

# **Society for Sex Therapy and Research**



## ***SSTAR 2008: 33<sup>rd</sup> Annual Meeting***

**Continuing Medical Education Credit is provided through joint sponsorship with The American College of Obstetricians and Gynecologists (ACOG).**

**Intercontinental Hotel  
Chicago, Illinois USA  
March 13-15, 2008**

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- Continental Breakfast (Friday) & Breakfast Roundtables with Speakers (Saturday)
- Tour of the Art Institute of Chicago & Millenium Park/Michigan Avenue stroll (Friday)
- Pizza Dinner for Students (Friday)
- Fellowship Dinners at Local Restaurants (Friday & Saturday night)

## PRESIDENT'S WELCOME

**W**elcome to the 33rd Annual Meeting of the Society for Sex Therapy and Research in fabulous Chicago. Whether you are a long-time SSTAR aficionado or you have come to this conference for the first time, you will find welcoming, enthusiastic, knowledgeable and gracious sex therapists and researchers versed in multiple specialties, cross-fertilizing in the relaxed, intimate atmosphere of a SSTAR meeting. We appreciate quality state-of-the-art presentations, good humor, fine food, interesting excursions, and warm friendships.

Thursday, you may be attending one of the fascinating workshops by the masters, intended for clinicians new to the field as well as those interested in the nuances and new theories in the areas of dyspareunia and multicultural perspectives. Thursday evening, after our inviting and generous welcoming reception, we will have the 2008 outstanding Professional Book Award presentation and a movie of the controversial icon, Betty Dodson, moderated by our own eloquent Derek Polonsky MD.

The program is impressive! Dr. Caroline Pukall, our scientific chair, has put together a meeting that appeals to the mental health practitioner, medical clinician, and university researcher. I want to thank Caroline for her indefatigable efforts and her diverse selection of presenters, notable for their theoretical and clinical applications in the field of sexuality. I am excited to hear the expert speakers and provocative, cutting edge lectures, posters and papers.

Dr. Richard Carroll, as our local arrangements chairperson, has taken us to the Intercontinental Hotel, a beautiful historic building, built in 1929 as the Medinah Athletic Club and lavishly redone as a fine hotel. It is nationally famous for its eclectic architecture and interior décor. It is also in the heart of the Magnificent Mile, the cultural and shopping center of the city. For St. Patrick's Day, Richard has even managed to turn the Chicago River green! Another treat Richard has arranged is the special guided tour on Friday of "Sex in Art" at the Chicago Art Institute followed by a tour of Millennium Park. Richard has also set up our popular fellowship dinners at wonderful restaurants, a nice time to visit with old friends and new. For students, SSTAR student research award chair, Dr. Stephanie Kuffel will host a Pizza Party on Friday evening.

If you enjoy the clinical part of the meeting, plan on joining us at our fall clinical conference on Friday, September 19, 2008 at the Penn Club in New York, or come to our meeting next year at the beautiful Ritz Carlton for Cherry Blossom season in Washington, DC. If you are moved to become a part of SSTAR, pick up an application at the registration desk, from our beloved administrator, Mrs. Yvonnada McNeil.

I look forward to meeting you personally and welcoming you to my favorite conference of the year.

Bonnie Saks, MD  
President of the Society for Sex Therapy and Research  
Clinical Professor of Psychiatry  
University of South Florida

# **SAVE THE DATES!**

## **SSTAR 2009 Annual Meeting in Arlington VA Ritz Carleton Pentagon City April 2-5, 2009**

### **Come experience SSTAR just steps away from our Nation's Capital!**

In addition to the exciting conference schedule of events for the 2009 meeting, the city of Arlington, VA is just steps away from Washington, D.C., offering attendees the opportunity to experience the sights and sounds of our nation's capital.

The city is packed with a plethora of places to visit, shop, eat, and enjoy. From the steps of the Lincoln Memorial to the bell tower of the National Cathedral, this location presents captivating symbols of our country's history. Hop on the Metro, steps from the hotel entrance, and enjoy the National Mall, the monuments, and the museums. Listen to the sounds of jazz along the U Street corridor or walk along the Georgetown waterfront near the Kennedy Center. Wander through the neighborhoods of Capitol Hill, Foggy Bottom, or Dupont Circle and stumble upon hip boutiques and galleries, historic homes, and spectacular gardens.

SSTAR 2009 offers a unique playground for all conference attendees to enjoy the legendary landmarks, national treasures, and blooming cherry blossoms.

### **Plan to attend the STAR 2008 Fall Clinical Meeting**

Friday, September 19, 2008  
The Penn Club of New York  
30 West 44th Street  
New York, New York 10036



**SOCIETY FOR SEX THERAPY AND RESEARCH  
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# CONTINUING EDUCATION ACCREDITATIONS & APPROVALS

NOTE: The SSTAR 2008 Annual Meeting is fully accredited or approved to award continuing education credits to psychologists, sexologists, physicians, social workers, and marriage and family therapists. For questions or concerns about continuing education credits, please contact:

**Eric W. Corty, PhD**  
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**Beachwood, OH 44122**  
**Phone: (814) 898-6238, Fax: (814) 898-6032**  
**E-mail: ewcorty@gmail.com**

## 1. **ACCME Accreditation**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of The American College of Obstetricians and Gynecologists (ACOG) and the Society for Sex Therapy and Research (SSTAR).

### **AMA PRA Category 1 Credit(s)™ or ACOG Cognate Credit(s)**

The American College of Obstetricians and Gynecologists (ACOG) designates this educational activity for a maximum of 20 AMA PRA Category 1 Credits™ or up to a maximum of 20 Category 1 ACOG Cognate Credits. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### **Disclosure of Faculty and Industry Relationships**

In accordance with ACOG policy, all faculty members have signed a conflict of interest statement in which they have disclosed any significant financial interests or other relationships with the industry relative to topics they will discuss at this program. At the beginning of the program, faculty members are expected to disclose any such information to participants. Such disclosure allows you to evaluate better the objectivity of the information presented in lectures. Please report on your evaluation form any undisclosed conflict of interest you perceive. Thank you!

## 2. **American Association of Sex Educators, Counselors and Therapists (AASECT)**

This program meets the requirements of the AASECT and is approved for up to 20 hours. These CEs may be applied toward AASECT certification and renewal of certification.

## 3. **American Psychological Association (APA)**

SSTAR is approved by the American Psychological Association (APA) to sponsor continuing education for psychologists. SSTAR maintains responsibility for this program and its content. This program qualifies for up to 20 hours.

## 4. **California Board of Behavioral Sciences (CBBS)**

The California Board of Behavioral Sciences approved SSTAR as a “Provider of Continuing Education” (PCE #1719) for Licensed Marriage and Family Therapists (LMFT) and Licensed Clinical Social Workers (LCSW). This program qualifies for up to 20 hours.

## **ACKNOWLEDGEMENTS**

SSTAR extends appreciation to the following valued friends from industry and SSTAR membership for their generous support of the educational and scientific objectives of the SSTAR 2008 Annual Meeting.

### ***PLATINUM PROMOTIONAL MARKETING SUPPORT:***

#### **Eli Lilly & Company**

Eli Lilly and Company is a leading, innovation-driven corporation committed to developing a growing portfolio of best-in-class and first-in-class pharmaceutical products that help people live longer, healthier and more active lives. We are committed to providing answers that matter – through medicines and information – for some of the world’s most urgent medical needs.

### ***EXHIBITORS:***

#### **Alexander Institute**

The Alexander Institute produces the most critically acclaimed sexuality video series for couples and singles who want to enhance their sex lives.

#### **U.S. Department of Health and Human Services**

The National HIV Testing Mobilization Campaign is a nationwide effort to promote HIV testing. The U.S. Department of Health and Human Services is mobilizing communities to encourage their members to get tested for HIV.

### ***SUPPORT OF SSTAR STUDENT RESEARCH AWARD:***

**Blanche Freund, PhD, RN**  
**Michael A. Perelman, PhD**

### ***SUPPORT FOR SERVICE AWARD:***

**Marta Meana, PhD**  
**Sharon Nathan, PhD**  
**Bonnie R. Saks, MD**

## PROGRAM SCHEDULE

**THURSDAY, MARCH 13, 2008**

### **Pre-conference workshops**

- 8:30 AM-4:15 PM     **Sexual Disorders: Evaluation and Management**  
*Moderator: Lori A. Brotto, PhD*  
Assessment and Treatment of Male Sexual Dysfunctions (8:30-9:30 AM)  
*Presenter: Michael E. Metz, PhD*  
Current Concepts in the Evaluation and Management of Female Sexual  
Dysfunctions: A Clinical Perspective (9:30-10:30 AM)  
*Presenter: Leah S. Millheiser, MD*  
Break (10:30-10:45AM)  
Hormonal Therapy in the Postmenopausal Woman with Sexual Dysfunction  
(10:45-11:45 AM)  
*Presenter: Claudia Panzer, MD*  
Lunch  
Using a Clinical Model to Assess and Treat Women's Loss of Sexual Desire  
& Arousal (1:00-2:00 PM)  
*Presenter: Lori A. Brotto, PhD*  
Chronic Medical Illness & Sexuality: Issues and Answers (2:00-3:00 PM)  
*Presenter: Michael L. Krychman, MD*  
Break (3:00-3:15 PM)  
Question and Answer Period (3:15-4:15 PM)
- 2:00-5:00 PM     **Medical and Psychosocial Aspects of Dyspareunia**  
*Moderators: Michael A. Perelman, PhD & Blanche Freund, PhD*  
*Presenters: Sophie Bergeron, PhD & Andrew Goldstein, MD*
- 2:00-5:00 PM     **Couples from a Tourist Lens: A Multicultural Approach to Sexuality and  
Intimacy**  
*Moderator: Marta Meana, PhD*  
*Presenter: Esther Perel, MA, LMFT*
- 1:00-5:00 PM     Meeting Registration
- 6:00-7:00 PM     Welcome Reception
- 7:00-7:15 PM     Health Professional Book Award Presentation  
*Recipient: Sharon Lamb, EdD; Sex, Therapy and Kids*  
*Presenter: Daniel Watter, EdD*
- Annual meeting begins
- 7:15-9:00 PM     Movie Screening: Betty Dodson: Her Life of Sex and Art  
*Moderator and discussant: Derek Polonsky, MD*

## FRIDAY, MARCH 14, 2008

- 7:30 AM-5:00 PM Meeting Registration
- 7:30-8:30 AM Continental Breakfast
- 8:30-8:45 AM Welcome  
*SSTAR President: Bonnie Saks, MD*  
*Scientific Program Chair: Caroline F. Pukall, PhD*  
*Local Arrangements Chair: Richard Carroll, PhD*  
*Continuing Education Officer: Eric W. Corty, PhD*
- 8:45-9:45 AM **INVITED LECTURE: Sexual Technologies and the Double Standard**  
*Presenter: Rachel P. Maines, PhD*  
*Moderator: Sharon Nathan, PhD*
- 9:45-10:00 AM Break
- 10:00-12:00 PM **SYMPOSIUM: Sexual Pain Disorders: Latest Research & Treatment**  
*Moderator: Marta Meana, PhD*
1. A Randomized Comparison of Cognitive-Behavioral Therapy and Medical Management in the Treatment of Provoked Vestibulodynia  
S. Bergeron, PhD, S. Khalifé MD, M-J. Dupuis, MD  
*Presenter: Sophie Bergeron, PhD*
  2. Botox® Therapy for Women Diagnosed with Vestibulodynia: A Randomized, Placebo Controlled Study  
C.D. Petersen MD, E. Kristensen MD, L. Lundvall MD, A. Giraldi MD  
*Presenter: Christina Petersen, MD*
  3. Fear and Pain vs. Muscle Spasm as the Main Diagnostic Criteria for Vaginismus  
M-A. Lahaie, PhD Candidate, Y.M. Binik PhD, S. Khalifé MD, R. Amsel MSc, C.F. Pukall PhD  
*Presenter: Marie-Andree Lahaie, PhD Candidate*
- 12:00-1:15 PM **Lunch and Student Research Award (SRA) Presentation**  
SRA Presentation (12:30-1:00 PM): *Attributions as Predictors of Psychosexual and Dyadic Adjustment in Women with Vestibulodynia*  
M. Jodoin BSc, S. Bergeron PhD, S. Khalifé MD, M-J. Dupuis MD, G. Desrochers BSc, B. Leclerc, BSc  
*Recipient: Melanie Jodoin, BSc*  
*Presenter & Moderator: Stephanie Kuffel, PhD, Chair of SRA Committee*
- 1:15-2:15 PM **PAPER SESSION I: Theoretical and Practical Issues in Sexual Health**  
*Moderator: Tuuli Kukkonen, BA*
1. Erectile Dysfunction and Prostate Cancer  
*Presenter: Anne Katz, RN, PhD*

**FRIDAY, MARCH 14, 2008 continued**

2. Pelvic Floor Involvement in Male and Female Sexual Dysfunction and the Role of Pelvic Floor Rehabilitation in Treatment  
*Presenter: Talli Rosenbaum, BS, PT*
3. Elements in Men's Sexual Health: Making Sense of Complexity  
M.E. Metz PhD, B.W. McCarthy PhD  
*Presenter: Michael E. Metz, PhD*
4. The Future is Now: An Integrated Sex Therapy for the New Millennium  
*Presenter: Michael A. Perelman, PhD*

2:15-3:15 PM      **INVITED LECTURE: Prevalence, Impact, and Treatment of Sexual Problems Experienced by Women in Later Life**  
*Presenter: Stacy Tessler Lindau, MD*  
*Moderator: Richard Carroll, PhD*

3:45-6:00 PM      **SPECIAL EXCURSION:** Art Institute of Chicago: A One-Hour Special Guided Museum Tour, Followed by a Guided Stroll through Millennium Park and Michigan Avenue (weather permitting).

