### How technology will change your practice in the next decade - the appealing image of new experimental technologies

**Poster Session 36**

**Location:** Green Area, Room 5

**Chairs:**
P.M. Kronenberg, Lisbon (PT)
U. Nagele, Hall in Tirol (AT)
E. Nemr, Beirut (LB)

Poster viewing of 20 minutes. Presentations will take place on stage. Standard presentations are 2 minutes in length, followed by 2 minutes for discussion.

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### 498

**The changing face of urologic oncologic surgery from 2000-2018 (63 141 patients) - impact of robotics**

By: Gill I.S., Cacciamani G.E.

University of Southern California, Dept. of Urology, Los Angeles, United States of America

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### 499

**Transcription and protein phenotyping with 3D pathology: Light-sheet microscopy overlooks cellular malignancy of intact tumour volumes**

By: Tanaka N., Kanatani S., Kaczynska D., Louhivuori L., Oya M., Miyakawa A., Uhlén P.

1Keio University School of Medicine, Dept. of Urology, Tokyo, Japan,
2Karolinska Institutet, Dept. of Medical Biochemistry and Biophysics, Stockholm, Sweden,
3Karolinska University Hospital, Dept. of Urology, Stockholm, Sweden

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### 500

**Characterization of bladder organoid cultures from healthy and cancer tissues**

By: Patard P.M., Rubio A., Tostivint V., Rouget C., Lluel P., Vergnolle N., Gamé X.

1Rangueil University Hospital, Dept. of Urology, Andrology and Kidney Transplantation, Toulouse, France,
2Inserm, Institut de Recherche en Santé Digestive, Inserm, U1220, Toulouse, France,
3University of Toulouse, CHU Rangueil, Dept. of Urology, Andrology and Kidney Transplantation, Toulouse, France,
4Urosphere, Dept. of Urology, Andrology and Kidney Transplantation, Toulouse, France

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### 501

**Holographic surgical planning of partial nephrectomy using a wearable mixed reality computer**

By: Yoshida S., Fukuda S., Moriyama S., Yokoyama M., Taniguchi N., Shinjo K., Sugimoto M., Saito K., Fujii Y.

1Tokyo Medical and Dental University, Dept. of Urology, Tokyo, Japan,
2Holoeys Inc., Dept. of Urology, Tokyo, Japan
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<th>Session</th>
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<td>502</td>
<td>Biodistribution and toxicity of gold nanoparticle-based photo-immuno-nanotherapy for bladder cancer</td>
<td>Barton G. 1, Liu Y. 2, Maccarini P. 2, Palmer G. 3, Etienne W. 1, Tan W.P 1, Vo-Dinh T. 2, Inman B. 1</td>
<td>1Duke University Medical Center, Dept. of Urology, Durham, United States of America, 2Duke University Medical Center, Dept. of Biomedical Engineering, Durham, United States of America, 3Duke University Medical Center, Dept. of Radiation Oncology, Durham, United States of America</td>
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<td>503</td>
<td>Remarkable difference between 3D and 2D cultures of bladder cancer cells in response to drugs: A concrete example for importance of 3D culture</td>
<td>Yoshida T. 1, Kates M. 2, Liu X. 2, Joice G. 2, Sopko N. 2, McConkey D. 2, Bivalacqua T. 2</td>
<td>1Hyogo Prefectural Nishinomiya Hospital, Dept. of Urology, Nishinomiya, Japan, 2The James Buchanan Brady Urological Institute, The Johns Hopkins University School of Medicine, Dept. of Urology, Baltimore, United States of America</td>
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<td>504</td>
<td>One year follow up of use of chitosan membranes after nerve-sparing radical prostatectomy: Results of a comparative study</td>
<td>Porpiglia F., Manfredi M., Checucci E., Garrou D., Cattaneo G., Amparore D., De Cillis S., Volpi G., Piramide F., Piana A., Ragni F., Fiori C.</td>
<td>AOU San Luigi Gonzaga, Dept. of Urology, Orbassano, Italy</td>
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<td>506</td>
<td>Cerenkov luminescence imaging for intraoperative specimen analysis: A pre-clinical evaluation</td>
<td>Olde Heuvel J. 1, De Wit-Van Der Veen L. 1, Stokkel M.P.M. 1, Van Der Poel H.G. 2, Tuch D.S. 3, Grootendorst M.R. 3, Vyas K.N. 3, Slump C.H. 4</td>
<td>1Netherlands Cancer Institute, Antoni van Leeuwenhoek, Dept. of Nuclear Medicine, Amsterdam, The Netherlands, 2Netherlands Cancer Institute, Antoni van Leeuwenhoek, Dept. of Urology, Amsterdam, The Netherlands, 3Lightpoint Medical Ltd, Chesham, United Kingdom, 4University of Twente, MIRA Institute for Biomedical Technology and Technical Medicine, Enschede, The Netherlands</td>
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<td>507</td>
<td>Implementation of grayscale values of hypoechoic lesions in transrectal ultrasound-guided biopsy for predicting prostate cancer and clinically significant prostate cancer: A validating confirmatory study</td>
<td>Park J.S., Koo K.C., Chung B.H., Lee K.S.</td>
<td>Yonsei University College of Medicine, Dept. of Urology, Seoul, South Korea</td>
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<td>508</td>
<td>Real-time high resolution diagnostic imaging for prostatic tissue with ex vivo fluorescence confocal microscopy: Our preliminary experience</td>
<td>Puliatti S. 1, Bertoni L. 2, Pirola G.M. 1, Azzoni P. 2, Bevilacqua L. 1, Eissa A. 3, Elsherbiny A. 3, Sighinolfi M.C. 1, Chester J. 2, Rocco B.M.C. 1, Micali S. 1, Bagni I. 4</td>
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1University of Modena and Reggio Emilia, Dept. of Urology, Modena, Italy, 2University of Modena and Reggio Emilia, Dept. of Surgical, Medical, Dental and Morphological Sciences with Interest transplant, Oncological and Regenerative Medicine, Modena, Italy, 3Faculty of Medicine, Tanta University, Dept. of Urology, Tanta, Egypt, 4University of Modena and Reggio Emilia, Dept. of Pathology, Modena, Italy, 5Hospital Clinic Barcelona, Dept. of Dermatology, Melanoma Unit, Barcelona, Spain, 6University of Modena and Reggio Emilia, Dept. of Dermatology, Modena, Italy, 7Politecnico University of the Marche Region, School of Medicine, United Hospitals, Dept. of Pathological Anatomy, Ancona, Italy, 8Global Robotics Institute, Florida Hospital-Celebration Health Celebration, Dept. of Urology, Orlando, United States of America

