

## POSTER SESSION

## 1. (EPI-)GENETICS IN ANDROLOGY

## P 1.1

**Loss-of-function mutations in *TRIM71* as novel cause of early germ cell depletion in men and mice**

J. EMICH<sup>1</sup>, L. TORRES-FERNÁNDEZ<sup>2</sup>, M. WÖSTE<sup>3</sup>, S. MITSCHKA<sup>2</sup>, Y. PORT<sup>2</sup>, C. FRIEDRICH<sup>1</sup>, S. KLIESCH<sup>4</sup>, H. SCHORLE<sup>5</sup>, W. KOLANUS<sup>2</sup>, F. TÜTTELMANN<sup>1</sup>

<sup>1</sup>University of Münster, Institute of Reproductive Genetics, Münster, Germany; <sup>2</sup>University of Bonn, Life and Medical Sciences Institute, Molecular Immunology and Cell Biology, Bonn, Germany; <sup>3</sup>University of Münster, Institute of Medical Informatics, Münster, Germany; <sup>4</sup>University Hospital Münster, Centre of Reproductive Medicine and Andrology, Department of Clinical and Surgical Andrology, Münster, Germany; <sup>5</sup>University of Bonn Medical School, Institute of Pathology, Department of Developmental Pathology, Bonn, Germany

## P 1.2

**Characterisation of the infertility-associated gene M1AP**  
N. ROTTE, M. WYRWOLL, C. FRIEDRICH, F.

TÜTTELMANN

Institute of Reproductive Genetics, Münster, Germany

## P 1.3

**The genetic portrait of male infertility: an *in silico* ethnic evaluation of haplotype distribution among populations**

D. SANTI, G. SPAGGIARI, L. PAGLIAI, M. SIMONI, L. CASARINI

University of Modena and Reggio Emilia, Unit of Endocrinology, Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy

## P 1.4

**49, XXXXY syndrome – an infant presenting with ambiguous genitalia**

P. PATEL<sup>1</sup>, R. NERLI<sup>2</sup>, S. GHAGANE<sup>2</sup>

<sup>1</sup>Jawaharlal Nehru Medical College, Belagavi, Urology, Belagavi, India; <sup>2</sup>KLES Dr. Prabhakar Kore Hospital and research centre, Urology, Belagavi, India

## P 1.5

**Ten-eleven-translocation enzyme 1 (TET1) and polycomb repressive complex 2 (PRC2) – roles in spermatogenesis and male fertility**

S. A. SHIPLU<sup>1,2</sup>, H. C. SCHUPPE<sup>1</sup>, P. WESTERN<sup>3</sup>, D. FIETZ<sup>4</sup>, K. STEGER<sup>1,5</sup>, U. SCHAGDARSURENGIN<sup>1,2</sup>

<sup>1</sup>Justus-Liebig-University Giessen, Clinic of Urology, Pediatric Urology and Andrology, Giessen, Germany;

<sup>2</sup>Justus-Liebig-University Giessen, Epigenetics of Urogenital System, Giessen, Germany; <sup>3</sup>Monash University, Germ Cell Development and Epigenetics, Melbourne, Australia;

<sup>4</sup>Justus-Liebig-University Giessen, Institute for Veterinary Anatomy, Histology and Embryology, Giessen, Germany;

<sup>5</sup>Justus-Liebig-University Giessen, Molecular Andrology, Giessen, Germany

## P 1.6

**Disorders in meiosis, spermatogenic cells and Sertoli cells in rats with experimentally induced metabolic syndrome**

O. L. KOLOMIETS<sup>1</sup>, A. A. KASHINTSOVA<sup>1</sup>, YU. N. KOROLEV<sup>3</sup>, V. E. SPANGENBERG<sup>1</sup>, E. E. BRAGINA<sup>2</sup>

<sup>1</sup>N.I. Vavilov Institute of General Genetics RAS, Moscow, Russia; <sup>2</sup>A.N. Belozersky Research Institute of Physico-Chemical Biology MSU, Moscow, Russia; <sup>3</sup>National Medical Research Center for Rehabilitation and Balneology, Moscow, Russia

## P 1.7

**TREGEL – a shiny tool to identify type, composition and location of gene regulatory elements**

S. BERRES<sup>1</sup>, S. LAURENTINO<sup>1</sup>, M. WÖSTE<sup>2</sup>, M. DUGAS<sup>2</sup>, J. GROMOLL<sup>1</sup>

<sup>1</sup>Centre of Reproductive Medicine and Clinical Andrology, Münster, Germany; <sup>2</sup>Institute of Medical Informatics, Münster, Germany

## P 1.8

**Upregulation of *MTHFR* gene expression by 3 weeks of yoga based lifestyle intervention in infertile men**

D. BORTHAKUR<sup>1</sup>, M. KUMAR<sup>1</sup>, H. BATRA<sup>1</sup>, R. KUMAR<sup>2</sup>, R. DADA<sup>1</sup>

<sup>1</sup>All India Institute of Medical Sciences, Anatomy, New Delhi, India; <sup>2</sup>All India Institute of Medical Sciences, Urology, New Delhi, India

**P 1.9****CFTR genotypes and spermatology in Cystic Fibrosis patients without CBAVD**

V. CHERNYKH, M. SHTAUT, A. SEDOVA, E. BRAGINA, S. REPINA, E. MARNAT, T. SOROKINA, L. KURILO  
*Research Centre for Medical Genetics, Laboratory of Genetics of Reproduction Disorders, Moscow, Russian Federation*

**P 1.10****HDACi drugs hamper experimental mouse teratoma development**

J. KRASIC<sup>1,2,3</sup>, L. SKARA<sup>1,2,3</sup>, A. KATUSIC BOJANAC<sup>1,3</sup>, F. BULIC-JAKUS<sup>1,3</sup>, D. JEZEK<sup>3,4</sup>, M. ULAMEC<sup>2,3,5</sup>, N. SINCIĆ<sup>1,2,3</sup>

<sup>1</sup>School of Medicine University of Zagreb, Zagreb, Croatia; <sup>2</sup>EpiMark, Group for Research on Epigenetic Biomarkers, Zagreb, Croatia; <sup>3</sup>Centre of Excellence for Reproductive and Regenerative Medicine, School of Medicine, University of Zagreb, Zagreb, Croatia; <sup>4</sup>School of Medicine University of Zagreb, Department of Histology and Embryology, Zagreb, Croatia; <sup>5</sup>University Hospital Center Sestre milosrdnice, Ljudevit Jurak Clinical Department of Pathology and Cytology, Zagreb, Croatia

**P 1.11****A case 46,XY DSD in female patient with pseudotranssexualism**

S. KHAYAT<sup>1</sup>, L. KURILO<sup>1</sup>, T. SOROKINA<sup>1</sup>, N. KIBRIK<sup>2</sup>, V. CHERNYKH<sup>1,3</sup>

<sup>1</sup>Research Centre for Medical Genetics, Laboratory of Genetics of Reproduction Disorders, Moscow, Russian Federation; <sup>2</sup>Psychiatry Moscow Research Institute, Moscow, Russian Federation; <sup>3</sup>Pirogov Russian National Research Medical University, Moscow, Russian Federation

**P 1.12****Whole exome sequencing of Sertoli cell only syndrome patient provides novel insights on genetic background on male infertility**

T. MARIC<sup>1,2</sup>, L. TRGOVEC-GREIF<sup>3</sup>, M. LOGARA<sup>4</sup>, L. ZUNIC<sup>4</sup>, R. BELUZIC<sup>3</sup>, O. VUGREK<sup>3</sup>, M. BARBALIC<sup>4,5</sup>, A. KATUSIC BOJANAC<sup>1,2</sup>

<sup>1</sup>School of Medicine University of Zagreb, Department of Medical Biology, Zagreb, Croatia; <sup>2</sup>School of Medicine University of Zagreb, Scientific Centre of Excellence of Reproductive and Regenerative Medicine, Zagreb, Croatia; <sup>3</sup>Ruder Bošković Institute, Laboratory for Advanced Genomics, Zagreb, Croatia; <sup>4</sup>Genom Ltd, Zagreb, Croatia; <sup>5</sup>School of Medicine University of Split, Department of Medical Biology, Split, Croatia

**P 1.13****Reproductive decline across generations due to paternal MTHFR deficiency and linked to demethylation of young retrotransposons**

G. KARAHAN<sup>1,2</sup>, D. CHAN<sup>2</sup>, K. SHIRANE<sup>3</sup>, S. JANSSEN<sup>3</sup>, M. LORINCZ<sup>3</sup>, J. TRASLER<sup>1,2,4,5</sup>

<sup>1</sup>McGill University, Human Genetics, Montreal, Canada;

<sup>2</sup>McGill University Health Centre, Research Institute,

Montreal, Canada; <sup>3</sup>University of British Columbia,

Department of Medical Genetics, Vancouver, Canada;

<sup>4</sup>McGill University, Department of Pharmacology and

Therapeutics, Montreal, Canada; <sup>5</sup>McGill University,

Department of Pediatrics, Montreal, Canada

**P 1.14****Small RNA library preparation for human sperm of young adults**

V. SHTRATNIKOVA<sup>1</sup>, V. NAUMOV<sup>2</sup>, V. BEZUGLOV<sup>3</sup>, M. LOGACHEVA<sup>1,4</sup>, L. SMIGULINA<sup>1,5</sup>, Y. DIKOV<sup>1,5</sup>, T. DENISOVA<sup>1,5</sup>, A. SUVOROV<sup>1,6</sup>, J. R. PILSNER<sup>6</sup>, R. HAUSER<sup>7</sup>, S. A. KRAWETZ<sup>8</sup>, O. SERGEYEV<sup>1,5</sup>

<sup>1</sup>A.N. Belozersky Research Institute of Physico-Chemical Biology Moscow State University, Moscow, Russian Federation; <sup>2</sup>Kulakov National Medical Research Center of Obstetrics, Gynecology & Perinatology, Ministry of Health of the Russian Federation, Moscow, Russian Federation;

<sup>3</sup>Moscow State University, Moscow, Russian Federation;

<sup>4</sup>Center for Data-Intensive Biomedicine & Biotechnology, Skolkovo Institute of Science & Technology, Moscow, Russian Federation; <sup>5</sup>Chapaevsk Medical Association, Chapaevsk, Russian Federation; <sup>6</sup>University of

Massachusetts, Department of Environmental Health Sciences, School of Public Health & Health Sciences, Amherst, United States; <sup>7</sup>Harvard T.H. Chan School of

Public Health, Department of Environmental Health, Boston, United States; <sup>8</sup>Wayne State University School of Medicine, Department of Obstetrics and Gynecology, Center for Molecular Medicine and Genetics, Detroit, United States

## 2. ADVANCED TECHNIQUES IN ANDROLOGY

### P 2.1

#### Ultrasonic sonoelastography of scrotum in the diagnosis of male fertility

O. B. ZHUKOV<sup>1,2</sup>

<sup>1</sup>RUDN University, Moscow, Russian Federation;

<sup>2</sup>Association of Vascular Urologists and Reproductologists, Moscow, Russian Federation

### P 2.2

#### X-ray endovascular treatments of vascular erectile dysfunction

O. B. ZHUKOV<sup>1,2</sup>, V. A. UKOLOV<sup>1,2</sup>

<sup>1</sup>RUDN University, Moscow, Russian Federation;

<sup>2</sup>Association of Vascular Urologists and Reproductologists, Moscow, Russian Federation

### P 2.3

#### The effect of salubrinol on ER stress pathway in heat-stressed spermatogonial cells in vitro

S. KARADENIZ SAYGILI<sup>1</sup>, M. K. ÖZBILGIN<sup>2</sup>

<sup>1</sup>Kütahya University of Health Sciences, Histology and Embryology, Kütahya, Turkey; <sup>2</sup>Manisa Celal Bayar University, Histology and Embryology, Manisa, Turkey

### P 2.4

#### Electrophysiological modeling of Vas deferens smooth muscle cells – role of ion channels in generating electrical activities

C. MAHAPATRA

University of California San Francisco, School of Medicine, San Francisco, United States

### P 2.5

#### Protective effect of astaxanthin on testicular ischemia-reperfusion injury in rats

M. BAŠKOVIĆ<sup>1</sup>, A. KATUŠIĆ BOJANAC<sup>2</sup>, N. SINČIĆ<sup>2</sup>, M. HIMELREICH<sup>2</sup>, D. KRŠNIK<sup>2</sup>, D. JEŽEK<sup>3</sup>

<sup>1</sup>Children's Hospital Zagreb, Department of pediatric urology, Zagreb, Croatia; <sup>2</sup>University of Zagreb, School of Medicine, Department of Medical Biology, Zagreb, Croatia;

<sup>3</sup>University of Zagreb, School of Medicine, Department of Histology and Embryology, Zagreb, Croatia

### P 2.6

#### The Novoglan-01 clinical trial of a conservative treatment for adult phimosis

D. GILLATT, E. CHUNG, H. MAZURE, A. JAMES

Macquarie University, Macquarie University Hospital, Macquarie University, Australia

### P 2.7

#### Machine learning applications in the domain of male infertility – development of a prediction model for Klinefelter Syndrome in azoospermic men

H. KRENZ<sup>1</sup>, A. SANSONE<sup>2,3</sup>, C. KRALLMANN<sup>3</sup>, M.

ZITZMANN<sup>3</sup>, M. DUGAS<sup>1</sup>, S. KLIESCH<sup>3</sup>, F.