7:00-9:00 PM      Pizza Dinner for Students

7:00-9:00 PM      Fellowship Dinners at Local Restaurants: Sign-up at the registration desk at the meeting.

**SATURDAY, MARCH 15, 2008**

7:30 AM-5:00 PM      Meeting Registration

7:30-8:30 AM      Breakfast Roundtables with Speakers

8:30-10:00 AM      **SYMPOSIUM: Traditional and Non-traditional Medical Treatments for Sexual Dysfunctions**

*Moderator: Michael Perelman, PhD*

1. Traditional Treatments for Female Sexual Dysfunction  
*Presenter: Bonnie Saks, MD*
2. Non-traditional Medical Treatments for Desire Disorders in Females: OB/GYN Perspective  
*Presenter: Leah Millheiser, MD*
3. Update on Traditional and Non-traditional Medical Treatments for Male Sexual Dysfunctions  
*Presenter: Kevin T. McVary, MD*

10:00-10:15 AM      Break

**SATURDAY, MARCH 15, 2008 continued**

10:15-11:00

**PAPER SESSION II: Hot Topics in Student Research**

*Moderator: Robyn Donaldson, MA*

1. The Heat is On: Applying Thermography to Healthy and Clinical Populations  
T.M. Kukkonen BA, Y.M. Binik PhD, R. Amsel MSc, S. Carrier MD  
*Presenter: Tuuli Kukkonen, BA*
2. Sex Differences in Visual Attention to Erotic and Non-erotic Stimuli  
A.D. Lykins MA, M. Meana PhD  
*Presenter: Amy D. Lykins, MA*
3. Does Acculturation Affect Participation in Sexual Psychophysiology Research in Canadian Asian Women?  
J.S.T. Woo MA, M.A. Yule BSc BA, L.A. Brotto PhD  
*Presenter: Jane S.T. Woo, MA*

11:00-12:00

**POSTER SESSION (\*indicates student presentation)**

*Moderator: Blanche Freund, PhD*

1. Who's Calling the Shots: Gender or Sexual Orientation? Sexual Satisfaction and Desire in Same-Sex and Mixed-Sex Couples  
K.L. Blair MSc, D. Holmberg PhD  
*Presenter: Karen L. Blair, MSc\**
2. Sexual Esteem and Body Image as Predictors of Sexual Functioning and Sexual Satisfaction Among Heterosexual and Queer-Identified Individuals  
C. Goldfinger BA, K.B. Smith MA, C.F. Pukall PhD, K. Blair MSc, E. Dargie  
*Presenter: Corrie Goldfinger, BA\**
3. Early Sexual Experience and Adult Sexual Orientation  
E.M. Latty MS, J.M. Bailey PhD  
*Presenter: Elizabeth M. Latty MS\**
4. The Double Standard: Perceptions of Women Through their Use of Contraceptives  
E. Beamon, BA  
*Presenter: Emily Beamon, BA\**
5. Laser Doppler Imaging as a Measure of Genital Blood Flow in Female Sexual Arousal  
S.E. Waxman MA, C.F. Pukall PhD  
*Presenter: Samantha E. Waxman, MA\**
6. Psychosocial Predictors of Relationship Satisfaction in Women with Vulvar Pain  
S.E. Waxman MA, K.B. Smith MA, K.S. Sutton MA, E. Gentilcore-Saulnier BSc PT, C.F. Pukall PhD, S. Boyer BSc



*Presenter: Samantha E. Waxman, MA\**

**SATURDAY, MARCH 15, 2008 continued**

7. Provoked Vestibulodynia: Double the Painful Stimulation, Double the Pain Perception?  
K.S. Sutton MA, C.F. Pukall PhD, S.M. Chamberlain MD  
*Presenter: Katherine S. Sutton, MA\**
8. Behavioral Observation of Pain in a Gynecological Setting: Pain Behaviors as a Diagnostic Tool for Sexual Pain Disorders  
S.C. Boyer BSc, M-A. Lahaie BA, Y.M. Binik PhD, R. Amsel MSc  
*Presenter: Stéphanie C. Boyer, BSc\**
9. Pelvic Floor Muscle Response to Vulvar Pain in Women with Provoked Vestibulodynia  
E. Gentilcore-Saulnier BSc, C. Goldfinger BA, L. McLean PhD, C.F. Pukall PhD, S.M. Chamberlain MD  
*Presenter: Evelyne Gentilcore-Saulnier, BSc(PT)\**
10. Saying it Hurts and Showing it Hurts: Consistency Between Self-Reported Pain Symptoms and Clinical Diagnosis Among Women with Vestibulodynia  
K.B. Smith MA, K.S. Sutton MA, C.F. Pukall PhD, S.M. Chamberlain MD  
*Presenter: Kelly B. Smith, BA\**
11. Pinpointing Pelvic Pain: A Novel Approach in Men  
S.N. Davis BA, Y.M. Binik PhD, S. Carrier MD  
*Presenter: Seth N. Davis, BA\**
12. Of Mice and Women: A Mouse Model of Vestibulodynia Following Repeated Vulvovaginal Candidiasis  
M.A. Farmer BA, Y.M. Binik PhD, J.S. Mogil PhD  
*Presenter: Melissa A. Farmer, BA\**
13. Not Tonight Dear, I Have a Vulvache: Evidence for Reduced Sexual Receptivity with Vulvar and Hindpaw Zymosan Using Paced Mating in the Mouse  
M.A. Farmer BA, Y.M. Binik PhD, J.G. Pfaus, J.S. Mogil PhD  
*Presenter: Melissa A. Farmer, BA\**
14. The Role of Sexuality in Reproductive Health Behaviors Among East Asian Women  
J.S.T. Woo MA, L.A. Brotto PhD  
*Presenter: Jane S.T. Woo, MA\**

**SATURDAY, MARCH 15, 2008 continued**

15. The Role of Acculturation in Reproductive Health Practices Among Indian, Indo-Canadian, Canadian East Asian, and Euro-Canadian Women  
L.A. Brotto PhD, A.Y. Chou BSc, T. Singh MD, J.S.T. Woo MA  
*Presenter: Jane S.T. Woo, MA\**
16. Effects of a Psychoeducational Treatment for Sexual Arousal Disorder in Gynecologic Cancer Survivors  
Y. Erskine, K. Rhodes, L. Mehak, L.A. Brotto  
*Presenter: Lisa Mehak BA\**
17. A Survey to Determine the Prevalence of Persistent Genital Arousal and Persistent Genital Arousal Disorder (PGAD) in a Female Population Attending a London Sexual Health Clinic  
L. Garvey MRCP, S. Leiblum PhD, D. Goldmeier MD FRCP  
*Presenter: Lucy Garvey, MRCP*
18. A Report on the International Society for Sexual Medicine (ISSM) Ad Hoc Committee for the Definition of Premature Ejaculation  
M.A. Perelman PhD, S.E. Althof PhD, R.C. Rosen PhD, R.T. Segraves MD PhD  
*Presenter: Michael A. Perelman, PhD*
19. A Phase III, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study of the Safety and Efficacy of Libigel® For Treatment of HSDD in Surgically Menopausal Women  
M.C. Snabes MD PhD, J. Zborowski BSN  
*Presenter: Michael C. Snabes, MD, PhD*
20. Validation of the Inventory of Sexual Events and Desire (ISED) Diary for the Study of Libigel® (Testosterone gel) in the Treatment of HSDD  
M.C. Snabes MD PhD, J. Zborowski BSN  
*Presenter: Michael C. Snabes, MD, PhD*
21. Psychosexual Dimensions of Genital herpes: A Review  
D. Goldmeier MD FRCP, L. Garvey MRCP  
*Presenter: David Goldmeier, MD FRCP*
22. Sexual Concerns of People with Disabilities  
Helena Juergens, PhD  
*Presenter: Helena Juergens, PhD*

12:00-2:00 PM

Business Meeting and Lunch (**SSTAR Members Only**)  
Presentation of the Service Award  
*Recipient: Bill Maurice, MD*

*Presenter: Michael Perelman, PhD*

**SATURDAY, MARCH 15, 2008 continued**

2:00-3:00 PM      **PAPER SESSION III: Painful Intercourse: Predictors, Correlates, and Development**

*Moderator: Sophie Bergeron, PhD*

1. From Onset to Treatment Seeking: A Cognitive-Behavioral Model of Early Dyspareunia

R.L. Donaldson MA, M. Meana PhD, J. Fernandez BA

*Presenter: Robyn L. Donaldson, MA*

2. Fear of Pain and Catastrophizing Among Women with Vulvodynia

K.B. Smith MA, S.E. Waxman MA, S.M. Chamberlain MD, C.F.

Pukall PhD, S. Segal BA

*Presenter: Kelly B. Smith, MA*

3. The Role of Fear of Pain, Catastrophizing, Hypervigilance, and Self-Efficacy in Pain and Sexual Impairment in Vestibulodynia

G. Desrochers BSc, S. Bergeron PhD, S. Khalifé MD, M-J. Dupuis MD, M. Jodoin BSc

*Presenter: Geneviève Desrochers, BSc*

4. Psychosocial and Psychophysical Characteristics of Women with Primary Versus Secondary Provoked Vestibulodynia

K.S. Sutton MA, C.F. Pukall PhD, S.M. Chamberlain MD, E. Dargie, M. Winning BA

*Presenter: Katherine S. Sutton, MA*

3:00-4:00 PM      **INVITED LECTURE: Sex and Sexual Orientation Differences in the Specificity of Sexual Arousal**

*Presenter: Meredith Chivers, PhD*

*Moderator: Amy Lykins, MA*

4:00-4:15 PM      Break

4:15-5:30 PM      **CASE PRESENTATION AND OPEN DISCUSSION: Desires and Divisions: The Partition of Self and Sexuality in a Pakistani Man**

*Presenter: Kathryn Hall, PhD*

*Moderator: Kelly B. Smith, MA*

Annual meeting ends

7:00-9:00 PM      Fellowship Dinners at Local Restaurants: Sign-up at the registration desk at the meeting.

## **2008 Award Recipients**

### **SSTAR Health Professional Book Award**

Sharon Lamb, EdD  
*Sex, Therapy, and Kids*  
Norton, 2006

### **Service Award**

Bill Maurice, MD  
Division of Sexual Medicine, Department of Psychiatry  
University of British Columbia

### **SSTAR Student Research Award**

Mélanie Jodoin, B.Sc.  
Department of Sexology, Université du Québec à Montréal  
Montréal, Québec

## **STUDENT RESEARCH AWARD**

### **ATTRIBUTIONS AS PREDICTORS OF PSYCHOSEXUAL AND DYADIC ADJUSTMENT IN WOMEN WITH VESTIBULODYNIA**

**Mélanie Jodoin, B.Sc., Sophie Bergeron, Ph.D., Samir Khalifé, MD, Marie-José Dupuis, MD,  
Geneviève Desrochers, B.Sc., Bianca Leclerc, B.Sc.**

**Mélanie Jodoin, B.Sc.**

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The goal of the present study was to determine whether causal attributions for vulvo-vaginal pain predicted pain intensity, as well as psychosexual and dyadic adjustment in women with vestibulodynia. Seventy-seven women with vestibulodynia completed measures of attributions, pain, psychological distress, sexual functioning, and dyadic adjustment. They also took part in a structured interview and a gynaecological examination for diagnostic purposes. Results show that after controlling for pain intensity and relationship duration, internal attributions predicted higher dyadic adjustment. Additionally, both global and stable attributions predicted lower dyadic adjustment and higher psychological distress, whereas global attributions also predicted increased sexual impairment. However, attributions were not significantly correlated with pain outcomes. Findings suggest that cognitive factors such as attributions may influence psychosexual and dyadic adjustment in women with vestibulodynia. Results also highlight the importance of adhering to a biopsychosocial perspective focusing on pain reduction, sexual rehabilitation and relationship enhancement in the treatment of dyspareunia.

#### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the role of causal attributions in the experience of vulvo-vaginal pain.
2. Identify which attributions to modify in the context of sex therapy.
3. Highlight the importance of a biopsychosocial perspective in the treatment of dyspareunia.

#### **References:**

- Fincham, F. D. (1985). Attribution processes in distressed and non distressed couples: 2. Responsibility for marital problems. *Journal of Abnormal Psychology*, 94, 183-190.
- Meana, M., Binik, Y. M., Khalifé, S., & Cohen, D. (1999). Psychosocial correlates of pain attributions in women with dyspareunia. *Psychosomatics*, 40(6), 497-502.
- Scepkowski, L. A., Wiegel, M., Bach, A. K., Weisberg, R. B., Brown, T. A., & Barlow, D. H. (2004). Attributions for sexual situations in men with and without erectile disorder: Evidence from a sex-specific attributional style measure. *Archives of Sexual Behavior*, 33(6), 559-569.

#### **Biography:**

Mélanie Jodoin is in the process of completing her Ph.D. in Clinical Psychology at Université du Québec à Montréal. She is a member of the Gynecological Pain Laboratory directed by Sophie Bergeron. Her research investigates the impact of psychological factors (causal attributions) on the psychosexual adaptation of women with sexual pain disorders. She conducts clinical work at the Sex and Couple Therapy Service of the McGill University Health Centre (Royal Victoria Hospital) and has established a private practice in the Montreal area.

