Basic science in functional urology: Where do we stand?

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.1, Yoshimura N.2, Kimiura Y.1, Kawamoto B.1, Tsounapi P.1, Hikita K.1, Shimizu S.3, Shimizu T.3, Saito M.3, Chancellor M.4, Takenaka A.1
Institutes: 1Tottori University Faculty of Medicine, Dept. of Urology, Yonago, Japan, 2University of Pittsburgh, Dept. of Urology, Pittsburgh, United States of America, 3Kochi Medical School, Dept. of Pharmacology, Nankoku, Japan, 4William 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.1, Coelho A.1, Cruz F.2, Cruz C.1
Institutes: 1Faculty of Medicine, University of Porto, Institute For Innovation and Health Research, Dept. of Biomedicine, Translational NeuroUrology Group, Porto, Portugal, 2Hospital 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.1, Ekman M.4, Zeng J.1, Swärd K.1, Uvelius B.4
Institutes: 1Lund University, Dept. of Experimental Medical Science, Lund, Sweden, 2The Sixth Affiliated Hospital of Guangzhou Medical University, Dept. of Urology, Qingyuan, China, 3Lund 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.1, Köck I.2, Vasquez E.3, Hashemi Gheinani A.2, Baumgartner U.4, Sack B.3, Lukianov S.3, Burkhard F.1, Adam R.3
Institutes: 1University Hospital Bern, Dept. of Urology, Bern, Switzerland, 2Urology Research Laboratory, Dept. of Clinical Research, Bern, Switzerland, 3Urological Diseases Research Center, Boston Children’s Hospital, Boston, United States of America, 4Institute 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.1, Eberhardt C.2, Rottmar M.2, Haralampieva D.1, Sulser T.1, Boss A.2, Eberli D.1
Institutes: 1University Hospital Zurich, Dept. of Urology, Zürich, Switzerland, 2University 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


**Poster Session 23**

**309**

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

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

Institutes: Hospital S. Joao, IBMC and I3S, University of Porto, Dept. of Urology, Porto, Portugal, ²Faculty of Medicine, IBMC and I3S, University of Porto, Dept. of Biomedicine, Porto, Portugal

**310**

**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

**311**

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

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

Institutes: Nicolaus Copernicus University in Torun, Ludwik Rydygier Medical College, Dept. of Regenerative Medicine, Bydgoszcz, Poland, ²Vetlab, Brudzew, Poland

**313**

**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

**314**

**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**


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

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

By: Kamei J. ¹, Aizawa N. ¹, Nakagawa T. ², Kaneko S. ¹, Homma Y. ⁴, Igawa Y. ¹

Institutes: The University of Tokyo Graduate School of Medicine, Dept. of Contience Medicine, Tokyo, Japan, ²Kyoto University Hospital, Dept. of Pharmacy, Kyoto, Japan, ³Kyoto University, Graduate School of Pharmaceutical Sciences, Dept. of Molecular Pharmacology, Kyoto, Japan, ⁴The University of Tokyo Graduate School of Medicine, Dept. of Urology, Tokyo, Japan

**316**

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

By: Zare A. ³, Jahanshahi A. ², Rahnama'i M.S. ¹, Celine M. ², Van Koeveringe G. ¹

Institutes: Maastricht UMC+, Dept. of Urology, Maastricht, The Netherlands, ²Maastricht University, Dept. of Neuroscience, Maastricht, The Netherlands