TÜTTELMANN<sup>4</sup>, J. GROMOLL<sup>3</sup>

<sup>1</sup>University of Münster, Institute of Medical Informatics, Münster, Germany; <sup>2</sup>University of Rome Tor Vergata, Chair of Endocrinology and Medical Sexology (ENDOSEX), Department of Systems Medicine, Rome, Italy; <sup>3</sup>University Hospital Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>4</sup>University of Münster, Institute of Reproductive Genetics, Münster, Germany

### P 2.8

#### Evaluation of functional and genetic integrity of spermatozoa extracted by migration-sedimentation (MS) method

H. Y. MEITEI<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, S. SCHLATT<sup>2</sup>, S. K. ADIGA<sup>1</sup>

<sup>1</sup>Kasturba Medical College, Manipal, Manipal Academy of Higher Education, Manipal, Department of Clinical Embryology, Manipal, India; <sup>2</sup>University of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany

### P 2.9

#### Multispiral computed pharmacocavernosography in the diagnosis of venoocclusive erectile dysfunction

O. APOLIKHIN, S. KRASNYAK

N.A. Lopatkin Research Institute of Urology and Interventional Radiology, Moscow, Russian Federation

### P 2.10

#### Satisfaction with the semirigid penile prosthesis among couples from a Semiurban Indian population

P. GUPTA

JN Medical College, KLE Academy of Higher Education and Research (Deemed to be University), Department of Urology, Belagavi, India

**P 2.11**

**Two piece inflatable penile prosthesis surgery: operative steps**

P. GUPTA

*JN Medical College, KLE Academy of Higher Education and Research (Deemed to be University), Department of Urology, Belagavi, India*

**P 2.12**

**Fluorescence microscopy and FE-SEM as complementary tools to detect terminal fucose residues on human sperm glycocalyx**

L. ROBLES GÓMEZ<sup>1</sup>, P. SÁEZ ESPINOSA<sup>1</sup>, E. LÓPEZ VILORIA<sup>1</sup>, N. HUERTA RETAMAL<sup>1</sup>, A. MANUEL<sup>2</sup>, A. ROMERO<sup>1</sup>, J. AIZPURUA<sup>3</sup>, M. J. GÓMEZ TORRES<sup>1</sup>

<sup>1</sup>*Universidad de Alicante, Biotecnología, Alicante, Spain;*

<sup>2</sup>*Universidad de Murcia, Biología Celular e Histología, Murcia, Spain; <sup>3</sup>IVF SPAIN, Alicante, Spain*

**P 2.13**

**Evaluation of the patient's genomic and metabolomic profile to improve the adherence to drug therapy: a study on PDE5 inhibitors**

M. S. ROCCA<sup>1</sup>, A. VIGNOLI<sup>2</sup>, L. TENORI<sup>3</sup>, M. GHEZZI<sup>1</sup>, M. DE ROCCO PONCE<sup>4</sup>, G. VATSELLAS<sup>5</sup>, D. THANOS<sup>5</sup>, R. PADRINI<sup>1</sup>, C. FORESTA<sup>1</sup>, L. DE TONI<sup>1</sup>

<sup>1</sup>*University of Padova, Department of Medicine, Padova, Italy; <sup>2</sup>Consorzio interuniversitario Risonanze Magnetiche di Metallo Proteine, Sesto Fiorentino, Italy; <sup>3</sup>Department of Chemistry "Ugo Schiff," University of Florence, Sesto Fiorentino, Italy; <sup>4</sup>Fundacio Puigvert, Andrology Department, Barcelona, Spain; <sup>5</sup>Biomedical Research Foundation Academy of Athens (BRFAA), Athens, Greece*

**3. ASSISTED REPRODUCTION AND FERTILITY PRESERVATION****P 3.1**

**Handling temperature and time interval prior to testicular-tissue organotypic culture in prepubertal mice have a differential impact on cellular homeostasis**

R. K. PANDYA<sup>1</sup>, S. R. SALIAN<sup>1</sup>, S. L. KOULMANE LAXMINARAYANA<sup>2</sup>, H. KRISHNAMURTHY<sup>3</sup>, A. CHEREDATH<sup>1</sup>, P. THOLETI<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, S. SCHLATT<sup>4</sup>, S. K. ADIGA<sup>1</sup>

<sup>1</sup>*Manipal Academy of Higher Education, Clinical Embryology, Udupi, India; <sup>2</sup>Manipal Academy of Higher Education, Department of Pathology, Udupi, India;*

<sup>3</sup>*National Centre for Biological Sciences, TIFR, Central Imaging & Flow Cytometry Facility, Bengaluru, India;*

<sup>4</sup>*Albert-Schweitzer-Campus 1, Gebäude D11, Centre of Reproductive Medicine and Andrology, Münster, Germany*

**P 3.2**

**The influence of different ways of education on the home injection of assisted reproduction patients**

H. PAN, L. LI, G. LIU

*Sixth Affiliated Hospital of Sun Yat-Sen University, Reproductive Centre, Guangzhou, China*

**P 3.3**

**Follow-up management of pregnant women undergoing preimplantation genetic testing under the new coronavirus epidemic**

H. PAN, L. LI, Y. LI

*Sixth Affiliated Hospital of Sun Yat-Sen University, Reproductive Centre, Guangzhou, China*

**P 3.4**

**Understanding the role of selective inhibition of Arachidonate 15-lipoxygenase (ALOX15) during human semen cryopreservation**

S. UPPANGALA, K. RAYALLA, H. Y. MEITEI, S. K. ADIGA Kasturba Medical College, MANIPAL, Manipal Academy of Higher Education, Clinical Embryology, Manipal, India

### P 3.5

#### **Loss of CatSper-channel function leads to male infertility and IVF failure: a case report**

T. POCK<sup>1</sup>, C. KRALLMANN<sup>1</sup>, T. SPERLBAUM<sup>2</sup>, F. TUTTELMANN<sup>3</sup>, H. BEHRE<sup>2</sup>, S. KLIESCH<sup>1</sup>, V. NORDHOFF<sup>1</sup>

<sup>1</sup>Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>2</sup>Kinderwunschzentrum, Münster, Germany;

<sup>3</sup>Institute of Reproductive Genetics, Münster, Germany

### P 3.9

#### **The optimization of freezing media with saccharides and/or antioxidants to improve the quality of cryopreserved boar spermatozoa**

R. SANCHEZ<sup>1</sup>, F. PEZO<sup>1</sup>, F. ZAMBRANO<sup>1</sup>, P. URIBE<sup>1</sup>, J. RISOPATRON<sup>1</sup>, R. A. BURGOS<sup>2</sup>

<sup>1</sup>Universidad de La Frontera, Temuco, Chile; <sup>2</sup>Universidad Austral de Chile, Institute of Pharmacology and

Morphophysiology, Valdivia, Chile

### P 3.6

#### **Developing an *in vitro* model for toxicological study of chemotherapy on isolated mouse germline stem cells**

F. LOPEZ<sup>1</sup>, A. CODINO<sup>2</sup>, D. O'CARROLL<sup>2</sup>, R. T. MITCHELL<sup>1</sup>

<sup>1</sup>University of Edinburgh, Queen's Medical Research

Institute, Edinburgh, United Kingdom; <sup>2</sup>University of Edinburgh, Centre for Regenerative Medicine, Edinburgh, United Kingdom

### P 3.10

#### **Gonocyte transformation into spermatogonial stem cells (SSC) – the key to understand infertility and malignancy of cryptorchidism**

R. LI, J. HUTSON

Murdoch Children's Research Institute, Surgical Research, Parkville, Australia

## 4. ENDOCRINOLOGY

### P 3.7

#### ***Ex vivo* testis explant culture of human intrapubertal testicular tissue**

N. L. ADEN<sup>1</sup>, A. SOAVE<sup>2</sup>, U. KORDES<sup>3</sup>, M. BLEEKE<sup>3,4</sup>, A. SALZBRUNN<sup>1</sup>, K. VON KOPYLOW<sup>1</sup>

<sup>1</sup>University Medical Center Hamburg-Eppendorf, Department of Andrology, Hamburg, Germany; <sup>2</sup>University Medical Center Hamburg-Eppendorf, Department of Urology, Hamburg, Germany; <sup>3</sup>University Medical Center Hamburg-Eppendorf, Department of Pediatric Hematology and Oncology, Hamburg, Germany; <sup>4</sup>University Medical Center Hamburg-Eppendorf, Division of Pediatric Stem Cell Transplantation and Immunology, Hamburg, Germany

### P 4.1

#### **Novel model of sex steroid deficiency in mice to study the physiological effects of delayed and suppressed puberty**

N. KIM<sup>1</sup>, R. KHALIL<sup>1</sup>, K. DAVID<sup>1</sup>, L. ANTONIO<sup>1</sup>, D.

SCHOLLAERT<sup>1</sup>, L. DEBOEL<sup>1</sup>, E. VAN HERCK<sup>1</sup>, N.

WARDENIER<sup>2</sup>, M. COOLS<sup>2</sup>, B. DECALLONNE<sup>1</sup>, F.

CLAESSENS<sup>3</sup>, V. DUBOIS<sup>1</sup>, D. VANDERSCHUEREN<sup>1</sup>

<sup>1</sup>KU Leuven, Clinical and Experimental Endocrinology, Leuven, Belgium; <sup>2</sup>Ghent University, Department of Internal Medicine and Pediatrics, Ghent, Belgium; <sup>3</sup>KU Leuven, Department of Cellular and Molecular Medicine, Leuven, Belgium

### P 3.8

#### **Novel organoid approaches to induce male differentiation of human PGCLCs**

E. M. MALL<sup>1,2</sup>, N. ROTTE<sup>3</sup>, R. SANDHOVE-KLAVERKAMP<sup>1</sup>, J. WISTUBA<sup>1</sup>, S. SCHLATT<sup>1</sup>

<sup>1</sup>University Hospital Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>2</sup>Max Planck Institute for Molecular Biomedicine, Münster, Germany;

<sup>3</sup>Institute of Reproductive Genetics, Münster, Germany

### P 4.2

#### **Alphoma – a pituitary tumor causing infertility**

K. JANKOWSKA, P. DUDEK, W. ZGLICZYŃSKI

Centre of Postgraduate Medical Education, Department of Endocrinology, Warsaw, Poland

**P 4.3**

**The role of gonadotropins in testicular and adrenal androgen biosynthesis pathways -insights from males with congenital hypogonadotropic hypogonadism on hCG/rFSH and on testosterone replacement**

J. ROHAYEM<sup>1</sup>, M. ZITZMANN<sup>1</sup>, S. LAURENTINO<sup>2</sup>, S. KLIESCH<sup>1</sup>, E. NIESCHLAG<sup>1</sup>, P. M. HOLTERHUS<sup>3</sup>, A. KULLE<sup>3</sup>

<sup>1</sup>Centre for Reproductive Medicine and Andrology, Clinical and Operative Andrology, Münster, Germany; <sup>2</sup>Centre for Reproductive Medicine and Andrology, Reproductive and Regenerative Biology, Münster, Germany; <sup>3</sup>Children's Hospital, University of Kiel, Pediatric Endocrinology and Diabetes, Kiel, Germany

**P 4.4**

**Relationship of Vitamin D status with testosterone levels – a systematic review and meta-analysis**

A. BARBONETTI, S. D'ANDREA, A. MARTORELLA, F. COCCIA, C. CASTELLINI, M. TOTATO, A. PARISI, F. FRANCAVILLA, S. FRANCAVILLA

University of L'Aquila, Andrology Unit, Department of Life, Health and Environmental Sciences, L'Aquila, Italy

**P 4.5**

**Gender dysphoria and hormonal treatment – ten years' experience of a specialized center in Greece**

KAKOULIDIS, I. ILIAS, C. MILIONIS, A. MICHOU, S. STERGIOTIS, S. TOGIAS, A. PAPPA, E. VENAKI, E. KOUKKOU

Elena Venizelou General and Maternity Hospital, Department of Endocrinology, Diabetes and Metabolism, Athens, Greece

**P 4.6**

**A combined form of hypothyroidism is present in Klinefelter syndrome from pre-pubertal children to adult subjects: a longitudinal retrospective study**

F. CARLOMAGNO, P. MAZZOTTA, F. SESTI, M. TENUTA, M. MINNETTI, C. LECIS, A. AURELI, M. SPAZIANI, C. POZZA, D. GIANFRILLI, A. RADICIONI, A. LENZI, A. M. ISIDORI

Sapienza University of Rome, Department of Experimental Medicine, Rome, Italy

**P 4.7**

**Pituitary response to LHRH stimulation tests in different FSHB -211G/T genotypes**

A. SANSONE<sup>1</sup>, M. SCHUBERT<sup>2</sup>, F. TÜTTELmann<sup>3</sup>, C. KRALLMANN<sup>2</sup>, M. ZITZMANN<sup>2</sup>, S. KLIESCH<sup>2</sup>, J. GROMOLL<sup>2</sup>

<sup>1</sup>University of Rome Tor Vergata, Chair of Endocrinology and Medical Sexology (ENDOSEX), Department of Systems Medicine, Rome, Italy; <sup>2</sup>University Hospital Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>3</sup>University of Münster, Institute of Reproductive Genetics, Münster, Germany

**P 4.8**

**Serum and seminal leptin levels, serum testosterone levels and sperm parameters in obese men**

V. RILCHEVA<sup>1</sup>, K. ANANIEVA-TODOROVA<sup>2</sup>, F. MEHMEDOVA<sup>1</sup>

<sup>1</sup>MC CIRM, Endocrinology, Pleven, Bulgaria; <sup>2</sup>Medical University Pleven, University Clinic of Endocrinology and Metabolic disease, Pleven, Bulgaria

**P 4.9**

**Action of progesterone on 2-arachidonoylglycerol (2-AG) levels and enzymes metabolizing 2-AG in human sperm**

T. DEPMEIER<sup>1</sup>, T. STRÜNKER<sup>2</sup>, M. LEHR<sup>1</sup>, J. FABIAN<sup>1</sup>, T. PHILIPPS<sup>1</sup>

<sup>1</sup>Institute of Pharmaceutical and Medicinal Chemistry, University of Münster, Münster, Germany; <sup>2</sup>Centre of Reproductive Medicine and Andrology, University of Münster, Münster, Germany

**5. GERM CELL BIOLOGY****P 5.1**

**Improving the HPO terms for non-syndromic male infertility**

M. J. WYRWOLL<sup>1,2</sup>, G. W. VAN DER HEIJDEN<sup>3</sup>, L. RAMOS<sup>3</sup>, S. KLIESCH<sup>2</sup>, F. TÜTTELmann<sup>1</sup>

<sup>1</sup>University of Münster, Institute of Human Genetics, Münster, Germany; <sup>2</sup>University Hospital Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany;

<sup>3</sup>Radboud University Medical Center, Division of Reproductive Medicine, Department of Obstetrics and Gynecology, Nijmegen, Netherlands

## P 5.2

### Do WWC proteins have an impact on germ cell differentiation and male fertility?

V. HÖFFKEN<sup>1</sup>, N. NEUHAUS<sup>2</sup>, F. TÜTTELMANN<sup>3</sup>, H. PAVENSTADT<sup>1</sup>, J. KREMERSKOTHEN<sup>1</sup>

<sup>1</sup>University Hospital Münster, Molecular Nephrology, Internal Medicine D, Münster, Germany; <sup>2</sup>University Hospital Münster, Centre of Reproductive Medicine And Andrology, Münster, Germany; <sup>3</sup>University Hospital Münster, Institute of Reproductive Genetics, Münster, Germany

## P 5.3

### Swine spermatozoa trigger neutrophil extracellular traps (nets) leading to adverse effects on sperm function

R. SANCHEZ<sup>1</sup>, F. ZAMBRANO<sup>1</sup>, C. NAMUNCURA<sup>1</sup>, F. PEZO<sup>1</sup>, P. URIBE<sup>1</sup>, M. SCHULZ<sup>1</sup>, R. A. BURGOS<sup>2</sup>, A. TAUBERT<sup>3</sup>, C. HERMOSILLA<sup>3</sup>

<sup>1</sup>Universidad de La Frontera, Temuco, Chile; <sup>2</sup>Universidad Austral de Chile, Institute of Pharmacology and Morphophysiology, Valdivia, Chile; <sup>3</sup>JL University of Giessen, Institute of Parasitology, Giessen, Germany

## P 5.4

### Pharmacology of the steroid- and prostaglandin-binding site controlling the activity of CatSper channels in human sperm

J. JESCHKE<sup>1</sup>, C. BIAGIONI<sup>1</sup>, F. BÖRGEL<sup>2</sup>, A. SCHÜRING<sup>2,3</sup>, A. KULLE<sup>4</sup>, P. M. HOLTERHUS<sup>4</sup>, B. WÜNSCH<sup>2</sup>, V. NORDHOFF<sup>1</sup>, T. STRÜNKER<sup>1</sup>, C. BRENKER<sup>1</sup>

