

SCIENTIFIC PROGRAM & ABSTRACTS

58TH Annual Meeting

March 16-19, 2011



Fontainebleau Miami
Miami Beach, Florida, USA

Dear Colleagues:

Welcome to the 58th Annual Meeting of the SGI in Miami, Florida. The theme of the 2011 meeting is "Reproduction and Regenerative Medicine," which we hope will prove timely and informative, if not a little controversial.

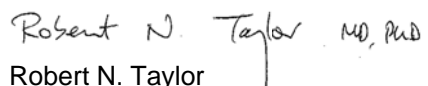
Dan Lebovic and the Scientific Program Committee, chaired by Kelle Moley, have created an outstanding program that promises to encompass the broad interests of our evolving Society. Our two plenary lectures are offered by national leaders in human stem cell ethics and biology, respectively, Professor R. Alta Charo (University of Wisconsin) and Professor José Cibelli (Michigan State University). We also are honoring our Society's best and brightest members in a special session to highlight the accomplishments of the SGI President's Distinguished Scientist, James Roberts (University of Pittsburgh) and the SGI President's Achievement Awardee, Lisa Halvorson (UT Southwestern). We have planned a series of twelve minisymposia, two of which have been organized by our sister societies, the American Society for Reproductive Medicine (ASRM) and the Society for Study of Reproduction (SSR). Special minisymposia on Spontaneous Preterm Labor and Delivery (Burroughs Wellcome Fund), Uterine Fibroids (SGI Corporate Advisory Board) and Early Diagnosis of Preeclampsia (PerkinElmer) have been supported generously. The important contributions of our young members will be showcased in a "New Investigator Plenary Session" and the SGI President's Presenter Awards are sponsored this year by Pfizer. Abstract submissions reached an all-time zenith for our 2011 meeting. With the assiduous help of member-volunteer referees and expert organization by the Program Committee, we plan 164 oral communications and 914 posters.

A continued emphasis of the annual meeting is the career development of our young participants. The SGI Trainee Symposium (sponsored by Ferring) will feature the personal experiences of two recent trainees and an overview of mentorship from the perspective of Prof. Michael Strong, Dean of Medicine at the University of Western Ontario. The Women in Reproductive Sciences Symposium will follow with an address to our membership from Dr. Alan Guttmacher, Director of the *Eunice Kennedy Shriver* NICHD. A "New Investigator Toolbox" luncheon will be moderated by an in-training SGI member, Samuel Pauli (Emory University) and will offer sessions devoted to career building, including collaborative research and manuscript review strategies. All young and in-training poster presenters will discuss their work with senior members of the society. Prizes (\$100 each) will be awarded for the best 20 poster presentations by young investigators. These prizes, along with the recipients of the generous Fondazione Giorgio Pardi awards and travel stipends, will be presented at the President's Farewell Reception at 1:00 p.m. on Saturday, March 27th. We hope that all members will be present to honor our young and "not-so-young" investigators at this important ceremony. In recognition of his long-standing support of junior SGI members it is a pleasure to announce that James Rose (Wake Forest University) will be the 2011 recipient of the Frederick Naftolin Mentorship Award.

As in prior years, the Annual Meeting is preceded by a day of special Satellite Meetings providing intensive topical reviews on: Placenta; Fetal Physiology; Myometrial Function; Endometrium and Preterm Birth. .

The SGI Annual Meeting is being held at the lovely Fontainebleau Miami Beach Hotel, <http://www.fontainebleau.com> which has over 1500 rooms, 10 restaurants and lounges, a golf course, spa and tropical pools together with unparalleled meeting space. We are certain that you will have an enjoyable and productive meeting.

On behalf of the SGI Council, officers and staff,


Robert N. Taylor
President 2010-2011

**SOCIETY FOR GYNECOLOGIC INVESTIGATION
EXECUTIVE COUNCIL
MARCH 2010 – MARCH 2011**

President

Robert Taylor, M.D., Ph.D.
Atlanta, GA, USA

Immediate Past President

Leslie Myatt, Ph.D.
San Antonio, TX, USA

President Elect

Stephen Lye, Ph.D.
Toronto, ON, Canada

President Nominee

Sarah Berga, M.D.
Atlanta, GA, USA

Secretary Treasurer

Michael G. Ross, M.D., M.P.H.
Torrance, CA, USA

Secretary Treasurer Elect

Kirk Conrad, M.D.
Gainesville, FL, USA

COUNCIL MEMBERS

MARCH 2010 – MARCH 2011

Sandra Davidge, Ph.D. (2011)
Edmonton, AB, Canada

Kelle Moley, M.D. (2011)
St. Louis, MO, USA

Serdar Bulun, M.D. (2012)
Chicago, IL, USA

Yoel Sadovsky, M.D. (2012)
Pittsburgh, PA, USA

Hilary Critchley, M.D. (2013)
Edinburgh, UK

James Segars, M.D. (2013)
Bethesda, MD, USA

In Training *ad-hoc* Council Member

Nastaran Foyouzi, M.D.
San Francisco, CA, USA

2011 PROGRAM COMMITTEE MEMBERS

Program Committee Chair

Kelle Moley, M.D.
St. Louis, MO, USA

Sarah Berga, M.D.
Atlanta, GA, USA

Leslie Myatt, Ph.D.
San Antonio, TX, USA

2011 Program Director

Dan Lebovic, M.D., M.A.
Madison, WI, USA

Sandra Davidge, Ph.D.
Edmonton, AB, Canada

Kunle Odunsi, M.D., Ph.D.
Buffalo, NY, USA

2012 Program Director

Stephen Matthews, Ph.D.
Toronto, ON, Canada

Charles Ducsay, Ph.D.
Loma Linda, CA, USA

Yoel Sadovsky, M.D.
Pittsburgh, PA, USA

2013 Program Director

Yolanda Smith, M.D., M.S.
Ann Arbor, MI, USA

Nastaran Foyouzi, M.D.
San Francisco, CA, USA

Robert Taylor, M.D., Ph.D.
Atlanta, GA, USA

2010 Program Director

Thomas Jansson, M.D., Ph.D.
San Antonio, TX, USA

Ronald Magness, Ph.D.
Madison, WI, USA

Ava A. Tayman
Annapolis, MD, USA

Ex-Officio

Stephen Lye, Ph.D.
Toronto, Canada

SGI ADMINISTRATION

Executive Director

Ava A. Tayman
Tel. (410) 571-1152
E-mail: sgiava@aol.com

Webmaster & Program Specialist

Linda S. Gildersleeve
Tel. (410) 571-1156
E-mail: lgildersleeve@sgionline.org

Director of Development

John E. Tyson, M.D., FRCS(C), FACS, FACOG
Tel. (410) 571-1158
E-mail: jtcare@aol.com

Administrative/ Membership Assistant

Stephanie L. Ponta
Tel. (410) 571-1143
E-mail: sponta@sgionline.org

888 Bestgate Rd., Suite 420
Annapolis, Maryland 21401
Fax: (410) 571-1118
Website: <http://www.sgionline.org>

SGI President's Page

1953+	William J. Diekmann	1981	Pentti K. Siiteri
1954+	William J. Diekmann	1982+	Samuel S.C. Yen
1955+	Ernest W. Page	1983	Lawrence D. Longo
1956+	Nicholas S. Assali	1984	James C. Warren
1957*		1985	William N. Spellacy
1958+	Allan C. Barnes	1986	Roy M. Pitkin
1959+	Russell R. deAlvarez	1987	Edward E. Wallach
1960+	Louis M. Hellman	1988	Daniel R. Mishell, Jr.
1961+	James T. Bradbury	1989+	Howard L. Judd
1962+	Leon C. Chesley	1990	Carl J. Pauerstein
1963+	Charles E. McLellan	1991	Norman F. Gant, Jr.
1964+	Roger B. Scott	1992	Frederick Naftolin
1965+	Jack A. Pritchard	1993	W. Ann Reynolds
1966+	Ben M. Peckham	1994+	Gary D. Hodgen
1967+	J. George Moore	1995	Alan H. DeCherney
1968	Charles H. Hendricks	1996	Anne Colston Wentz
1969+	Andre E. Hellegers	1997	James M. Roberts
1970	Edward J. Quilligan	1998	Rogério A. Lobo
1971+	Joseph Seitchik	1999	Joe Leigh Simpson
1972+	T. Terry Hayashi	2000	Eli Y. Adashi
1973+	William M. Paul	2001	Jennifer R. Niebyl
1974+	C. Donald Christian	2002	Sherman Elias
1975	Walter L. Herrmann	2003	John R.G. Challis
1976	Robert B. Jaffe	2004	Jerome F. Strauss, III
1977+*	Kenneth J. Ryan	2005	Steven G. Gabbe
1978+*	Paul C. McDonald	2006	Gerson Weiss
1979	Thomas H. Kirschbaum	2007	Linda C. Giudice
1980	A. Brian Little	2008	Charles J. Lockwood
		2009	Felice Petraglia
		2010	Leslie Myatt
		2011	Robert N. Taylor