## **Abstracts for Pre-conference workshops**

Sexual disorders: Evaluation and Management (March 13 2008, 8:30-4:15 PM)

*Drs. Metz, Millheiser, Panzer, Brotto, and Krychman*

Medical and Psychosocial Aspects of Dyspareunia (March 13 2008, 2-5 PM)

*Drs. Bergeron and Goldstein*

Couples from a Tourist Lens: A Multicultural Approach to Sexuality (March 13 2008, 2-5 PM)

*Ms Perel*

## ASSESSMENT AND TREATMENT OF MALE SEXUAL DYSFUNCTION

**Michael E. Metz, PhD**

**Michael E. Metz, PhD**

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The traditional model of male sexual dysfunction (SD) emphasized that it was a simple problem usually treated with one approach (e.g., behavioral therapy, vacuum device, “squeeze” technique, pharmacologic “pill”), and that there was no need for follow-up monitoring. This presentation summarizes the integrative, multidimensional, biopsychosocial approach to comprehensive sex therapy for male sexual problems developed by Metz & McCarthy as published in *Coping with Premature Ejaculation* (2003) and *Coping with Erectile Dysfunction* (2004). This approach conceptualizes sexual problems as multidimensional (physical, cognitive, behavioral, emotional, and interpersonal) issues, with multiple causes and multiple effects on the man and his intimate relationship.

SD is best conceptualized, assessed, and treated using the model of the male being responsible for his sexuality and the couple working together as an “intimate team.” The presentation reviews the Diagnostic Decision Tree process of exploring the 10 types (causes & effects) of SD → five physical/medical (physiologic systems, acute physical illness, physical injury, pharmacologic side-effect, lifestyle issues), four psychological/relational (psychological system, acute psychological distress, psychosexual skills deficit, relationship distress) and one mixed type (multiple sexual dysfunctions). The comprehensive treatment plan addresses all “types” and features for maximum outcome effectiveness and has as its ultimate goal couple satisfaction.

The emphasis is on understanding SD as multi-causal and multi-dimensional in terms of both causes and effects. Typically, the treatment plan involves a number of interventions tailored to the type(s) of SD and the physical, psychological, and relationship factors. There are medical, individual, and couple interventions. Medical, physiological, and pharmacological techniques are not used as “stand alone” interventions, but are integrated into the comprehensive approach. Cognitive-behavioral interventions include a variety of techniques to develop couple communication for sexual comfort, relaxation training, monitoring and using the pelvic muscles, learning “easy erections,” arousal pacing, pleasure saturation, developing flexible sexual arousal scenarios, vaginal acclimatization, and relaxed and “playful” intercourse. The couple learns to implement specific psychosexual skills for sexual desire, arousal, and satisfaction.

The workshop presentation will emphasize the importance of (1) efficient assessment and comprehensive treatments → even within the usual 7-8 minute “express lane” patient visit that most MDs have; (2) the essential need for follow-up visit; and (3) the individualized relapse prevention program to ensure couple satisfaction. Data does indicate high rates of non-compliance with pharmacologic therapies as well as traditional sex therapy relapse, so it is crucial to establish positive, realistic sexual expectations including how to cope with a lapse. Effective therapy utilizes all resources – medical, psychological, and relationship – for individual and couple satisfaction.



### **Behavioral Learning Objectives:**

1. Identify the features of the Integrative, biopsychosocial, multidimensional couple approach to assess and treat male sex dysfunctions within the “express lane” of primary medical practice.
2. Learn to conduct a comprehensive assessment and design treatment for the 10 “types” (causes & effects) of male SD.
3. Recognize the essential need for the medical follow-up visit to ensure compliance, provide relapse prevention, and facilitate individual and couple satisfaction.

### **References:**

- McCarthy, B., & Fucito, L. (2005). Integrating medication, realistic expectations, and therapeutic integration in the treatment of male sexual dysfunction. *Journal of Sex & Marital Therapy*, 31, 319-328.
- McCarthy, B., & Metz, M. E. (2007). *Men's sexual health*. NY: Routledge.
- Metz, M. E., & McCarthy, B. W. (2003). *Coping with premature ejaculation: Overcome PE, please your partner, and have great sex*. Oakland: New Harbinger Publications.
- Metz, M. E., & McCarthy, B. W. (2004). *Coping with erectile dysfunction: How to regain confidence and enjoy great sex*. Oakland: New Harbinger Publications.
- Metz, M. E., & Pryor, J. L. (2000). Premature ejaculation: A psychophysiological approach for assessment & management. *Journal of Sex & Marital Therapy*, 26(4), 293-320.

### **Biography:**

Michael E. Metz, Ph.D. is a psychologist and marital & family therapist in private practice in St. Paul, MN. He earned his PhD with distinction from the University of Pennsylvania, Philadelphia, Pennsylvania, and for 12 years, served on the faculty of the University of Minnesota Medical School, Department of Family Practice. He is the author with Barry McCarthy of *Men's Sexual Health*, 2007; *Coping with Premature Ejaculation*, 2003; and *Coping with Erectile Dysfunction*, 2004 (given the 2007 SSTAR best consumer sexual health book award). He is also the author of the *Styles of Conflict Inventory* (1993) to assess couple interaction patterns.

## **CURRENT CONCEPTS IN THE EVALUATION AND MANAGEMENT OF FEMALE SEXUAL DYSFUNCTION: A CLINICAL PERSPECTIVE**

**Leah S. Millheiser, MD**

**Leah S. Millheiser, MD**

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**Introduction:** Approximately 43% of women in the United States suffer from a sexual complaint; however, only 25% of primary care physicians address the issue with their patients. Female sexual dysfunction is a multifactorial problem incorporating both biological and psychosocial components. Traditionally, physicians in the United States receive limited education in sexual health, with the majority centered on the evaluation and treatment of male sexual disorders.

**Aims:** To review evidence-based recommendations regarding the evaluation and treatment of female sexual dysfunction.

**Methods:** This workshop will achieve several goals: review the classification system for female sexual dysfunction; describe the physiology of female sexual response; describe the multifactorial nature of female sexual dysfunction; review the role of the patient history, physical examination and laboratory assessment in the work-up of female sexual dysfunction; and, discuss multidisciplinary treatment options.

**Conclusion:** The goal of this workshop is to provide the clinician with tools to adequately assess and manage a female patient with a recurrent sexual complaint based on the most current research findings.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the classification system for female sexual dysfunction.
2. Explain the medical evaluation process for a female patient with a recurrent sexual complaint.
3. Discuss the data behind commonly prescribed off-label treatments for female sexual dysfunction.
4. Approach female sexual dysfunction from a multidisciplinary perspective.

### **Biography:**

Dr. Millheiser received her MD from Northwestern University School of Medicine in 1999 and completed her residency in Obstetrics and Gynecology at Stanford University in 2004. She received a Women's Reproductive Health Research scholarship from the NIH in 2004 in order to pursue her interest in the field of female sexual health. Her research has centered on the comparison of peripheral and central sexual arousal in healthy women and women with hypoactive sexual desire disorder. She currently has a female sexual medicine practice within the Division of Gynecologic Specialties at the Stanford University Medical Center.

# **HORMONAL THERAPY IN THE POSTMENOPAUSAL WOMAN WITH SEXUAL DYSFUNCTION**

**Claudia Panzer MD**

## **Claudia Panzer MD**

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Vasomotor symptoms such as hot flashes and night sweats are common complaints in peri- and postmenopausal women. Estradiol therapy to relieve these symptoms has been under scrutiny since 2000 as the results of the Women's Health Initiative (WHI) showed an increased risk for coronary heart disease and breast cancer. The most recent publication of the WHI, a secondary analysis addressing these risks in early menopausal women did not show an increased risk for coronary heart disease events or breast cancer, emphasizing that age and time since menopause at the initiation of hormone therapy are important factors. Female sexual dysfunction, mainly hypoactive sexual desire disorder, can also be frequently found in the peri- and postmenopausal woman. Testosterone therapy (off label in the USA) has been added to hormone replacement regimens to improve sexual desire and arousability. Abundant epidemiological and randomized placebo-controlled trials of testosterone therapy have shown that adding testosterone to hormone therapy has a beneficial effect on sexual function in these women with a good safety profile.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. To understand risks and benefits of hormone replacement therapy in view of recent WHI publications.
2. To assess the role of androgens in women and contrast the risks and benefits for using androgens to treat hypoactive sexual desire disorder in postmenopausal women.
3. To formulate treatment strategies for women suffering from menopausal symptoms.

### **References:**

- Manson, J. E., Allison, M. A., Rossouw, J. E., Carr, J. J., Langer, R. D., Hsia, J., et al. (2007). Estrogen therapy and coronary-artery calcification. *New England Journal of Medicine*, 356 (25), 2591.
- Rossouw, J., Prentice, R. L., Manson, J. E., Wu, L., Barad, D., Barnabei, V. M., et al. (2007). Postmenopausal hormone therapy and risk of cardiovascular disease by age and years since menopause. *The Journal of the American Medical Association*, 297, 13.
- Shifren, J. L., Braunstein, G. D., Simon, J. A., Casson, P. R., Buster, J. E., Redmond, G. P., et al. (2000). Transdermal testosterone treatment in women with impaired sexual function after oophorectomy. *New England Journal of Medicine*, 343(10), 682.
- Somboonporn, W., Davis, S., Seif, M. W., & Bell, R. (2005). Testosterone for peri- and postmenopausal women. *The Cochrane Database of Systematic Reviews*, 4.

### **Biography:**

Dr. Panzer received her M.D. degree at the Ludwig-Maximilians-University in Munich, Germany, performed an Internal Medicine residency at the Cleveland Clinic Foundation and Endocrinology fellowship at Boston University Medical Center. Under the guidance of Dr. Irving Goldstein she completed a one-year fellowship in Sexual Medicine. She now lives in Denver, Colorado where she is practicing Endocrinology and Sexual Medicine at Rose Medical Center.

## USING A CLINICAL MODEL TO ASSESS AND TREAT WOMEN'S LOSS OF SEXUAL DESIRE AND AROUSAL

Lori A. Brotto, PhD

Lori A. Brotto, PhD

Assistant Professor

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The goal of this talk is to provide an overview of the diagnostic categories of women's sexual desire/interest and arousal disorders, emphasizing recent changes to the diagnostic system proposed in the DSM-IV-TR. Despite much recent attention aimed at discovering an effective pharmacologic treatment for desire and arousal disorders in women, there are currently no such approved treatments for these complaints in North America. Psychological therapy has a long history in the treatment of sexual dysfunction, however, only recently have there been randomized controlled trials of Cognitive Behavioural Therapy for women's low desire, and no published controlled trials on psychological therapy for arousal difficulties. In part, this is due to the high degree of comorbidity of arousal complaints with desire, orgasmic, and genital pain difficulties. Using a clinical model of responsive desire developed by Basson (2005), this talk will illustrate how this model is effectively used to guide a thorough assessment and formulate a treatment plan. The major evidence-based treatments from both a psychological and biological perspective for women's loss of desire and arousal will also be discussed.

### **Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Understand recent reconceptualizations in the diagnosis of sexual desire/interest and arousal disorders in women.
2. Formulate a comprehensive "case conceptualization" that takes into account aspects of personal, interpersonal, sociocultural, and medical factors that may be contributing to the low desire or arousal.
3. Understand the major evidence-based treatments, and their degree of efficacy, in treating sexual desire and arousal difficulties in women.

### **References:**

- Basson, R. (2005). Female Hypoactive Sexual Desire Disorder. In R. Balon, & R. T. Segraves (Eds.), *Handbook of sexual dysfunction* (pp. 43-66). Boca Raton, Florida: Taylor & Francis Group.
- Basson, R., Leiblum, S., Brotto, L., Derogatis, L., Fourcroy, J., Fugl-Meyer, K., et al. (2003). Definitions of women's sexual dysfunction reconsidered: Advocating expansion and revision. *Journal of Psychosomatic Obstetrics and Gynaecology*, 24, 221-229.
- Leiblum, S. R., & Wiegel, M. (2002). Psychotherapeutic interventions for treating female sexual dysfunction. *World Journal of Urology*, 20, 127-136.

### **Biography:**

Lori Brotto has a PhD in clinical psychology from the University of British Columbia (2002) and completed a Fellowship in Reproductive and Sexual Medicine from the University of Washington

(2004). She is an Assistant Professor in the UBC Department of Obstetrics and Gynaecology as well as a registered psychologist in Vancouver, Canada. She is the director of the UBC Sexual Health Laboratory where research primarily focuses on developing and testing psychological/psychoeducational interventions for women with sexual desire and arousal difficulties – many secondary to gynaecologic cancers. Her clinical work includes individuals and couples with sexual dysfunction. Dr Brotto trains gynaecology residents and medical students at UBC and teaches an undergraduate course in Human Sexuality. She is on the Editorial Boards of the Archives of Sexual Behavior, the Journal of Sex and Marital Therapy, and the International Journal of Sexual Health. Dr Brotto is the recipient of a Scholar Career Award from the Michael Smith Foundation for Health Research as well as a New Investigator Award from the Canadian Institutes of Health Research.

## **CHRONIC MEDICAL ILLNESS AND SEXUALITY: ISSUES AND ANSWERS**

**Michael L Krychman MD**

**Michael L Krychman MD**

Medical Director of Sexual Medicine

Hoag Memorial Hospital

Newport Beach, CA

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Chronic medical illnesses like hypertension, diabetes, neuropathies and cancers can impact the sexual response cycle and result in both personal and marital distress. The importance of identifying and addressing medical health concerns are critical when completing a comprehensive sexual evaluation for the patient. Many illnesses have negative effects on sexual desire, arousal, orgasm and the effects can have both physiological and psychological etiologies. Medical illnesses can impact relationship dynamics, sexual self esteem as well as alter sexual hormones. Understanding medical illness and the medications that are often used to treat a variety of conditions can help the health care provider, therapist and sexual expert in their multidimensional assessment and provide insight when formulating a differential diagnosis. Some simple therapeutic interventions can be implemented with the patient and can help treat sexual problems resulting in enhanced couple intimacy.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the importance of chronic medical illnesses and their possible impact on sexuality.
2. Discuss the possible effects of some medications on female sexuality.
3. Discuss some therapeutic interventions that can be instituted to help manage both chronic medical illnesses and sexual problems.

