

ASA 37th Annual Meeting
**“Male Reproductive Health:
This Generation to the Next”**
April 21 – 24, 2012

Hilton Tucson El Conquistador
Tucson, Arizona

Program Chairs: Janice P. Evans, PhD and Ajay K. Nangia, MBBS
Location: Turquoise I-III

FRIDAY, APRIL 20, 2012

2:00 p.m. – 6:00 p.m. **Registration**
Location: Turquoise Foyer

SATURDAY, APRIL 21, 2012

7:00 a.m. – 7:00 p.m. **Registration**
Location: Turquoise Foyer

10:00 a.m. – 4:30 p.m. **Exhibit Hall Open**
Location: Turquoise III

7:30 p.m. – 9:30 p.m. **Exhibit Hall Open**
Location: Turquoise III

6:00 p.m. – 6:10 p.m. **Welcome and Opening Remarks**

6:10 p.m. – 6:30 p.m. **Updates from NICHD & NIEHS**
Stuart B. Moss, PhD
NICHD
Jerry J. Heindel, PhD
NIEHS

6:30 p.m. – 6:50 p.m. **Distinguished Andrologist Award**

6:50 p.m. – 7:50 p.m. **EMIL STEINBERGER MEMORIAL LECTURE**
Bedside to Bench: Discovery of Genes that Control Reproduction in Men
William Crowley, MD
Harvard Medical School
(Introduced by Gail A. Cornwall, PhD)

7:50 p.m. – 9:30 p.m. **Welcome Reception**
Location: Turquoise III

SUNDAY, APRIL 22, 2012

6:30 a.m. – 8:00 a.m. **Past President’s Breakfast**
Location: Copper Cactus Room

7:00 a.m. – 4:00 p.m. **Exhibit Hall Open**
Location: Turquoise III

7:00 a.m. – 6:00 p.m. **Registration**
Location: Turquoise Foyer

- 8:00 a.m. – 9:00 a.m.** **AUA LECTURE**
Androgen Receptor Regulation in Prostate Cancer and Other Cells
Donald J. Tindall, PhD
Mayo Clinic
(Introduced by Paul J. Turek, MD)
- 9:00 a.m. – 9:15 a.m.** **Distinguished Service Award**
- 9:15 a.m. – 10:45 a.m.** **SYMPOSIUM I – Paternal Contributions to Embryo Quality and Reproductive Success**
Session Chairs: Sarah Kimmins, PhD
Mike Eisenberg, MD
- Father Knows Best: Paternal Impacts of Embryogenesis**
Douglas T. Carrell, PhD
University of Utah
- Paternal Reprogramming of Metabolic Gene Expression in Offspring**
Oliver Rando, MD, PhD
University of Massachusetts
- Effects of First- and Second-Hand Tobacco Smoke: How Does It Affect Male Reproductive Function**
Francesco Marchetti, PhD
Health Canada, Ottawa
- 10:45 a.m. – 11:00 a.m.** **Quick Break**
- 11:00 a.m. – 12:30 p.m.** **Poster Session I**
Location: Exhibit Hall
- 12:30 p.m. – 2:00 p.m.** **Lunch (on your own)**
- 12:30 p.m. – 2:00 p.m.** **MENTORING LUNCHEON SPONSORED BY THE DIVERSITY AND TRAINEE AFFAIRS COMMITTEES**
(not included in registration; tickets required)
Location: Presidio I
“My First ‘Real’ Job: What is It Like to Be an ‘Early Stage’ Professional?”
Speakers: Distinguished Panel
- 12:30 p.m. – 2:00 p.m.** **Editorial Board Luncheon**
Location: Agave I, II
- 2:00 p.m. – 3:30 p.m.** **Concurrent Oral Sessions**
Oral Session I: New Discoveries on Therapeutic and Diagnostic Tools for Male Reproductive Health
Location: Turquoise I, II
Moderators:
Hari K. Koul, PhD
James F. Smith, MD

2:00 p.m. – Abstract #1

IMPROVEMENTS OF COMPONENTS OF THE METABOLIC SYNDROME UNDER TESTOSTERONE TREATMENT OVER 48 MONTHS IN THREE COHORTS, IN TOTAL, 410 MEN

Farid Saad, DVM, PhD¹, Ahmad Haider, MD, PhD², Aksam Yassin, MD, PhD³, Michael Zitzmann, MD, PhD⁴, Louis Gooren, MD, PhD⁵ and Eberhard Nieschlag, MD, PhD⁴