*no meeting

+deceased

Past President's Initiative

Past SGI Presidents established a fund in 2011 to which they are contributing donations to support special future projects. We wish to thank the following for their generosity

John Challis, PhD, DSc
Alan DeCherney, MD
Sherman Elias, MD
Steven Gabbe, MD
Norman Gant, MD
Robert Jaffe, MD

Rogério Lobo, MD
Charles Lockwood, MD
Lawrence Longo, MD
Leslie Myatt, PhD
Jennifer Niebyl, MD
Felice Petraglia, MD

James Roberts, MD
Pentti Siiteri, PhD, MD, (HON)
Joe Leigh Simpson, MD
William Spellacy, MD
Gerson Weiss, MD

Members interested in supporting this initiative should contact Ms. Stephanie Ponta for details.

Phone: (410) 571-1143

E-mail: sponta@sgionline.org

SGI Corporate Advisory Board Members

The Society for Gynecologic Investigation wishes to welcome the members of its Corporate Advisory Board to the 58th Annual Meeting and Scientific Forum and to express our sincere appreciation for their loyal support of the Society and its mission.

Abbott Laboratories - Kristof Chwalisz
Bayer Healthcare Pharmaceuticals - Leo Plouffe, Jr.
Bruker Daltonics - Paula Audet
EMD Serono - Joan Schertz, MSc
Ferring Pharmaceuticals, Inc. - Paul Weathersbee, PhD

Hologic, LP - Margaret Eckenroad
PerkinElmer - Michael O'Shea
Pfizer - Barry S. Komm, PhD
SAGE Publications, Inc. - Courtney Pugh
VisualSonics - Sonica van Wyk

On-Site Meeting Registration

All scientific sessions, poster sessions, and ancillary meetings will be held at the Fontainebleau Miami Hotel. Entry to all sessions (including guests at the poster sessions) requires a paid registration and the wearing of a name badge.

Registration Hours

Tuesday, March 15	3:00 p.m. – 6:00 p.m.
Wednesday, March 16	7:00 a.m. – 7:00 p.m.
Thursday, March 17	7:00 a.m. – 5:00 p.m.
Friday, March 18	7:00 a.m. – 5:00 p.m.
Saturday, March 19	7:00 a.m. – 2:00 p.m.

Registration Fees

	<u>ADVANCE</u>	<u>ON SITE</u>
Member	\$550.00	\$730.00
Associate Member	\$400.00	\$580.00
In-Training Member	\$275.00	\$455.00
Non-Member	\$660.00	\$840.00
*In-Training Non-Member (Must have support letter)	\$350.00	\$530.00

Session Fees:

Satellite Meetings

(Wednesday, March 16, 2011)	\$65.00	\$80.00
-----------------------------	---------	---------

New Investigator Toolbox (incl. boxed lunch)

(Friday, March 18, 2011)	\$45.00	\$45.00
--------------------------	---------	---------

* All In-Training Non Member registrations must be accompanied by a letter from the trainee's supervisor confirming the status of the registrant.

Speaker Ready Room

Participants and Speakers who are scheduled to give oral presentations may preview their presentations prior to their lectures. The Speaker Ready Room is located in the Dazzle Room. **Please note that all presentations will be in Microsoft PowerPoint format. Disks, USB Flash Drives, USB Thumb Drives and USB Pen Drives containing presentations must be provided to the AV Technicians in the Speaker Ready Room at least 4 hours prior to the oral session or the day before for morning presentations.**

SGL Cancellation Policy:

Meeting Registration cancellation must be in writing to the SGL administrative office in Annapolis, MD.

888 Bestgate Rd., Suite 420
Annapolis, MD 21401.

Registration fees will be refunded, less a \$165.00 administrative fee if the request is made in writing prior to February 18, 2011. **No Refunds** will be made on registration cancellations after February 18, 2011.

Fontainebleau Miami Beach

4441 Collins Avenue
Miami Beach, Florida, 33140
www.fontainebleau.com
General Inquiries: +1 877-854-2033
Room Reservations: +1 800-548-8886
Restaurant Reservations: +1 877-326-7412
Lapis Spa & Salon: +1 866-750-4772
E-mail: info@fontainebleau.com

The Presidents Distinguished Scientist Award

An award is made annually to a senior member of the Society who has made significant and lasting contributions to the Society and to scientific research in reproductive medicine. The recipient is selected by the President with the advice of officers and other members. Past awardees include *Nicholas S. Assali* (1982); *Willard M. Allen* (1983); *Edward H. G. Hon* (1984); *Donald H. Barron* (1985); *James T. Bradbury* and *Leon Chesley* (1986); *Louis Hellman* and *Elizabeth Ramsey* (1987); *Jack A. Pritchard* (1988); *Kenneth J. Ryan* (1989); *Paul C. MacDonald* (1990); *Giacomo Meschia* (1991); *Samuel S. C. Yen* (1992); *Robert B. Jaffe* (1993); *Daniel R. Mishell, Jr.* (1994); *Paul G. McDonough* (1995); *Lawrence D. Longo* (1996); *Pentti K. Siiteri* (1997); *Edward J. Quilligan* (1998); *Orlando J. Miller* (1999); *Howard W. Jones, Jr.* (2000); *Georgeanna Seegar Jones* (2000); *James R. Scott* (2000); *Robert K. Creasy* (2000); *Frederick P. Zuspan* (2001); *Joe Leigh Simpson* (2002); *Frederick Naftolin* (2003); *Luigi Mastroianni, Jr.* (2004); *Maria Delivoria-Papadopoulous* (2005); *Jerome F. Strauss, III* (2006); *D. Michael Nelson* (2007); *Linda C. Giudice* (2008); *John R.G. Challis* (2009); *Gautam Chaudhuri* (2010); *this year's award recipient is James M. Roberts*

The President's Achievement Award

An award is made annually to a junior member of the Society whose record in scientific investigation is outstanding and assures a continued productive career in research. The recipient is selected by the President with the advice of officers and other members. Past awardees include *Gary D. Hodgen* (1983); *Evan R. Simpson* (1984); *John R.G. Challis* (1985); *Joe Leigh Simpson* (1986); *A. H. DeCherney* (1987); *Aaron J.W. Hsueh* (1988); *Eli Y. Adashi* (1989); *Jerome F. Strauss* (1990); *Murray D. Mitchell* (1991); *Roberto Romero* (1992); *Maria Delivoria-Papadopoulos* (1993); *Robert Schenken* and *M. Linette Casey* (1994); *Rogério A. Lobo* (1995); *Linda C. Giudice* (1996); *Stephen J. Lye* (1997); *Deborah J. Anderson* (1998); *Mark I. Evans* (1999); *Ricardo Azziz* (2000); *Sarah L. Berga* (2000); *Richard S. Legro* (2000); *Katherine D. Wenstrom* (2001); *Serdar Bulun* (2002); *Sandra Davidge* (2003); *Yoel Sadovsky* (2004); *Philip Baker* (2005); *Sam Mesiano* (2006); *Kelle Moley* (2007); *Hugh Taylor* (2008); *Fiona Lyall and Jane Norman* (2009); *Marilyn Cipolla* (2010); *this year's award recipient is Lisa M. Halvorson*

