



ORGANIZATION FOR THE
STUDY OF SEX DIFFERENCES

OSSD First Annual Meeting May 9–12, 2007

Washington Plaza Hotel
10 Thomas Circle NW, Washington, DC

WEDNESDAY, MAY 9

3:00 - 5:00 pm

Satellite Event

“Isis Network New Investigators: The Next Generation”

4:00 pm

Begin OSSD Meeting Registration (pre-function area)

Exhibit Set-up

5:00 - 7:00 pm

Reception/Exhibits

7:00 - 8:00 pm

Estelle Ramey Memorial Lecture

- William R. Rice, Ph.D., Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara, CA
“Sexual Conflict and the Evolution of Sex Differences”

THURSDAY, MAY 10

7:00 - 9:00 am

Breakfast

8:30 - 10:30 am

Panel I: Sex, Hormones and Autoimmunity

Chair: Rhonda R. Voskuhl, M.D., UCLA Multiple Sclerosis Program, Department of Neurology, University of California, Los Angeles, CA

This panel will aim to shed light on the role of sex chromosomes and sex hormones and autoimmune disease, focusing on animal models of multiple sclerosis and lupus.

- Rhonda R. Voskuhl, M.D., UCLA Multiple Sclerosis Program, Department of Neurology, University of California, Los Angeles, CA
“Sex Chromosome Effects in Experimental Autoimmune Encephalomyelitis (EAE) and Lupus”

- Cory Teuscher, Ph.D., Department of Medicine and Pathology and Medical Biostatistics, University of Vermont, Burlington, VT
“Y Chromosome Effects in Experimental Allergic Encephalomyelitis (EAE)”

- Betty A. Diamond, Ph.D., Department of Medicine, Columbia University, College of Physicians and Surgeons, New York, NY
“Estrogen Effects in Systemic Lupus Erythematosus (SLE)”

10:30 - 11:00 am

Break and Poster viewing/Exhibits

11:00 - 1:00 pm

Panel II: Sex Differences in Obesity and Metabolic Disease

Chair: Jennifer Lovejoy, Ph.D. School of Nutrition and Exercise Science, Bastyr University, Kenmore, WA

A significant body of research has indicated the existence of sex differences in the prevalence and pathophysiology of obesity, as well as sex differences in the impact of obesity on metabolic disease morbidity and mortality. This panel will offer an overview of the latest clinical and basic research relating hormones (estrogens and androgens) to obesity and metabolic disease, and will outline those areas where further research is needed.

- Deborah J. Clegg, Ph.D., Department of Psychiatry, University of Cincinnati, Cincinnati, OH
“Estrogen, the ‘Other’ Adiposity Hormone?”
- Steven R. Smith, M.D., Endocrinology Laboratory, Pennington Biomedical Research Center, Louisiana State University System, Baton Rouge, LA
“Sex Differences in Body Composition and Fat Distribution”
- Andrea Dunaif, M.D., Division of Endocrinology, Northwestern University, The Feinberg School of Medicine, Chicago, IL
“Genes, Environment and Pathogenesis of Polycystic Ovarian Syndrome”

1:00 - 2:00 pm

Lunch Break

2:00 - 4:00 pm

Poster Session I/Exhibits

4:00 - 6:00 pm

Panel III: The Impact of Sex and Gender on Musculoskeletal Disorders on Earth and Space
Chair: Saralyn Mark, M.D., Associate Clinical Professor adjunct of Medicine and OB/GYN at Yale and Georgetown School of Medicine

Studies have shown that some musculoskeletal disorders such as osteoporosis are more prevalent in women than in men. From bone growth and development, musculoskeletal injuries and malignancy, there is now a greater appreciation of the influence of sex and gender on musculoskeletal health. During this session, research findings from terrestrial and space based models will be presented as well as how these findings will impact the delivery of effective musculoskeletal healthcare for both men and women on Earth and in Space.

- Joan McGowan, Ph.D., Musculoskeletal Diseases Branch, NIAMS, NIH, Bethesda, M.D.
“The Impact of Sex/Gender on Bone Health”

- Jay R. Shapiro, M.D., Osteogenesis Imperfecta Clinic, Kennedy Krieger Institute, Baltimore, MD
“Musculoskeletal Sex Differences in Space-flight and Related Non-weight-bearing Conditions”
- Laura L. Tosi, M.D., Department of Orthopaedics, Children’s National Medical Center, Washington, DC
“Sex and the Orthopedic Surgeon”

6:15 - 7:00 pm

OSSD Annual Business Meeting

(*Lunch and dinner not included)

FRIDAY MAY 11

7:00 - 9:00 am

Breakfast

8:30 - 10:30 am

Panel IV: Sex Differences in Pain

Chair: Arthur Arnold, Ph.D., Department of Physiological Science, University of California, Los Angeles, CA

- Linda LeResche, Sc.D., Department of Oral Medicine, University of Washington, Seattle, WA
“Sex and Gender Differences in Clinical Pain”
- Jeff S. Mogil, Ph.D., Department of Psychology and Centre for Research on Pain, McGill University, Montreal, QC, Canada
“Quantitative and Qualitative Sex Differences in Pain and Analgesia”
- Roger B. Fillingim, Ph.D., University of Florida College of Dentistry, Public Health Services and Research, Gainesville, FL
“What Do Experimental Findings Tell Us About Sex Differences in Pain?”