### **References:**

- Basson, R., & Weijmar-Schultz, W. (2007). Sexual sequelae of general medical disorders. *Lancet*, 369, 409-424.
- Somers, K. J., & Philbrick, K. L. (2007). Sexual dysfunction in the medically ill. *Current Psychiatry Reports*, 9, 247-254.

### **Biography:**

Dr. Krychman received his degree in medicine from the McGill University in 1993 and is presently the Medical Director of Sexual Medicine at Hoag Memorial Hospital and the Executive Director of the Southern California Center for Sexual Health and Survivorship Medicine both located in Newport Beach California. He has a Masters in Public Health in Human Sexuality and is a clinical Sexologist. He has been working in the field of Human Sexuality for over a decade and his interests include chronic medical illnesses including breast cancer and their impact on quality of life and sexual function as well as intimacy. He is an executive board member for the International Society for the Study of Women's Health.

**MEDICAL AND PSYCHOSOCIAL ASPECTS OF DYSPAREUNIA**  
**Sophie Bergeron, PhD and Andrew T. Goldstein, MD**

**Sophie Bergeron, PhD**

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**Andrew T. Goldstein, MD FACOG**

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The workshop will begin with an introduction to the sexual pain disorders, in particular, the two most common forms of vulvodynia (i.e., provoked vestibulodynia [Vulvar vestibulitis syndrome, VVS] and generalized vulvodynia [GVD]), in addition to vaginismus. The prevalence, typical clinical presentation, and diagnostic strategies will be discussed. Common sequelae, both physical (e.g., heightened muscle tension) and psychological (e.g., catastrophizing thoughts), will be framed in a biopsychosocial model of sexual pain, setting up the subsequent discussion of treatments targeting each component. This part of the workshop will last 30 minutes and will be presented by Sophie Bergeron.

Next, Andrew Goldstein will present information regarding the evaluation and medical treatment options for Vestibulodynia, GVD as well as other causes of dyspareunia vaginismus [i.e. pelvic floor dysfunction, levator ani syndrome], vulvar dermatoses, atrophic vulvovaginitis, and interstitial cystitis). This part of the workshop will include information on the information necessary to make these diagnoses. In addition, treatments including local non-surgical therapies (e.g., injections, creams), systemic treatment options (e.g., oral medications), and surgery (i.e., vestibulectomy) will be described.

Finally, Sophie Bergeron will provide an overview of psychological and other non-medical treatments for sexual pain, focusing on cognitive behavior therapy (CBT) and physical therapy (PT). Specifically, she will provide the audience with an outline of CBT and PT goals and treatment strategies. In addition, she will briefly review alternative therapies for dyspareunia including hypnosis and acupuncture. Finally, she will discuss how and when to combine various treatment approaches within a multimodal, multidisciplinary perspective. This part of the workshop will last 60 minutes.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Diagnose the common causes of dyspareunia.
2. Offer patients a treatment plan based on the specific cause of their dyspareunia.
3. Understand non-medical methods of treatment such as cognitive-behavior therapy.

### **References:**

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- Goldstein, A. T., Marinoff, S. C., & Haefner, H. K. (2005). Vulvodynia: Strategies for treatment. *Clinical Obstetrics and Gynecology*, 48(4), 769-85.
- O'Connell, T. X., Nathan, L. N., Satmary, W. A., & Goldstein, A. T. (in press). Non-neoplastic epithelial disorders of the vulva. *American Family Physician*.

### **Biographies:**

Dr. Andrew T. Goldstein grew up in Bridgeton, New Jersey and graduated from the University of Virginia and the University of Virginia School of Medicine. He pursued his internship and residency in Obstetrics and Gynecology at the Beth Israel Medical Center. After completing his residency, Dr. Goldstein moved to Annapolis, Maryland and joined the faculty of the Division of Gynecologic Specialties at the Johns Hopkins School of Medicine. In 2002 he became the Director of the Centers for Vulvovaginal Disorders in Washington, D.C. and New York City.

Dr. Goldstein is board certified by the American Board of Obstetrics and Gynecology and he has been elected to the International Society for the Study of Vulvovaginal Disease (ISSVD) and to the American Society for Colposcopy and Cervical Pathology (ASCCP). He is the Treasurer of the International Society for the Study of Women's Sexual Health (ISSWSH) and has been a grant recipient of the National Vulvodynia Association. He recently co-authored the chapter on female sexual dysfunction for the *Johns Hopkins Manual of Gynecology and Obstetrics* and his book *Reclaiming Desire* was published by Rodale Books in 2004. Dr. Goldstein is actively involved in research and has recently published peer-reviewed articles on lichen sclerosus, lichen planus, lichen simplex chronicus, and vulvar vestibulitis syndrome.

Sophie Bergeron, Ph.D., is an Associate Professor of Sexology at Université du Québec à Montréal and a Clinical Psychologist at the Sex and Couple Therapy Service of the McGill University Health Centre (Royal Victoria Hospital). She received her Ph.D. in Clinical Psychology from McGill University in 1999 under the supervision of Dr. Irv Binik. The author and co-author of several articles, chapters, and conferences on the topics of dyspareunia and vestibulodynia, Dr. Bergeron's current research focuses on the treatment outcome of dyspareunia as well as on the role of dyadic variables in the experience of genital pain. She is a member of the Society for Sex Therapy and Research and was the Scientific Program Chair for the SSTAR 2004 meeting held in Washington, D.C.



## **COUPLES FROM A TOURIST LENS: A MULTICULTURAL APPROACH ON SEXUALITY AND INTIMACY**

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Couples' expectations about the relationship of intimacy and sexuality have changed dramatically in the last 40 years. The west is deeply influenced by the ideas of the romantic ideal. We want our partners to fulfill our needs for connection, belonging and continuity as well as give us a sense of transcendence, mystery and passion. Other parts of the world value respect more than closeness, responsibility more than freedom, interdependence more than autonomy. Clearly assigned role repartition is favored above the post feminist egalitarian model. The workshop will show how these cultural differences shape our ideology of love and the role of desire, sexual intimacy, and pleasure in committed relationships. It will examine the cultural pressures that shape domesticated sex and the inverse correlation between greater intimacy and loss of sexual desire. We will demonstrate how to help couples communicate in their own language, and how they can voice their erotic longings and move beyond their familiar comfort zones into an expansive fully charged sexuality.

### **Behavioral learning Objectives:**

After attending this presentation, participants will be able to:

1. Tease out the cultural dynamics underlying a couple's erotic impasse.
2. Help couples develop curiosity for the erotic interiority of their partner.
3. Learn how to help couples become more flexible vis a vis gender differences, emotional stalemates, and sexual assertiveness.

### **References:**

Giddens, A. (1992). *The transformations of intimacy: Sexuality, love and eroticism in modern societies*. Stanford, California: Stanford University Press.

Mitchell, S. A. (2002). *Can love last? The fate of romance over time*. New York: Norton.

Perel, E. (2003, May/June). Erotic intelligence: Reconciling sensuality and domesticity. *Psychotherapy Networker*.

Perel, E. (2006). *Mating in captivity: Reconciling the erotic and the domestic*. New York, NY: Harper Collins.

### **Biography:**

Esther Perel is a licensed marriage and family therapist who has spent half her life treating patients and the other half coaching, consulting and training for organizations and lay and professional audiences. An acknowledged authority on cultural identity, cross cultural relations and ethnic and religious intermarriage, she has led private and public interventions around the world. For nearly a quarter of a century, her expertise in wartime, post-war and refugee families has been sought after by victims of conflict as well as by therapists and crisis counselors in training.

Ms. Perel has a private psychotherapy practice in New York, with multilingual clients. She is fluent in eight languages. Her clinical teaching and interests center on culture and sexuality with a focus on

couples.

A frequently referenced author, Ms. Perel's book, *Mating in Captivity: Reconciling the Erotic and the Domestic* was published last fall. Her 2002 essay, "Erotic Intelligence: Reconciling Sensuality and Domesticity," was featured on the front cover of the *Utne Reader* and was included in the anthology, *Best Erotic Writings 2004*. She has written numerous articles and chapters about intermarriage, the families of Holocaust survivors, cross-cultural couples and cultural and religious identity.

**Abstracts for Poster Presentations  
(in numerical order)**

**1. WHO'S CALLING THE SHOTS: GENDER OR SEXUAL ORIENTATION?  
SEXUAL SATISFACTION AND DESIRE IN SAME-SEX AND MIXED-SEX COUPLES  
Karen L. Blair, MSc & Diane Holmberg, PhD**

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Past research comparing the sexual functioning and behaviour of men and women in same-sex versus mixed-sex relationships has tended to focus on issues surrounding sexual frequency, sexual exclusivity, and safer sex practices (Christopher & Sprecher, 2000; Kurdek, 1991). More subjective aspects of sexuality, moving beyond "who does what with whom," have received relatively less attention. The current paper will describe a study in which we compare and contrast the subjective sexual experiences of sexual desire and sexual satisfaction in four groups of individuals: men versus women, currently in same-sex versus mixed-sex relationships.

Participants were recruited for a larger online study of social support, relationships and health, in which sexuality measures formed only one small section of the larger study. The final sample for the current analysis included 423 respondents, 322 women (205 in mixed-sex relationships, 117 in same-sex relationships), and 101 men (48 in mixed-sex relationships; 53 in same-sex relationships). Participants had a mean age of 30 years and had, on average, been in their relationship for 5 years and the majority of participants reported being in a serious relationship.

While one might expect to find significant gender differences in subjective sexual experiences, and even differences based on relationship type, which may or may not be a result of exaggerated gender differences, the current study found far more similarities than differences between the four groups of participants. The differences that did occur were far more likely to be related to gender than to relationship type, and nearly no interactions between gender and relationship type were found. The presentation of this paper will focus on describing the differences that were found and providing potential theoretical explanations for the overwhelming similarity in these four groups despite ample cause to expect otherwise.

**Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Interpret subjective sexual experiences of couples on an individual basis, realizing that sexual orientation and the gender composition of the couple play less of a role in dictating sexual desire and behaviour than may be intuitively expected.
2. Recognize that there are very few differences in the sexual repertoires of men and women in both same-sex and mixed-sex relationships.
3. Reject the notion of 'lesbian bed death' as purely a function of sexual desire and question the origin and meaning of this 'condition.'

**References:**

- Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage and the Family*, 62, 999-1017.
- Kurdek, L. A. (1991). Sexuality in homosexual and heterosexual couples. In K. McKinney, & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 177-191). Hillsdale, NJ: Lawrence Erlbaum.
- Kurdek, L. A. (2004). Are gay and lesbian cohabiting couples really different from heterosexual married couples? *Journal of Marriage and the Family*, 66, 880-900.

**Biography:**

Karen Blair is a PhD Candidate at Queen's University working in the Sexual Health Research Lab with Dr. Caroline Pukall studying the psychosocial and psychosexual aspects of contemporary couples. Karen completed her master's degree at Acadia University, working with Dr. Diane Holmberg studying the impact of social support for relationships on relationship well-being and health in same-sex and mixed-sex couples.

## **2. SEXUAL ESTEEM AND BODY IMAGE AS PREDICTORS OF SEXUAL FUNCTIONING AND SEXUAL SATISFACTION AMONG HETEROSEXUAL AND QUEER-IDENTIFIED INDIVIDUALS**

**Corrie Goldfinger, BA; Kelly B. Smith, MA; Caroline F. Pukall, PhD;  
Karen Blair, MSc; and Emma Dargie**

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Sexual functioning and satisfaction are essential components of a healthy sexual life and of overall mental health. Researchers have therefore attempted to uncover predictors of these variables. Self-esteem, sexual esteem, and general and sex-specific body image have all been shown to have significant relationships with either sexual functioning and/or sexual satisfaction in males and females. The presence and directionality of these relationships, however, has been inconsistent and much of the research has focused on heterosexual populations. We were interested in examining the differential effect of sexual esteem and body image on sexual functioning and satisfaction among heterosexual and queer-identified males and females.

The current study invited heterosexual and queer-identified individuals to participate in an online study after a brief telephone screening interview to ensure eligibility. Participants completed measures of sexual functioning, sexual satisfaction, sexual esteem, general body image, and body image during sexual activity, as well as a variety of other health and relationship-related variables. Preliminary results from this ongoing study revealed both gender and sexual orientation differences with respect to the variables that predicted sexual functioning and satisfaction.

Sexual esteem was a significant predictor of sexual functioning in both heterosexual and queer-identified females; however, this was not so for either group of males. After controlling for sexual esteem, general body image and sex-specific body image combined were not significant predictors of sexual functioning in either males or females, regardless of sexual orientation. When predicting sexual satisfaction, sexual esteem was a significant predictor for both groups of females as well as for heterosexual males, but not for gay males. After controlling for sexual esteem, general body image and sex-specific body image combined were significant predictors of sexual satisfaction in heterosexual females as well as gay males, but not for lesbians or heterosexual males.

The findings from this study suggest that the factors affecting sexual functioning and satisfaction may be different for individuals depending on their gender and sexual orientation. Discussion will focus on possible explanations for the gender and sexual orientation differences as well as on implications for therapeutic work with individuals with sexual difficulties.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Compare the role that sexual esteem and body image play in sexual functioning and satisfaction across genders and sexual orientations.
2. Recognize the importance of including non-heterosexual individuals in sex research.

