of the most prestigious German science prizes with a prize money of €50,000. It was established by the Ernst Schering Research Foundation in 1991 and is given annually. Since 2003, the prize has been awarded by the Ernst Schering Foundation. It is bestowed on an international level for particularly outstanding basic research in the fields of medicine, biology or chemistry.

IMPORTANT DATES

Press conference with the prize winner

September 20, 2011, at 11 a.m.

Ernst Schering Foundation | Unter den Linden 32-34 | 10117 Berlin | Germany

Award ceremony "Ernst Schering Prize 2011"

September 20, 2011, at 6 p.m. in Berlin, by invitation only

Presentations of the prize winner

September 21, 2011, at 10 a.m.

Lecture to High School Students in Berlin-Tegel (non-public event)

"A Scientist's Quest to Understand How Hormones Work"

September 21, 2011, at 6 p.m.

Public Lecture for Scientists and Students

in cooperation with the Graduate College 1208 at Charité Universitätsmedizin Berlin

"Receptor Coactivators: 'Masters' of Physiology and Pathology"

Robert-Koch-Forum, Lecture Hall

Dorotheenstr. 96 | 10117 Berlin

The lecture will be in English. Registration is not necessary.

For photographs please see: www.scheringstiftung.de/en/press/press-photos.html

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