

## Basic science in functional urology: Where do we stand?

Poster Session 23

Saturday, 25 March  
16:00 - 17:30

**Location:** Room Berlin, North Hall (Level 1)

**Chairs:** D. Eberli, Zürich (CH)  
S. Poletajew, Warszawa Wesola (PL)

### Aims and objectives of this session

Cell-based therapy, genetics, receptors and channels...the story continues.

Poster viewing of 20 minutes. Presentations will take place on stage. Standard presentations are 2 minutes in length, followed by 2 minutes for discussion. Extended presentations (\*) are 3 minutes in length, followed by 3 minutes for discussion.

- 303 **The inhibitory effect of neuropeptide Y Y1 receptor agonist on micturition reflex in rats**  
By: [Honda M.](#)<sup>1</sup>, Yoshimura N.<sup>2</sup>, Kimiura Y.<sup>1</sup>, Kawamoto B.<sup>1</sup>, Tsounapi P.<sup>1</sup>, Hikita K.<sup>1</sup>, Shimizu S.<sup>3</sup>, Shimizu T.<sup>3</sup>, Saito M.<sup>3</sup>, Chancellor M.<sup>4</sup>, Takenaka A.<sup>1</sup>  
**Institutes:**<sup>1</sup>Tottori University Faculty of Medicine, Dept. of Urology, Yonago, Japan, <sup>2</sup>University of Pittsburgh, Dept. of Urology, Pittsburgh, United States of America, <sup>3</sup>Kochi Medical School, Dept. of Pharmacology, Nankoku, Japan, <sup>4</sup>William Beaumont Hospital, Dept. of Urology, Royal Oak, United States of America
- 304 **Development of neurogenic detrusor overactivity is prevented by early bladder afferent desensitization in spinal cord injured rats**  
By: [Oliveira R.](#)<sup>1</sup>, Coelho A.<sup>1</sup>, Cruz F.<sup>2</sup>, Cruz C.<sup>1</sup>  
**Institutes:**<sup>1</sup>Faculty of Medicine, University of Porto, Institute For Innovation and Health Research, Dept. of Biomedicine, Translational NeuroUrology Group, Porto, Portugal, <sup>2</sup>Hospital São João, Porto, Institute For Innovation and Health Research, Translational NeuroUrology Group, Porto, Portugal
- 305 **Effects of neurotrophins and bladder tissue on neurite outgrowth in cultured mouse pelvic ganglia**  
By: [Zhu B.](#)<sup>1</sup>, Ekman M.<sup>1</sup>, Zeng J.<sup>2</sup>, Swärd K.<sup>1</sup>, Uvelius B.<sup>3</sup>  
**Institutes:**<sup>1</sup>Lund University, Dept. of Experimental Medical Science, Lund, Sweden, <sup>2</sup>The Sixth Affiliated Hospital of Guangzhou Medical University, Dept. of Urology, Qingyuan, China, <sup>3</sup>Lund University, Dept. of Urology, Clinical Sciences, Lund, Sweden
- 306 **Corresponding microRNA and mRNA expression profiles in a mouse model of bladder outlet obstruction and human patients' biopsies**  
By: [Monastyrskaya K.](#)<sup>1</sup>, Köck I.<sup>2</sup>, Vasquez E.<sup>3</sup>, Hashemi Gheinani A.<sup>2</sup>, Baumgartner U.<sup>4</sup>, Sack B.<sup>3</sup>, Lukianov S.<sup>3</sup>, Burkhard F.<sup>1</sup>, Adam R.<sup>3</sup>  
**Institutes:**<sup>1</sup>University Hospital Bern, Dept. of Urology, Bern, Switzerland, <sup>2</sup>Urology Research Laboratory, Dept. of Clinical Research, Bern, Switzerland, <sup>3</sup>Urological Diseases Research Center, Boston Children's Hospital, Boston, United States of America, <sup>4</sup>Institute of Pathology, Dept. of Molecular Pathology, Bern, Switzerland
- 307 **Imaging human skeletal muscle regeneration after stem cell application for sphincter reconstruction using diffusion tensor imaging (DTI) and magnetisation transfer (MT) measurements**  
By: Keller D.<sup>1</sup>, Eberhardt C.<sup>2</sup>, Rottmar M.<sup>2</sup>, Haralampieva D.<sup>1</sup>, Sulser T.<sup>1</sup>, Boss A.<sup>2</sup>, [Eberli D.](#)<sup>1</sup>  
**Institutes:**<sup>1</sup>University Hospital Zurich, Dept. of Urology, Zürich, Switzerland, <sup>2</sup>University Hospital Zurich, Institute for Diagnostic and Interventional Radiology, Zürich, Switzerland
- 308 **In vivo evaluation of the effectiveness of an innovative technology for the recovery of erectile**

