Steroid Hormone Pathways and Mechanisms of Action in Benign Urologic Disease

May 22-24, 2017
University of Wisconsin Health Sciences Learning Center - 1335

Keynote Speaker

Jim Dalton, PhD, Professor and Dean of University of Michigan School of Pharmacy, University of Michigan

Visiting Speakers

Jonathan Barasch, PhD, Columbia University
Larry Baskin, MD, University of California, San Francisco
Paul Cooke, PhD, University of Florida
Don DeFranco, PhD, University of Pittsburgh School of Medicine
Stephen Hammes, MD, PhD, University of Rochester School of Medicine and Dentistry
Dolores Lamb, PhD, HCLD, Baylor College of Medicine Medical Center
Jun Luo, PhD, Johns Hopkins Hospital
Jill Macoska, PhD, University of Massachusetts Boston
Claus Roehrborn, MD, University of Texas Southwestern Medical Center
Fred vom Saal, PhD, University of Missouri

University of Wisconsin Speakers

Elaine Alarid, PhD
Lisa Arendt, DVM, PhD
Dale Bjorling, DVM
Joan Jorgensen, DVM, PhD
Pamela Kreeger, PhD
Paul Lambert, PhD
Paul Marker, PhD
Stephen Nakada, MD
Kyle Richards, MD
Will Ricke, PhD
Linda Schuler, VMD, PhD
Chad Vezina, PhD
Wei Xu, PhD

K12 Scholar Speakers

Heidi W. Brown, MD
Diego Hernando, PhD
Teresa Liu, PhD
Lindsay Hampson, MD
Alejo Roldan, PhD
Adriane Sinclair, PhD
Adam Szafran, MD
Mike Wood, DVM, PhD
Monday, May 22

8:00  Breakfast

8:30  Welcoming Remarks — Will Ricke, PhD, Director UW O’Brien Center, Professor, Urology Dept, UW-Madison

8:35  Welcoming Remarks — Richard Moss, PhD, Associate Dean for Basic Research, Biotechnology and Graduate Studies, UW-Madison

8:45  BPH: Androgens, Estrogens, and Fibrosis — Kyle Richards, MD, Assistant Professor, Urology Dept, UW-Madison

9:10  Opportunities and Challenges for Modeling BPH and LUTS in Rodents — Paul Marker, PhD, Professor and Associate Dean, School of Pharmacy, UW-Madison

9:35  Linking Lower Urinary Tract Function and Structure — Dale Bjorling, DVM, Professor and Associate Dean, School of Veterinary Medicine, UW-Madison

9:55  Mass Spectrometry-based Urinary Proteomics — Sam Thomas, PhD Candidate, Ricke lab, METC Program, UW-Madison

10:05  Urinary Flow Dynamics - An MR Based Computational Modeling Approach — Alejo Roldan, PhD, K12 Scholar, Assistant Professor, Dept of Mechanical Engineering, UW-Madison

10:15  Break

10:35  Steroid Hormones and Clinical LUTS/BPH: Correlations, Causations and Therapeutic Targets — Claus Roehrborn, MD, Professor and Chairman, Dept of Urology, UT Southwestern

11:15  Role of G-Protein Coupled Receptors in Lower Urinary Tract Fibrosis — Jill Macoska, PhD, Professor, Biological Sciences, U-Mass Boston

11:45  Next Generation ER and AR Blockers for Cancer Treatment — Wei Xu, PhD, Professor, Dept of Oncology, UW-Madison

12:15  Identification of Estrogen Regulated Gene Networks in BPH — Teresa Liu, PhD, K12 Scholar, Dept of Urology, UW-Madison

12:30  Lunch

1:30  Hormone Action in the Cervix - Paul Lambert, PhD, Professor and Chairman, Dept of Oncology, UW-Madison

2:00  What is BPH and What Roles Might Estrogen Be Playing? — Will Ricke, PhD, Director UW O’Brien Center, Professor, Urology Dept, UW-Madison
2:20  Reconstructing the Tissue Microenvironment to Understand the Role of Estrogens in Prostate Disease Progression — Molly Morgan, PhD Candidate, Beebe lab, METC Program, UW-Madison

2:30  Break

2:50  Steroids and Inflammation: How Studying Androgen Signaling Leads to the Neutrophil — Stephen Hammes, MD, PhD, Professor and Associate Chair, Dept of Medicine, U-Rochester, NY

3:20  Androgen Receptor Splice Variants: From Biology to Utility — Jun Luo, PhD, Associate Professor, Dept of Urology, Johns Hopkins Medical Center