<sup>1</sup>University Hospital Münster, University of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>2</sup>University of Münster, Department of Pharmaceutical and Medicinal Chemistry, Münster, Germany; <sup>3</sup>University of Münster, UKM Kinderwunschzentrum, Münster, Germany; <sup>4</sup>Christian-Albrechts-University, Division of Pediatric Endocrinology and Diabetes, Department of Pediatrics, Kiel, Germany

## P 5.5

### Exposure to polycyclic aromatic hydrocarbons and nicotine, and sperm DNA strand breaks

J. AXELSSON

Lund University, Translational Medicine, Malmö, Sweden

## P 5.6

### Indication of novel alternate pathway of testosterone action in spermatogenic germ cells of male Sprague Dawley rats

A. TALAPATRA, N. MILLS

Texas Woman's University, Biology, Denton, United States

## P 5.7

### Identifying novel activin A targets in mouse gonocytes

S. MOODY<sup>1,2</sup>, P. WHILEY<sup>1,2</sup>, P. WESTERN<sup>1,2</sup>, K. LOVELAND<sup>1,2</sup>

<sup>1</sup>Hudson Institute of Medical Research, Centre for Reproductive Health, Clayton, Australia; <sup>2</sup>Monash University, Department of Molecular and Translational Sciences, Clayton, Australia

## P 5.8

### The effect of sexual activity on mice spermatozoa mitochondrial functionality

B. ŠVALBE<sup>1</sup>, M. MAKRECKA-KUKA<sup>1</sup>, E. VAVERS<sup>1,2</sup>, M. DAMBROVA<sup>1,2</sup>, L. ZVEJNIECE<sup>1</sup>

<sup>1</sup>Latvian Institute of Organic Synthesis, Riga, Latvia; <sup>2</sup>Riga Stradins University, Riga, Latvia

## P 5.9

### Detection of oxidative stress in native semen samples – a new flow cytometric technique

L. RILEY, O. CAMPOLATTANO, R. MASTI, E. BALDI, M. MURATORI

University of Florence, Experimental and Clinical Biomedical Sciences, Florence, Italy

## P 5.10

### Optical recording of rapid non-genomic progesterone signaling events in human sperm

M. KIERZEK<sup>1</sup>, E. MILLER<sup>2,3,4</sup>, T. STRÜNKER<sup>1</sup>  
C. BRENKER<sup>1</sup>,

<sup>1</sup>Centre of Reproductive Medicine and Andrology, University of Münster, Münster, Germany; <sup>2</sup>University of California, Berkeley, Department of Chemistry, Berkeley, United States; <sup>3</sup>University of California, Berkeley, Department of Molecular & Cell Biology, Berkeley, United States; <sup>4</sup>Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, United States

**P 5.11****Emerging roles of Melanoma Antigens in male germline stress-resistance**

J. KLEIN<sup>1</sup>, A. LEE<sup>1</sup>, R. P. POTTS<sup>1</sup>, M. J. OATLEY<sup>2</sup>, J. M. OATLEY<sup>2</sup>, T. LORD<sup>2</sup>, K. FON TACER<sup>3</sup>

<sup>1</sup>St. Jude's Children Research Hospital, Memphis, TN, United States; <sup>2</sup>Washington State University, Pullman, WA, United States; <sup>3</sup>Texas Tech University, School of Veterinary Medicine, Amarillo, TX, United States

**6. MALE HYPOGONADISM****P 6.1****Novel Indices for the evaluation of Obesity in Erectile Dysfunction patients**

S. JOSE, V. VISHAL, R. AT, F. CARDOZA

Government Medical College Kozhikode, Department Of Urology, Calicut, India

**P 6.2****Stereological properties of seminiferous tubules in infertile men with chromosomal and genetic abnormalities**

D. JEZEK<sup>1</sup>, M. MOKOS<sup>1</sup>, A. PLANINIC<sup>1</sup>, M. HIMELREICH PERIC<sup>2</sup>, A. KATUSIC BOJANAC<sup>2</sup>, N. SINCIC<sup>2</sup>, F. BULIC JAKUS<sup>2</sup>

<sup>1</sup>University of Zagreb, School of Medicine, Histology and Embryology, Zagreb, Croatia; <sup>2</sup>University of Zagreb, School of Medicine, Medical Biology, Zagreb, Croatia

**P 6.3****Prostate volume in men with chronic spinal cord injury – a systematic review and meta-analysis of case-control studies**

M. TOTARO<sup>1</sup>, S. D'ANDREA<sup>1</sup>, C. CASTELLINI<sup>1</sup>, A. PARISI<sup>1</sup>, G. FELZANI<sup>2</sup>, S. FRANCAVILLA<sup>1</sup>, F. FRANCAVILLA<sup>1</sup>, A. BARBONETTI<sup>1</sup>

<sup>1</sup>University of L'Aquila, Andrology Unit, Department of Life, Health and Environment Science, L'Aquila, Italy;

<sup>2</sup>Spinal Unit, San Raffaele, Sulmona, Italy

**P 6.4****Association of erectile dysfunction and type II diabetes mellitus at a tertiary care centre of south India**

P. PATEL<sup>1</sup>, R. NERLI<sup>2</sup>, S. GHAGANE<sup>2</sup>, S. NUTALAPATI<sup>2</sup>

<sup>1</sup>Jawaharlal Nehru Medical College, Belagavi, Urology, Belagavi, India; <sup>2</sup>KLES Dr. Prabhakar Kore Hospital and research centre, Urology, Belagavi, India

**P 6.5****Testosterone treatment in male patients with Klinefelter syndrome – a systematic review and meta-analysis**

W. VENA<sup>1</sup>, A. PIZZOCARO<sup>1</sup>, F. PELLICCIONE<sup>2</sup>, R.

PIVONELLO<sup>3</sup>, A. RADICIONI<sup>4</sup>, R. SELICE<sup>5</sup>, G. RASTRELLI<sup>6</sup>, D. PASQUALI<sup>7</sup>, A. E. CALOGERO<sup>8</sup>, A. FERLIN<sup>9</sup>, S. FRANCAVILLA<sup>10</sup>, A. GAROLLA<sup>5</sup>, G. CORONA<sup>11</sup>

<sup>1</sup>Humanitas Research Hospital, Endocrinology & Medical Andrology Unit , Rozzano (MI), Italy; <sup>2</sup>F. Renzetti Hospital, Diabetology & Metabolic Disease Unit, Lanciano (CH), Italy; <sup>3</sup>University of Naples, Federico II, Clinical Medicine and Surgery Department , Naples, Italy; <sup>4</sup>Sapienza, University of Rome, Section of Medical Pathophysiology, Center of Rare Disease, Department of Experimental

Medicine, Roma, Italy; <sup>5</sup>University of Padova, Department of Medicine, Andrology and Reproductive Medicine Unit, Padova, Italy; <sup>6</sup>University of Florence, Sexual Medicine and Andrology Unit, Department of Experimental and Clinical Biomedical Sciences, Florence, Italy; <sup>7</sup>Second University of Naples, Department of Cardiothoracic and Respiratory Sciences, Endocrine Unit, Naples, Italy; <sup>8</sup>University of Catania, Department of Clinical and Experimental

Medicine, Catani, Italy; <sup>9</sup>University of Brescia, Department of Clinical and Experimental Medicine, Brescia, Italy; <sup>10</sup>University of L'Aquila, Department of Life Health and Environmental Sciences, L'Aquila, Italy; <sup>11</sup>Azienda ASL Bologna Maggiore - Bellaria Hospital, Endocrinology Unit, Medical Department, Bologna, Italy

**P 6.6****Safety of injected testosterone undecanoate in the elderly male**

J. ABILDGAARD, A. K. BANG, L. AKSGLADE, P.

CHRISTIANSEN, A. JUUL, N. JØRGENSEN

Rigshospitalet, Department of Growth and Reproduction, København Ø, Denmark

**P 6.7**

**Testosterone deficiency and erectile dysfunction in middle-aged type 2 diabetics**

V. ODIN, O. ALEKSEENKO, V. DIDENKO, V. YUDIN

*Military Medical Academy, Faculty Therapy, St. Petersburg, Russian Federation*

**P 6.8**

**Male infertility with empty sella syndrome: a case report**

S. S. SUYONO<sup>1</sup>, R. S. MARTHASARI<sup>2</sup>, N. ABDULLAH<sup>3</sup>

<sup>1</sup>*Gladiool IVF Centre, Andrology, Magelang, Indonesia;*

<sup>2</sup>*Faculty of Medicine, Universitas Katolik Widya Mandala, Biology, Surabaya, Indonesia; <sup>3</sup>Faculty of Medicine, Universitas Hasanuddin, Obstetrics and Gynecology, Makassar, Indonesia*

**P 6.9**

**Male osteoporosis, a still overlooked issue: an identikit of patients seeking bone health evaluation at a tertiary academic medical centre**

S. DE VINCENTIS<sup>1,2</sup>, A. RUSSO<sup>1,2</sup>, E. TALIANI<sup>2</sup>, A.

ANSALONI<sup>2</sup>, D. DOMENICI<sup>1,2</sup>, B. MADEO<sup>2</sup>, V. ROCHIRA<sup>1,2</sup>

<sup>1</sup>*University of Modena and Reggio Emilia, Unit of Endocrinology, Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy; <sup>2</sup>Azienda Ospedaliero-Universitaria di Modena, Unit of Endocrinology, Department of Medical Specialties, Modena, Italy*

**P 6.10**

**High Prevalence of Sexual Dysfunction Among Patients with Growth Hormone Deficiency (GHD): results from the Management of Adult GHD (MAGHD) Study**

M. L. MONZANI<sup>1,2</sup>, S. PEDERZOLI<sup>1,2</sup>, L. VOLPI<sup>1</sup>, E. MAGNANI<sup>3</sup>, C. DIAZZI<sup>2</sup>, V. ROCHIRA<sup>1,2</sup>

<sup>1</sup>*Università di Modena e Reggio Emilia, Dipartimento di Scienze Biomediche, Metaboliche e Neuroscienze, Modena, Italy; <sup>2</sup>Azienda Ospedaliero Universitaria di Modena, Unità di Endocrinologia, Dipartimento di Specialità Mediche, Modena, Italy; <sup>3</sup>AUSL-IRCCS di Reggio Emilia, Unità di Endocrinologia, Dipartimento di Specialità Mediche, Reggio Emilia, Italy*

**P 6.11**

**Family history for cardio-metabolic diseases: a predictor of major adverse cardiovascular events in men with erectile dysfunction**

G. RASTRELLI, D. YANNAS, B. MUCCI, G. CORONA, M. MAGGI

*University of Florence, Experimental and Clinical Biomedical Sciences, Florence, Italy*

**P 6.12**

**Insight on the intracrinology of menopause: androgen production within human vagina**

V. DI STASI<sup>1</sup>, I. CELLAI<sup>1</sup>, P. COMEGLIO<sup>1</sup>, E. MASEROLI<sup>1</sup>, T. TODISCO<sup>1</sup>, C. CORNO<sup>1</sup>, S. FILIPPI<sup>2</sup>, S. CIPRIANI<sup>1</sup>, F. SORBI<sup>1</sup>, M. FAMBRINI<sup>1</sup>, F. PETRAGLIA<sup>1</sup>, I. SCAVELLO<sup>1</sup>, G. RASTRELLI<sup>1</sup>, G. ACCIAI<sup>1</sup>, F. VILLANELLI<sup>1</sup>, G. DANZA<sup>1</sup>, E. SARCHIELLI<sup>3</sup>, G. GUARNIERI<sup>3</sup>, A. MORELLI<sup>3</sup>, M. MAGGI<sup>1</sup>, L. VIGNOZZI<sup>1</sup>

<sup>1</sup>*University of Florence, Italy, Experimental and Clinical Biomedical Sciences, Florence, Italy; <sup>2</sup>University of*

*Florence, Italy, Neurosciences, Psychology, Drug Research and Child Health (NEUROFARBA), Florence, Italy;*

<sup>3</sup>*University of Florence, Italy, Experimental and Clinical Medicine, Florence, Italy*

**P 6.13**

**Self-reported Premature Ejaculation and related distress – occurrence and clinical correlates – results from the European Male Ageing Study**

G. CORONA<sup>1</sup>, G. RASTRELLI<sup>1</sup>, G. BARTFAI<sup>2</sup>, F. CASANUEVA<sup>3</sup>, A. GIWERCMAN<sup>4</sup>, L. ANTONIO<sup>5</sup>, J. SLOWIKOWSKA<sup>5,6</sup>, J. TOURNOY<sup>5</sup>, M. PUNAB<sup>7</sup>, I. HUHTANIEMI<sup>8</sup>, D. VANDERSCHUEREN<sup>5</sup>, T. O'NEILL<sup>9</sup>, F. WU<sup>9</sup>, M. MAGGI<sup>1</sup>

<sup>1</sup>*University of Florence, Experimental and Clinical Biomedical Sciences, Florence, Italy; <sup>2</sup>Albert Szent-Gyorgyi*

*Medical University, Szeged, Hungary; <sup>3</sup>Santiago de Compostela University, Santiago de Compostela, Spain;*

<sup>4</sup>*Malmö University Hospital, Malmö, Sweden; <sup>5</sup>Katholieke Universiteit Leuven, Leuven, Belgium; <sup>6</sup>Medical University of Lodz, Lodz, Poland; <sup>7</sup>United Laboratories of Tartu University Clinics, Tartu, Estonia; <sup>8</sup>Imperial College London, London, United Kingdom; <sup>9</sup>University of Manchester, Manchester, Germany*

**P 6.14**

**Hyperhomocysteinemia and velocimetric para-meters in patients with erectile dysfunction undergoing penile echo-color Doppler**

G. SALVIO, A. CIARLONI, M. CUTINI, N. DELLI MUTI, F. FINOCCHI, L. GIOVANNINI, G. BALERCIA  
*Polytechnic University of Marche, Endocrinology clinic, Ancona, Italy*

## 7. MALE REPRODUCTIVE ORGAN FUNCTION AND PHYSIOLOGY

### P 7.1

**Testosterone, level of the lesion and age are independently associated with prostate volume in men with chronic spinal cord injury**

A. PARISI<sup>1</sup>, M. TOTARO<sup>1</sup>, S. D'ANDREA<sup>1</sup>, C. CASTELLINI<sup>1</sup>, G. FELZANI<sup>2</sup>, S. FRANCARVILLA<sup>1</sup>, F. FRANCARVILLA<sup>1</sup>, A. BARBONETTI<sup>1</sup>

<sup>1</sup>University of L'Aquila, Andrology Unit, Department of Life, Health and Environment Sciences, L'Aquila, Italy;

<sup>2</sup>San Raffaele, Spinal Unit, Sulmona, Italy

### P 7.2

**Specific function of the neonatal epididymis is reflected in its contractile structures**

D. WEISER, C. RAGER, S. TASCH, R. MIDDENDORFF  
Justus-Liebig-University, Institute of Anatomy and Cell Biology, Giessen, Germany