3. Discuss the importance of exploring esteem issues with clients with sexual difficulties.

**References:**

- Reissing, E., Laliberté, G., & Davis, H. (2005). Young women's sexual adjustment: The role of sexual self-schema, sexual self-efficacy, sexual aversion and body attitudes. *Canadian Journal of Human Sexuality, 14*(3-4), 77-85.
- Shires, A., & Miller, D. (1998). A preliminary study comparing psychological factors associated with erectile dysfunction in heterosexual and homosexual men. *Sexual & Marital Therapy, 13*, 37-49.
- Urban, A. M. (2005). Body image and sexual functioning in a college student population. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 65*(9-B), 4855.
- Walker-Hill, R. (2000). An analysis of the relationship of human sexuality knowledge, self-esteem, and body image to sexual satisfaction in college and university students. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 60*(9-B), 4560.
- Wiederman, M. W. (2000). Women's body image self-consciousness during physical intimacy with a partner. *The Journal of Sex Research, 37*, 60-68.

**Biography:**

Corrie Goldfinger received her BA in Honours Psychology from York University. She then joined a research team at the Centre for Addiction and Mental Health studying perinatal mental health in lesbian women. She is currently in her second year of a Master's program in Clinical Psychology at Queen's University; she is supervised by Dr. Caroline Pukall, and her research focuses on non-medical treatment options for vulvar pain.

### 3. EARLY SEXUAL EXPERIENCE AND ADULT SEXUAL ORIENTATION

Elizabeth M. Latty, MS and J. Michael Bailey, PhD

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Some researchers hypothesize that a same-sex sexual experience during childhood or adolescence can cause an individual to become homosexual in adulthood (Browning & Laumann, 1997, 2001; Cameron & Cameron, 1995). Similarly, published studies suggest that homosexual men and women are more likely to have experienced childhood or adolescent sex with an adult (Bell et al., 1981; Eskin, Kaynak-Demir, and Demir, 2001; Tomeo et al., 2001; Van Wyk and Geist, 1984). However, there are several possible explanations of this correlation. We present four possible models of the relation between early sexual experience and adult sexual orientation. We include *causal models*, in which the early sexual experience contributes to the development of homosexuality, and *non-causal models*, in which pre-existing characteristics of some individuals enhance both the likelihood that they will have early sexual experiences and the likelihood that they will identify themselves as homosexual when they are adults. Our review of relevant evidence confirms the statistical association between childhood sexual experience and adult sexual orientation, while identifying reasons for exercising caution when drawing conclusions based on this association. In addition, we offer suggestions for elucidating the nature of the correlation between early sexual experiences and sexual orientation.

#### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Describe, in a general sense, the literature supporting an association between early sexual experience and adult sexual orientation.
2. Identify possible explanatory models of the relation between early sexual experience and adult sexual orientation.
3. Analyze possible confounds of this relation when reviewing and/or planning research regarding these issues.

#### **References:**

- Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981). *Sexual preference: Its development in men and women*. Bloomington: Indiana University Press.
- Browning, C. R., & Laumann, E. O. (1997). Sexual contact between children and adults: A life course perspective. *American Sociological Review*, 62, 540-560.
- Browning, C. R., & Laumann, E. O. (2001). Sexual contact between children and adults: A life-course perspective. In E. O. Laumann, & R .T. Michael (Eds.), *Sex, love, & health in America: Private choices, public policies* (pp.148-196). Chicago: University of Chicago Press.
- Cameron, P., & Cameron, K. (1995). Does incest cause homosexuality? *Psychological Reports*, 76, 611-621.
- Eskin, M., Kaynak-Demir, H., & Demir, S. (2005). Same-sex sexual orientation, childhood sexual abuse, and suicidal behavior in university students in Turkey. *Archives of Sexual Behavior*, 34, 185-195.



Tomeo, M. E., Templer, D. I., Anderson, S., & Kotler, D. (2001). Comparative data of childhood and adolescence molestation in heterosexual and homosexual persons. *Archives of Sexual Behavior, 30*, 535-541.

Van Wyk, P. H., & Geist, C. S. (1984). Psychosexual development of heterosexual, bisexual, and homosexual behavior. *Archives of Sexual Behavior, 13*, 505-544.

**Biography:**

Ms. Latty is working toward her PhD under J. Michael Bailey at Northwestern University. She has been conducting research on sex differences in sexual arousal and sexual orientation with Dr. Bailey for eight years, and has been a member of SSTAR since 2006.

#### **4. THE DOUBLE STANDARD: PERCEPTIONS OF WOMEN THROUGH THEIR USE OF CONTRACEPTIVES**

**Emily Beamon, BA**

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A pioneer researcher, Ira Reiss (1960) explained the issue of the double standard as prohibiting sexual encounters prior to marriage for women, however, allowing them for men. In studying the double standard, research has been conducted regarding sexual behavior, evaluations of men and women who engage in certain acts, and preferences about previous sexual behaviors concerning the double standard (Milhausen & Herold, 1999); current research suggests that the double standard still influences both genders concerning their sexual behavior (Milhausen & Herold, 1999). The sexual double standard is also important in examining the attitudes towards contraceptive use, specifically towards women to do or do not provide protection. Attitudes towards contraceptives are an essential tool to providing young adults with safe ways of engaging in sexual contact. Traditional-aged college students read a scenario in which a woman was on birth control, provided her partner with a condom, or used no protection during a sexual encounter, and were asked to rate her on specific traits. The target using a condom during sex was deemed most sexually knowledgeable, compared to birth control and no contraceptive. The condom condition was also perceived as most responsible and knowledgeable of Sexually Transmitted Infections. The target using birth control was seen as least educated about STI; this may be explained by Williams, Kimble, Covell, Weiss, Newton, Fisher, & Fisher (1992) when it was concluded that the birth control pill may be used for increased sexual contacts, but not deemed as making the target more knowledgeable. Male participants rated the target more negatively than the female participants, supporting research of the sexual double standard; this was discovered in the ratings of the female target's morality and her likelihood of infidelity. Results also indicated that the more sexual partners the participant had, the more likely they were to project their attitudes on the target- feeling that she would have potentially had more sexual partners as well. The present research concluded the existence of a sexual double standard in the participants' point of view towards a promiscuous female. It also displayed differences in attitudes towards contraception methods; although commonly used, birth control is still negatively associated with lack of knowledge, especially with regards to Sexually Transmitted Infections.

#### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the prevalence of the sexual double standard in sexual relationships with others.
2. Identify changing attitudes towards the use of different contraceptive methods.
3. Examine the relationship between past sexual experience and current sexual attitudes.

#### **References:**

- Agnew, C., & Loving, T. (1998). Future time orientation and condom use attitudes, intentions, and behavior. *Journal of Social Behavior and Personality, 13*, 755-764.
- Conley, T., & Rabinowitz, J. (2004). Scripts, close relationships, and symbolic meanings of contraceptives. *Personal Relationships, 11*, 539-558.

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- Hynie, M., & Lydon, J. (1995). Women's perception of female contraceptive behavior. *Psychology of Women Quarterly, 19*, 563-581.
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- Kelly, J., & Bazzini, D. (2001). Gender, sexual experience, and the sexual double standard: Evaluations of female contraceptive behavior. *Sex Roles, 45*, 785-799.
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- Lance, L. (2004). Attitudes of college students toward contraceptives: A consideration of gender differences. *College Student Journal, 38*, 579-586.
- Longmore, M., Manning, W., Giordano, P., & Rudolph, J. (2003). Contraceptive self-efficacy: Does it influence adolescents' contraceptive use? *Journal of Health and Social Behavior, 44*, 45-60.
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- Oliver, M. B., & Sedikides, C. (1992). Effects of sexual permissiveness on desirability of partner as a function of low and high commitment to relationship. *Social Psychology Quarterly, 55*, 321-333.
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- Williams, S., Kimble, D., Covell, N., Weiss, L., Newton, K., Fisher, J., et al. (1992). College students use implicit personality theory instead of safer sex. *Journal of Applied Social Psychology, 22*, 921-933.

### **Biography:**

Emily Beamon received her BA in Psychology, with honors, from Guilford College in 2007. She completed her college career early and looks forward to pursuing higher education in Clinical Psychology with a focus on sexual behaviors.

## 5. LASER DOPPLER IMAGING AS A MEASURE OF GENITAL BLOOD FLOW IN FEMALE SEXUAL AROUSAL

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Sexual arousal refers to one's feelings of sexual excitement and pleasure and has both physiological (i.e., objective) and psychological (i.e., subjective) components. The most common method for measuring the objective component of female sexual arousal is to examine changes in vaginal vasocongestion via the vaginal photoplethysmograph (Bartlik & Goldberg, 2000). In addition to the measurement of genital sexual arousal, it is also necessary to record women's subjective ratings of sexual arousal as such experiences (e.g., cognitions, affect) play an important role in sexual arousal (Basson, 2002). In contrast to the literature on male sexual arousal, studies on female sexual arousal have demonstrated discordance between correlations of objective and subjective indicators of arousal (e.g., Heiman, 1977). Such studies have primarily utilized the vaginal photoplethysmograph, which assesses blood flow internally and indirectly. Studies using methods assessing external changes in the vulva via the labial thermistor or through thermal imaging, for example, have revealed high correlations between objective and subjective measures of arousal (e.g., Kukkonen et al., 2007; Payne et al., 2007). However, these instruments provide only an indirect measure of blood flow through temperature change. An alternative method for the objective and direct measurement of genital blood flow is laser Doppler imaging (LDI), which measures cutaneous blood flow to a depth of 2-3 mm. LDI has been used in one previous study of female sexual arousal (Styles et al., 2006). Results indicated a significant increase in blood flow to the vulvar area after participants read erotic fiction. However, the subjective component of sexual arousal was not measured; therefore, the relationship between objective and subjective measures of arousal is not known. The purposes of this ongoing study are to examine 1) the usefulness of LDI as a method for measuring the objective component of female sexual arousal (i.e., genital blood flow) in response to visual sexual stimulation, and 2) the strength of the relationship between objective and subjective components of sexual arousal. All participants will watch three 15 minute films during LDI scanning, two of which are nature films: the first film is to allow the participant to reach a steady state (i.e., acclimatization), and the second is to examine baseline blood flow. Participants will then be randomized to one of three types of films: nature, anxiety, humor, or erotic. Participants will be asked to rate their level of subjective arousal before and after the third film. A mixed-model ANOVA will be conducted to compare mean blood flow in the vulva during viewing of the experimental films. In this ANOVA, the within-subjects factor will be time (baseline, experimental) and the between-subjects factor will be experimental film (neutral, humor, erotic). The dependent variable will be blood flow. To assess the association between subjective and physiological measures of arousal, correlations will be obtained between subjective ratings of arousal and mean blood flow during film exposure for each of the experimental films.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the important role that Laser Doppler imaging has in measuring female sexual arousal.
2. Evaluate the relationship between the objective and subjective components of sexual arousal in females.
3. Appreciate the need for further research in the area of female sexual arousal.

**References:**

- Bartlik, B., & Goldberg, J. (2000). Female sexual arousal disorder. In S. R. Leiblum, & R. C. Rosen (Eds.), *Principles and practices of sex therapy* (3<sup>rd</sup> ed.) (pp. 85-117). New York: The Guilford Press.
- Basson, R., Berman, J., Burnett, A., Derogatis, L., Ferguson, D., Fourcroy, J., et al. (2001). Report on the international consensus development conference on female sexual dysfunction: Definitions and classifications. *Journal of Sex & Marital Therapy*, 27, 83-94.
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**Biography:**

Samantha Waxman is currently a PhD student in the Clinical Psychology Program at Queen's University, working under the supervision of Caroline Pukall, PhD. Her dissertation research focuses on the measurement of female sexual arousal using Laser Doppler Imaging. Her Master's research focused on the impact of chronic low back pain on relationship functioning. This is her first time attending SSTAR, and she is looking forward to this and future meetings.

## **6. PSYCHOSOCIAL PREDICTORS OF RELATIONSHIP SATISFACTION IN WOMEN WITH VULVAR PAIN**

**Samantha E. Waxman, MA; Kelly B. Smith, MA; Kate S. Sutton, MA;  
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Chronic vulvar pain (i.e., vulvodynia) is a common condition affecting approximately 16% of women in the general population (Harlow et al., 2001). Vulvodynia has been associated with several negative outcomes, including impaired relationship, sexual, and psychological functioning, and diminished quality of life (e.g., Granot et al., 2002; Masheb et al., 2002; Pukall et al., 2006). Although research has established that vulvar pain impacts women's sexual functioning, little research has examined relationship satisfaction among such women. In addition, little is known regarding the impact of psychosocial factors in predicting relationship satisfaction among women with vulvar pain. The purpose of this study was to examine the predictive value of a number of psychosocial variables on relationship satisfaction among affected women. Twenty-four eligible women with vulvar pain were recruited for an ongoing online study, and were provided with a secure web-based address and log-in ID number. Participants completed the following standardized measures: the Multidimensional Pain Inventory (MPI; Kerns, Turk, & Rudy, 1985), Dyadic Adjustment Scale (Spanier, 1976), Centre for Epidemiological Studies for Depression Scale (CES-D; Radloff, 1977), Pain Catastrophizing Scale (PCS; Sullivan, Bishop, & Pivik, 1995), short form of the Pain Anxiety Symptoms Scale (PASS; McCracken & Dhingra, 2002), and Golombok-Rust Inventory of Sexual Satisfaction (GRISS-F; Rust & Golombok, 1985) to assess pain severity, relationship satisfaction, depression, pain catastrophizing, pain-related fear, and sexual satisfaction, respectively. A series of regressions revealed that only sexual satisfaction significantly predicted relationship satisfaction among women with vulvar pain. In contrast, pain severity, depression, pain catastrophizing, and pain-related fear were not significant predictors. These results indicate that, among women with vulvar pain, sexual satisfaction is an important predictor of relationship satisfaction. Unexpectedly, the variables often found to predict relationship satisfaction in the chronic pain literature were not found to play an important role in the relationship satisfaction in this sample. However, given the small sample size, it is important to further assess the associations between psychosocial variables and relationship satisfaction among women with vulvar pain in larger studies. As vulvodynia entails a strong interpersonal component, more research is needed to understand the factors that may contribute to relationship satisfaction and potential relationship difficulties among women with this condition.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Evaluate the influence of various psychosocial variables on relationship satisfaction among women with vulvar pain.
2. Discuss the important role that sexual satisfaction may play in the relationship of women with vulvar pain.
3. Appreciate the need for further research in the area of psychosocial functioning and relationship satisfaction among women with vulvar pain.