The Frederick Naftolin Award for Mentorship

This award was established in 2003 to recognize the contributions of a member of the society to training and career development of investigators in the field of reproductive and women's health. The award is named in honor of Dr. Naftolin, a former President of the society and past recipient of the President's Distinguished Scientist Award. Dr. Naftolin a staunch advocate for creating a mechanism for the society to celebrate outstanding service to our scientific community through excellence in mentoring. The award was endowed by generous contributions from members of the society, Dr. Naftolin's colleagues and trainees. The awardee is selected by Council in consultation with the Past President's and members of the society. The first recipient of this award was *Lawrence D. Longo* (2004); *Edward J. Quilligan* (2005); *Mortimer Levitz* (2006); *Philip J. DiSaia* (2007); *James Roberts* (2008); *B.C.J.M. Fauser* (2009); *Louis Peeters* (2010); *this year's award recipient is James C. Rose*

The Rogério A. Lobo Award

This award was established in 2007 to recognize the most outstanding contribution to *Reproductive Sciences* by a member of the Society for Gynecologic Investigation. The award is named in honor of Dr. Lobo, a former President of the society and former Editor in Chief of the *Journal of the Society for Gynecologic Investigation (JSGI)* which is now *Reproductive Sciences*. The first recipients of this award were: *Michael G. Ross and Omid Khorram* (2008); *Joan S. Hunt* (2009); *Carolyn Y. Muller* (2010); *this year's award recipient is Linda C. Giudice*

The Pfizer President's Presenter's Award

The Pfizer President's Presenter's Award was originally established in 1996 as the Wyeth President's Presenter Award to recognize the 25 most meritorious abstracts (either poster or oral presentation) submitted by individuals still in training. Fellows and those in both pre and post-doctoral training are eligible to receive the award, which has been generously funded by Pfizer. The 25 awardees will receive a certificate, check, and they and their training directors will be honored at a reception. The Society has always sought a means by which to encourage young investigators to present their research at our meeting. We anticipate the Pfizer President's Presenter's Award will result in the submission of more and better abstracts by the very people who need encouragement to consider a research career.

The Giorgio Pardi Foundation President's Presenter's Award

This award has been generously funded by the Giorgio Pardi Foundation and recognizes the three best abstracts (either poster or oral presentations) in the field of fetal medicine and placental function presented by a senior researcher and by two junior researchers still in training. The FGP will also recognize a special Giorgio Pardi Award 2011 for the best abstract (either poster or oral presentation) on the topic "The Fetus of Today is the Adult of Tomorrow". In addition, Giorgio Pardi Foundation will fund 5 travel awards to highly meritorious abstracts submitted by individuals still in training. This year's awardees will be announced at the Awards Ceremony. This year the five travel awards are limited to new investigators from Italy.

**SGI Annual Scientific Meeting
March 16-19, 2011
Miami Beach, Florida, USA**

Meeting at a Glance

Tuesday March 15	Wednesday March 16	Thursday March 17	Friday March 18	Saturday March 19
3:00 p.m. – 6:00 p.m. Registration	7:00 a.m. – 7:00 p.m. Registration	7:00 a.m. – 5:00 p.m. Registration	7:00 a.m. – 5:00 p.m. Registration	7:00 a.m. – 2:00 p.m. Registration
2:00 p.m. – 6:00 p.m. Council Meeting (SGI Council Only)	<p>8:30 a.m. – 4:30 p.m. Satellite Meeting Placenta Association of the Americas</p> <p>8:30 a.m. - 4:30 p.m. Satellite Meeting Fetal Physiology</p> <p>8:30 a.m. – 4:30 p.m. Satellite Meeting Myometrial Function and Parturition</p> <p>8:30 a.m. - 4:30 p.m. Satellite Meeting Endometrium</p> <p>8:30 a.m. - 4:30 p.m. Satellite Meeting Preterm Birth International Collaborative (PREBIC)</p> <p>4:30 p.m. - 5:45 p.m. Reproductive Sciences Editorial Board Meeting (Board Members Only)</p> <p>4:30 p.m. - 5:30 p.m. SGI/Ferring Trainee Symposium</p> <p>5:30 p.m. – 6:30 p.m. Women in Reproductive Sciences Symposium Alan Guttmacher, M.D. (Open to Everyone)</p> <p>6:30 p.m. - 8:00 p.m. Welcome Reception</p>	<p>8:00 a.m. – 8:10 a.m. Welcome Address</p> <p>8:10 a.m. – 9:00 a.m. President's Distinguished Lecture I "Nuclear Transfer and Cellular Reprogramming" Jose Cibelli, DVM, PhD Michigan State University</p> <p>9:00 a.m. - 10:00 a.m. President's New Investigator Plenary Session</p> <p>10:00 a.m. - 12:00 p.m. Poster Session I With Coffee Break</p> <p>11:00 a.m. – 12:00 p.m. SGI Program Committee Meeting</p> <p>12:00 p.m. – 1:30 p.m. SGI President's Presenter Awards Luncheon (By Invitation Only)</p> <p>12:00 p.m. – 1:30 p.m. PerkinElmer Lunchtime Symposium</p> <p>1:30 p.m. – 3:30 p.m. Mini Symposia I (6 Concurrent Sessions)</p> <p>3:30 p.m. - 3:45 p.m. Break</p> <p>3:45 p.m. - 5:45 p.m. Concurrent Oral Presentations I (7 Concurrent Sessions)</p> <p>6:00 p.m. – 7:00 p.m. SGI Annual Business Meeting (SGI Members Only)</p> <p>7:30 p.m. – 9:30 p.m. President's Private Dinner (Invitation Only)</p>	<p>8:00 a.m. – 9:00 a.m. President's Distinguished Lecture II "hESC Ethics and Regulation" R. Alta Charo, JD</p> <p>9:00 a.m. – 11:00 a.m. Poster Session II With Coffee Break</p> <p>11:00 a.m. – 12:30 p.m. Concurrent Oral Presentations II (6 Concurrent Sessions)</p> <p>12:30 p.m. – 2:00 p.m. New Investigator Toolbox With Boxed Lunch</p> <p>12:30 p.m. – 2:00 p.m. Past President's Luncheon (Invitation Only)</p> <p>2:00 p.m. – 3:00 p.m. SGI Corporate Advisory Board Meeting (Members Only)</p> <p>2:00 p.m. – 4:00 p.m. Mini Symposia II (6 Concurrent Sessions)</p> <p>4:00 p.m. – 4:15 p.m. Break</p> <p>4:15 p.m. – 5:45 p.m. Concurrent Oral Presentations III (6 Concurrent Sessions)</p> <p>5:45 p.m. – 7:15 p.m. Wine & Cheese Reception Presidential Address & Awards Ceremony</p>	<p>8:00 a.m. – 9:30 a.m. Concurrent Oral Presentations IV (6 Concurrent Sessions)</p> <p>9:30 a.m. – 11:30 a.m. Poster Session III With Coffee Break</p> <p>11:30 a.m. – 12:30 p.m. President's Award Lectures Distinguished Scientist Award President's Achievement Award</p> <p>12:30 p.m. – 2:00 p.m. Awards Ceremony Best New Investigator Poster Awards President's Pizza Bash</p> <p>2:30 p.m. – 4:30 p.m. SGI Council Meeting (SGI Council Only)</p>

“Reproduction and Regenerative Medicine”
58th Annual Meeting of the Society for Gynecologic Investigation
March 16-19, 2011
Fontainebleau Miami, Miami Beach, FL, USA

Tuesday, March 15, 2011

2:00 p.m. - 6:00 p.m. SGI Council Meeting (*SGI Council Members Only*) - [Flash](#)

3:00 p.m. – 6:00 p.m. Registration – [Luster Galerie](#)

Wednesday, March 16, 2011

7:00 a.m. – 7:00 p.m. Registration – [Luster Galerie](#)

8:00 a.m. – 4:00 p.m. SGI Satellite Meetings

**Placenta Association of the Americas – [Glimmer 1](#)
Satellite Symposium 2011**

Morning Session: Extravillous Trophoblast

Program Director: John J. Moore, M.D., Division of Neonatology Department of Pediatrics
MetroHealth Medical Center, Cleveland, OH, USA