### P 7.3

**Natriuretic peptides as a future alternative for Tamsulosin in BPH treatment**

M. A. KUCHTA<sup>1</sup>, F. WAGENLEHNER<sup>2</sup>, R. MIDDENDORFF<sup>1</sup>

<sup>1</sup>Justus-Liebig University, Institute for Anatomy and Cell Biology, Giessen, Germany; <sup>2</sup>Justus-Liebig University, Department of Urology, Pediatric Urology and Andrology, Giessen, Germany

### P 7.4

**Does reduced lipid substrate mean impaired testicular function? Androgen and sperm production in men with heterozygous familial hypobetalipoproteinemia**

G. SPAGGIARI<sup>1</sup>, F. NASCIMBENI<sup>2,3</sup>, S. LUGARI<sup>2,3</sup>, A. R. GRANATA<sup>1</sup>, F. CARUBBI<sup>2,3</sup>, M. SIMONI<sup>1,4</sup>, D. SANTI<sup>1,4</sup>

<sup>1</sup>Azienda Ospedaliero-Universitaria of Modena, Unit of Endocrinology, Department of Medical Specialties, Modena, Italy; <sup>2</sup>Azienda Ospedaliero-Universitaria of Modena, Operating Unit of Internal and Metabolic Medicine, Modena, Italy; <sup>3</sup>University of Modena and Reggio Emilia, Operating Unit of Internal and Metabolic Medicine, Modena, Italy; <sup>4</sup>University of Modena and Reggio Emilia, Unit of Endocrinology, Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy

### P 7.5

**Generation of three-dimensional extracellular matrix (ECM)-derived scaffolds to reorganize human testicular cells *in vitro***

V. HÖFFKEN<sup>1,2</sup>, R. SANDHOWE-KLAVERKAMP<sup>2</sup>, S. SCHLATT<sup>2</sup>, J. WISTUBA<sup>2</sup>

<sup>1</sup>University Hospital Münster, Molecular Nephrology, Internal Medicine D, Münster, Germany; <sup>2</sup>University Hospital Münster, Centre of Reproductive Medicine And Andrology, Münster, Germany

### P 7.6

**Repair of penile fracture – how long can it be delayed?**

P. PATEL<sup>1</sup>, R. NERLI<sup>2</sup>, S. GHAGANE<sup>2</sup>

<sup>1</sup>Jawaharlal Nehru Medical College, Belagavi, Urology, Belagavi, India; <sup>2</sup>KLES Dr. Prabhakar Kore Hospital and research centre, Urology, Belagavi, India

### P 7.7

**Epididymosomes participate in the transfer of a subset of epididymis-specific proteins to sperm**

F. BARRACHINA<sup>1,2</sup>, M. A. BATTISTONE<sup>1</sup>, J. CASTILLO<sup>2</sup>, C. MALLOFRE<sup>3</sup>, M. JODAR<sup>2,4</sup>, S. BRETON<sup>1,5</sup>, R. OLIVA<sup>2,4</sup>

<sup>1</sup>Massachusetts General Hospital and Harvard Medical School, Program in Membrane Biology, Nephrology Division, Department of Medicine, Boston, United States;

<sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Fundació Clínic per a la Recerca Biomèdica, Universitat de Barcelona, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Barcelona, Spain; <sup>3</sup>Universitat de Barcelona, Hospital Clínic, Department of Pathology, Barcelona, Spain; <sup>4</sup>Hospital Clinic, Biochemistry and Molecular Genetics Service, Barcelona, Spain; <sup>5</sup>Université Laval, Department of Obstetrics, Gynecology, and Reproduction, Faculty of Medicine, Québec, Canada

## P 7.8

### Altered secretory function of male accessory organs and oxidative stress may be involved in male infertility evoked by scrotal heat stress

M. FRACZEK<sup>1</sup>, L. WOJNAR<sup>2</sup>, M. KAMIENICZNA<sup>1</sup>, M. PIASECKA<sup>3</sup>, K. GILL<sup>3</sup>, M. KUPS<sup>3</sup>, V. CHOPYAK<sup>4</sup>, A. HAVRYLYUK<sup>4</sup>, J. NAKONECHNYY<sup>5</sup>, A. NAKONECHNYY<sup>6</sup>, M. KURPISZ<sup>1</sup>

<sup>1</sup>Institute of Human Genetics, Polish Academy of Sciences, Poznan, Poland; <sup>2</sup>Poznan University of Medical Sciences, Clinic of Urology and Oncological Urology, Poznan, Poland; <sup>3</sup>Pomeranian Medical University in Szczecin, Department of Histology and Developmental Biology, Szczecin, Poland; <sup>4</sup>Danylo Halytsky Lviv National Medical University, Department of Clinical Immunology and Allergology, Lviv, Ukraine; <sup>5</sup>Danylo Halytsky Lviv National Medical University, Department of Urology, Lviv, Ukraine; <sup>6</sup>Danylo Halytsky Lviv National Medical University, Department of Pediatric Surgery, Lviv, Ukraine

## P 7.9

### TLR4/NFKB signaling pathway regulates epididymal embryonic development

L. G. FERREIRA<sup>1</sup>, F. A. NISHINO<sup>1</sup>, S. G. FERNANDES<sup>1</sup>, C. M. RIBEIRO<sup>1</sup>, B. T. HINTON<sup>2</sup>, M. C. W. AVELLAR<sup>1</sup>

<sup>1</sup>Universidade Federal de São Paulo, Escola Paulista de Medicina, São Paulo, SP, Brazil; <sup>2</sup>University of Virginia, School of Medicine, Charlottesville, VA, United States

## P 7.10

### Angiopoietin pathway in Benign Prostatic Hyperplasia after Pulsed Electromagnetic Field Therapy – evaluation of a new serum inflammatory marker

M. G. TARSIANO<sup>1</sup>, M. TENUTA<sup>1</sup>, F. SCIARRA<sup>1</sup>, P. MAZZOTTA<sup>1</sup>, M. MINNETTI<sup>1</sup>, F. SESTI<sup>1</sup>, V. OLIVIERI<sup>1</sup>, R. POFI<sup>1</sup>, M. A. VENNERI<sup>1</sup>, D. GIANFRILLI<sup>1</sup>, A. ISIDORI<sup>1</sup>  
*Sapienza - Università di Roma, Rome, Italy*

## P 7.11

### Selection for female high fertility feedbacks on male reproductive performance

M. MICHAELIS<sup>1</sup>, A. SOBCZAK<sup>1</sup>, C. L. M. LUDWIG<sup>1</sup>, M. LANGHAMMER<sup>2</sup>, J. M. WEITZEL<sup>1</sup>

<sup>1</sup>Leibniz Institute for Farm Animal Biology (FBN), Institute of Reproductive Biology, Dummerstorf, Germany; <sup>2</sup>Leibniz Institute for Farm Animal Biology (FBN), Institute of Genetics and Biometry, Dummerstorf, Germany

## P 7.12

### Anogenital distance – a marker of severity of hypospadias and in-utero androgen production

S. CHANDRA<sup>1</sup>, R. B. NERLI<sup>1</sup>, S. GHAGANE<sup>2</sup>

<sup>1</sup>Jawaharlal Nehru Medical College, KLE University, Belagavi, Karnataka, India, Urology, Belagavi, India;

<sup>2</sup>KLES Dr Prabhakar Kore Hospital and MRC, Urinary Biomarkers, Belagavi, India

## 8. ONCOLOGICAL ANDROLOGY

## P 8.1

### Male Oncofertility – Awareness, knowledge and barriers among Oncologists in India

P. THOLETI<sup>1</sup>, V. BHAT<sup>2</sup>, K. UDUPA<sup>3</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, N. SPEARS<sup>4</sup>, T. WOODRUFF<sup>5</sup>, S. K. ADIGA<sup>1</sup>

<sup>1</sup>Manipal Academy of Higher Education, Clinical Embryology, Manipal, India; <sup>2</sup>Manipal Academy of Higher Education, Pediatric Hematology & Oncology, Manipal, India; <sup>3</sup>Manipal Academy of Higher Education, Medical Oncology, Manipal, India; <sup>4</sup>University of Edinburgh, Edinburgh, United Kingdom; <sup>5</sup>Northwestern University, Chicago, United States

## P 8.2

### MAGEC2 as a biomarker for Testicular Germ Cell Tumors

D. RAOS<sup>1,2</sup>, J. KRASIC<sup>1,2</sup>, S. MASIC<sup>3</sup>, M. CORIC<sup>4</sup>, B. KRUSLIN<sup>3,1,2</sup>, A. KATUSIC BOJANAC<sup>1,2</sup>, F. BULIC-JAKUS<sup>1,2</sup>, D. JEZEK<sup>2,5</sup>, M. ULAMEC<sup>3,2</sup>, N. SINCIĆ<sup>1,2</sup>

<sup>1</sup>University of Zagreb School of Medicine, Department of Medical Biology, Zagreb, Croatia; <sup>2</sup>Centre of Excellence for Reproductive and Regenerative Medicine, University of Zagreb School of Medicine, Zagreb, Croatia; <sup>3</sup>University Hospital Center Sestre milosrdnice, Ljudevit Jurak Clinical Department of Pathology and Cytology, Zagreb, Croatia;

<sup>4</sup>University Hospital Centre Zagreb, Department of Pathology and Cytology, Zagreb, Croatia; <sup>5</sup>University of Zagreb School of Medicine, Department of Histology and Embryology, Zagreb, Croatia

**P 8.3****Immunopathology of testicular germ cell tumors: a clinical approach**

J. HEYER<sup>1,2</sup>, R. ISLAM<sup>2</sup>, F. DITTMAR<sup>1</sup>, A. PILATZ<sup>1</sup>, K. HARTMANN<sup>2</sup>, S. KLESCH<sup>3</sup>, F. WAGENLEHNER<sup>1</sup>, M. HEDGER<sup>4</sup>, B. LOVELAND<sup>5</sup>, K. L. LOVELAND<sup>4,6</sup>, D. FIETZ<sup>2</sup>, H. C. SCHUPPE<sup>1</sup>

<sup>1</sup>Justus Liebig University, Giessen, Dept. of Urology, Pediatric Urology and Andrology, Giessen, Germany;

<sup>2</sup>Justus Liebig University, Giessen, Dept. of Veterinary Anatomy, Histology and Embryology, Giessen, Germany;

<sup>3</sup>University of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>4</sup>Hudson Institute for Medical Research, Centre for Reproductive Health, Clayton, Australia; <sup>5</sup>Burnet Institute, Melbourne, Australia;

<sup>6</sup>Monash University, School of Clinical Sciences, Clayton, Australia

**P 8.4****Evidence of a dramatic alteration of the H4 acetylation pattern in testicular cancer patients prior to any treatment**

A. DE LA IGLESIAS<sup>1</sup>, F. BARRACHINA<sup>1</sup>, M. JODAR<sup>1,2</sup>, A. SOLER-VENTURA<sup>1</sup>, C. MALLOFRÉ<sup>3</sup>, L. RODRÍGUEZ-CARUNCHIO<sup>3</sup>, A. GOUDARZI<sup>4</sup>, J. M. CORRAL<sup>5</sup>, J. L. BALLESCA<sup>6</sup>, J. CASTILLO<sup>1</sup>, R. OLIVA<sup>1,2</sup>

<sup>1</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Molecular Biology of Reproduction and Development Research Group, Fundació Clínic per a la Recerca Biomèdica, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universitat de Barcelona, Barcelona, Spain; <sup>2</sup>Hospital Clínic, Biochemistry and Molecular Genetics Service, Barcelona, Spain;

<sup>3</sup>Hospital Clínic, Department of Pathology, Barcelona, Spain; <sup>4</sup>Shahid Beheshti University of Medical Sciences, Department of Clinical Biochemistry, School of Medicine, Tehran, Iran; <sup>5</sup>Hospital Clínic, Department of Urology, Barcelona, Spain; <sup>6</sup>Hospital Clínic, Clinic Institute of Gynaecology, Obstetrics and Neonatology, Barcelona, Spain

**P 8.5****miRNA in prostate cancer – (pre)analytical challenges**

I. ABRAMOVIC<sup>1</sup>, M. ULAMEC<sup>2</sup>, N. SINCIC<sup>1</sup>

<sup>1</sup>School of Medicine University of Zagreb, Department of Medical Biology, Zagreb, Croatia; <sup>2</sup>University Clinical Hospital Center Sestre milosrdnice, Department of Pathology and Cytology, Zagreb, Croatia

**P 8.6****The Persistent Müllerian Duct Syndrome (PMDS) in an adult – case report**

J. K. WOLSKI<sup>1,2</sup>, T. DEMKOW<sup>2</sup>, R. SOSNOWSKI<sup>2</sup>, T. KALINOWSKI<sup>2</sup>, B. ADAMOWICZ<sup>2</sup>, K. SIKORA<sup>3</sup>

<sup>1</sup>Fertility Clinic Novum, Andrology/Urology Unit, Warsaw, Poland; <sup>2</sup>M. Skłodowska-Curie Memorial Cancer Centre and Institute of Oncology, Department of Uro-oncology, Warsaw, Poland; <sup>3</sup>M. Skłodowska-Curie Memorial Cancer Centre and Institute of Oncology, Department of Pathology, Warsaw, Poland

**P 8.7****FXYD5/DYSADHERIN is a new marker of prostate cancer progression and aggressiveness associated to epithelial-to-mesenchymal transition**

M. V. MENCUCCI<sup>1</sup>, R. BELLO<sup>2</sup>, M. ROSSO<sup>1</sup>, C. MOIOLA<sup>1</sup>, M. J. BESSO<sup>1</sup>, M. VAZQUEZ-LEVIN<sup>1</sup>

<sup>1</sup>Instituto de Biología y Medicina Experimental (IBYME); CONICET-FIBYME), Laboratorio de Estudios de Interacción Celular en Reproducción y Cáncer, Ciudad Autónoma de Buenos Aires, Argentina; <sup>2</sup>Universidad de Tres de Febrero, Saenz Peña, Argentina

**P 8.8****Short anogenital distance is associated with testicular germ cell tumour development**

D. MORENO MENDOZA<sup>1</sup>, E. CASAMONTI<sup>2</sup>, A. RIERA-ESCAMILLA<sup>3</sup>, S. PIETROFORTE<sup>3</sup>, G. CORONA<sup>4</sup>, E. RUIZ CASTAÑE<sup>1</sup>, C. KRAUSZ<sup>1,2</sup>

<sup>1</sup>Fundació Puigvert, Instituto de Investigaciones Biomédicas Sant Pau (IIB-Sant Pau), Departament de Medicina, Universitat Autònoma de Barcelona, Andrology, Barcelona, Spain; <sup>2</sup>University of Florence, Department of Biomedical, Experimental and Clinical Sciences "Mario Serio," Florence, Italy; <sup>3</sup>Fundació Puigvert. Instituto de Investigaciones Biomédicas Sant Pau (IIB-Sant Pau), Molecular Biology Laboratory, Barcelona, Spain; <sup>4</sup>Azienda USL Bologna Maggiore-Bellaria Hospital, Endocrinology Unit, Medical Department, Bologna, Italy