¹Scientific Affairs Men's Healthcare, Bayer Pharma AG; ²Private Urology Practice, Bremerhaven, Germany; ³Segeberger Kliniken, Norderstedt, Germany; ⁴University of Muenster, Muenster, Germany; ⁵VUMC Amsterdam, Amsterdam, The Netherlands

(Presented By: Farid Saad, DVM, PhD)

2:15 p.m. – Abstract #2

SERUM INSL3 CONCENTRATION IS HIGHLY CORRELATED WITH INTRATESTICULAR TESTOSTERONE CONCENTRATION IN NORMAL MEN STIMULATED BY VERY LOW DOSE HUMAN CHORIONIC GONADOTROPIN DURING EXPERIMENTAL GONADOTROPIN DEFICIENCY

Mara Roth, MD¹, Kat Lin, MD¹, Katrine Bay, MSc, PhD², John Amory, MD, MPH¹, Bradley Anawalt, MD¹, Alvin Matsumoto, MD³, Brett Marck, BS³, William Bremner, MD, PhD¹ and Stephanie Page, MD, PhD¹

¹University of Washington; ²Rigshospitalet; ³Veterans Affairs Puget Sound Health Care System

(Presented By: Mara Roth, MD)

2:30 p.m. – Abstract #3

LONG-TERM SURVIVAL AND DEVELOPMENT OF XENOGRAFTED HUMAN FETAL TESTICULAR TISSUE IN IMMUNODEFICIENT MICE

Yingchun Zhu¹, Kirk Lo, MD², Brendan Mullen, MD², Keith Jarvi, MD² and Colin McKerlie, DVM, PhD³

¹Mount Sinai Hospital; ²Mount Sinai Hospital, Toronto; ³Hospital for Sick Children, Toronto

(Presented By: Yingchun Zhu)

2:45 p.m. – Abstract #4

3D IMAGE ANALYSIS OF CHROMATIN STRUCTURE OF MOTILE AND IMMOTILE SPERM POPULATIONS

Naazish Alladin, BSc^{1,2}, Shlomit Kenigsberg, PhD¹, Clifford Librach, MD^{1,3} and Sergey Moskovtsev, MD, PhD^{1,4}

¹CReATe Fertility Centre; ²Department of Biomedical Sciences, Eastern Virginia Medical School, Norfolk; ³Division of Reproductive Endocrinology and Infertility, Department of Obstetrics & Gynaecology, Sunnybrook Health Sciences Centre; ⁴Department of Obstetrics & Gynaecology, University of Toronto

(Presented By: Naazish Alladin, BSc)

3:00 p.m. – Abstract #5

VALPROIC ACID REVERSES PENILE FIBROSIS AND ERECTILE DYSFUNCTION IN CAVERNOUS NERVE INJURY RATS

Johanna Hannan, PhD, Omer Kutlu, MD, Xiaopu Liu, BS, Sena Sezen, PhD, Arthur Burnett, MD, MBA and Trinity Bivalacqua, MD, PhD

Johns Hopkins Medical Institutes

(Presented By: Johanna Hannan, PhD)

6:15 p.m. – Abstract #6

Podium #6

MOLECULAR INTERACTIONS OF GALECTIN-3 AND PSA IN HUMAN SEMEN, PROSTATE, AND PROSTATE TUMORS

Alan Diekman, PhD¹, Matthew Kovak, BS, MS², Sabrina Goddard², Rebecca Gilbride, BS², Ashley Block, BS, MS² and Sarika Saraswati, PhD²

¹Department of Biochemistry and Molecular Biology; ²UAMS

(Presented By: Alan Diekman, PhD)

2:00 p.m. – 3:30 p.m.

Oral Session II: Male Fertility—Spermatogenesis, Tract Biology and Sperm Function

Location: Coronado Ballroom

Moderators:

William Wright, PhD

Thomas Garcia, PhD

2:00 p.m. – Abstract #7

A SPERM STEM CELL BASED FORWARD GENETIC SCREEN FOR REPRODUCTION PHENOTYPES IN THE LABORATORY RAT

Gerardo A. Medrano, BS^{1,2}, Jaideep Chaudhary, BS^{1,2}, Heather M. Powell, BS^{1,2}, Karen M., Chapman BS^{1,2} and F. Kent Hamra, PhD^{1,2}