Co-Chair: Charles H. Graham, Department of Anatomy and Cell Biology, Queens University, Kingston, ON, Canada

8:30 a.m. – 9:30 a.m. **Maternal Inflammation and Shallow Trophoblast Invasiveness**
Charles H. Graham, Ph.D., Department of Anatomy and Cell Biology, Queens University
Kingston, ON, Canada

9:30 a.m. – 10:00 a.m. **Coffee Break**

10:00 a.m. – 11:00 a.m. **Role of Uterine NK Cells in Trophoblast Invasion and Spiral Artery Remodeling in Early Human Pregnancy**
Judith Bulmer, Ph.D., Reproductive and Vascular Biology Group, Institute of Cellular Medicine
Newcastle University, Newcastle Upon Tyne, UK

11:00 a.m. – 12:00 p.m. **Trophoblast Mechanisms of Extravillous Differentiation and Survival**
D. Randall Armant, Ph.D., Program in Reproductive & Adult Endocrinology, NICHD
and Wayne State University School of Medicine, Detroit, MI, USA

12:00 p.m. – 1:00 p.m. **Lunch**

Afternoon Session: Placental Transport

Co-Chair: Leslie Myatt, Ph.D., University of Texas HSC at San Antonio, San Antonio, TX, USA

1:00 p.m. – 2:00 p.m. **A Tale of Two Membranes: An Integrated View of Placental Amnio Acid Transport**
Rohan Lewis, Ph.D., Institute of Developmental Sciences, University of Southampton, Southampton, UK

2:00 p.m. – 3:00 p.m. **Placental Homocysteine Transport and Metabolism: Interactions with Folate and Vitamin B₁₂**
Jo Glazier, Ph.D., Maternal and Fetal Health Research Group, University of Manchester, Manchester, UK

3:00 p.m. – 3:30 p.m. **Coffee Break**

3:30 p.m. – 4:30 p.m. **Placental Transfer of Medications**
Mahmoud Ahmed, Ph.D., Department of Ob-Gyn, UTMB, Galveston, TX, USA

Fetal Physiology Satellite Symposium 2011 – [Glimmer 2](#)

8:15 a.m. - 8:30 a.m. **Introduction**
Lorna G Moore, Ph.D., Professor of Obstetrics & Gynecology
Wake Forest University Health Sciences, Winston-Salem, NC, USA

8:30 a.m. – 9:30 a.m. **The Remarkable Vasodilatory Response to Pregnancy: Mechanisms, Implications and Spin-offs**
Kirk Conrad, Ph.D., Professor of Physiology
University of Florida, Gainesville, FL, USA

9:30 a.m. – 10:00 a.m. **Coffee Break**

10:00 a.m. – 11:00 a.m. **Gene Array and microRNA Studies: Implications for Understanding Pregnancy Outcomes**
Susan Fisher, Ph.D., Professor of Stem Biology
University of California at San Francisco, San Francisco, CA, USA.

- 11:30 a.m. – 12:00 p.m. mTOR and the Regulation of Placental Protein Synthesis**
Graham J. Burton, Ph.D., Professor of Reproductive Biology
University of Cambridge, Cambridge, UK
- 12:00 a.m. -1:00 p.m. Lunch**
- 1:00 p.m. – 2:00 p.m. Identification of a New Molecular Pathogenesis of Preeclampsia Defines a New Therapy**
Asif Ahmed, Ph.D., Professor of Obstetrics & Gynecology
University of Edinburgh, UK
- 2:00 p.m. – 3:00 p.m. Perinatal Origins of Chronic Mountain Sickness: A New Pathway for Fetal Programming?**
Colleen G. Julian, Ph.D., Postdoctoral Fellow,
Altitude Research Center - University of Colorado, Denver, CO, USA.
- 3:00 p.m. – 3:30 p.m. Coffee Break**
- 3:30 p.m. – 4:30 p.m. Obesity and Fetal Programming**
Lucilla Poston, Ph.D., Director Maternal and Fetal Research Unit
Kings College London, London, UK.

Myometrial Function and Parturition – [Glimmer 3](#) Satellite Symposium 2011

- 8:30 a.m. – 9:30 a.m. Genetics, Connective Tissue and Preterm Birth**
Jerome Strauss, M.D., Ph.D., Dean, School of Medicine, Virginia Commonwealth University and Executive Vice President for Medical Affairs, VCU Health System
Adjunct Professor of Obstetrics and Gynecology, University of Pennsylvania, Philadelphia, PA, USA
Virginia Commonwealth University, Richmond, VA, USA
- 9:30 a.m. – 10:00 a.m. Coffee Break**
- 10:00 a.m. – 11:00 a.m. Cytoskeletal Lysine Acetylation: A New Post-Translational Modification Regulating Myometrial Function**
G.N. Europe-Finner, Ph.D., Professor of Myometrial Science
Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK
- 11:00 a.m. – 12:00 p.m. Microdomains: Mysterious Places of Myometrial Regulation**
Helena C. Parkington, Ph.D., Professor of Physiology
Monash University, Victoria, Australia
- 12:00 p.m. – 1:00 p.m. Lunch**
- 1:00 p.m. – 2:00 p.m. The Circadian Timing of Parturition: A New Perspective**
James Olcese, Ph.D., Associate Professor of Biomedical Sciences, Neuroscience and Molecular Biophysics
Florida State University, Tallahassee, FL, USA
- 2:00 p.m. – 3:00 p.m. Molecular Mechanisms of Progesterone Action in the Female Reproductive Tract**
Francesco DeMayo, Ph.D., Professor of Developmental Biology
Baylor College of Medicine, Houston, TX, USA
- 3:00 p.m. – 3:30 p.m. Coffee Break**
- 3:30 p.m. – 4:30 p.m. Molecular Mechanisms of Estrogen Signaling**
W. Lee Kraus, Ph.D., Director, Cecil H. and Ida Green Center for Reproductive Biology
Professor and Vice Chair for Basic Science, Department of Ob-Gyn
The University of Texas Southwestern Medical Center, Dallas, TX, USA

Endometrial – [Glimmer 4](#) Satellite Symposium 2011

- Program Organizers/
Moderators:** Peter Rogers, Ph.D., Monash University, Clayton, Victoria, Australia
Asgerally Fazleabas, Ph.D., Michigan State University, Grand Rapids, MI, USA
- 8:30 a.m. – 9:30 a.m. Environmental Contaminants and Uterine/Oviducal Development: An Embryonic Basis for Endometriosis**
Louis J. Guillette, Ph.D. – Medical University of South Carolina, Charleston, SC, USA
- 9:30 a.m. – 10:00 a.m. Coffee Break**
- 10:00 a.m. – 11:00 a.m. Environmental Toxicant Exposure and the Progesterone-Insensitive Endometriosis Phenotype**
Kevin Osteen, Ph.D. – Women's Reproductive Health Research Center
Vanderbilt University, Nashville, TN, USA
- 11:00 a.m. – 12:00 p.m. Genes Contributing to Endometriosis: The Role of Common Variants and New Mutations**
Kenneth Ward, M.D. – Lucina Foundation, Salt Lake City, UT, USA
- 12:00 p.m. – 1:00 p.m. Lunch**

- 1:00 p.m. – 2:00 p.m. Genetic Risk Factors for Endometriosis**
Grant Montgomery, Ph.D. - Queensland Institute of Medical Research, Queensland, Australia
- 2:00 p.m. – 3:00 p.m. Neural Mechanisms of Pain in Endometriosis: Lessons from a Rat Model**
Karen Berkley, Ph.D. – Florida State University, Tallahassee, FL, USA
- 3:00 p.m. – 3:30 p.m. Coffee Break**
- 3:30 p.m. – 4:30 p.m. Chronic Pelvic Pain and Endometriosis: Translational Evidence of the Relationship and Implications**
Pamela Stratton, M.D. – Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD, USA

**Global Issues for Preterm Birth: Epidemiology, Genetics and Pathophysiology – [Glimmer 6](#)
Updates by Preterm Birth International Collaborative (PREBIC) and World Health Organization
Satellite Symposium 2011**