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## **Biography:**

Samantha Waxman is currently a PhD student at Queen's University, working under the supervision of Caroline Pukall, PhD. Her dissertation research focuses on the measurement of female sexual arousal using Laser Doppler Imaging. Her Master's research focused on the impact of chronic low back pain on relationship functioning. This is her first time attending SSTAR, and she is looking forward to this and future meetings.

## **7. PROVOKED VESTIBULODYNIA: DOUBLE THE PAINFUL STIMULATION, DOUBLE THE PAIN PERCEPTION?**

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Provoked Vestibulodynia (PVD) is a common form of genital pain, characterized by a severe burning pain in response to pressure localized to the vaginal entrance. PVD is a common problem, affecting 12% of women in the general population. Research indicates that women with PVD display heightened sensitivity to both painful and non-painful stimuli in affected and non-affected areas. This pattern of increased pain sensitivity has also been demonstrated in other chronic pain conditions; these conditions exhibit impairment in centrally acting endogenous pain modulation systems, such as Diffuse Noxious Inhibitory Control (DNIC). DNIC is triggered by the simultaneous application of two painful stimuli, with pain at one body site inhibiting pain at a distal body site. The major aim of this research was to investigate DNIC function in women with PVD. Twenty-two women with PVD and 24 control participants underwent thermal quantitative sensory testing to determine the integrity of DNIC function. Participants underwent three trials of testing for heat pain tolerance on the forearm before, during, and after immersion of the opposite arm in a cold water bath. Pain intensity ratings were recorded on a 0 (no pain at all) to 10 (worst pain imaginable) scale after each trial. Results indicated that when DNIC was measured by temperature change, there was no significant difference between groups in terms of the number of women with an intact DNIC response (Control N = 79%; PVD N=80%),  $t(42) = -.07$ , *ns*. However, when measured by self-reported pain intensity ratings, 75% of control women and only 45% of women with PVD had an intact DNIC response, resulting in a significant difference between groups,  $t(42) = 2.06$ ,  $p < .05$ . These results will be discussed in terms of discrepant findings between psychophysical and self-reported pain intensity ratings and the implications this difference holds for future research in the areas of chronic pain and PVD.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the role played by the central nervous system, specifically DNIC function, in chronic pain conditions, including PVD.
2. Appraise two forms of pain measurement commonly used in both clinical and research settings: psychophysical and self-report.
3. Compare PVD with other chronic pain conditions in order to gain a better understanding of this condition.

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**Biography:**

Katherine Sutton received her Honours BA in the Psychology of Gender and Human Sexuality through the Scholar's Electives Program at The University of Western Ontario in 2005. She received her MA in Clinical Psychology from Queen's University in 2007, and she is currently pursuing her PhD in Clinical Psychology at Queen's University under the supervision of Dr. Caroline Pukall. Her research examines psychophysical and psychosocial aspects of vulvodynia and sexual attitudes and behaviours of young adults.

## **8. BEHAVIORAL OBSERVATION OF PAIN IN A GYNECOLOGICAL SETTING: PAIN BEHAVIORS AS A DIAGNOSTIC TOOL FOR SEXUAL PAIN DISORDERS**

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Sexual pain disorders affect approximately 15-20% of women (Laumann, Paik, & Rosen, 1999), however, despite their high prevalence much remains unknown concerning how to reliably diagnose and assess these conditions. There is a great deal of overlap between the two main categories of sexual pain disorders, vaginismus and dyspareunia, as the main diagnostic criteria (pain and vaginal spasm) have not been shown to be reliable or valid in discriminating between the two groups (Reissing et al., 2004). Defensive and avoidance behaviors during gynecological examinations have been the most successful in differentiating between women with these conditions (Reissing et al., 2004). Despite the potential of pain behavior coding in a gynecological setting to help in the differential diagnosis of vulvar pain, no standardized system has been developed for such a setting. The present study sought to develop a pain behavior observation system for a gynecological setting, as well as to assess its reliability and validity. Two trained students coded videos of premenopausal women undergoing a standardized gynecological examination as part of a larger ongoing study investigating vulvar pain, which included women meeting the criteria outlined by Reissing et al. (2004) for vaginismus, provoked vestibulodynia (PVD, the most prevalent form of dyspareunia) and pain-free controls. Coders assessed the frequency and intensity of 8 operationalized pain behaviors, some of which were adapted from existing pain behavior coding systems (Keefe & Block, 1982; Sullivan, Adams & Sullivan, 2004). Preliminary results (n=44) suggest that the following system possesses inter-rater reliability with regards to both the frequency and intensity of each category of pain behavior, as well as demonstrating internal consistency through the correlation of each pain behavior category with the overall number of pain behaviors coded for each participant. Construct validity was assessed through the correlation of the overall number of pain behaviors with measures of pain and sexual functioning. Lastly, the coding system differentiated between women based on whether or not they received a diagnosis of a sexual pain disorder by the gynecologist performing the examination, illustrating the discriminant validity of this coding system in a gynecological setting. The results suggest that the developed pain behavior observation system is reliable and valid and should be further assessed as a potential tool in the differential diagnosis of vulvar pain.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the potential utility of identifying and empirically assessing pain behaviors in a gynecological setting.
2. Identify the major components of the presented pain behavior coding system, as well as evaluate the reliability and validity data provided.

### **References:**

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**Biography:**

Stéphanie Boyer is currently a Master's student at Queen's University under the supervision of Dr. Caroline Pukall. For her Master's dissertation she is examining genital blood flow in women with provoked vestibulodynia (PVD) through the use of laser Doppler imaging (LDI), including the impact of increased blood flow on vestibular pain thresholds in women with PVD. This is her first time attending SSTAR and she is looking forward to this experience and future meetings.

## 9. PELVIC FLOOR MUSCLE RESPONSE TO VULVAR PAIN IN WOMEN WITH PROVOKED VESTIBULODYNIA

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**INTRODUCTION:** Recent reviews consider pelvic floor muscle (PFM) dysfunction as one component of the pathophysiology of provoked vestibulodynia (PVD; Farage & Galask, 2005). Physical therapy directed at rehabilitating the PFMs has thus been suggested as a treatment option (Weijmar et al., 2005), and has been shown to be efficacious in decreasing pain in women with PVD (Bergeron et al., 2001). Mostly based on the assumption that PFMs are hypertonic (i.e., with high resistance to passive stretch) in women with vulvar pain, physical therapy addresses PFM dysfunction through education, biofeedback assisted exercises, manual therapy and electrotherapy (Rosebaum, 2005). Using the subjective findings from physical examinations, recent research has suggested that PFM involvement in PVD pathophysiology can be attributed to a state of over-reactivity of predominantly the superficial PFMs (Reissing, Brown, Lord, Binik, & Khalifé, 2005). However, the presence of this superficial PMF over-reactivity has not yet been verified using surface electromyography (EMG; i.e., a measure of skeletal muscle's electrical activity upon a contraction). The purpose of this study was to collect and examine preliminary data of the PFMs using surface EMG, thereupon providing an objective measure of PFM reactivity in women diagnosed with PVD. Surface EMG of the PFMs was recorded in response to a supra-threshold pressure pain stimulus (PPS) applied at the vulvar vestibule (i.e., area around the vaginal entrance). It was hypothesized that the PFMs would contract in response to the stimulus and that superficial PFMs would be more reactive than deep PFMs. **METHODS:** To date, eight women diagnosed with PVD by the study gynecologist have participated after providing informed consent. Surface EMG data were amplified using Delsys EMG system amplifiers (gain 1000, bandpass filter 20-450 Hz, CMRR 100 dB at 60 Hz, input impedance 100 MOhms, sampling rate 1000Hz). EMG activity was recorded from the deep PFM (levator ani) using a Femiscan<sup>TM</sup> probe (Mega Electronics Ltd, Finland) and from the superficial PFM (bulbospongiosus) using disposable surface electrodes (Kendall-LTP 5500, USA). They began by performing a maximum voluntary contraction (MVC) of the PFM. A PPS was then applied at the posterior position of the vulvar vestibule using a vulvalgesiometer, a device that exerts a standard amount of pressure via a cotton swab tip (Pukall, Binik & Khalifé, 2004). Increasing pressures were applied until the participant reported a pain rating of 6 out of 10 on a Likert scale. At this point, EMG data were recorded during the application of three more PPS to the vulvar vestibule. To allow between-subject comparisons, the data were normalized using the MVC values. Non-parametric analyses were used to test the differences between superficial and deep PFM responses. **RESULTS:** The mean age of participants was 24 (SD  $\pm$  5.0) years, mean BMI was 22.7 (SD  $\pm$  3.0) kg/m<sup>2</sup>, and the mean duration of PVD was 4.5 (SD  $\pm$  4.0) years. The median PPS applied at or beyond a pain rating of 6 was 400 (IQR 100-500) g/0.4cm<sup>2</sup>. All eight women demonstrated an increase in both superficial and deep PFM EMG activity on both sides in response to the PPS. This response was 18.1 (IQR 8.0-25.9) %MVC for the deep PFMs and 61.5 (IQR 43.8-75.7) %MVC for the superficial PFMs. A Wilcoxin signed rank test revealed that the superficial PFMs demonstrated

higher EMG responses to the PPS than did the deep PFMs (Median difference = 42.8 %MVC,  $p=0.0001$ ). **CONCLUSION:** As suggested in previous studies, these preliminary results suggest that both superficial and deep PFMs may be involved in protective reactions to vulvar pain in women with PVD, and that superficial PFMs may be more reactive than deep PFMs. As this research progresses, these findings will be compared to the responses observed in women without vulvar pain in order to better examine and define the suspected PFM dysfunction in women with PVD. The participant's PFM response will also be compared to values collected after they have undergone pelvic-floor physical therapy treatment for their PVD in order to examine the effect of treatment on such responses.

### **Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Appraise the evidence based on EMG data that supports the involvement of PFMs in PVD pathophysiology.
2. Compare the superficial and deep EMG PFM protective pain response in women with PVD.
3. Reflect on the foreseeable research paths that arise from this study.

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### **Biography:**

Ms. Gentilcore-Saulnier received her B.Sc. in Physical Therapy from McGill University in 2005 and has since specialized in providing pelvic-floor physical therapy for women with vulvar pain. Since 2006, under the supervision of Drs. Linda McLean and Caroline Pukall, she has been pursuing her M.Sc. degree in the School of Rehabilitation Therapy at Queen's University with a focus on pelvic floor muscles response using electromyography. She has recently become a member of SSTAR in 2007.

## **10. SAYING IT HURTS AND SHOWING IT HURTS: CONSISTENCY BETWEEN SELF-REPORTED PAIN SYMPTOMS AND CLINICAL DIAGNOSIS AMONG WOMEN WITH VESTIBULODYNIA**

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Provoked vestibulodynia (PVD) is a prevalent form of genital pain among women, and a common cause of dyspareunia (i.e., painful intercourse). The diagnosis of PVD is based upon self-reported dyspareunia and pain during a diagnostic examination. However, to date, little research has examined the associations between subjective pain ratings and clinical diagnosis. The current study examined the relationship between pain ratings during the diagnostic examination (i.e., the cotton-swab test), self-reported pain symptoms, and vestibular pain thresholds assessed via quantitative sensory testing (QST). In this ongoing study, participants were 25 women with PVD and 31 controls who reported gynecological history, including any vulvar pain symptoms, during a telephone interview. Women were subsequently scheduled for a standardized gynecological examination that included the cotton-swab test, and a laboratory appointment that assessed vestibular thresholds using QST. Pain intensity ratings were collected during both the cotton-swab test and QST. The cotton-swab test confirmed 89.3% of self-reported PVD cases and 100% of control cases. Pain ratings during this test distinguished between women with PVD and controls, with PVD women reporting significantly higher pain ratings ( $t = -8.53, p < .05$ ). During QST, pain detection threshold was associated with pain ratings during the cotton-swab test,  $r = -.63, p < .05$ , indicating that increased pain sensitivity during QST related to higher pain ratings during the examination. These results indicate that the cotton-swab examination correlates with both patient self-report and QST findings and can distinguish between women with and without PVD. This study supports the cotton-swab test as a valuable clinical instrument, as it appears to be a quick and useful tool for the accurate diagnosis of PVD.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the relationship between self-reported pain symptoms, vestibular sensitivity, and clinical diagnosis among women with Provoked Vestibulodynia (PVD).
2. Recognize the diagnostic utility of the cotton-swab test for PVD.

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**Biography:**

Kelly Smith received her B.A. in Honours Psychology from the University of British Columbia (2002) and her M.A. in Clinical Psychology from Queen's University. She is currently completing her Ph.D. in Clinical Psychology at Queen's University under the supervision of Dr. Caroline Pukall. Her research focuses on sexual, relationship, and psychological adjustment among individuals with chronic uro-genital pain conditions. Kelly has been a student member of SSTAR since 2005 and won the SSTAR Student Research Award (SRA) in 2006. She is currently on the SSTAR SRA Committee.

## **11. PINPOINTING PELVIC PAIN: A NOVEL APPROACH IN MEN** **Seth N. Davis, BA, Yitzchak M. Binik, PhD, & Serge Carrier, MD**

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Chronic prostatitis (CP) is a common, yet poorly understood problem, comprising 1% of primary care visits and 8% of urologist visits. It is the most frequent reason for urology visits in men under the age of 50, and the third most common reason for men over the age of 50 (Collins et al., 1998). At present, CP diagnosis is based on prostate secretions and bacterial culture in the urine, and can be categorized into four subtypes: I) Acute bacterial II) Chronic bacterial III) Chronic nonbacterial IV) Asymptomatic (Krieger et al., 1999). While traditional medical interventions are successful in treating types I & II (bacterial), over 90% of cases fall under type III. As the physiological basis for pain in type III is unclear, it has been coined termed Chronic Pelvic Pain Syndrome (CPPS). In addition to pain, many men suffer from sexual dysfunction, such as premature ejaculation and erectile dysfunction.