10:30 - 11:00 am

Break and Poster Viewing/Exhibits

11:00 - 1:00 pm

Panel V: Sex Differences in Lung Cancer

Chair: Jill M. Siegfried, Ph.D., University of Pittsburgh School of Medicine

The session will examine mechanisms that may play a role in differences in presentation and outcome of lung cancer between men and women. The presentation will focus on the possible role of estrogen receptors in lung cancer, sex differences in enzymes responsible for activation and deactivation of tobacco carcinogens, and lung cancer therapeutics that utilize estrogenic pathways for enhanced efficacy.

- Jill M. Siegfried, Ph.D., University of Pittsburgh Cancer Institute Lung Cancer Program, Pittsburgh, PA
“Estrogen Receptor pathways in lung cancer.”
- Pamela A. Hershberger, Ph.D., The Hillman Cancer Institute, University of Pittsburgh, Pittsburgh, PA
“Sex-specific chemotherapy”
- Shama C. Buch, Ph.D., Center for Clinical Pharmacology, University of Pittsburgh, Pittsburgh, PA
“Lung Cancer in Women: Emerging Differences in Genetic Susceptibility”

1:00 - 2:00 pm

Lunch Break

2:00 - 4:00 pm

Poster Session II/Exhibits

4:00 - 6:00 pm

Panel VI: Sex Differences in Behavioral Disorders: Depression, Anxiety and Schizophrenia

Chair: Geert J. de Vries, Ph.D., Center for Neuroendocrine Studies, University of Massachusetts, Amherst

Males and females show prominent differences in symptoms of, and susceptibility for, psychiatric disorders. This panel will explore the neural basis of these differences, integrating clinical data as well as data obtained in experimental animals. It will also address whether optimal treatment strategies differ by sex.

- Tracy Bale, Ph.D., Institute of Neurological Sciences, University of Pennsylvania, Philadelphia, PA
“Sex and Disease: Is Stress the Missing Link?”
- Jill M. Goldstein, Ph.D., Department of Psychiatry, Harvard Medical School, Brigham Women’s Hospital, Boston, MA
“Sex, Hormones & Affect Circuitry Dysfunction in Schizophrenia and Depression”
- Robert T. Rubin, M.D., Ph.D., Department of Psychiatry and Mental Health, VA Greater Los Angeles Healthcare System and University of California, Los Angeles, CA
“Sex Differences in the Psychobiology of Major Depression”

6:00 pm

Exhibits Dismantled

7:30 pm

Annual OSSD Banquet

SATURDAY MAY 12

7:00 - 8:30 am

Breakfast

8:30 - 10:30 am

Panel VII: Imprinting and Parent-of-Origin Effects

Co-chairs: Carmen Sapienza, Ph.D., Associate Director, Fels Institute for Cancer Research and Molecular Biology, Temple University, Philadelphia, PA

Rosanna Weksberg, M.D., Ph.D., Research Institute Hospital for Sick Children and Department of Pediatrics, University of Toronto

One of the less obvious but most dramatic differences between males and females is in the number, size and morphology of gametes that each produces. Over the past two decades we have come to appreciate that the differences between eggs and sperm extend to equally dramatic differences in the way in which each sex modifies the genome itself. In this session, we will explore the mechanisms by which maternal and paternal modifications are imprinted on the genome and the implications of aberrations in the process for development, disease and evolution.

- Marisa S. Bartolomei, Ph.D., Department of Cell and Developmental Biology University of Pennsylvania School of Medicine, Philadelphia, PA
“Genomic Imprinting: How Parents Make Their Marks”
- Andrew P. Feinberg, M.D., M.P.H., Department of Medicine and Center for the Epigenetics of Common Human Disease, Johns Hopkins University School of Medicine, Baltimore, MD
“The Epigenetics of Cancer Etiology”
- Theodore P. Rasmussen, Ph.D., Department of Animal Science and Molecular Cell Biology & Center for Regenerative Biology, University of Connecticut, Storrs, CT
“Reprogramming Somatic Cells Without Nuclear Transfer”

10:30 am

Break

11:00 - 12:00 pm

Closing Keynote Lecture

- David Skuse, M.D. FRCP, FRCPsych, FRCPCH, Behavioral Brain Unit, Institute of Child Health, London, UK
‘Sex Differences in Perception: What Do We Know?’

12:00 pm

Meeting Adjourned