Morning Session:

Moderator: Ramkumar Menon, Ph.D., Emory University, Atlanta, GA, USA

- 8:30 a.m. – 8:40 a.m. Preterm Birth International Collaborative – Update 2011**
Calvin J Hobel, MD, Miriam Jacobs Chair in Maternal Fetal Medicine
Cedars Sinai Medical Center, Los Angeles, CA, USA
- 8:40 a.m. – 9:30 a.m. Preterm Birth: An Epidemiological Prospective**
Vinod Paul, M.D., Division of Neonatology, Department of Pediatrics
All India Institute of Medical Science, New Delhi, India
- 9:30 a.m. – 10:00 a.m. Coffee Break**
- 10:00 a.m. – 11:00 a.m. Genome-Wide Approaches to the Causes of Preterm Birth**
Jeff Murray, M.D., Neonatology and Genetics, Professor of Biological Sciences, Dentistry, and
Epidemiology in the College of Public Health
University of Iowa, Iowa City, IA, USA
- 11:00 a.m. – 12:00 p.m. Novel Mechanisms of Disease Responsible for Preterm Labor and Fetal Injury**
Roberto Romero, M.D., Chief, Perinatology Research Branch, Program Director for Obstetrics and
Perinatology Intramural Division, NICHD, NIH, DHHS
Wayne State University, Detroit, MI, USA
- 12:00 p.m. – 1:00 p.m. Lunch**

Afternoon Session:

Moderator: Mario Meriardi, M.D., Ph.D., MPH - Coordinator, Improving Maternal and Perinatal Health (MPH)
Reproductive Health and Research (RHR), World Health Organization, Geneva, Switzerland

- 1:00 p.m. – 2:00 p.m. Evolutionary Genomic Insights into Pregnancy, Placentation, and Preterm Birth**
Derik Wildman, Ph.D., Center for Molecular Medicine and Genetics Molecular Evolution Group
Wayne State University, Detroit, MI, USA
- 2:00 p.m. – 3:00 p.m. The Maternal and Placental Origins of Chronic Disease**
David Barker, M.D., Ph.D., FRS, Professor of Clinical Epidemiology,
University of Southampton, Southampton, UK
Professor in Cardiovascular Medicine
Oregon Health & Science University, Portland, OR, USA
- 3:00 p.m. – 3:30 p.m. Coffee Break**
- 3:30 p.m. – 4:30 p.m. Evidence Based Interventions in Preterm Birth**
Vincenzo Berghella, M.D., Department of Obstetrics & Gynecology
Director, Division of Maternal Fetal Medicine
Thomas Jefferson University, Philadelphia, PA, USA
- 4:30 p.m. – 5:45 p.m. Reproductive Sciences Editorial Board Meeting (*Members Only*) – [Flicker 1](#)**

4:30 p.m. – 5:30 p.m. SGI/ Ferring Trainee Symposium 2011 – [Glimmer 5](#)
(Supported in part with a grant from Ferring Pharmaceuticals, Inc.)

The meeting will focus extensively on mentorship and training. Building on previous Ferring sponsored symposia, the 2011 event will feature the newly appointed Dean of Medicine at the University of Western Ontario. Dean Strong will describe his University's new efforts to vertically integrate the scientific mentoring of junior faculty and young research trainees.

Next will be the personal experiences of two recent trainees, their funding, their successes and failures. Both have since completed their training and hold faculty positions in institutions of higher learning.

Speakers

Bedside to Bench and Back Again: Training the Next Generation of Clinical Academics

Michael J. Strong, MD, FRCSC, Dean of the Faculty of Medicine
University of Western Ontario, London, Ontario, Canada

Reflections on the Road to an Independent Research Career: The Physician Scientist Perspective

Caleb Kallen, MD, PhD – Emory University, Atlanta, GA, USA

Reflections on the Road to an Independent Research Career: The Basic Scientist Perspective

Peta Grigsby, PhD – Oregon Health Sciences, Portland, OR, USA

5:30 p.m. – 6:30 p.m. Women in Reproductive Sciences Symposium (This session is open to everyone) – [Glimmer 5](#)

A discussion with the newly appointed Director of *The Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD).



Speaker

A Discussion with the Director of NICHD

Alan Guttmacher, M.D. – Director of The *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, Bethesda, MD, USA

6:30 p.m. - 8:00 p.m. Welcome Reception – [Ocean Lawn](#)

Thursday, March 17, 2011

7:00 a.m. – 5:00 p.m. Registration – [Luster Gallerie](#)

8:00 a.m. – 8:10 a.m. Welcome Address – [Glimmer Ballroom](#)

8:10 a.m. – 9:00 a.m. President's Distinguished Lecture I – [Glimmer Ballroom](#)

Nuclear Transfer and Cellular Reprogramming

Jose Cibelli, DVM, Ph.D. - Michigan State University, Lansing, MI, USA

9:00 a.m. – 10:00 a.m. President's New Investigator Plenary Session – [Glimmer Ballroom](#)

10:00 a.m. – 12:00 p.m. Poster Session I (with coffee break) – [Sparkle](#)

11:00 a.m. – 12:00 p.m. SGI Program Committee Meeting – [Shimmer](#)

12:00 p.m. – 1:30 p.m. Pfizer President's Presenter Awards Luncheon - [Splash 11 & 12](#)

(Supported in part with a grant from Pfizer)

12:00 p.m. – 1:30 p.m. PerkinElmer Lunchtime Symposium – [Splash 9 & 10](#)

First Trimester Strategies for Prediction, Management and Prevention of Preeclampsia

(Supported with a grant from PerkinElmer)

First Trimester Maternal Serum Markers for Adverse Obstetric Outcomes Including Preeclampsia

Lorraine Dugoff, M.D., University of Colorado, Denver School of Medicine, Aurora, CO

Clinical Detection and Management of Placental Dysfunction, Including Preeclampsia in Early Pregnancy

John Kingdom, M.D., Mt. Sinai Hospital, Toronto, Canada

Prevention of Preeclampsia and IUFR with Aspirin Started in Early Pregnancy, A Meta Analysis

Emmanuel Bujold, M.D., Laval University, Quebec, Canada

Mini Symposia I

1:30 p.m. - 3:30 p.m.

a. **Stem Cells: Derivation, Induction and Application in Reproductive Sciences – [Flicker 2 & 3](#)**

(In collaboration with the American Society for Reproductive Medicine)

Moderator: Caroline Gargett, Ph.D. – Monash Institute of Medical Research, Clayton, Victoria, Australia

In-Training Co-Moderator: Lusine Aghajanova M.D., Ph.D. – UCSF, San Francisco, CA, USA

The Stem Cell mini-symposium will cover recent exciting developments in pluripotent and adult stem cell research and their potential applications to reproductive medicine. Topics on pluripotent stem cells cover the basic science behind the reprogramming of somatic cells to form induced pluripotent stem cells (iPS) and the differentiation of human embryonic stem cells into gametes. Further evidence for germline stem cells in the ovary and the implications for ovarian failure will also be covered. Finally, the potential use of human endometrial mesenchymal stem cells for a tissue engineering application in pelvic organ prolapse repair surgery will be explored.

1:30 p.m. – 2:00 p.m.

Induced Pluripotent Cells and Cellular Reprogramming: the Basics

Jose Cibelli, DVM, Ph.D. – Michigan State University, Lansing, MI, USA

2:00 p.m. – 2:30 p.m.

Germ Cell Differentiation from Human Embryonic Stem Cells

Carlos Simon, M.D., Ph.D. – Valencia University, Valencia, Spain

2:30 p.m. – 3:00 p.m.

Germline Stem Cells in the Ovary: Implications for Ovarian Failure

Jonathan Tilly, Ph.D. – Massachusetts General Hospital, Boston, MA, USA

3:00 p.m. – 3:30 p.m.