At present, there are few instruments that examine pain symptoms in prostatitis. The most widely used is the National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) (Litwin et al., 1999). This questionnaire examines three different aspects of prostatitis: pain, urinary symptoms, and quality of life. The purpose of the NIH-CPSI is to differentiate CP from other disorders of the prostate, such as benign prostatic hyperplasia. The NIH-CPSI does not, however, evaluate the pain in enough detail to differentiate between the CP groups, nor does it investigate temporal sequencing, quality, or activities associated with pain. In light of the reported pain variability within CPPS, this questionnaire lacks sufficient breadth to adequately assess the pain. It also ignores sexual dysfunction, which is a common symptom. The purpose of this study is to examine CPPS and the associated symptoms from a more comprehensive point of view. At this time, there has not been a systematic examination of the location and intensity of the pain in these men; this is reminiscent of our knowledge of female dyspareunia two decades ago.

For this study, 200 men who have been diagnosed with prostatitis by their urologist are being examined using a novel combination of standardized measures. Men answer a number of questionnaires, including the NIH-CPSI, the Pain Catastrophizing Scale (PCS), the State Trait Anxiety Inventory (STAI), the Male Sexual Health Questionnaire (MSHQ), the Short Form 36 (SF-36), and the Dyadic Adjustment Scale (DAS). They are also given a structured interview about the pain they experience, including its location, intensity, description, and what activities exacerbate it. We then use a standardized pain threshold measurement. Each man is tested on the coccyx, perineum, testicles, penis, and abdomen. Finally, they are given the Stamey 4-glass test, which is the gold standard for testing bacteria in the prostate gland.

Thus far, 10 men have been tested, and this appears to be a feasible study of pelvic pain in men. Areas that would be expected to be more sensitive, such as the testicles generally take less pressure ( $>2\text{kg/cm}^2$ ), while areas on the abdomen have higher thresholds ( $>5\text{kg/cm}^2$ ). When more participants have been tested, we will be able to compare these values to their subjective rating of pain. This



method will allow a more in-depth analysis of the effects of CPPS, as we will be able to examine specific correlations between the pain that is experienced and secondary symptoms. We expect to differentiate groups within what is presently a very heterogeneous diagnosis. In addition, it will allow us to compare the pain that is experienced by men that are suffering from prostate inflammation, with those for whom the etiology is not known.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize a commonly underestimated male pain syndrome associated with elevated levels of sexual dysfunction.
2. Compare male CPPS to the female sexual pain disorders.
3. Recognize the need for a new, standardized measure of pain in men with CPPS.

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**Biography:**

Mr. Davis is currently completing his Ph.D. in Clinical Psychology at McGill University in Montreal, Quebec, Canada, under the supervision of Dr. Y. M. Binik.

## 12. OF MICE AND WOMEN: A MOUSE MODEL OF VESTIBULODYNIA FOLLOWING REPEATED VULVOVAGINAL CANDIDIASIS

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Vestibulodynia, one of the most common forms of female genital pain, is characterized by debilitating pain in the vaginal vestibule and may be accompanied by impaired quality of life, mood disturbances, and diminished sexual functioning. The etiology of vestibulodynia is uncertain; however, it has been hypothesized that women with vestibulodynia are significantly more likely to have experienced recurrent vulvovaginal candidiasis (RVVC, defined as  $\geq 3$  yeast infections/year) compared to healthy women. To evaluate whether persistent vulvovaginal inflammation from yeast infections can alter vulvar pain thresholds, we have developed a mouse model of vestibulodynia. A novel method of mechanical sensitivity testing was used to measure vulvar pain thresholds at baseline and following the resolution of three separate vulvovaginal infections with *C. albicans*. Infections were resolved with the antifungal fluconazole and post-infection mechanical sensitivity measurements were made 3 weeks following the clearance of yeast. Following each vulvovaginal infection, mouse vulvar mechanical sensitivity was increased in mice exposed to vulvovaginal *Candida* (with and without estradiol priming) compared to saline, estradiol, and fluconazole control groups. These novel findings provide the first experimental evidence that persistent vulvovaginal infection may lead to altered vulvar pain thresholds, thereby indicating a potential etiological pathway for vestibulodynia.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify prominent risk factors of vestibulodynia.
2. Explain the assumptions underlying the hypothesis that vulvar pain may result from prolonged vulvovaginal inflammation.
3. Extrapolate the implications of infection-induced vulvar pain in mice to clinically affected women.

### **References:**

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### **Biography:**

Ms. Farmer is currently a Ph.D. candidate at McGill University under the supervision of Y.M. Binik. Her work focuses on animal models of acute and chronic genital pain with the aim of elucidating behavioral and pathological mechanisms for human genital pain, particularly vestibulodynia. This work is funded by the National Vulvodynia Association.

**13. NOT TONIGHT DEAR, I HAVE A VULVACHE:  
EVIDENCE FOR REDUCED SEXUAL RECEPTIVITY WITH VULVAR AND HINDPAW  
ZYMOSAN USING PACED MATING IN THE MOUSE**

**Melissa A. Farmer, B.A., Y. M. Binik, Ph.D., James G. Pfaus, Ph.D. & Jeffrey S. Mogil, Ph.D.**

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Dyspareunia, defined as persistent genital pain with sexual intercourse that results in psychological distress, impacts 10-15% of women ages 18 to 34. Genital pain may be comorbid with a variety of sexual disturbances, including reduced sexual desire. Specifically, low sexual desire may impair the arousal response, thereby making genital contact painful, or genital pain may directly dampen sexual desire. However, no empirical evidence has determined whether pain alone—genital or otherwise—is sufficient to reduce sexual motivation. This issue can easily be studied in animals using the paced mating paradigm, which was founded on the principles of female sexual motivation described by Beach. Paced mating in rats has been used to measure female sexual motivation by allowing the female to control, or “pace,” copulation. The current research is novel in two ways: it constitutes the first extension of paced mating to mice, and the paced mating paradigm is used to test the hypothesis that tonic inflammatory pain will result in reduced female sexual behavioral receptivity. Female outbred CD-1® (ICR:Crl) mice, 8-10 weeks of age (Charles River, Boucherville, QC) received subcutaneous injections of zymosan (0.5 mg/kg in 10 uL saline) 4 hours before testing, in either the posterior ridge of the vulva or the dorsal aspect of the hindpaw, or saline only for controls. Female mice were placed in a Plexiglass chamber (8” x 8.5” x 14”), divided in half by a Plexiglass partition with 4 escape holes (spaced 1” apart). At hour 4, male mice were placed into one side and behaviors over the next 2 hours were digitally recorded for later coding by blinded observers. Results indicate that mice with vulvar and hindpaw zymosan exhibited significantly fewer female-paced mounts and intromissions compared to saline controls. Zymosan groups, but not vulvar zymosan groups, spent less time in the male side of the testing chamber compared to saline controls. The vulvar zymosan group had fewer mounts and intromission compared to the hindpaw zymosan group. In summary, zymosan-induced tonic inflammatory pain in the vulva and hindpaw significantly reduced the amount of female-paced receptive behaviors. These findings indicate that the presence of pain, particularly vulvar pain, will reduce behavioral measures of female sexual motivation.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the difficulty in causally linking genital pain with reduced sexual desire.
2. Recognize sexual biases in paced versus non-paced mating paradigms.
3. Compare patterns of reduced mouse sexual receptivity due to genital versus nongenital pain.

**References:**

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Pfaus, J. G., Kippin, T. E., & Coria-Avila, G. (2003). What can animal models tell us about human sexual response? *Annual Review of Sex Research, 14*, 1-63.

**Biography:**

Ms. Farmer is currently a Ph.D. candidate at McGill University under the supervision of Y.M. Binik. Her work focuses on animal models of acute and chronic genital pain with the aim of elucidating behavioral and pathological mechanisms for human genital pain, particularly vestibulodynia.

## 14. THE ROLE OF SEXUALITY IN REPRODUCTIVE HEALTH BEHAVIOURS AMONG EAST ASIAN WOMEN

Jane S.T. Woo, MA and Lori A. Brotto, PhD

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Pap testing rates are significantly lower among East Asian women than Euro-Canadian women despite efforts to raise awareness of the importance of regular testing. Clinicians have speculated that East Asian women's reluctance to undergo Pap testing may be related to culture-linked discomfort with sexuality. The purpose of this study was to empirically explore the role of sexuality in the interaction between acculturation and reproductive health behaviours. Euro-Canadian ( $n = 157$ ) and East Asian ( $n = 191$ ) female university students completed a battery of questionnaires in private. Euro-Canadian women had significantly more accurate sexual knowledge, significantly higher levels of sexual functioning, a broader repertoire of sexual activities and significantly higher rates of Pap testing. Doctor's advice, embarrassment and sexual function all significantly predicted whether a woman had ever had a Pap test. East Asian women were significantly more likely to cite embarrassment as a barrier to Pap testing and those who had ever had a Pap test had higher sexual function than those who had never had a Pap test. Heritage acculturation, but not Mainstream acculturation, predicted whether an East Asian woman had ever had a Pap test. Acculturation to Western culture was significantly related to more accurate sexual knowledge, greater sexual desire and satisfaction, less sexual pain, and less anxiety and depression, whereas length of residency was not significantly related to any variable. The findings provide support for the hypothesis that low Pap testing rates in East Asian women are related to cultural attitudes towards sexuality and highlight the importance of taking into account sexuality in seeking to understand reproductive health behaviours among different cultural groups.

### **Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the importance of taking acculturation into account when studying sexuality in different cultures.
2. Compare the impact of embarrassment on Pap testing behaviour in East Asian and Euro-Canadian women.

### **References:**

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**Biography:**

Jane Woo received her MA in Economics from the University of British Columbia in 2002. She decided early in her banking career that her true interest lay in how culture impacts sexuality and has been conducting research in this area since 2005. She is currently enrolled in the MA program in Clinical Psychology at the University of British Columbia under the supervision of Dr Brotto. She has been a member of SSTAR since 2007.

## 15. THE ROLE OF ACCULTURATION IN REPRODUCTIVE HEALTH PRACTICES AMONG INDIAN, INDO-CANADIAN, CANADIAN EAST ASIAN, AND EURO-CANADIAN WOMEN

Lori A. Brotto, PhD, Annie Y. Chou, BSc, Tara Singh, MD and Jane S.T. Woo, MA

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Indian women have consistently been found to have low rates of cervical cancer screening and this is related to cultural barriers. South and East Asian immigrants comprise the largest and fastest-growing immigrant groups in Canada; therefore, understanding the factors that underlie the reproductive health behaviours of these ethnic minority groups is of great importance. The purpose of this study was to compare reproductive health knowledge and behaviours among Indian women living in India and in Canada, East Asian women in Canada, and Euro-Canadian women. We also explored level of acculturation in the two immigrant groups to better understand the extent to which affiliation with western culture may improve reproductive health knowledge. 663 women of reproductive age were recruited from India and a Canadian university. Participants completed the Health Beliefs Questionnaire, which measures reproductive health behaviours and knowledge, and the Vancouver Index of Acculturation, which measures level of affiliation with the culture of origin as well as western culture. Euro-Canadian women were most likely to have ever had a Pap test and performed a breast self-examination (BSE). There was no difference between the two Indian groups in the proportion who had ever had a Pap test, but Indo-Canadian women were more likely to have performed a BSE. Although the Indo-Canadian women had greater knowledge about reproductive health behaviours than the Indian women, the Pap testing behaviours of the two groups were not significantly different. Level of acculturation was associated with reproductive health knowledge in the two immigrant groups. Results suggest that targeted efforts at ethnic minority groups to improve reproductive health knowledge and behaviours are greatly needed.

### **Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

3. Discuss the knowledge-behaviour desynchrony in regard to Pap testing among the Indo-Canadian women.
4. Recognize the association between acculturation and knowledge of reproductive health.
5. Explain the need to increase reproductive health knowledge and identify barriers to preventive reproductive health screening among ethnic minority groups.

### **References:**

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Saraiya, U. B. (2003). Preventable but not prevented: The reality of cervical cancer. *Journal of Obstetrics and Gynaecological Research*, 29, 351-359.

**Biography:**

Jane Woo received her MA in Economics from the University of British Columbia in 2002. She decided early in her banking career that her true interest lay in how culture impacts sexuality and has been conducting research in this area since 2005. She is currently enrolled in the MA program in Clinical Psychology at the University of British Columbia under the supervision of Dr Brotto. She has been a member of SSTAR since 2007.



## 16. EFFECTS OF A PSYCHOEDUCATIONAL TREATMENT FOR SEXUAL AROUSAL DISORDER IN GYNECOLOGIC CANCER SURVIVORS

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**Introduction:** Treatment of gynecologic cancers by hysterectomy, radiation therapy, and/or oophorectomy results in persisting sexual arousal complaints in a sizable number of women. There are no evidence-based treatments available, leaving many women with chronic sexual difficulty that negatively impacts quality of life. We recently developed a psychoeducational intervention (PED) consisting of 3, 75 minute monthly sessions. The PED included elements of treatment for other sexual dysfunctions, marital counseling, mindfulness training, and anxiety reduction.