**P 8.9****Leydig cell tumor presenting as azoospermia – testis sparing surgery and micro TESE – a single center experience**

C. KONSTANTINIDIS<sup>2</sup>, T. CHARALAMPOS<sup>1</sup>

<sup>1</sup>Athens Bioclinic, Urology, Athens, Greece; <sup>2</sup>National Rehabilitation Center, Neuro-Urology, Athens, Greece

## P 8.10

**Abnormalities in the sperm DNA methylome both pre- and post-treatment in men with Hodgkin's disease and testicular cancer**

D. CHAN<sup>1</sup>, K. KLEIN<sup>2</sup>, C. O'FLAHERTY<sup>1,3,4</sup>, P. CHAN<sup>1,5</sup>, B. ROBAIRE<sup>3,6</sup>, J. TRASLER<sup>1,3,7</sup>

<sup>1</sup>Research Institute of the McGill University Health Centre, Montreal, Canada; <sup>2</sup>Lady Davis Institute for Medical Research, Jewish General Hospital, Montreal, Canada;

<sup>3</sup>McGill University, Department of Pharmacology and Therapeutics, Montreal, Canada; <sup>4</sup>McGill University, Department of Surgery, Montreal, Canada; <sup>5</sup>McGill University, Department of Urology, Montreal, Canada; <sup>6</sup>McGill University, Department of Obstetrics and Gynecology, Montreal, Canada; <sup>7</sup>McGill University, Department of Human Genetics, Montreal, Canada

## 9. SEXUAL MEDICINE AND MALE SEXUAL HEALTH

### P 9.1

**First night impotence dilemma in man – a Malaysian Study**

M. I. MOHD TAMBI

*Damai Service Hospital, Men's Wellness Clinic, Kuala Lumpur, Malaysia*

### P 9.2

**Prevalence of self-reported sexual dysfunctions among male COVID-19 patients in Italy**

A. SANSONE<sup>1</sup>, D. MOLLAOLI<sup>1</sup>, G. CIOCCA<sup>2</sup>, E. COLONNELLO<sup>1</sup>, E. LIMONCIN<sup>1</sup>, E. A. JANNINI<sup>1</sup>

<sup>1</sup>University of Rome Tor Vergata, Chair of Endocrinology and Medical Sexology (ENDOSEX), Department of Systems Medicine, Rome, Italy; <sup>2</sup>"Sapienza" University of Rome, Department of Dynamic and Clinical Psychology, Rome, Italy

### P 9.3

**The physicians gender influences the results of the diagnostic workup for erectile dysfunction**

G. RASTRELLI<sup>1</sup>, S. CIPRIANI<sup>1</sup>, A. CRAPARO<sup>2</sup>, S. DE VINCENTIS<sup>2</sup>, A. GRANATA<sup>2</sup>, G. SPAGGIARI<sup>2</sup>, M. SIMONI<sup>2</sup>, M. MAGGI<sup>1</sup>, D. SANTI<sup>2</sup>

<sup>1</sup>University of Florence, Experimental and Clinical Biomedical Sciences, Florence, Italy; <sup>2</sup>University of Modena and Reggio Emilia, Department of Biomedical, Metabolic and Neural Sciences, Modena, Italy

## P 9.4

**Shaeer's punch technique for trans-corporal excavation of peyronie's plaques upon penile prosthesis implantation**

O. SHAEER

*Kasr El Aini Faculty of Medicine, Cairo University, Andrology, Giza, Egypt*

## P 9.6

**Erectile dysfunction as an early marker of cardiovascular disease**

S. KRASNAYAK, O. APOLIKHIN, E. EFREMOV

*N.A. Lopatkin Research Institute of Urology and Interventional radiology - branch of National Medical Research Center of Radiology, Department of Andrology and Human Reproduction, Moscow, Russian Federation*

## P 9.7

**Circumferential acquired macropenis – definition and proposal of a geometrically-based reduction corporoplasty**

E. PESCATORI, B. DREI, S. RABITO

*Hesperia Hospital, Andrology, Modena, Italy*

## P 9.8

**The role of family history of cardiovascular disease in andrological patients in the late ontogenesis**

V. ODIN, E. KOCHANOV, V. DIDENKO

*Kirov Military Medical Academy, Saint Petersburg, Russian Federation*

## P 9.9

**Long term penile perception scores and sexual health outcomes in patients treated for exstrophy bladder**

P. GUPTA

*JN Medical College, KLE Academy of Higher Education and Research (Deemed to be University), Department of Urology, Belagavi, India*

**P 9.10**

**Autophotography underestimates clinical extent of Peyronie's disease for penile angulation assessment**  
D. SCHLAGER<sup>1</sup>, O. CAKIR<sup>2</sup>, F. CHIERIGO<sup>3</sup>, F. GEIGER<sup>1</sup>, D. RALPH<sup>2</sup>, C. LEIBER<sup>1</sup>

<sup>1</sup>University Medical Center Freiburg, Urology and Andrology, Freiburg, Germany; <sup>2</sup>University College London Hospitals & St Peter's Andrology, Andrology, London, United Kingdom; <sup>3</sup>Department of Urology, San Martino University Hospital - IST National Cancer Research Institute, Genoa, Italy

**P 9.11**

**Collagenase clostridium histolyticum for the treatment of Peyronie's disease – a prospective 24 month follow up study**

D. SCHLAGER<sup>1</sup>, O. CAKIR<sup>2</sup>, F. CHIERIGO<sup>3</sup>, F. GEIGER<sup>1</sup>, D. RALPH<sup>2</sup>, U. WETTERAUER<sup>1</sup>, C. LEIBER<sup>1</sup>

<sup>1</sup>University Medical Center Freiburg, Urology and Andrology, Freiburg, Germany; <sup>2</sup>University College London Hospitals & St Peter's Andrology, Andrology, London, United Kingdom; <sup>3</sup>Department of Urology, San Martino University Hospital - IST National Cancer Research Institute, Genoa, Italy

## 10. TESTICULAR CELL BIOLOGY AND STEM CELLS

**P 10.1**

**Adenosine is a pro-inflammatory molecule in human testicular peritubular cells**

A. MISSEL<sup>1</sup>, L. WALENTA<sup>1</sup>, M. TROTTMANN<sup>2</sup>, U. PICKL<sup>2</sup>, F. M. KOHN<sup>3</sup>, A. MAYERHOFER<sup>1</sup>

<sup>1</sup>LMU München, Biomedical Center - Anatomy III, Cell Biology, Planegg-Martinsried, Germany; <sup>2</sup>Urologie und Andrologie am Promenadenplatz, München, Germany;

<sup>3</sup>Andrologicum München, München, Germany

**P 10.2**

**Regulation of macrophage responses in bone marrow-derived and cell line macrophages by activin A: implications for testis immunology**

J. BENDER<sup>1,2,3</sup>, S. BHUSHAN<sup>3</sup>, A. MANSELL<sup>1,4</sup>, K. LOVELAND<sup>1,2</sup>, A. MEINHARDT<sup>3</sup>, M. HEDGER<sup>1,2</sup>

<sup>1</sup>Monash University, Department of Molecular and Translational Sciences, Melbourne, Australia; <sup>2</sup>Hudson Institute of Medical Research, Centre for Reproductive Health, Melbourne, Australia; <sup>3</sup>Justus-Liebig University Giessen, Institute of Anatomy and Cell Biology, Giessen, Germany; <sup>4</sup>Hudson Institute of Medical Research, Centre for Innate Immunity and Infectious Diseases, Melbourne, Australia

**P 10.3**

**Do G protein-coupled estrogen receptor (GPER) and peroxisome proliferator-activated receptors (PPARs) regulate lipid metabolism and steroidogenesis in Leydig cell tumors?**

B. BILIŃSKA<sup>1</sup>, E. GÓROWSKA-WÓJTOWICZ<sup>1</sup>, A. MIŁOŃ<sup>1</sup>, P. PAWICKI<sup>1</sup>, M. KOTULA-BALAK<sup>2</sup>, A. HEJMEJ<sup>1</sup>, J. K. WOLSKI<sup>3</sup>

<sup>1</sup>Institute of Zoology and Biomedical Research, Faculty of Biology, Jagiellonian University, Department of Endocrinology, Kraków, Poland; <sup>2</sup>University Centre of Veterinary Medicine, University of Agriculture in Krakow, Krakow, Poland; <sup>3</sup>nOvum Fertility Clinic, Warszawa, Poland

**P 10.4**

**Indolamine deoxygenase-1 (*Ido-1*) expression and the effects of follistatin treatment in murine autoimmune epididymo-orchitis**

R. WIJAYARATHNA<sup>1,2</sup>, H. KHANDE<sup>1</sup>, N. NICOLAS<sup>1,2,3</sup>, S. BINIWALE<sup>1,2</sup>, P. GREGOREVIC<sup>4</sup>, K. LOVELAND<sup>1,2</sup>, A. MEINHARDT<sup>1,2,3</sup>, M. FIJAK<sup>3</sup>, M. HEDGER<sup>1,2</sup>

<sup>1</sup>Hudson Institute of Medical Research, Centre for Reproductive Health, Clayton, Australia; <sup>2</sup>Monash University, Southern Clinical School, Melbourne, Australia; <sup>3</sup>Justus-Liebig University, Institute of Anatomy and Cell Biology, Giessen, Germany; <sup>4</sup>University of Melbourne, School of Biomedical Sciences, Melbourne, Australia

**P 10.5**

**Testicular dysgenesis syndrome has a stem cell basis**

A. KAUSHIK, D. BHARTIYA

National Institute For Research In Reproductive Health, Stem Cell Biology, Mumbai, India

## P 10.6

### A journey into the testicular tissue of cryptozoospermic patients using single cell RNA sequencing analysis

S. DI PERSIO<sup>1</sup>, T. TEKATH<sup>2</sup>, L. M. SIEBERT-KUSS<sup>1</sup>, J. F. CREMERS<sup>3</sup>, J. WISTUBA<sup>1</sup>, X. LI<sup>4</sup>, G. MEYER ZU HÖRSTE<sup>4</sup>, H. C. DREXLER<sup>4,5</sup>, M. DUGAS<sup>2</sup>, S. KLIESCH<sup>3</sup>, S. SCHLATT<sup>1</sup>, S. LAURENTINO<sup>1</sup>, N. NEUHAUS<sup>1</sup>

<sup>1</sup>University Hospital of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>2</sup>University Hospital of Münster, Institute of Medical Informatics, Münster, Germany; <sup>3</sup>University Hospital of Münster, Centre of Reproductive Medicine and Andrology, Department of Clinical and Surgical Andrology, Münster, Germany;

<sup>4</sup>University Hospital of Münster, Department of Neurology, Institute of Translational Neurology, Münster, Germany;

<sup>5</sup>Max Planck Institute for Molecular Biomedicine, Bioanalytical Mass Spectrometry Unit, Münster, Germany

## P 10.7

### Delta-like and Jagged are regulated by androgens in mouse Sertoli cells *in vitro*

A. HEJMEJ, A. KAMIŃSKA, S. MAREK, M. BRZOSKWINIA, B. BILINSKA

Institute of Zoology and Biomedical Research, Faculty of Biology, Jagiellonian University, Department of Endocrinology, Kraków, Poland

## P 10.8

### Initiation of testicular differentiation in prepubertal marmoset (*Callithrix jacchus*) testicular tissue using an *in vitro* organ culture system

S. SHARMA, R. SANDHOWE-KLAVERKAMP, J. WISTUBA, S. SCHLATT

Centrum für Reproduktionsmedizin und Andrologie, Münster, Germany

## P 10.9

### Presence and distribution of mast cells in the testis and epididymis of ten species

M. HIMELREICH PERIĆ<sup>1</sup>, A. DUDAS<sup>1</sup>, M. HOHSTETER<sup>2</sup>, I. MIHIKOVIC BUHIN<sup>2</sup>, M. KOS<sup>3</sup>, A. KATUSIC BOJANAC<sup>1</sup>, D. JEZEK<sup>4</sup>

<sup>1</sup>University of Zagreb, School of Medicine, Medical Biology, Zagreb, Croatia; <sup>2</sup>University of Zagreb, Faculty of Veterinary Medicine, Department of Veterinary Pathology, Zagreb, Croatia; <sup>3</sup>Clinical Hospital Centre "Sisters of Mercy," "Ljudevit Jurak" Clinical Department of Pathology, Zagreb, Croatia; <sup>4</sup>University of Zagreb, School of Medicine, Histology and Embryology, Zagreb, Croatia

## P 10.10

### Comparative analysis of apoptosis and proliferation in teratocarcinoma and the experimental teratocarcinoma *in vivo* model

L. ŠKARA<sup>1,2</sup>, J. KRASIC<sup>1,2</sup>, A. KATUSIC BOJANAC<sup>1,2</sup>, F. BULIC-JAKUS<sup>1,2</sup>, D. JEZEK<sup>2,3</sup>, N. SINCIĆ<sup>1,2</sup>, M. ULAMEC<sup>2,4,5</sup>

<sup>1</sup>School of Medicine, University of Zagreb, Department of Medical Biology, Zagreb, Croatia; <sup>2</sup>Centre of Excellence for Reproductive and Regenerative Medicine, Zagreb, Croatia;

<sup>3</sup>University of Zagreb School of Medicine, Department of Histology, Zagreb, Croatia; <sup>4</sup>University of Zagreb, School of Medicine, Department of Pathology, Zagreb, Croatia;

<sup>5</sup>University Clinical Hospital Center Sestre milosrdnice, Ljudevit Jurak Clinical Department of Pathology and Cytology, Zagreb, Croatia

## P 10.11

### Formation of the Testicular Immunological Barrier Through Immune Modulation by Somatic Cells

H. KABBESH<sup>1,2</sup>, K. LOVELAND<sup>3</sup>, P. STANTON<sup>3</sup>, G. SCHEINER-BOBIS<sup>1</sup>, L. KONRAD<sup>2</sup>

<sup>1</sup>Justus-Liebig-University Giessen, Department of veterinary Physiology and Biochemistry, Giessen, Germany; <sup>2</sup>Justus Liebig University Giessen, Center of Gynecology and Obstetrics, Giessen, Germany; <sup>3</sup>Monash University, Hudson Institute of Medical Research, Melbourne, Australia

## P 10.12

### Peritubular myoid cells in men with normal and impaired spermatogenesis: CLEC3B as novel candidate for fibrotic remodeling

L. M. SIEBERT-KUSS<sup>1</sup>, S. DI PERSIO<sup>1</sup>, T. TEKATH<sup>2</sup>, J. F. CREMERS<sup>3</sup>, J. WISTUBA<sup>1</sup>, X. LI<sup>4</sup>, G. MEYER ZU HÖRSTE<sup>4</sup>, M. DUGAS<sup>2</sup>, S. KLIESCH<sup>3</sup>, S. SCHLATT<sup>1</sup>, S. LAURENTINO<sup>1</sup>, N. NEUHAUS<sup>1</sup>

<sup>1</sup>University Hospital of Münster, Institute of Reproductive and Regenerative Biology, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>2</sup>University Hospital of Münster, Institute for Medical Informatics, Münster, Germany;