¹Department of Pharmacology; ²Cecil H. & Ida Green Center for Reproductive Biology Sciences, UT Southwestern Medical Center

(Presented By: F. Kent Hamra PhD)

2:15 p.m. – Abstract #8

CONSTITUTIVE EXPRESSION OF ACTIVATED NOTCH1 IN SERTOLI CELLS LEADS TO A LOSS OF GDNF AND CYP26B1 EXPRESSION, AND PREMATURE GONOCYTE DIFFERENTIATION

Thomas Garcia, PhD and Marie-Claude Hofmann, PhD

Department of Comparative Biosciences, University of Illinois at Urbana-Champaign

(Presented By: Thomas Garcia, PhD)

2:30 p.m. – Abstract #9

HIDDEN MESSAGES: SPERM MRNA TRANSCRIPTS AS BIOMARKERS OF LOW DOSE TESTICULAR INJURY IN THE RAT

Sara Pacheco, BS, Linnea Anderson, BS, MS, Moses Sandrof, BS, Susan Hall, BS and Kim Boekelheide, MD, PhD

Brown University

(Presented By: Sara Pacheco, BS)

2:45 p.m. – Abstract #10

REAL-TIME IN VIVO IMAGING OF ENDOCYTOSIS AND MICROVILLI EXTENSION IN EPIDIDYMAL CLEAR CELLS BY MULTIPHOTON INTRAVITAL MICROSCOPY

Ye Chun Ruan, PhD, Jeremy Roy, PhD and Sylvie Breton, PhD

Massachusetts General Hospital, Harvard Medical School, Program in Membrane Biology, Center for Systems Biology

(Presented By: Ye Chun Ruan, PhD)

3:00 p.m. – Abstract #11

CYTOPLASMIC DROPLETS FUNCTION AS AN ENERGY SOURCE ESSENTIAL FOR NORMAL SPERM EPIDIDYMAL MATURATION

Shuiqiao Yuan, MSc¹, Hui Xu, MD², Zhihong Zheng, MD, PhD² and Wei Yan, MD, PhD¹

¹Department of Physiology and Cell Biology, University of Nevada School of Medicine, Reno, NV, USA; ²Department of Laboratory Animal Medicine, China Medical University, Shenyang, China

(Presented By: Wei Yan, MD, PhD)

3:15 p.m. – Abstract #12

JUNCTIONAL ADHESION MOLECULE-A (JAM-A) INTERACTS WITH CALCIUM/CALMODULIN-DEPENDENT SERINE KINASE (CASK) AND IS SERINE-PHOSPHORYLATED IN HUMAN AND MOUSE SPERM; ITS POTENTIAL ROLE IN ASTHENOZOOSPERMIA AND MALE SUBFERTILITY

Rolands Aravindan, PhD and Patricia Martin-DeLeon, PhD

University of Delaware

(Presented By: Patricia Martin-DeLeon, PhD)

3:30 p.m. – 4:00 p.m. Refreshment Break

Location: Exhibit Hall

4:00 p.m. – 4:45 p.m.

LECTURE I

Hormone Replacement Therapy in Men of Reproductive Age

Edward D. Kim, MD

University of Tennessee

(Introduced by Mark Sigmon, MD)

4:45 p.m. – 5:30 p.m.

LECTURE II

Crosstalk Between Sertoli and Germ Cells – How Does This Lead to Testicular Cell Differentiation?

Leslie L. Heckert, PhD

Kansas University Medical Center

(Introduced by: Kate Loveland, PhD)

6:30 p.m. – 8:30 p.m.

Trainee Forum and Mixer

(All Trainee Travel Awards will be distributed and celebrated at this event)

Location: Sunset Point Outdoor Area

(Rain Location: Presidio I)

MONDAY, APRIL 23, 2012

7:00 a.m. – 3:30 p.m.

Exhibit Hall Open

Location: Turquoise III

7:00 a.m. – 6:00 p.m.

Registration

Location: Turquoise Foyer

8:00 a.m. – 9:00 a.m.

WOMEN IN ANDROLOGY LECTURE

Paternal Obesity Affects Offspring Diabetes Risk

Margaret Morris, PhD

University of New South

Wales, Australia

(Introduced by: Patricia Martin-DeLeon, PhD)

9:00 a.m. – 9:15 a.m.

Young Andrologist Award

9:15 a.m. – 10:45 a.m.