509 Early experience on IR technology for kidney graft re-perfusion assessment. An ESUT-YAUWP project


1Grande Ospedale Metropolitano BMM, Dept. of Urology and Kidney Transplant, Reggio Calabria, Italy, 2Hospital Universitario la Paz, Dept. of Urology, Madrid, Spain, 3University of Southern California, Dept. of Urology, Los Angeles, United States of America, 4University of California Irvine, Dept. of Urology, Los Angeles, United States of America, 5Camargo Cancer center, Dept. of Urology, Sao Paulo, Brazil, 6Hospital São Marcos, Dept. of Urology, Teresina, Brazil, 7Fundacio Puigvert, Dept. of Urology, Barcelona, Spain

510 Utilisation of the HoloLens mixed-reality device in minimally invasive surgery


1King's College London, MRC Centre for Transplantation, London, United Kingdom, 2Università degli Studi di Milano, ASST Santi Paolo e Carlo, Milan, Italy, 3Guy's and St. Thomas' NHS Foundation Trust, Dept. of Urology, London, United Kingdom

511 Electrophysiological differences between typical and dense benign prostatic hyperplasia tissues retrieved after holmium laser enucleation of the prostate


1Pusan National University Hospital, Dept. of Urology, Busan, South Korea, 2BHS Haneo Hospital, Dept. of Urology, Busan, South Korea, 3Kosin University College of Medicine, Dept. of Urology, Busan, South Korea, 4Dong-A University Hospital, Dept. of Urology, Busan, South Korea, 5Inje University Busan Paik Hospital, Dept. of Urology, Busan, South Korea, 6Samsung Changwon Hospital, Dept. of Urology, Changwon, South Korea, 7Ulsan-Jeil Hospital, Dept. of Urology, Ulsan, South Korea, 8Gwangju Institute of Science and Technology, Biomedical Science and Engineering, Gwangju, South Korea

512 Electric stimulation hyperthermia relieves inflammation via toll-like receptor 4 (TLR-4) suppressor of cytokine signaling (SOCS) pathway in chronic prostatitis/
chronic pelvic pain syndrome

Seoul St. Mary's Hospital, Catholic University of Korea, Dept. of Urology, Seoul, South Korea