Endometrial Stem/Progenitor Cells for Tissue Engineering the Pelvic Floor

Caroline Gargett, Ph.D. – Monash Institute of Medical Research, Clayton, Victoria, Australia

b. **Preeclampsia: Why Predict It If We Can't Prevent It? – [Glimmer 5](#)**

Moderator: Leslie Myatt, Ph.D. – University of Texas HSC at San Antonio, San Antonio, TX, USA

In-Training Co-Moderator: Arun Jeyabalan M.D. – University of Pittsburgh, Pittsburgh, PA, USA

Preeclampsia affects up to 7% of the pregnant population and is associated with significant fetal and maternal morbidity and mortality. Clinically it presents as early and late onset and mild or severe phenotypes. Despite no prophylaxis being available for treatment or prevention, the ability to predict preeclampsia would define populations for increased clinical surveillance; enrich populations for clinical biophysical and biochemical markers of trophoblast invasion and function, and angiogenic activity. While small scale studies have promised potential for prediction, studies with larger patient numbers often display a lack of sensitivity and specificity. This mini-symposium will address the principles and challenges of predicting preeclampsia and whether the syndrome of preeclampsia encompasses more than one disease and the subsequent implications for prediction and prevention. Data will be presented from large scale clinical studies utilizing a variety of biomarkers for prediction that also addresses whether different disease phenotypes can be defined via different panels of biomarkers. The utility of “omic” technologies to identify novel candidates for prediction of disease and to help define pathophysiology will be presented.

1:30 p.m. – 2:00 p.m.

Preeclampsia – More Than One Disease? Implications for Prediction and Prevention

James Roberts, M.D. – University of Pittsburgh, Pittsburgh, PA, USA

2:00 p.m. – 2:30 p.m.

Principles and Challenges of Predicting Preeclampsia

Robyn North, Ph.D. – Kings College London, London, UK

2:30 p.m. – 3:00 p.m.

Prediction of Preeclampsia in Low Risk Women – Can We Define Different Phenotypes of Disease

Leslie Myatt, Ph.D. – University of Texas HSC at San Antonio, San Antonio, TX, USA

3:00 p.m. – 3:30 p.m.

Can Proteomic Technologies Deliver New Screening Candidates for Preeclampsia?

Jenny Myers, Ph.D. – University of Manchester, Manchester, UK

c. **Endometriosis: Innovation in Medical Treatments – [Glimmer 3 & 4](#)**

Moderator: Felice Petraglia, M.D. – University of Siena, Siena, Italy

In-Training Co-Moderator: Hongling Du, M.D., Ph.D. – Yale University School of Medicine, New Haven, CT, US

Endometriosis is a syndrome which involves multiple pathogenetic pathways. Therefore, there is a rationale for proposing and investigating various medical treatments, which may be used in addition or as a substitute for surgery. Current studies are searching for new hormonal, anti inflammatory, immunomodulatory or antiangiogenic drugs. The effect of dopamine agonists, statins and herbs will be explored in this mini-symposium.

1:30 p.m. – 2:00 p.m.

Endometriosis: Innovations in Medical Treatment

Felice Petraglia, M.D. – University of Siena, Siena, Italy

2:00 p.m. – 2:30 p.m.

Dopamine Agonists to Treat Angiogenesis in the Medical Treatment of Endometriosis

Antonio Pellicer, M.D. – Valencia University, Valencia, Spain

2:30 p.m. – 3:00 p.m.

Effects of Statins on Endometrium and Endometriosis

Anna Sokalska, M.D., Ph.D. – University of California-Davis, Davis, CA, USA

3:00 p.m. – 3:30 p.m.

Mechanisms of Herbs in Endometriosis

Friedrich Wieser, M.D. – Emory University School of Medicine, Atlanta, GA, USA

d. Stratified Medicine (New Investigator Mini Symposium) – [Glimmer 6](#)

Moderator: Philip Baker, FRCOG – University of Alberta, Alberta, Canada

In-Training Co-Moderator: Fergus McCarthy, MBCh – Cork University Maternity Hospital, Wilton, Ireland)

Stratified medicine, or personalized medicine, involves the use of biomarkers to identify those patients most likely to benefit or experience adverse effects of a treatment. Stratified medicine may also be used to determine the predisposition to disease and to deliver timely and stratified prevention at a population level. This developing field is likely to have a major effect on clinical practice and the development of new diagnostic tests and pharmacological interventions. The move towards stratified medicine is a stepwise process; therefore we decided to devote our 58th SGI annual In-Training mini-symposium to explore this subject. We invited 4 experts in the field of personalized medicine to share their skills and experiences and we are delighted to invite both scientists and clinical practitioners to participate in this mini-symposium.

- 2:00 p.m. – 2:30 p.m. Women’s Health and Personalized Medicine: Opportunities in Research and Clinical Practice**
Teresa K. Woodruff, Ph.D. – Northwestern University, Chicago, IL USA
- 2:30 p.m. – 3:00 p.m. Predictive Markers: When Can a Marker Help in Treatment Decisions?**
Patrick Bossuyt, Ph.D. – University of Amsterdam, Amsterdam, The Netherlands
- 3:00 p.m. – 3:30 p.m. Personalized Medicine: The Changing Landscape of Healthcare**
Edward Abrahams, Ph.D. – Personalized Medicine Coalition, Washington, DC, USA
- 3:30 p.m. – 4:00 p.m. Development and Evaluation of Prenatal Markers Using OMIC Technologies**
Philip Baker, FRCOG – University of Alberta, Alberta, Canada

e. Mechanisms and Management of Tumor Metastasis – [Glimmer 1 & 2](#)

Moderator: Setsuko Chambers, M.D. – Arizona Cancer Center, Tucson, AZ, USA

In-Training Co-Moderator: Heidi Godoy, M.D. – Roswell Park Cancer Institute, Buffalo, NY, USA

There are many mechanisms which influence tumor behavior and metastasis. This mini-symposium, geared to reproductive scientists, will cover concepts which may parallel those important to reproductive biology. The objective is to take-home concepts in cytokine signaling, immune modulation, targeting of molecular mediators, and post-transcriptional regulation, which may impact on aspects of future reproductive science research.

- 1:30 p.m. – 2:00 p.m. The Pathogenesis in Endometriosis in Relation to Mechanisms in Malignant Disorders**
Ludwig Kiesel, M.D., Ph.D. – University of Muenster, Muenster, Germany
- 2:00 p.m. – 2:30 p.m. Immune Tolerance at the Tumor-Host Interface: Many Parallels to Reproductive Immunology?**
George Coukos, M.D. – University of Pennsylvania, Philadelphia, PA, USA
- 2:30 p.m. – 3:00 p.m. Molecular Targeting of Metastatic Cancer**
Anil Sood, M.D. – University of Texas, MD Anderson Cancer Center, Houston, TX, USA
- 3:00 p.m. – 3:30 p.m. RNA Binding Proteins and miRNA Post-Transcriptional Regulation of Tumor Behavior**
Setsuko Chambers, M.D. – Arizona Cancer Center, Tucson, AZ, USA

f. CAB Symposium – Fibroids: Therapeutically Useful Molecular Mechanisms – [Glimmer 7](#)

Moderator: Serdar Bulun, M.D. – Northwestern University, Chicago, IL, USA

This symposium was designed to stimulate discussions on signaling pathway and genetic mechanisms involved with fibroid development and growth. Defining novel molecular targets may lead to generation of new treatments of introduction of uterine fibroids as a new indication for signaling inhibitor drugs that exist at various stages of development in the market.