SYMPOSIUM II – Future Technologies and Targets for Improving Men's Health

Session Chairs: Mohit Khera, MD

Polina Lishko, PhD

H2-Gamendazole, A New Non-Hormonal Oral Male Contraceptive: The Road to Clinical Trials

Joseph S. Tash, PhD
Kansas University Medical Center
Gene Therapy, Stem Cells, and Tissue Regeneration for Erectile Dysfunction: Past, Present, and Future
Trinity J. Bivalacqua, MD, PhD
Johns Hopkins University

Cavernous Nerve Regeneration as an ED Therapy
Carol A. Podlasek, PhD
Northwestern University

10:45 a.m. – 11:00 a.m. Quick Break

11:00 a.m. – 12:30 p.m. Poster Session II
Location: Exhibit Hall

12:30 p.m. – 2:00 p.m. Lunch (on your own)

**12:30 p.m. – 2:00 p.m. WOMEN IN ANDROLOGY
LUNCHEON AND DISCUSSION**
(Not included in registration fee; tickets required)
Location: Agave

Strategies for Keeping the Lab Afloat During Difficult Funding Times
Moderator: Patricia A. Martin-DeLeon, PhD
Panelists: Patricia S. Cuasnicu, PhD
Kate Loveland, PhD
Gail S. Prins, PhD
Christina Wang, MD

**2:00 p.m. – 3:30 p.m. SYMPOSIUM III
Male Germ Cells – From Their Birth to Their Grave**
Session Chairs: Marie-Claude Hofman, PhD
Andrew Major, BSci

Human Deleted in AZoospermia (DAZ) Gene Family – 600 Million Years in the Making
Eugene Xu, PhD
Nanjing Medical University

**The Rules of Transcriptional
Regulation of Spermatogenesis:
Keep It Simple**
Prabhakara Reddi, PhD
University of Virginia

Sertoli Cells: Not Just Nurse Cells But Undertakers Too
Jeffrey J. Lysiak, PhD
University of Virginia

3:30 p.m. – 4:00 p.m. Refreshment Break
Location: Exhibit Hall

**4:00 p.m. – 4:45 p.m. LECTURE III:
How a Sperm Learns to Be Fertile**
Harvey M. Florman, PhD
University of Massachusetts
Medical School

**4:45 p.m. – 5:30 p.m. LECTURE IV:
Ageing and Benign Prostatic Hyperplasia – What's the Connection?**
Jill A. Macoska, PhD
University of Michigan

5:30 p.m. **ASA Business Meeting Outstanding Trainee Investigator and Trainee Awards**

7:00 p.m. – 11:00 p.m. **Annual Banquet**
(Not included in registration fee; tickets required)
Location: The Last Territory,
Hilton Tucson El Conquistador

TUESDAY, APRIL 24, 2012

7:00 a.m. – 8:00 a.m. **2013 Program Committee Meeting**
Location: Boardroom

7:30 a.m. – 12:15 p.m. **Registration**
Location: Turquoise Foyer

8:00 a.m. – 9:30 a.m. **SYMPOSIUM IV:**
Androgen Actions and Responsive Tissues
Session chairs: Jacques Tremblay, PhD
Johanna Hannan, PhD

Androgen Axis Disruption in Prostate Cancer
Karen E. Knudsen, PhD
Thomas Jefferson University

Applying “-omics” Technology to Understand Sperm Production
Liza O’Donnell, PhD
Prince Henry’s Institute

Dissecting Androgen Action: New Clues from Conditional Knockout Mice
Lee B. Smith, PhD
MRC, Human Reproductive Sciences Unit

9:30 a.m. – 9:45 a.m. **Refreshment Break**
Location: Turquoise Foyer

9:45 a.m. – 10:45 a.m. **INTERNATIONAL LECTURE:**
Environmental Perturbations and Vulnerabilities in Male Reproductive Health
Jorma Toppari, MD, PhD
University of Turku, Finland

10:45 a.m. – 12:15 p.m. **SYMPOSIUM V:**
Genetic Foundations of Male Infertility
Session Chairs: Kirk C. Lo, MD
Sherwin Zagaroff, MD

Reproductive Fitness of the Human Y Chromosome
Sjoerd Repping, PhD
University of Amsterdam

New Insights in Genetics of Oligozoospermia in Infertile Men
Alexander Yatsenko, MD, PhD
University of Pittsburgh

Mutations in X-Linked Genes as Cause of Infertility in Men
Jeremy Wang, MD, PhD
University of Pennsylvania

MEETING ADJOURNED