<sup>3</sup>University Hospital of Münster, Department of Clinical and Surgical Andrology, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>4</sup>University Hospital of Münster, Department of Neurology, Institute of Translational Neurology, Münster, Germany

## 11. GENERAL MALE INFERTILITY

### P 11.1

**ITRAQ-based quantitative differential protein expression analysis revealed essential role of glycolytic pathway in flagellum energy balance in asthenozoospermic males**  
 B. BASNET BARUAH<sup>1,2</sup>, R. RANA<sup>3</sup>, S. KOLA<sup>3</sup>, P. CHATURVEDI<sup>2</sup>, A. SRINIVASAN<sup>3</sup>

<sup>1</sup>Mergen Biologics, Reproductive Biology, GUWAHATI, India; <sup>2</sup>All India Institute Of Medical Sciences, Reproductive Biology, New Delhi, India; <sup>3</sup>All India Institute Of Medical Sciences, Biophysics, New Delhi, India

### P 11.2

**Genetic architecture of severe spermatogenic failure and male infertility - time to advance standard of care**  
 N. KÖCKERLING<sup>1</sup>, C. FRIEDRICH<sup>1</sup>, M. J. WYRWOLL<sup>1</sup>, J. EMICH<sup>1</sup>, N. ROTTE<sup>1</sup>, R. WABSCHKE<sup>1</sup>, M. VOCKEL<sup>2</sup>, M. WÖSTE<sup>3</sup>, C. RUCKERT<sup>2</sup>, J. SEGGEWISS<sup>2</sup>, S. LEDIG<sup>2</sup>, A. C. TEWES<sup>2</sup>, Y. STRATIS<sup>2</sup>, J. WISTUBA<sup>4</sup>, C. KRALLMANN<sup>4</sup>, S. KLIESCH<sup>4</sup>, A. RÖPKE<sup>2</sup>, F. TÜTTELMANN<sup>1</sup>

<sup>1</sup>Institute of Reproductive Genetics, University of Münster, Münster, Germany; <sup>2</sup>Institute of Human Genetics, University of Münster, Münster, Germany; <sup>3</sup>Institute of Medical Informatics, University Hospital Münster, Münster, Germany; <sup>4</sup>Centre of Reproductive Medicine and Andrology, University Hospital Münster, Münster, Germany

### P 11.3

**Clinical and seminal parameters associated with testis microlithiasis and its severity in males from infertile couples**

S. D'ANDREA, C. CASTELLINI, M. TOTARO, G. CORDESCHI, A. PARISI, F. FRANCAVILLA, S. FRANCAVILLA, A. BARBONETTI  
*University of L'Aquila, Andrology Unit, Department of Life, Health and Environment Sciences, L'Aquila, Italy*

### P 11.4

**Are bisphenols analogues safer than bisphenol A for human spermatozoa? An *in vitro* study**

C. CASTELLINI, S. D'ANDREA, M. TOTARO, A. PARISI, G. DI EMIDIO, C. TATONE, S. FRANCAVILLA, F. FRANCAVILLA, A. BARBONETTI  
*University of L'Aquila, Department of Life, Health and Environmental Sciences, L'Aquila, Italy*

### P 11.5

**Clinical and psychological characteristics of men with primary and secondary couple infertility**

F. LOTTI, F. FRIZZA, A. PISETTA, M. MAGGI

*University of Florence, Experimental and Clinical Biomedical Sciences , Florence, Italy*

### P 11.6

**LIN28A and LIN28B expression in testicular fibrosis: a case study**

D. KRSNIK<sup>1</sup>, A. KATUSIC BOJANAC<sup>1</sup>, M. HIMELREICH PERIC<sup>1</sup>, F. BULIC JAKUS<sup>1</sup>, D. JEZEK<sup>2</sup>

<sup>1</sup>University of Zagreb, School of Medicine, Medical Biology, Zagreb, Croatia; <sup>2</sup>University of Zagreb, School of Medicine, Histology and Embryology, Zagreb, Croatia

### P 11.7

**The protein phosphatase with EF-hand domain 1, PPEF1, is a Ca2+-dependent calmodulin binding protein present in mature spermatozoa**

C. LAVOIE-OUELLET, A. SAINDON, M. CLARK, J. RUIZ, C. BELLEANNÉE, P. LECLERC

*CHU de Québec - Université Laval, Québec, Canada*

### P 11.8

**Characterization of human sperm intracellular metabolites to understand their association with functional ability and genetic integrity**

A. CHEREDATH<sup>1</sup>, S. UPPANGALA<sup>1</sup>, G. KALTHUR<sup>1</sup>, H. S. ATREYA<sup>2</sup>, S. K. ADIGA<sup>1</sup>

<sup>1</sup>Kasturba Medical College, Manipal Academy Of Higher Education, Clinical Embryology, Manipal, India; <sup>2</sup>Indian Institute of Science, NMR Research Centre, Bengaluru, India

### P 11.9

**Results of testicular biopsy evaluation and reproductive hormones analysis in infertile men with Sertoli cell only syndrome**

D. ADAMCZEWSKA, J. SLOWIKOWSKA-HILCZER, K. MARCHLEWSKA, R. WALCZAK-JEDRZEJOWSKA

*Medical University of Lodz, Department of Andrology and Reproductive Endocrinology, Lodz, Poland*

**P 11.10**

**Mapping men's reproductive decision-making pathways**

A. WHITE

*University of Oxford, Nuffield Department of Primary Health Care Sciences, Oxford, United Kingdom*

**P 11.11**

**Ex vivo 7T magnetic resonance imaging of testicular tissue – preliminary results**

A. PLANINIĆ<sup>1,2</sup>, S. ŠKOKIĆ<sup>3</sup>, D. JEŽEK<sup>1,2</sup>

<sup>1</sup>*Department of Histology and Embryology, School of Medicine University of Zagreb, Zagreb, Croatia;* <sup>2</sup>*Scientific Center of Excellence for Reproductive and Regenerative Medicine, Zagreb, Croatia;* <sup>3</sup>*Croatian Institute for Brain Research, School of Medicine University of Zagreb, Zagreb, Croatia*

**P 11.12**

**Annexin V MACS sperm selection method could be effective on sperm parameter and embryo quality in male factor patients with high DNA fragment**

M. SALEHI NOVIN<sup>1</sup>, Z. ZANDIE<sup>2</sup>, M. BAKHTIARI<sup>1</sup>, R. AFLATOONIAN<sup>3</sup>

<sup>1</sup>*Iran university of medical sciences, Anatomy, Tehran, Iran;* <sup>2</sup>*Iran university of medical science, Shahid Akbar-abadi clinical Research development unit, Tehran, Iran;* <sup>3</sup>*Royan institute for reproductive biomedicine, Endocrinology and female infertility, Tehran, Iran*

**P 11.13**

**Sperm Izumo1 immunofluorescence comparison of the unexplained infertile men and the men without fertilization problems**

S. E. ÓZKOCER<sup>1</sup>, C. M. SEYmen<sup>1</sup>, A. ÖCAL<sup>2</sup>, I. KAPLANOGLU<sup>3</sup>, Ç. ELMAS<sup>1</sup>

<sup>1</sup>*Gazi University Faculty of Medicine , Histology and Embryology, Ankara, Turkey;* <sup>2</sup>*Etilik Zübeyde Hanım Hospital, Urology, Ankara, Turkey;* <sup>3</sup>*Etilik Zübeyde Hanım Hospital, In Vitro Fertilization, Ankara, Turkey*

**P 11.14**

**First Genome Wide Association Study (GWAS) in men with unexplained infertility – Identification of a genetic region determining Follicle-stimulating hormone action**

M. SCHUBERT<sup>1</sup>, L. PÉREZ LANUZA<sup>2</sup>, M. WÖSTE<sup>3</sup>, M. DUGAS<sup>3</sup>, Y. RASSAM<sup>1</sup>, S. HEILMANN-HEIMBACH<sup>4</sup>, F. TÜTTELMANN<sup>5</sup>, S. KLIESCH<sup>1</sup>, J. GROMOLL<sup>2</sup>

<sup>1</sup>*Centre of Reproductive Medicine and Andrology, University Hospital Münster, Department of Clinical and Surgical Andrology, Münster, Germany;* <sup>2</sup>*Institute of Reproductive and Regenerative Biology, Centre of Reproductive Medicine and Andrology, Münster, Germany;* <sup>3</sup>*Institute of Medical Informatics, University of Münster, Münster, Germany;* <sup>4</sup>*Institute of Human Genetics, University of Bonn, Medical School, University Clinics, Bonn, Germany;* <sup>5</sup>*Institute of Reproductive Genetics, University of Münster, Münster, Germany*

**12. MALE INFERTILITY AND ENVIRONMENT**

**P 12.1**

***In vitro effects of aqueous extract of unfermented rooibos on human sperm function***

N. TAKALANI<sup>1</sup>, G. ADEFOLAJU<sup>2</sup>, R. HENKEL<sup>3,4</sup>, C. OPUWARI<sup>2</sup>

<sup>1</sup>*University of Limpopo, Pathology and Medical Sciences , Polokwane, South Africa;* <sup>2</sup>*University of Limpopo, Pre-Clinical Sciences, Polokwane, South Africa;* <sup>3</sup>*University of the Western Cape, Bellville, South Africa;* <sup>4</sup>*American Centre for Reproductive Medicine, Ohio, United States*

**P 12.2**

***Impact of metabolically healthy obesity in patients with andrological problems***

F. LOTTI, G. RASTRELLI, E. MASEROLI, S. CIPRIANI, F. GUARALDI, C. KRAUSZ, Y. REISMAN, A. SFORZA, M. MAGGI, G. CORONA

*University of Florence, Experimental and Clinical Biomedical Sciences, Florence, Italy*

**P 12.3****Does maternal smoking cessation before the fetal masculinization window mitigate adverse effects on offspring semen quality?**

K. KEGLBERG HÆRVIG<sup>1</sup>, K. UGELVIG PETERSEN<sup>1</sup>, J. P. BONDE<sup>1</sup>, A. GIWERCMAN<sup>2</sup>, G. TOFT<sup>3</sup>, B. BJERRE HØYER<sup>1</sup>, C. LINDH<sup>4</sup>, C. HØST RAMLAU-HANSEN<sup>5</sup>, A. M. NYBO ANDERSEN<sup>6</sup>, K. SØRIG HOUGAARD<sup>7</sup>, S. SØGAARD TØTTENBORG<sup>1</sup>

<sup>1</sup>Bispebjerg & Frederiksberg Hospital, Occupation- and Environmental Medicine, Copenhagen NV, Denmark;

<sup>2</sup>Molecular Reproductive Medicine, Department of Translational Medicine, Malmö, Sweden; <sup>3</sup>Aarhus University Hospital, Department of Clinical Epidemiology, Aarhus, Denmark; <sup>4</sup>Division of Occupational and Environmental Medicine, Department of Laboratory Medicine, Lund, Sweden; <sup>5</sup>Research Unit for Epidemiology, Aarhus University, Department of Public Health, Aarhus, Denmark; <sup>6</sup>The Faculty of Health Sciences, University of Copenhagen, Department of Public Health, Copenhagen, Denmark; <sup>7</sup>National Research Centre for the Working Environment, Copenhagen, Denmark

**P 12.4****Sperm quality and features of the antioxidant protection system in men living in different regions of Siberia**

N. KURASHOVA, B. DASHIEV, L. KOLESNIKOVA

Federal State Public Scientific Institution "Scientific Centre for Family Health and Human Reproduction Problems", Irkutsk, Russian Federation

**P 12.5****Inhibition of autophagy impairs sperm quality and promotes cell death in human spermatozoa exposed to oxidative stress**

P. URIBE<sup>1,2</sup>, J. MERIÑO<sup>2</sup>, M. SCHULZ<sup>2,3</sup>, F. ZAMBRANO<sup>2,3</sup>, J. V. VILLEGAS<sup>2,4</sup>, I. CONEJEROS<sup>5</sup>, A. TAUBERT<sup>5</sup>, C. HERMOSILLA<sup>5</sup>, R. SÁNCHEZ<sup>1,3</sup>

<sup>1</sup>University of La Frontera, Department of Internal Medicine, Temuco, Chile; <sup>2</sup>University of La Frontera, Center of Excellence in Translational Medicine – Scientific and Technological Bioresource Nucleus (CEMT – BIOREN), Temuco, Chile; <sup>3</sup>Universidad de La Frontera, Department of Preclinical Sciences, Temuco, Chile; <sup>4</sup>Universidad de La Frontera, Center of Reproductive Biotechnology – Scientific and Technological Bioresource Nucleus (CEBIOR – BIOREN), Temuco, Chile; <sup>5</sup>Justus Liebig University Giessen, Institute of Parasitology, Giessen, Germany

**P 12.6****Impact of Electronic Cigarette Smoke Exposure on Testicular and Spermatozoa Performances in Albino Rats**

O. SHAEER<sup>1</sup>, W. EL-NATTAT<sup>2</sup>, M. FARAG<sup>1</sup>, S. ELSHIMY<sup>3</sup>,

K. SHAEER<sup>3</sup>

<sup>1</sup>Kasr El Aini Faculty of Medicine, Cairo University, Andrology, Giza, Egypt; <sup>2</sup>National Research Center, Cairo, Germany; <sup>3</sup>Kasr El Aini Faculty of Medicine, Cairo University, Giza, Egypt

**P 12.7****Determination of Promoter Methylation of MLH1 and MSH2 Genes and Their Effect on Sperm DNA Fragmentation and Sperm Chromatin Condensation in Men with Varicocele**

N. HEKIM<sup>1</sup>, S. GUNES<sup>1</sup>, E. LAHRMANN<sup>2</sup>, R. DA COSTA<sup>2</sup>, J. GROMOLL<sup>2</sup>, S. LAURENTINO<sup>2</sup>

<sup>1</sup>Ondokuz Mayıs University, Medical Biology, Samsun, Turkey; <sup>2</sup>Centre of Reproductive Medicine and Andrology, Münster, Germany

**P 12.8****Paternal preconception methotrexate exposure and perinatal characteristics of the children – a nation-wide register study in Sweden 2006-2014**

P. ZARÉN<sup>1</sup>, A. GIWERCMAN<sup>1,2</sup>

<sup>1</sup>Lund University, Department of Translational Medicine, Malmö, Sweden; <sup>2</sup>Skane University Hospital, Reproductive Medicine Centre, Malmö, Sweden

**P 12.9****Epididymis-on-a-chip approach to elucidate the impact of environmental plastic pollution on male fertility**

E. STOIMENOU<sup>1</sup>, K. PONDMAN<sup>1</sup>, B. VENZAC<sup>1</sup>,

T. BURGERS<sup>1</sup>, S. SHARMA<sup>2</sup>, S. SCHLATT<sup>1,2</sup>, S. LE GAC<sup>1</sup>

<sup>1</sup>University of Twente, Enschede, Netherlands; <sup>2</sup>CeRA, Münster, Germany

**P 12.10****Widely used pesticides and biocides interfere with Ca (2+)-signaling through effects on the CatSper channel in human sperm cells**