**dysfunction after radical prostatectomy**

By: Skoufias S.<sup>1</sup>, Adamakis I.<sup>1</sup>, Levis P.<sup>1</sup>, Stergiopoulos N.<sup>2</sup>, Araujo Fraga Da Silva R.<sup>2</sup>, Papaioannou T.G.<sup>3</sup>, Constantinides C.<sup>1</sup>

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**Serotonin paraneuronal cells in the urethral epithelium of human and rodents: Expression and function**

By: Coelho A.<sup>2</sup>, Oliveira R.<sup>2</sup>, Cavaleiro H.<sup>2</sup>, Cruz C.D.<sup>2</sup>, Cruz F.<sup>1</sup>

**Institutes:**<sup>1</sup>Hospital S. Joao, IBMC and I3S, University of Porto, Dept. of Urology, Porto, Portugal, <sup>2</sup>Faculty of Medicine, IBMC and I3S, University of Porto, Dept. of Biomedicine, Porto, Portugal

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**Expression of programmed death ligand 1 in interstitial cystitis patients is correlated with bladder pain degree and hydrodistension outcome**

By: Chen Y., Yu W., Yang Y., Fan Y., Wu S., Jin J.

**Institutes:**Peking University First Hospital, Dept. of Urology, Beijing, China

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**Understanding the role of stem cells in urinary bladder regeneration - a preclinical study in a large animal model**

By: Pokrywczynska M.<sup>1</sup>, Jundzill A.<sup>1</sup>, Buhl M.<sup>1</sup>, Balcerczyk D.<sup>1</sup>, Rasmus M.<sup>1</sup>, Warda K.<sup>1</sup>, Buchholz L.<sup>1</sup>, Kowalski F.<sup>1</sup>, Kwiecinski P.<sup>2</sup>, Drewa T.<sup>1</sup>

**Institutes:**<sup>1</sup>Nicolaus Copernicus University in Torun, Ludwik Rydygier Medical College, Dept. of Regenerative Medicine, Bydgoszcz, Poland, <sup>2</sup>Vetlab, Brudzew, Poland

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**Urinary bladder regenerate by recruiting developmental hedgehog signaling pathway**

By: Pokrywczynska M., Jundzill A., Warda K., Rasmus M., Buchholz L., Kowalski F., Drewa T.

**Institutes:**Nicolaus Copernicus University in Torun, Ludwik Rydygier Medical College, Dept. of Regenerative Medicine, Bydgoszcz, Poland

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**Uncovering links between metabolic syndrome and lower urinary tract symptoms suggestive of BPH at molecular level: First evidence for an involvement of the ghrelin system**

By: Wang Y., Gratzke C., Yu Q., Ciotkowska A., Rutz B., Strittmatter F., Stief C., Hennenberg M.

**Institutes:**LMU Munich, Dept. of Urology, Munich, Germany

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**Pathophysiological roles of TRPA1 channel in lipopolysaccharide (LPS)-induced bladder inflammatory nociception and hypersensitivity in mice**

By: Kamei J.<sup>1</sup>, Aizawa N.<sup>1</sup>, Nakagawa T.<sup>2</sup>, Kaneko S.<sup>3</sup>, Homma Y.<sup>4</sup>, Igawa Y.<sup>1</sup>

**Institutes:**<sup>1</sup>The University of Tokyo Graduate School of Medicine, Dept. of Continence Medicine, Tokyo, Japan, <sup>2</sup>Kyoto University Hospital, Dept. of Pharmacy, Kyoto, Japan, <sup>3</sup>Kyoto University, Graduate School of Pharmaceutical Sciences, Dept. of Molecular Pharmacology, Kyoto, Japan, <sup>4</sup>The University of Tokyo Graduate School of Medicine, Dept. of Urology, Tokyo, Japan

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**The neurotransmitters in the periaqueductal grey matter, involved in bladder function**

By: Zare A.<sup>2</sup>, Jahanshahi A.<sup>2</sup>, Rahnama'i M.S.<sup>1</sup>, Celine M.<sup>2</sup>, Van Koeveeringe G.<sup>1</sup>

**Institutes:**<sup>1</sup>Maastricht UMC+, Dept. of Urology, Maastricht, The Netherlands, <sup>2</sup>Maastricht University, Dept. of Neuroscience, Maastricht, The Netherlands