- 1:30 p.m. – 2:00 p.m. Molecular and Cellular Origins of Uterine Fibroids**
Cheryl Walker, Ph.D. – The University of Texas, MD Anderson Cancer Center, Houston, TX, USA
- 2:00 p.m. – 2:30 p.m. Fibroids and the Sex Steroid Cascade: Therapeutic Targets Old and New**
Erica Marsh, M.D. – Northwestern University, Chicago, IL, USA
- 2:30 p.m. – 3:00 p.m. Retinoid-Related Mechanisms in Uterine Fibroids**
William Catherino, M.D., Ph.D. – NICHD, Bethesda, MD, USA
- 3:30 p.m. – 4:00 p.m. A Unique Target: Progesterone and AKT Crosstalk in Fibroids**
J. Julie Kim, Ph.D. – Northwestern University, Chicago, IL, USA
- 3:30 p.m. – 3:45 p.m. Break**
- 3:45 p.m. – 5:45 p.m. Concurrent Oral Presentations 1 (7 Concurrent Sessions)**
- a. **Basic Parturition I – [Glimmer 3 & 4](#)**
 - b. **Fetal Programming: Brain, Heart & Hormones – [Glimmer 6](#)**
 - c. **Gynecology – [Glimmer 1 & 2](#)**
 - d. **Perinatology I – Diabetes, Nutrition & Metabolism – [Flicker 1](#)**
 - e. **Placenta Transport & Metabolism - [Glimmer 5](#)**
 - f. **Preeclampsia & Related Disorders - [Glimmer 7](#)**
 - g. **Reproductive Biology & Immunology I – [Flicker 2 & 3](#)**

- 6:00 p.m. – 7:00 p.m. **SGI Annual Business Meeting** (*Members Only*) – [Glimmer 1 & 2](#)
- 7:30 p.m. – 9:30 p.m. **President's Private Dinner** (invitation only) – [Glimmer Terrace](#)

Friday, March 18, 2011

- 7:00 a.m. – 5:00 p.m. **Registration** – [Luster Gallerie](#)
- 8:00 a.m. – 9:00 a.m. **President's Distinguished Lecture II** – [Glimmer Ballroom](#)
Human Embryonic Stem Cells: Ethics and Regulation
 R. Alta Charo, J.D. – University of Wisconsin Law School, Madison, WI, USA
- 9:00 a.m. – 11:00 a.m. **Poster Session II** (*with coffee break*) – [Sparkle](#)
- 11:00 a.m. – 12:30 p.m. **Concurrent Oral Presentation II** (*6 Concurrent Sessions*)
- Basic Parturition II – Inflammation & Infection** – [Glimmer 3 & 4](#)
 - Clinical Parturition & Prematurity** – [Glimmer 1 & 2](#)
 - Epidemiology** - [Glimmer 5](#)
 - Fetus: Growth & Metabolism (Programming)** - [Glimmer 6](#)
 - Maternal Physiology & Biology** - [Glimmer 7](#)
 - Reproductive Biology & Immunology** – [Flicker 2 & 3](#)

New Investigator Toolbox (*with boxed lunch*) – [Glimmer 1 & 2](#)

12:30 p.m. – 2:00 p.m.

In-Training Moderator: Sam Pauli, M.D. - Emory University, Atlanta, GA, USA

12:30 p.m. – 1:00 p.m. **Hospital-Medical Faculty Collaboration: A Mechanism for Facilitating Translational Research**
 Philip Baker, FRCOG – University of Alberta, Edmonton, Alberta, Canada

1:00 p.m. – 1:30 p.m. **Advice from the Editor: Optimizing your Manuscript Reviews**
 D. Michael Nelson, M.D., Ph.D. – Washington University, St. Louis, MO, USA

1:30 p.m. – 2:00 p.m. **How to Grow Your Career: What to Do After You Get Your First Big Grant**
 Kelle Moley, M.D., Washington University, St. Louis, MO, USA

12:30 p.m. – 2:00 p.m. **Past Presidents Luncheon** (*Invitation Only*) - [Flash](#)

2:00 p.m. – 3:00 p.m. **SGI Corporate Advisory Board Meeting** (*Members Only*) – [Flicker 1](#)

Mini Symposia II

2:00 p.m. - 4:00 p.m.

a. **Microchimerism and Its Role in Regeneration and Reproductive Outcomes** – [Flicker 2 & 3](#)

Moderator: Diana Bianchi, M.D. – Tufts Medical Center, Boston, MA, USA

In-Training Co-Moderator: David Lissauer, M.D. – University of Birmingham, Birmingham, UK

This translational multi-disciplinary mini-symposium will address recent knowledge regarding fetal and maternal microchimerism in humans and mouse models. The mini-symposium will address issues that occur as a result of microchimerism both during and after pregnancy. Some of the fetal microchimeric cells in the mother have stem cell-like properties, which has implications for both regenerative medicine and the long term health of parous females.

2:00 p.m. – 2:30 p.m. **Microchimeric Fetal Cells and the Repair of Maternal Lung Disease**
 Diana Bianchi, M.D. – Tufts Medical Center, Boston, MA, USA

2:30 p.m. – 3:00 p.m. **Use of Iatrogenic Microchimerism to Explore Stem Cell Differentiation**
 Hugh Taylor, M.D. – Yale University School of Medicine, New Haven, CT, USA

3:00 p.m. – 3:30 p.m. **Microchimerism and Adverse Reproductive Outcomes**
 Hilary Gammill, M.D. – University of Washington, Seattle, WA, USA

3:30 p.m. – 4:00 p.m. **Microchimerism and Tolerance**
 William Burlingham, Ph.D. – University of Wisconsin-Madison, Madison, WI, USA

b. Cardiovascular Adaptation to Pregnancy in Health and Disease – [Glimmer 5](#)

Moderator: Marilyn Cipolla, Ph.D. – University of Vermont, Burlington, VT, USA

In-Training Co-Moderator: Perrie O'Tierney, Ph.D. – Oregon Health & Science University, Portland, OR, USA)

This mini-symposium will focus on the tremendous adaptation of the cardiovascular system to pregnancy and how that adaptation either contributes to disease states such as preeclampsia/eclampsia or is altered under those conditions. In addition, this mini-symposium will focus on changes in systemic, renal, uteroplacental and brain circulations and how these unique organs are affected by normal pregnancy and disease states.

- 2:00 p.m. – 2:30 p.m. Mechanisms Controlling Uterine Blood Flow Adaptation During Pregnancy**
Ronald Magness, Ph.D. – University of Wisconsin-Madison, Madison, WI, USA
- 2:30 p.m. – 3:00 p.m. Pregnancy and Relaxin: Vasodilatory Responses and Mechanisms**
Kirk Conrad, M.D. – University of Florida College of Medicine, Gainesville, FL, USA
- 3:00 p.m. – 3:30 p.m. The Adaptation of the Brain to Pregnancy and Preeclampsia: Role of Circulating Factors in Blood-Brain Barrier Permeability and Seizure**
Marilyn Cipolla, Ph.D. – University of Vermont, Burlington, VT, USA
- 3:30 p.m. – 4:00 p.m. Effect of Preeclampsia on Mechanisms of Placentation, Endothelial Function and the Development of Cardiovascular Disease Later in Life**
Christianne JM de Groot, M.D., Ph.D. – Erasmus University Medical Centre, Rotterdam, Netherlands

c. Spontaneous Preterm Labor and Delivery: Novel Mechanisms of Disease and Biomarkers – [Glimmer 3 & 4](#)
(Supported in part with a grant from the Burroughs Wellcome Fund)

Moderator: Roberto Romero, M.D. – Wayne State University, Detroit, MI, USA

In-Training Co-Moderator: Sarah Stock, Ph.D. – University of Edinburgh, Edinburgh, Scotland

This mini-symposium will focus on novel information about mechanisms of disease responsible for the preterm parturition syndrome, the identification and performance of biomarkers using proteomics to predict pregnancy outcome, and the role of genomics in assessing the risk of preterm birth. Since preterm birth is a leading cause of developmental disabilities, this session will conclude with a discussion of the mechanisms of fetal brain injury in infection/inflammation-induced preterm birth.