A. REHFELD, A. M. ANDERSSON, N. E. SKAKKEBÆK

Rigshospitalet, Growth and Reproduction, Copenhagen, Denmark

## P 12.11

### **Associations between semen quality and age, meteorological variables, clinical conditions, and lifestyles**

G. L. VERÓN<sup>1</sup>, A. D. TISSERA<sup>2</sup>, G. M. ESTOFAN<sup>3</sup>, R. BELLO<sup>4</sup>, F. BELTRAMONE<sup>3</sup>, R. I. MOLINA<sup>2</sup>, M. H. VAZQUEZ-LEVIN<sup>1</sup>

<sup>1</sup>*Instituto de Biología y Medicina Experimental (IBYME), Ciudad Autónoma de Buenos Aires, Argentina;*

<sup>2</sup>*Laboratorio de Andrología y Reproducción (LAR), Córdoba, Argentina;* <sup>3</sup>*Centro Integral de Ginecología, Obstetricia y Reproducción (CIGOR), Córdoba, Argentina;*

<sup>4</sup>*Universidad de Tres de Febrero (UNTREF), Ciudad Autónoma de Buenos Aires, Argentina*

## P 12.12

### **Are ZnO-NPs harmless to spermatogenesis? Focusing cytoskeleton and nucleoskeleton dynamics in spermatogonia cells**

A. R. PINHO<sup>1,2</sup>, F. MARTINS<sup>1,3</sup>, M. E. V. COSTA<sup>4,5</sup>, A. M. R. SENOS<sup>4,5</sup>, O. A. B. DA CRUZ E SILVA<sup>1,3</sup>, M. D. L. PEREIRA<sup>1,4</sup>, S. REBELO<sup>1,3</sup>

<sup>1</sup>*Aveiro University, Department of Medical Sciences, Aveiro, Portugal;* <sup>2</sup>*CICECO-Aveiro Institute of Materials, University of Aveiro, Aveiro, Germany;* <sup>3</sup>*Neuroscience and Signaling Laboratory, Institute of Biomedicine—iBIMED, University of Aveiro, Aveiro, Portugal;* <sup>4</sup>*CICECO-Aveiro Institute of Materials, University of Aveiro, Aveiro, Portugal;* <sup>5</sup>*Aveiro University, Department of Materials and Ceramic Engineering, Aveiro, Portugal*

## P 12.13

### **Lyophilized acai berry (*Euterpe oleracea Martius*) prevents senescence-related decay in male reproductive outcome**

Y. CERAGIOLI DA SILVA, T. C. SIMÕES FERREIRA, M. MUMCU, V. VENDRAMINI

*Federal University of São Paulo, Laboratory of Reproductive and Developmental Biology, Department of Morphology and Genetics, São Paulo, Brazil*

## 13. REPRODUCTIVE HEALTH

## P 13.1

### **Inhibin b and fsh – the best male fertility report**

K. JANKOWSKA, M. RABIJEWSKI, W. ZGLICZYŃSKI

*Centre of Postgraduate Medical Education, Department of Endocrinology, Warsaw, Poland*

## P 13.2

### **Differential tissue-specific damage caused by bacterial epididymo-orchitis in the mouse**

B. KLEIN<sup>1,2</sup>, S. BHUSHAN<sup>2</sup>, S. GÜNTHER<sup>3</sup>, R. MIDDEENDORFF<sup>2</sup>, K. L. LOVELAND<sup>4,5</sup>, M. P. HEDGER<sup>4,5</sup>, A. MEINHARDT<sup>2,4</sup>

<sup>1</sup>*WWU Münster, ZTE, Münster, Germany;* <sup>2</sup>*Justus-Liebig University of Giessen, Institute of Anatomy and Cell Biology, Giessen, Germany;* <sup>3</sup>*Max Planck Institute for Heart and Lung Research, ECCPS Bioinformatics and Deep Sequencing Platform, Bad Nauheim, Germany;* <sup>4</sup>*Hudson Institute of Medical Research, Centre for Reproductive Health, Clayton, Australia;* <sup>5</sup>*School of Clinical Sciences, Monash University, Department of Molecular and Translational Sciences, Clayton, Australia*

## P 13.3

### **Medice, cura te ipsum – case report of a first-person experience with male infertility**

A. SANSONE

*University of Rome Tor Vergata, Chair of Endocrinology and Medical Sexology (ENDOSEX), Department of Systems Medicine, Rome, Italy*

## P 13.4

### **Prolactin in patients of a specialized andrology clinic**

E. VENAKI, I. ILIAS, A. MICHOU, C. MILIONIS, I. KAKOULIDIS, S. TOGIAS, S. STERGIOTIS, A. PAPPA, S. NIKOPOULOU, E. KOUKKOU

*Elena Venizelou General and Maternity Hospital, Department of Endocrinology, Diabetes and Metabolism, Athens, Greece*

**P 13.5****The (patho)physiology of CatSper Ca<sup>2+</sup> channels in human sperm**

S. YOUNG<sup>1</sup>, C. SCHIFFER<sup>1</sup>, C. BRENNER<sup>1</sup>, F. TUTTELMANN<sup>2</sup>, A. RÖPKE<sup>2</sup>, A. WAGNER<sup>1</sup>, M. KIERZEK<sup>1</sup>, C. KRALLMANN<sup>3</sup>, S. KLIESCH<sup>3</sup>, T. STRÜNKER<sup>1</sup>

<sup>1</sup>Centre of Reproductive Medicine and Andrology, University of Münster, Münster, Germany; <sup>2</sup>Institute of Human Genetics, University Hospital Münster, Münster, Germany; <sup>3</sup>Centre of Reproductive Medicine and Andrology, University Hospital Münster, Münster, Germany

**P 13.6****The role of activin A and chemokines in the development of inflammatory responses during chronic testicular inflammation in mice**

H. HASAN<sup>1</sup>, W. PENG<sup>1</sup>, S. BHUSHAN<sup>1</sup>, E. WAHLE<sup>1</sup>, C. PLEUGER<sup>1</sup>, K. L. LOVELAND<sup>2,3</sup>, A. MEINHARDT<sup>1,2</sup>, M. HEDGER<sup>2,3</sup>, M. FIJAK<sup>1</sup>

<sup>1</sup>Justus-Liebig-Universität Giessen, Institute of Anatomy and Cell Biology, Giessen, Germany; <sup>2</sup>Hudson Institute of Medical Research, Centre of Reproductive Health, Clayton, Germany; <sup>3</sup>Monash University, Department of Molecular and Translational Sciences, Clayton, Australia

**P 13.7****Development of a multivariable prediction model for congenital unilateral absence of the vas deferens (CUAVD)**

S. HAMDI, C. BRUSQ, R. MIEUSSET

University Hospital of Toulouse/Toulouse University, Research Group in Human Fertility, Toulouse, France

**P 13.8****Are tests for sperm antibodies useful in clinical routine to identify men with immunologic cause for infertility?**

P. HOUSKA, L. BJÖRNDAHL

Karolinska University Hospital and Karolinska Institutet, ANOVA, Stockholm, Sweden

**P 13.9****Impact of genetic risk scores on association between childlessness and the risk of cardiovascular mortality**

A. ELENKOV, O. MELLANDER, P. M. NILSSON, A. GIWERCMAN

Lund University, Malmö, Sweden

**P 13.10****Does the *FSHB* c.-211G>T polymorphism impact the spermatogenic potential in infertile male patients?**

S. KALDEWEY<sup>1</sup>, M. SCHUBERT<sup>1</sup>, L. PÉREZ LANUZA<sup>2</sup>, H. KRENZ<sup>3</sup>, M. DUGAS<sup>3</sup>, S. BERRES<sup>2</sup>, S. KLIESCH<sup>1</sup>, J. WISTUBA<sup>2</sup>, J. GROMOLL<sup>2</sup>

<sup>1</sup>Centre of Reproductive Medicine and Andrology, Department of Clinical and Surgical Andrology, Münster, Germany; <sup>2</sup>Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>3</sup>Institute of Medical Informatics – Informatics for Personalized Medicine, Münster, Germany

**P 13.11****Association of seminal plasma infections with oxidative stress**

Y. RASSAM, M. ZITZMANN, S. KLIESCH

Centrum of Reproduction and Andrology, Department of Clinical and Surgical Andrology, Münster, Germany

**P 13.12****Effect of bariatric surgery on reproductive hormones and semen quality**

M. C. CRAIA<sup>1,2</sup>, C. MASSONI<sup>3</sup>, M. VICENTIN<sup>4</sup>, M. GRIMOLDI<sup>4</sup>, A. CAILLE<sup>1</sup>, R. TIONI<sup>4</sup>, A. MARCOLINI<sup>4</sup>, A. DIEGO<sup>4</sup>, M. J. SVETAZ<sup>3</sup>, M. POSADAS<sup>2</sup>, M. J. MUNUCE<sup>1</sup>

<sup>1</sup>Reproductive Medicine Laboratory, School of Biochemical and Pharmaceutical Sciences, National University of Rosario, Clinical Biochemistry, Rosario, Argentina; <sup>2</sup>School of Medical Sciences, National University of Rosario Biology, Rosario, Argentina; <sup>3</sup>Centenario Hospital Endocrinology Laboratory, Rosario, Argentina; <sup>4</sup>British Sanatorium, Bariatric and Metabolic Surgery Unit, Rosario, Argentina

**14. REPRODUCTIVE SUCCESS****P 14.1****Sperm retrieval and cryopreservation in testicular torsion patients – benefits and limitations**

A. RASHED<sup>1</sup>, K. MEKATTI<sup>2</sup>

<sup>1</sup>October 6th University, Faculty of Medicine, Urology/Andrology, Giza, Egypt; <sup>2</sup>Tanta Uni. Faculty of Medicine, Urology/Andrology, Tanta, Egypt

## P 14.2

### Does Anti-Müllerian hormone have a place in the management of azoospermia? A single-center study of 134 patients

H. BENDERADJI<sup>1,2</sup>, J. PRASIVORAVONG<sup>2</sup>, F. MARCELLI<sup>2</sup>, A. L. BARBOTIN<sup>3</sup>, C. MARCHETTI<sup>4</sup>, S. CATTEAU-JONARD<sup>5</sup>, C. GUITTARD<sup>6</sup>, A. VILLERS<sup>2</sup>, P. PIGNY<sup>7</sup>, C. LEROY<sup>2</sup>

<sup>1</sup>Lille Neuroscience & Cognition research center, Inserm U 1172, Lille, France; <sup>2</sup>Lille University Hospital, Department of Andrology and Urology, Lille, France; <sup>3</sup>Lille University Hospital, Reproductive Biology-Spermiology—CECOS Institute, Lille, France; <sup>4</sup>Reproductive Biology center "DU BOIS", Lille, France; <sup>5</sup>Lille University Hospital, Department of Reproductive Medicine, Lille, France; <sup>6</sup>Reproductive Biology Center "DU BOIS", Lille, France; <sup>7</sup>Lille University Hospital, CNRS, Inserm, UMR9020 – UMR-S 1277, Lille, France

## P 14.3

### Centriolar defects, centrin 1 alterations and FISH studies in human spermatozoa of a man of a couple that produces aneuploid embryos in natural and artificial fertilization

D. NOTO<sup>1</sup>, G. COLLODEL<sup>1</sup>, G. BELMONTE<sup>1</sup>, M. RICCIO<sup>1</sup>, R. GUAZZO<sup>2</sup>, E. MORETTI<sup>1</sup>

<sup>1</sup>University of Siena, Molecular and Developmental Medicine, Siena, Italy; <sup>2</sup>University of Siena, Medical Biotechnology, Siena, Italy

## P 14.4

### The functionality of the sperm cell in the presence of antisperm antibodies

A. F. SILVA<sup>1</sup>, M. I. CRISTO<sup>1</sup>, A. P. SOUSA<sup>1,2</sup>, T. ALMEIDA-SANTOS<sup>1,2,3</sup>, S. SCHLATT<sup>4</sup>, J. RAMALHO-SANTOS<sup>1,5</sup>, S. AMARAL<sup>1</sup>

<sup>1</sup>CNC - Center for Neuroscience and Cell Biology, University of Coimbra, Coimbra, Portugal; <sup>2</sup>Reproductive Medicine Unit, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal; <sup>3</sup>Faculty of Medicine, University of Coimbra, Coimbra, Portugal; <sup>4</sup>Centre for Reproductive Medicine and Andrology (CeRA), University of Münster, Münster, Germany; <sup>5</sup>Department of Life Sciences, Faculty of Sciences and Technology, University of Coimbra, Coimbra, Portugal

## P 14.5

### Non-invasive management of ejaculatory dysfunction in patients referred for sperm cryopreservation: a retrospective study

M. DEKNUYDT<sup>1</sup>, F. MARCELLI<sup>2</sup>, B. DUCROCQ<sup>3</sup>, A. L. BARBOTIN<sup>3</sup>, G. ROBIN<sup>2,4</sup>, M. LEROY<sup>4</sup>, C. PROUST<sup>1</sup>, H. BENDERADJI<sup>2</sup>, J. M. RIGOT<sup>2</sup>, X. BIARDEAU<sup>2</sup>, J. PRASIVORAVONG<sup>2</sup>

<sup>1</sup>Lens Hospital, Reproductive medicine, Lens, France; <sup>2</sup>Lille Hospital, Urology and andrology, Lille, France; <sup>3</sup>Lille Hospital, Institute of Reproductive Biology-Spermiology—CECOS, Lille, France; <sup>4</sup>Jeanne de Flandre Hospital, Reproductive medicine, Lille, France

## P 14.6

### Effect of Vas Ligation on TESE results in Non Obstructive Azoospermic Rats

O. SHAEER, M. GHALY, E. IBRAHIM, M. ABDELMOTALEB, K. SHAEER

Kasr El Aini Faculty of Medicine, Cairo University, Giza, Egypt

## P 14.7

### Oxytocin as a new treatment option for ejaculatory disorders – S19 of the rat epididymis as a testing model

B. STADLER<sup>1,2</sup>, M. R. WHITTAKER<sup>3</sup>, C. J. NOWELL<sup>4</sup>, B. EXINTARIS<sup>2</sup>, R. MIDDENDORFF<sup>1</sup>

<sup>1</sup>Justus-Liebig-University, Institute of Anatomy and Cell Biology, Giessen, Germany; <sup>2</sup>Monash University Parkville, Faculty of Pharmacy and Pharmaceutical Sciences, Drug Discovery Biology, Melbourne, Australia; <sup>3</sup>Monash University Parkville, Monash Institute of Pharmaceutical Sciences, Drug Delivery, Dynamics and Disposition, Melbourne, Australia; <sup>4</sup>Monash University Parkville, Monash Institute of Pharmaceutical Sciences, Drug Discovery Biology, Melbourne, Australia

## P 14.8

### Sperm morphology and motility in mice and men: Investigations of defective male germ cell differentiation

S. D. KOTHALAWALA<sup>1</sup>, S. GÜNTHER<sup>2</sup>, T. TIMM<sup>3</sup>, G. LOCHNIT<sup>3</sup>, H. C. SCHUPPE<sup>4</sup>, A. PILATZ<sup>4</sup>, F. WAGENLEHNER<sup>4</sup>, D. FIETZ<sup>1</sup>

