**University of Pittsburgh**  
**O’Brien Benign Urology Research Center**  
**Mini-Symposium on BPH/LUTS**  
**Monday, June 19, 2017**  
**Herberman Conference Center**  
**Auditorium and Classrooms ABC**  
**UPMC Cancer Pavilion / Pittsburgh, PA**

*Supported by the University of Pittsburgh O’Brien Urology [Cooperative] Research Center NIH/NIDDK 1U54DK112079*

<table>
<thead>
<tr>
<th>MORNING SESSION</th>
<th>AFTERNOON SESSION</th>
</tr>
</thead>
</table>
| **8:30 a.m.-9:00 a.m.** | 11:40 a.m.-12:00 p.m. | **Molecular Signatures of**  
Prostatic Inflammation in  
Rodent and Human BPH  
Specimens  
Pradeep Tyagi, Ph.D.  
University of Pittsburgh |
| **9:00 a.m. – 9:05 a.m.** | **12:00 p.m.-12:05 p.m.** | **Questions & Discussion** |
| **Introduction & Welcome**  
Joel B. Nelson, M.D.  
University of Pittsburgh | **12:05 p.m.-1:05 p.m.** | **Lunch (will be provided)** |
| **9:05 a.m.-9:45 a.m.** | **1:05 p.m.-1:45 p.m.** | **Keynote Lecture:**  
Identifying molecular  
mechanisms of BPH/LUTS  
and prostate cancer using  
mouse models  
Paul C. Marker, Ph.D.  
University of Wisconsin-Madison |
| **Keynote Lecture:** Prostate  
stem cells as hormone targets  
in the regulation of homeostasis  
and disease susceptibility.  
Gail S. Prins, Ph.D.  
University of Illinois at Chicago | **1:45 p.m.-1:50 p.m.** | **Questions & Discussion** |
| **9:45 a.m.-9:50 a.m.** | **1:50 p.m.-2:10 p.m.** | **Modulation of umbrella cell  
tight junctions during  
bladder filling and voiding**  
Gerard Apodaca, Ph.D.  
University of Pittsburgh |
| **Questions & Discussion** | **2:10 p.m.-2:15 p.m.** | **Questions & Discussion** |
| **9:50 a.m.-10:10 a.m.** | **2:15 p.m.-2:35 p.m.** | **TGF-β1 increases prostatic  
luminal epithelial layer  
permeability**  
Feng Li, M.D.  
University of Pittsburgh |
| **Variation in the treatment of  
BPH**  
Bruce L. Jacobs, M.D.  
University of Pittsburgh | **2:35 p.m.-2:40 p.m.** | **Questions & Discussion** |
| **10:10 a.m.-10:15 a.m.** | **2:40 p.m.** | **Closing Remarks**  
Zhou Wang, Ph.D.  
University of Pittsburgh |
| **Questions & Discussion** | **Lunch (will be provided)** | **11:00 a.m.-12:00 p.m.** |  
**Opposing Roles for Cox-2 in  
Regulating Estrogen Receptor-  
beta Function in the Prostate**  
Donald B. Defranco, Ph.D.  
University of Pittsburgh |
| **Break** | **Molecular Signatures of**  
Prostatic Inflammation in  
Rodent and Human BPH  
Specimens  
Pradeep Tyagi, Ph.D.  
University of Pittsburgh |
| **10:25 a.m.-10:45 a.m.** | **1:05 p.m.-1:45 p.m.** | **Keynote Lecture:**  
Identifying molecular  
mechanisms of BPH/LUTS  
and prostate cancer using  
mouse models  
Paul C. Marker, Ph.D.  
University of Wisconsin-Madison |
| **Potential Role of the Bladder  
mucosa in BPH/LUTS**  
Lori Birder, Ph.D.  
University of Pittsburgh | **1:45 p.m.-1:50 p.m.** | **Questions & Discussion** |
| **1:05 p.m.-1:45 p.m.** | **1:50 p.m.-2:10 p.m.** | **Modulation of umbrella cell  
tight junctions during  
bladder filling and voiding**  
Gerard Apodaca, Ph.D.  
University of Pittsburgh |
| **2:15 p.m.-2:35 p.m.** | **2:35 p.m.-2:40 p.m.** | **Questions & Discussion** |
| **2:40 p.m.** | **Closing Remarks**  
Zhou Wang, Ph.D.  
University of Pittsburgh | **11:40 a.m.-12:00 p.m.** |  
**Molecular Signatures of**  
Prostatic Inflammation in  
Rodent and Human BPH  
Specimens  
Pradeep Tyagi, Ph.D.  
University of Pittsburgh |
| **11:10 a.m.-11:15: a.m.** | **1:05 p.m.-1:45 p.m.** | **Keynote Lecture:**  
Identifying molecular  
mechanisms of BPH/LUTS  
and prostate cancer using  
mouse models  
Paul C. Marker, Ph.D.  
University of Wisconsin-Madison |
| **Questions & Discussion** | **1:45 p.m.-1:50 p.m.** | **Questions & Discussion** |
| **11:15 a.m.-11:35 a.m.** | **1:50 p.m.-2:10 p.m.** | **Modulation of umbrella cell  
tight junctions during  
bladder filling and voiding**  
Gerard Apodaca, Ph.D.  
University of Pittsburgh |
| **Potential Mechanisms  
underlying bladder and afferent  
sensitization in prostatic  
inflammation**  
Naoki Yoshimura, M.D., Ph.D.  
University of Pittsburgh | **2:10 p.m.-2:15 p.m.** | **Questions & Discussion** |
| **2:15 p.m.-2:35 p.m.** | **2:35 p.m.-2:40 p.m.** | **Questions & Discussion** |
| **2:40 p.m.** | **Closing Remarks**  
Zhou Wang, Ph.D.  
University of Pittsburgh | **11:40 a.m.-12:00 p.m.** |  
**Molecular Signatures of**  
Prostatic Inflammation in  
Rodent and Human BPH  
Specimens  
Pradeep Tyagi, Ph.D.  
University of Pittsburgh |