3:50  Androgen Regulation of FGF5 and its Role in the Prostate — Dalton McLean, PhD Candidate, Ricke lab, McArdle Cancer Biology Program, UW-Madison

4:00  Keynote: Selective Androgen Receptor Modulators (SARMs) as Prostate-sparing Anabolic Therapy — Jim Dalton, PhD, Professor and Dean of University of Michigan School of Pharmacy, University of Michigan

4:55  Closing Remarks — Stephen Nakada, MD, Professor and Chairman, Dept of Urology, UW-Madison

5:00-6:30  Poster Session

**Tuesday, May 23**

8:00  Breakfast

8:30  Exploring Novel Alterations in Steroid Hormone Receptor Signaling that Underlie Human Congenital Genitourinary Anomalies — Dolores Lamb, PhD, HCLD, Professor, Dept of Urology, Baylor College of Medicine

9:05  Development of Individual Male Urogenital Tract Components Require Distinct Threshold Concentrations of Fetal Testosterone — Joan Jorgensen, DVM, PhD, Associate Professor, Dept of Pharmacology, UW-Madison

9:25  Hormonal Control of Genital Development — Larry Baskin, MD, Professor, Dept of Urology, UCSF

10:00  Break

10:20  Estradiol and Estrogenic Chemicals Modulate Androgen Action During Prostate Development — Fred vom Saal, PhD, Professor, Div of Biological Sciences, U of Missouri

11:00  Role of Membrane Estrogen Receptor 1 in the Development and Function of the Male Reproductive Tract — Paul Cooke, PhD, Professor and Chair, Dept of Physiological
11:40 Pinpointing Cellular Origins and Physiological Consequences of Prostate Fibrosis — Chad Vezina, PhD, Associate Professor, Dept of Comparative Biosciences, UW-Madison

12:10 Investigating the Mechanism of Estrogen Receptor a Regulation by Paracrine Interactions — David Lung, PhD Candidate, Alarid lab, McArdle Cancer Biology Program, UW-Madison

12:20 One In Six Hypogonadal Men Treated With Clomiphene Citrate Need Combination Therapy With an Aromatase Inhibitor — Brett Johnson, MD, Urology Resident, Dept of Urology, UW-Madison

12:30 Lunch

1:30 Opposing Roles for Cox-2 in Regulating Estrogen Receptor beta Function in the Prostate — Don DeFranco, PhD, Professor, Dept of Pharmacology, U-Pittsburgh

2:10 Hormone-ECM Collusion in Breast Cancer — Linda Schuler, VMD, PhD, Professor, Dept of Comparative Biosciences, UW-Madison

2:40 Obesity and ERα: Selecting for Hormonal Responsiveness? — Lisa Arendt, PhD, Assistant Professor, Dept of Comparative Biosciences, UW-Madison

3:10 Harnessing Lineage Tracing to Study Hormonal Responses in the Prostate — Diya Binoy Joseph, PhD Candidate, Vezina lab, Cellular and Molecular Biology Program, UW-Madison

3:20 Break

3:40 Postranslational Dynamics of ER and Its Paradoxical Roles in Cancer — Elaine Alarid, PhD, Professor, Dept of Oncology, UW-Madison

4:10 Computational Modeling of Cell Signaling Networks — Pamela Kreeger, PhD, Associate Professor, Dept of Biomedical Engineering, UW-Madison

4:40 Measurement of Multi-steroid Hormones in Mouse Serum using LC-MS/MS — Clara Jeong, PhD, Postdoctoral Fellow, Ricke lab, Dept of Urology, UW-Madison

4:50 Investigating the Effects of Phosphorylation on the DNA Binding Properties of ERα — Kyle Helzer, PhD Candidate, Alarid lab, McArdle Cancer Biology Program, UW-Madison

5:00-6:30 Poster Session

Wednesday, May 24

8:00 Breakfast

8:30 How SHAIP is Shaping Up — Heidi Wendell Brown, MD, K12 Scholar, Assistant Professor,
About the O’Brien Center

The UW-George M. O’Brien Center of Research Excellence is a research cooperative between the University of Wisconsin-Madison, University of Massachusetts-Boston, and the National Institutes of Health. Our goals are to:

- Identify factors that cause urinary dysfunction in aging men
- Build consensus around research approaches to model urinary dysfunction in rodents
- Provide opportunities for established investigators to transition into the field of benign urology
- Secure the future of urologic research by promoting development of the next generation of urologic researchers
- Disseminate urologic research knowledge