<sup>1</sup>Institute for Veterinary Anatomy, Histology and Embryology, Justus-Liebig University of Giessen, Giessen, Germany; <sup>2</sup>Max Planck Institute, Bad Nauheim, Germany; <sup>3</sup>Protein Analytics, Biochemistry Institute, Justus-Liebig University of Giessen, Giessen, Germany; <sup>4</sup>Clinic of Urology, Pediatric Urology and Andrology, Justus-Liebig University of Giessen, Giessen, Germany

**P 14.9****Genetics and spermatology in CBAVD patients**

V. CHERNYKH, E. MARNAT, A. SEDOVA, M. SHTAUT, E. BRAGINA, T. SOROKINA, T. ADYAN, A. POLYAKOV, L. KURIRO

*Research Centre for Medical Genetics, Laboratory of Genetics of Reproduction Disorders, Moscow, Russian Federation*

**P 14.10****Sperm recovery and ICSI outcomes in men with non-obstructive azoospermia: a systematic review and meta-analysis**

W. VENA<sup>1</sup>, G. CORONA<sup>2</sup>, S. MINHAS<sup>3</sup>, A. GIWERCMAN<sup>4</sup>, C. BETTOCCHI<sup>5</sup>, M. DINKELMAN-SMIT<sup>6</sup>, G. DOHLE<sup>6</sup>, F. FUSCO<sup>7</sup>, A. KADIOGLU<sup>8</sup>, S. KLIESCH<sup>9</sup>, Z. KOPA<sup>10</sup>, C. KRAUSZ<sup>11</sup>, F. PELLICCIONE<sup>12</sup>, A. PIZZOCARO<sup>1</sup>, J. RASSWEILER<sup>13</sup>, P. VERZE<sup>5</sup>, L. VIGNOZZI<sup>11</sup>, W. WEIDNER<sup>14</sup>, M. MAGGI<sup>11</sup>, N. SOFIKITIS<sup>15</sup>

<sup>1</sup>*Humanitas Research Hospital, Endocrinology & Medical Andrology Unit, Rozzano (MI), Italy;* <sup>2</sup>*Azienda ASL Bologna Maggiore - Bellaria Hospital, Endocrinology Unit, Medical Department, Bologna, Italy;* <sup>3</sup>*Imperial College NHS Healthcare, Department of Urology, London, United Kingdom;* <sup>4</sup>*Lund University, Molecular Reproductive Medicine, Department of Translational Medicine, Faculty of Medicine, Malmö, Sweden;* <sup>5</sup>*University of Bari, Department of Urology, Andrology and Kidney Transplantation Unit, Department of Emergency and Organ Transplantation, Bari, Italy;* <sup>6</sup>*University Medical Center Rotterdam, Department of Urology, Erasmus MC, Rotterdam, Netherlands;* <sup>7</sup>*University of Naples Federico II, Department of Neurosciences, Human Reproduction and Odontostomatology, Naples, Italy;* <sup>8</sup>*University of Istanbul, Department of Urology, Istanbul Faculty of Medicine, Istanbul, Turkey;* <sup>9</sup>*Münster University Hospital (UKM), Department of Clinical and Surgical Andrology, Centre of Reproductive Medicine and Andrology (CeRA), Münster, Germany;* <sup>10</sup>*Semmelweis University, Andrology Centre, Department of Urology, Budapest, Hungary;* <sup>11</sup>*Azienda Ospedaliera Universitaria Careggi, Andrology, Women's Endocrinology and Gender Incongruence Unit, Department of Experimental and Clinical Biomedical Sciences, Florence, Italy;* <sup>12</sup>*F. Renzetti Hospital, Diabetes and Metabolism Unit, Department of Internal Medicine, Lanciano (CH), Italy;* <sup>13</sup>*SLK-Kliniken Heilbronn, University of Heidelberg, Department of Urology, Heilbronn, Germany;* <sup>14</sup>*Justus Liebig University of Giessen, Department of Urology, Pediatric Urology and Andrology, Giessen, Germany;* <sup>15</sup>*Ioannina University School of Medicine, Department of Urology, Ioannina, Greece*

**P 14.11****Factors associated with abnormal epididymo-testicular unit in a cohort of French boys operated for unilateral cryptorchidism**

S. HAMDI<sup>1</sup>, V. ENG<sup>1</sup>, C. BRUSQ<sup>1</sup>, R. MIEUSSET<sup>1</sup>, O. ABBO<sup>2</sup>

<sup>1</sup>*University Hospital of Toulouse/Toulouse University, Research Group in Human Fertility, Toulouse, France;*

<sup>2</sup>*University Hospital of Toulouse, Pediatric Surgery, Toulouse, France*

**P 14.12****Asymptomatic urogenital infections and their impact on male and female fertility**

J. NOVÁK<sup>1,2</sup>, T. FÜRST<sup>3</sup>, A. LANGEROVÁ<sup>4</sup>, V. VIK<sup>2,5</sup>, Z. KRÁTKA<sup>6</sup>

<sup>1</sup>*General University Hospital and First Faculty of Medicine, Charles University, Prague, Dpt. of Urology, Praha, Czech Republic;* <sup>2</sup>*Gennet, Urology and Andrology, Praha, Czech Republic;*

<sup>3</sup>*Faculty of Science, Palacky University, Dpt. of Mathematical Analysis and Application of Mathematics, Olomouc, Czech Republic;* <sup>4</sup>*Gennet, IVF, Praha, Czech Republic;* <sup>5</sup>*Institute of Clinical and Experimental Medicine, Transplant Surgery Dpt., Praha, Czech Republic;* <sup>6</sup>*Gennet, Laboratory of Immunology, Praha, Czech Republic*

**15. SPERM MORPHOLOGY AND FUNCTION****P 15.1****Sperm motility subpopulation structure in stallion: breed differences**

S. GACEM<sup>1</sup>, A. VELVERDE<sup>2</sup>, J. CATALÁN<sup>1</sup>, J. MIRÓ<sup>1</sup>, C. SOLER<sup>1,3</sup>

<sup>1</sup>*Universitat autònoma de barcelona, equine reproduction, sabadell, Spain;* <sup>2</sup>*Costa Rica Institute of Technology, School of Agronomy, San Carlos Campus, 223-21001 Alajuela, Costa Rica;* <sup>3</sup>*Departamento de Biología Celular, Biología Funcional y Antropología Física, Universitat de València, 46100, Burjassot, Valencia, Spain*

**P 15.2****Equine sperm morphology analysis: Alive vs dead stained sperms techniques**

S. GACEM<sup>1</sup>, J. CATALÁN<sup>1</sup>, I. YANEZ-ORTIZ<sup>1</sup>, C. SOLER<sup>1,2</sup>, J. MIRÓ<sup>1</sup>

<sup>1</sup>*universitat autònoma de barcelona, equine reproduction, sabadell, Spain;* <sup>2</sup>*Departamento de Biología Celular, Biología Funcional y Antropología Física, Universitat de València, 46100, Burjassot, Valencia, Spain*

### P 15.3

#### **Topological distribution of functional-biochemical features of spermatozoa by Raman Microspectroscopy**

V. ZIEGER<sup>1</sup>, R. DA COSTA<sup>1</sup>, S. AMARAL<sup>1,2,3</sup>, S. SCHLATT<sup>1</sup>

<sup>1</sup>*University of Münster, Centre for Reproductive Medicine and Andrology, Münster, Germany;* <sup>2</sup>*University of Coimbra, Center for Neuroscience and Cell Biology (CNC), Biology of Reproduction and Stem Cell Group, Coimbra, Portugal;* <sup>3</sup>*University of Coimbra, Institute for Interdisciplinary Research, Coimbra, Portugal*

### P 15.4

#### **Development of a Rapid-Mixing-CASA technique to quantify transient ligand-induced motility responses in sperm populations**

S. YOUNG, C. BRENNER, T. STRÜNKER, C. SCHIFFER

*University Hospital Münster, Centre of Reproductive Medicine and Andrology, Molecular Reproductive Physiology, Münster, Germany*

### P 15.5

#### **Assessment of DNA fragmentation in live spermatozoa – a novel and rapid application of flow cytometry for sperm analysis**

R. DA COSTA, K. REDMANN, S. SCHLATT

*Centre of Reproductive Medicine and Andrology, Münster, Germany*

### P 15.6

#### **Effect of incubation and analysis temperature on kinematic and morphometric human semen values**

A. GARCÍA MOLINA<sup>1</sup>, N. NAVARRO<sup>2</sup>, D. BOMPART<sup>1</sup>, C. CERVERÓ<sup>3</sup>, S. SADEGHİ<sup>1</sup>, C. SOLER<sup>1,3</sup>

<sup>1</sup>*Proyectos i Serveis R+D, Biology, Valencia, Spain;*

<sup>2</sup>*Instituto de Infertilidad Valenciano (IVI), Andrology, Valencia, Spain;* <sup>3</sup>*University of Valencia, Department of Functional Biology and Physical Anthropology, Valencia, Spain*

### P 15.7

#### **Atlas of human sperm morphoanomalies using Trumorph®**

A. GARCÍA MOLINA<sup>1</sup>, N. NAVARRO<sup>2</sup>, E. NÁCHER<sup>3</sup>, D. BOMPART<sup>1</sup>, S. SADEGHİ<sup>1</sup>, C. SOLER<sup>1,3</sup>

<sup>1</sup>*Proyectos i Serveis R+D, Biology, Valencia, Spain;*

<sup>2</sup>*Instituto de Infertilidad Valenciano (IVI), Andrology, Valencia, Spain;* <sup>3</sup>*University of Valencia, Department of Functional Biology and Physical Anthropology, Valencia, Spain*

### P 15.8

#### **Optimal capture frame rate for kinematic human sperm analysis using CASA-Mot systems**

A. GARCÍA MOLINA<sup>1</sup>, D. BOMPART<sup>1</sup>, N. NAVARRO<sup>2</sup>, R. ESTEVE<sup>3</sup>, S. SADEGHİ<sup>1</sup>, C. SOLER<sup>1,3</sup>

<sup>1</sup>*Proyectos i Serveis R+D, Biology, Valencia, Spain;*

<sup>2</sup>*Instituto de Infertilidad Valenciano (IVI), Andrology, Valencia, Spain;* <sup>3</sup>*University of Valencia, Department of Functional Biology and Physical Anthropology, Valencia, Spain*

### P 15.9

#### **Synthesis of caged prostaglandin E<sub>1</sub> derivatives to study the ligand-control of CatSper Ca<sup>2+</sup> channels**

T. SCHIERLING<sup>1,2</sup>, T. STRÜNKER<sup>2</sup>, B. WÜNSCH<sup>1</sup>

<sup>1</sup>*University of Münster, Institute for Pharmaceutical and Medicinal Chemistry, Münster, Germany;* <sup>2</sup>*University of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany*

### P 15.10

#### **Novel perspective in human spermatozoa RNA content assessment and morphology evaluation with *In vivo* acridine orange staining**

T. MARIĆ<sup>1,2</sup>, A. FUČIĆ<sup>2,3</sup>, V. VIČIĆ BOĆKOR<sup>4</sup>, D. JEŽEK<sup>2,5</sup>

<sup>1</sup>*School of Medicine, Department of Medical Biology, Zagreb, Croatia;* <sup>2</sup>*Scientific Centre of Excellence for Reproductive and Regenerative Medicine, University of Zagreb School of Medicine, Zagreb, Croatia;* <sup>3</sup>*Institute for Medical Research and Occupational Health, Zagreb, Croatia;*

<sup>4</sup>*Faculty of Science, University of Zagreb, Division of Molecular biology, Zagreb, Croatia;* <sup>5</sup>*University of Zagreb School of Medicine, Department of Histology and Embryology, Zagreb, Croatia*

**P 15.11****Unique features of human sperm circular RNAs (circRNAs)**

M. JODAR<sup>1,2</sup>, A. SOLER-VENTURA<sup>2</sup>, A. ODRIozOLA<sup>2</sup>, J. CASTILLO<sup>2</sup>, D. DELGADO-DUEÑAS<sup>2</sup>, J. M. CORRAL<sup>3</sup>, J. L. BALLESCÀ<sup>2</sup>, R. OLIVA<sup>1,2</sup>

<sup>1</sup>Hospital Clinic, Biochemistry and Molecular Genetics Service, Barcelona, Spain; <sup>2</sup>Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Fundació Clínic per a la Recerca Biomèdica, Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, Universitat de Barcelona, Molecular Biology of Reproduction and Development Research Group, Barcelona, Spain; <sup>3</sup>Hospital Clinic, Urology, Barcelona, Spain

**P 15.12****The Ca<sup>2+</sup> channel CatSper is not activated by cAMP/PKA signaling but directly affected by chemicals used to probe the action of cAMP and PKA**

T. WANG<sup>1</sup>, S. YOUNG<sup>2</sup>, H. KRENZ<sup>3</sup>, F. TÜTTELMANN<sup>4</sup>, A. RÖPKE<sup>5</sup>, C. KRALLMANN<sup>2</sup>, S. KLIESCH<sup>2</sup>, X. H. ZENG<sup>1</sup>, T. STRÜNKER<sup>2</sup>, C. BRENKER<sup>2</sup>

<sup>1</sup>Nanchang University, Institute of Life Science and School of Life Science, Nanchang, China; <sup>2</sup>University of Münster, Centre of Reproductive Medicine and Andrology, Münster, Germany; <sup>3</sup>University of Münster, Institute of Medical Informatics, Münster, Germany; <sup>4</sup>University of Münster, Institute of Reproductive Genetics, Münster, Germany; <sup>5</sup>University of Münster, Institute of Human Genetics, Münster, Germany

**P 15.13****RAC1 controls progressive movement and competitiveness of mammalian spermatozoa**

A. AMARAL<sup>1</sup>, B. G. HERRMANN<sup>1,2</sup>

<sup>1</sup>Max Planck Institute for Molecular Genetics, Developmental Genetics, Berlin, Germany; <sup>2</sup>Institute for Medical Genetics, Charité – University Medicine Berlin, Berlin, Germany

**P 15.14****TUMOR NECROSIS FACTOR-alpha RECEPTOR-1(TNFR1) is present in human spermatozoa but is not functional in triggering apoptosis pathways**

C. CASTELLINI<sup>1</sup>, S. D'ANDREA<sup>1</sup>, M. TOTARO<sup>1</sup>, A. PARISI<sup>1</sup>, P. PALUMBO<sup>2</sup>, F. R. AUGELLO<sup>2</sup>, F. LOMBARDI<sup>2</sup>, B. CINQUE<sup>2</sup>, S. FRANCAVILLA<sup>1</sup>, F. FRANCAVILLA<sup>1</sup>, A. BARBONETTI<sup>1</sup>

<sup>1</sup>Andrology Unit, Department of Life, Health and Environmental Sciences, University of L'Aquila, L'Aquila, Italy; <sup>2</sup>University of L'Aquila, Department of Life, Health and Environmental sciences, L'Aquila, Italy