- 2:00 p.m. – 2:30 p.m. A Novel Mechanism of Disease Accounting for Spontaneous Preterm Birth**
Roberto Romero, M.D. – Wayne State University, Detroit, MI, USA
- 2:30 p.m. – 3:00 p.m. Proteomic Biomarkers in Vaginal Fluid and Amniotic Fluid to Identify the Patient at Risk for Preterm Delivery**
Michael Gravett, M.D. – University of Washington, Seattle, WA, USA
- 3:00 p.m. – 3:30 p.m. Candidate Genes and Whole Genome Association Studies to Identify DNA Variants Predisposing to Spontaneous Preterm Birth?**
Ramkumar Menon, Ph.D. – Emory University, Atlanta, GA, USA
- 3:30 p.m. – 4:00 p.m. New Developments in the Understanding of Fetal Brain Injury in Infection/Inflammation-Induced Preterm Labor and Delivery**
Michal Elovitz, M.D. – University of Pennsylvania, Philadelphia, PA, USA

d. Downstream of RNA: Post-Transcriptional Regulation of Gene Expression – [Glimmer 1 & 2](#)

Moderator: Nasser Chegini, Ph.D. – University of Florida, Gainesville, FL, USA

In-Training Co-Moderator: Jonathan McGuane, Ph.D. – University of Florida, Gainesville, FL, USA

The aim of this mini-symposium is to discuss several aspects of gene expression, regulation and function. Dr. Seli will present and discuss translational regulation of gene expression during oocyte and early embryo development. Dr. Santangelo will present the influence of oxidative stress which affects global gene expression via translational repression, using single RNA sensitive imaging probes, immunofluorescence, and high resolution fluorescence microscopy, to quantitatively characterize changes in native mRNA localization and their interactions with regulatory structures such as stress granules, p-bodies, and the RNA exosome, on a subcellular and per granule basis. Dr. Jansson will present emerging evidence showing that mammalian target of rapamycin signaling regulates placental amino acid transport by affecting the trafficking of transporter proteins between the cytosol and the plasma membrane. Dr. Chegini will present recent evidence of miRNAs expression and regulatory function in uterine environment during normal and pathological conditions. These interactions have many implications for aberrant gene expression leading to various reproductive tract disorders including cancer pathogenesis and microbial infections.

- 2:00 p.m. – 2:30 p.m. Imaging Subcellular mRNA Dynamics and Localization During Oxidative Stress**
Philip Santangelo, Ph.D. – Georgia Institute of Technology at Emory University, Atlanta, GA, USA
- 2:30 p.m. – 3:00 p.m. Translational Regulation of Gene Expression During Oocyte and Early Embryo Development**
Emre Seli, M.D. – Yale University School of Medicine, New Haven, CT, USA
- 3:00 p.m. – 3:30 p.m. Post-Translational Regulation of Placental Nutrient Transporters: Critical Role of Membrane Trafficking**
Thomas Jansson, M.D., Ph.D. – University of Texas HSC at San Antonio, San Antonio, TX, USA
- 3:30 p.m. – 4:00 p.m. Uterine MicroRNA, Signature, Regulation and Function During Normal and Disease States**
Nasser Chegini, Ph.D. – University of Florida, Gainesville, FL, USA

e. Neuroendocrine Manifestations of Stress – [Glimmer 7](#)

Moderator: Sarah Berga, M.D. – Emory University, Atlanta, GA, USA

In-Training Co-Moderator: Nastaran Foyouzi, M.D. – UCSF Center for Reproductive Health, San Francisco, CA, USA

This mini-symposium will delineate the mechanisms mediating some of the common reproductive consequences of stress, including anovulation, infertility, preterm labor and poor fetal neurodevelopment. The mini-symposium will highlight how stress increases chronic health burden in women by illuminating the mechanisms subserving stress-induced obesity and cardiovascular disease. Finally, there will be discussion regarding treatment implications and interventions that might interdict or mitigate the health burden of stress upon reproduction and the long-term health of women and offspring.

- 2:00 p.m. – 2:30 p.m. Pathogenesis and Treatment of Stress-Induced Anovulation**
Sarah Berga, M.D. – Emory University, Atlanta, GA, USA
- 2:30 p.m. – 3:00 p.m. Maternal-Fetal Consequences of Stress**
Hyagriv Simhan, M.D. – University of Pittsburgh, Pittsburgh, PA, USA
- 3:00 p.m. – 3:30 p.m. Stress, Obesity and Reproduction: Lessons from the Monkey Model**
Mark Wilson, Ph.D. – Emory University, Atlanta, GA, USA
- 3:30 p.m. – 4:00 p.m. Health Consequences of Stress-Induced Reproductive Compromise in Monkeys**
Jay Kaplan, Ph.D. – Wake Forest University, Winston-Salem, NC, USA

f. Rodent and Nonhuman Primate Models of Reproduction: Pros and Cons – [Glimmer 6](#)

(In collaboration with the Society for the Study of Reproduction)

Moderator: Peter Nathanielsz, M.D., Ph.D. – University of Texas HSC at San Antonio, San Antonio, TX, USA

In-Training Co-Moderator: Irina Buhimschi, M.D. – Yale University, New Haven, CT, USA

This mini-symposium will discuss the use of animal models to underlie mechanisms and major problems of reproduction. The speakers will address the comparative physiology of use of rodents and nonhuman primates. A central theme will be the need for combined approaches to study whole phenotype and systems function at the molecular level.

- 1:30 p.m. – 2:00 p.m. Rat Models are UnderRATed**
Kathy Sharpe-Timms, Ph.D. – University of Missouri, Columbia, MO, USA
- 2:00 p.m. – 2:30 p.m. Advancing Clinical Interventional Strategies for Infection-Induced Preterm Labor with Our Knowledge from the Nonhuman Primate**
Peta Grigsby, Ph.D. – Oregon National Primate Research Center, Beaverton, OR, USA
- 2:30 p.m. – 3:00 p.m. Humans versus Rodents in Translational Studies of Preterm Labor and Preeclampsia**
Irina Buhimschi, M.D. – Yale University, New Haven, CT, USA
- 3:00 p.m. – 3:30 p.m. Does Developmental Programming Differ Between Precocial Monotocus and Altricial Polytocous Species?**
Peter Nathanielsz, M.D., Ph.D. – University of Texas HSC at San Antonio, San Antonio, TX, USA
- 4:00 p.m. – 4:15 p.m. Break**
- 4:15 p.m. – 5:45 p.m. Concurrent Oral Presentations III (6 Concurrent Sessions)**
- a. Basic Parturition III – Myometrial Function, Membranes & Cervix – [Glimmer 3 & 4](#)
 - b. Endometrium, Implantation & Endometriosis - [Glimmer 1 & 2](#)
 - c. Fetal Hypoxia & Cardiovascular Programming - [Glimmer 6](#)
 - d. Ovarian Biology - [Glimmer 7](#)
 - e. Perinatology II - [Glimmer 5](#)
 - f. Reproductive Endocrinology I – [Flicker 2 & 3](#)
- 6:15 p.m. – 7:15 p.m. Presidential Address & Awards Ceremony – [Glimmer 6](#)**
Wine & Cheese Reception – [Glimmer Corridor](#)

Saturday, March 19, 2011

- 7:00 a.m. – 2:00 p.m. Registration – [Luster Gallerie](#)**
- 8:00 a.m. – 9:30 a.m. Concurrent Oral Presentation IV (6 Concurrent Sessions)**
- a. Angiogenesis, Oxidative Stress & Preeclampsia – [Glimmer 7](#)
 - b. Basic Parturition IV – Hormones, Cytokines & Inflammation/Infection - [Glimmer 3 & 4](#)
 - c. Gynecologic Oncology - [Glimmer 1 & 2](#)
 - d. Placenta Angiogenesis & Invasion - [Glimmer 5](#)
 - e. Programming & Epigenetics - [Glimmer 6](#)
 - f. Reproductive Endocrinology II – [Flicker 2 & 3](#)

9:30 a.m. – 11:30 a.m. **Poster Session III (with coffee break) – [Sparkle](#)**

11:30 a.m. – 12:30 p.m. **President’s Award Lectures – [Glimmer 5](#)**

***Distinguished Scientist**

James M. Roberts, M.D. - Magee-Women’s Research Institute, Pittsburgh, PA, USA

***President’s Achievement Award**

Lisa M. Halvorson, M.D. - University of Texas Southwestern Medical Center, Dallas, TX, USA

12:30 p.m. – 2:00 p.m. **Awards Ceremony – [Glimmer 6](#)**

“Best New Investigator Poster Awards”

President’s Pizza Bash – [Glimmer Terrace](#)

2:00 p.m. **Meeting Adjourns**

2:30 p.m. – 4:30 p.m. **SGI Council Meeting (SGI Council Only) – [Flash](#)**