**Aim:** The goal was to replicate the findings of Brotto et al. (2007) using a randomized design.

**Methods:** Women having undergone a hysterectomy for cervical or endometrial cancer were randomized into Treatment or Control conditions. Physiological (VPA) and subjective sexual arousal were assessed with a vaginal photoplethysmograph before and immediately following the PED. Questionnaire data were collected the same time points as VPA, and at six months post-PED.

**Outcome measures:** VPA, self-report measures of subjective sexual arousal, sexual distress, mood, relationship satisfaction.

**Results:** Data are available on 13 heterosexual women who completed baseline and post-PED assessments (mean age 54 yrs; mean relationship duration 13 yrs). Seventy-five percent had their hysterectomy for endometrial cancer, and 85% had a bilateral salpingo-oophorectomy. Preliminary findings indicate that sexual desire, arousal, lubrication, orgasm, and satisfaction significantly increased and sexual distress marginally decreased after the PED. Distressing mood symptoms, energy, social functioning, and general health improved after the PED. There was no significant change in VPA but women reported greater mental arousal while watching an erotic stimulus following the PED. There was no improvement in women in the control group in the period before they received the PED. These preliminary data support the feasibility and efficacy of a brief psychoeducational intervention for sexual arousal disorder among gynaecologic cancer survivors, and demonstrate that improvements are not due simply to the passage of time.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Do discuss a brief psychoeducational intervention for sexual dysfunction following gynaecologic cancer
2. To present initial outcome data on a small sample of women who completed the psychoeducational intervention
3. To consider broader implications of a validated psychoeducational intervention for women's sexual dysfunctions.

**References:**

- Bergmark K et al. (2002). Patient-rating of distressful symptoms after treatment for early cervical cancer. *Acta Obstetrica et Gynecologia Scandinavica*, 81, 443-450.
- Bergmark K et al. (1999). Vaginal changes and sexuality in women with a history of cervical cancer. *New England Journal of Medicine*, 340, 1383-1389.
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**Biography:**

Lisa Mehak received her Honours BA in Psychology from the University of Ottawa in 2007. She currently works with school-aged children during a hiatus from her academic studies. She also works as a research assistant for Dr. Lori Brotto at the University of British Columbia. Lisa plans to pursue a Masters and PhD in Psychology and hopes to become a sex therapist in the future.

**17. A SURVEY TO DETERMINE THE PREVALENCE OF PERSISTENT GENITAL AROUSAL AND PERSISTENT GENITAL AROUSAL DISORDER (PGAD) IN A FEMALE POPULATION ATTENDING A LONDON SEXUAL HEALTH CLINIC**  
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Persistent genital arousal disorder (PGAD) in women was first described in 2001 and is emerging as an area of interest in sexual medicine. The disorder is characterised by sensations of intense, persistent and unwanted genital arousal that occurs in the absence of sexual desire, and which is unresolved despite one or more orgasms. The disorder causes marked distress.

Isolated case reports have suggested PGAD may be associated with the sleep cycle, prolonged cycling, discontinuation of anti-depressant therapy, ingestion of soy products and cardiac or arteriovenous malformations. A recent online survey, however, suggested that depression, panic attacks and obsessive monitoring of bodily sensations were statistically associated with PGAD compared with women who did not have all the features of PGAD.

Persistent genital arousal, whether as part of the PGAD syndrome, or even in the context of a clinical picture where the arousal is construed as neutral or welcome is unlikely to be spontaneously self-reported and to our knowledge, no prevalence studies in this area have yet been reported.

We are currently undertaking a non-interventional population survey to assess the frequency of the whole range of persistent genital arousal symptoms in women attending a sexual health walk-in clinic in London. Participants will also complete a validated depression and anxiety questionnaire. Early results of this work, which is currently underway, will be presented at the meeting.

**Learning objectives:**

After attending this presentation, the participants will be able to:

1. Appreciate the emergence of PGAD as an area of interest in sexual medicine.
2. Understand the prevalence of PGA and PGAD in a female population attending a sexual health clinic in London.
3. Comprehend the association with PGAD and symptoms of depression and anxiety.

**References:**

- Amsterdam, A., Abu-Rustum, N., Carter, J., & Krychman, M. (2005). Persistent sexual arousal syndrome associated with increased soy intake. *Journal of Sexual Medicine*, 2(3), 338-40.
- Goldmeier, D., Bell, C., & Richardson, D. (2006). Withdrawal of selective serotonin reuptake inhibitors (SSRIs) may cause increased atrial natriuretic peptide (ANP) and persistent sexual arousal in women? *Journal of Sexual Medicine*, 3(2), 376.
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- Wylie, K., Levin, R., Hallam-Jones, R., & Goddard, A. (2006). Sleep exacerbation of persistent sexual arousal syndrome in a postmenopausal woman. *Journal of Sexual Medicine*, 3(2), 296-302.

**Biography:**

Lucy Garvey studied Medicine at Manchester University and is currently training as a Specialist Registrar in GU and HIV Medicine in London.

**18. A REPORT ON THE INTERNATIONAL SOCIETY FOR SEXUAL MEDICINE (ISSM)  
AD HOC COMMITTEE FOR THE DEFINITION OF PREMATURE EJACULATION**

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**Introduction:** The International Society for Sexual Medicine (ISSM) convened a meeting with most of the world's leading experts on premature ejaculation (PE) in Amsterdam on October 19-21, 2007. The purpose of the meeting was to develop a contemporary, evidence-based definition of premature ejaculation. The ISSM leadership along with others felt current PE definitions suffered from excessive vagueness, imprecision and a subjectivity which primarily hindered research efforts and to a lesser extent clinical practice.<sup>1</sup>

**Method:** Organized under the auspices of the Standards Committee of the ISSM, the meeting was facilitated by an unrestricted educational grant from Plethora Solutions. Johnson & Johnson gave an additional unrestricted educational grant later. ISSM required complete independence from industry during the development of the new definition of PE. There were no industry representatives at the meeting and there was no attempt by industry to influence any part of the development process. The panel of PE experts was chosen by peer-recommendation from 12 experts and opinion leaders in sexual medicine each of whom was asked to nominate, based on expertise in PE, 10 candidates. Several additional experts in sexual medicine were invited to provide balance of opinion, gender and geography. Ultimately, 26 experts were invited and 21 attended (including all of the experts who were nominated by three or more peers and all five who were nominated by > 9 peers).<sup>1</sup>

**Results:** The panel of experts agreed that the constructs that are necessary to define premature ejaculation are: time to ejaculation; inability to delay ejaculation; and negative consequences from premature ejaculation. The panel agreed that the currently available objective evidence on premature ejaculation is limited to men with lifelong premature ejaculation who engage in vaginal intercourse. The panel agreed that, while an evidence-based definition of premature ejaculation currently comes only from studies of men with lifelong premature ejaculation engaging in vaginal intercourse, the following definition is likely to apply to men with premature ejaculation who engage in sexual activities other than vaginal intercourse. The panel concluded that there are insufficient objective data to propose an evidence-based definition of acquired premature ejaculation. By the end of the meeting, there was unanimous agreement on the following evidence-based definition of premature ejaculation: "Premature ejaculation is a male sexual dysfunction characterized by ejaculation which always or nearly always occurs prior to or within about one minute of vaginal penetration; and inability to delay ejaculation on all or nearly all vaginal penetrations; and negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy."<sup>2</sup>

**Discussion:** This definition was approved by the ISSM's Executive Committee, and posted to the ISSM website. It is likely that this definition will have a profound impact on research, as well as, the diagnosis and treatment of PE. There are a number of reasons for this, but a few are particularly salient. There are at least two manuscripts, which will be submitted to peer reviewed journals for publication prior to the annual meeting of the American Urological Association (AUA) in spring

2008. In addition, there will be presentations at that AUA meeting, as well as numerous other professional societies about the development of a “new” definition for PE. The membership of the ISSM Ad Hoc committee, and the process used in developing the definition, all under the auspices of the ISSM which has a large and diverse membership of over 2700 plus members, with representation from over 75 nations, every major religion, many smaller religions and a great variety of races, cultures and ethnicities carries meaningful imprimatur. In this regard, there is reason to believe that this definition will rapidly become the international standard definition of this condition, at least within the medical community. While some professional groups (e.g. American Psychiatric Association) may publish their own definition (diagnostic and statistical manuals, etc.) the probability that the ISSM definition will be influential and seriously considered in these processes is very high. What does this mean for sex therapy? ISSM’s emphasis on an “evidence-based definition of PE is likely to help elevate the appreciation of sexual conditions by the larger scientific and professional communities, as well as the public at large. Furthermore, the final clause of the definition referencing “negative personal consequences” will facilitate needed flexibility for clinicians who wish to provide appropriate treatment to men whose ejaculatory latency is greater than “one minute.” It is noteworthy that sex therapists, of course, have considerable expertise in teaching men how to “delay ejaculation.” Yet, having a strict definition for research purposes will allow for an increased understanding of potential treatment options for those many men whose condition has a strong biological component. Finally, the background of the mental health professionals who participated in this process, implicitly and explicitly helped insure sensitivity to a “sex therapy” viewpoint, reaffirming appreciation within the ISSM of the value of a multidimensional and multidisciplinary perspective regarding PE in particular and sexual disorders in general.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be:

1. Aware of the International Society for Sexual Medicine (ISSM) having convened a meeting in 2007 to develop a contemporary, evidence-based definition of premature ejaculation.
2. Familiar with the constructs necessary to define premature ejaculation
3. Familiar with the new ISSM evidence-based definition of premature ejaculation.

### **References:**

Sharlip, I., ISSM President (personal communication, 2007).

*The International Society for Sexual Medicine*. Retrieved December 12, 2007, from <http://www.issm.info/>

### **Biographies:**

Stanley E. Althof, Ph.D. is Professor of Psychology Case Western Reserve University School of Medicine and a Voluntary Professor, University of Miami School of Medicine. Dr Althof is also the Exec. Director, Center for Marital & Sexual Health of South Florida. Michael A. Perelman, Ph.D. is a Clinical Associate Professor of Psychiatry, Reproductive Medicine, and Urology at the NY Weill Medical College of Cornell University. In addition, Dr Perelman is the Co-Director of the Human Sexuality Program, Payne Whitney Clinic of the New York Presbyterian Hospital in New York City. Raymond C. Rosen, Ph.D. is the Chief Scientist, New England Research Institutes, Watertown, MA. Dr Rosen is also Professor Of Psychiatry and Medicine, UMDNJ - Robert Wood Johnson Medical School. R. Taylor Segraves, MD, PhD, is Professor & Chairperson, Department of Psychiatry Case Western Reserve University and Metro Health Medical Center, Cleveland, OH. All are long-term contributors to sex therapy theory and practice in general and SSTAR in particular.



**19. A PHASE III, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED, MULTICENTER STUDY OF THE SAFETY AND EFFICACY OF LIBIGEL<sup>®</sup> FOR TREATMENT OF HSDD IN SURGICALLY MENOPAUSAL WOMEN**

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**Introduction:** The goal of testosterone treatment of hypoandrogenemic women complaining of Hypoactive Sexual Desire Disorder (HSDD) is to increase serum testosterone toward the normal range of premenopausal women in an effort to alleviate the symptoms of this disorder. In a Phase II study, LibiGel (testosterone gel) with a calculated nominal daily delivery of approximately 300mcg/day was effective in significantly increasing the number of satisfying sexual events at the end of 3 months in women with HSDD. Our Phase III study will examine the safety and efficacy of LibiGel 300 mcg/day for 6 months in healthy surgically menopausal women with HSDD receiving estrogen treatment.

**Patients and Methods:** In this randomized, double-blind, multi-center study of 500 surgically menopausal women, subjects will be randomized to receive LibiGel 300mcg/day or matching placebo. The primary efficacy endpoints are the change from baseline to week 24 in the 4-week satisfying sexual event rate and the change from baseline in the subject's level of desire as recorded in the subject's validated diary. The key secondary endpoint is the change from baseline in sexual distress. Safety assessments include laboratory measurements, application site assessment and adverse events.

**Results:** The study was initiated by BioSante Pharmaceuticals, Inc. in December, 2006 and enrollment is ongoing. A second replicate Phase III study will be initiated in early 2008.

**Conclusion:** In the US there are no FDA approved testosterone therapies available for treatment of HSDD in women. This study is expected to provide pivotal efficacy data to support LibiGel registration for the treatment of HSDD in women.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Understand the efficacy requirements to demonstrate the efficacy of testosterone in the treatment of HSDD in postmenopausal women.
2. Understand the clinical design of a pivotal study designed to demonstrate the safety and efficacy of testosterone gel in treating HSDD in postmenopausal women.



### **References:**

- DeRogatis, L., Koltun, W., Brown, C., Swanson, S., Zborowski, J. G. & Snabes, M. C. (2007). *Validation of the Inventory of Sexual Events and Desire (ISED) Diary for the study of LibiGel<sup>®</sup> (testosterone gel) in the treatment of HSDD*. Paper presented at the meeting of the North American Menopausal Society, Dallas, Texas.
- Lehman, L. M., Zborowski, J. G., Simes, S. M., & Simon, J. A. (2004). *Efficacy and safety of LibiGel<sup>™</sup>, a novel testosterone gel for decreased sexual desire*. Paper presented at the meeting of the International Society for the Study of Women's Sexual Health, Atlanta, Georgia, USA.

### **Biography:**

Dr. Snabes is a Board Certified Reproductive Endocrinologist who received his Ph.D. in Physiology at the University of Michigan and his M.D. from the University of Texas. He completed both a postdoctoral and clinical fellowship at Baylor College of Medicine in Houston where, in addition, he completed a special NIH Reproductive Scientist Fellowship in addition to being on the faculty of the medical school in the Department of Obstetrics and Gynecology. His most recent faculty appointment was in the Department of Obstetrics and Gynecology at the University Of Chicago Pritzker School Of Medicine. Since 2006 he has been consulting full time in the clinical development of compounds such as LibiGel. He has more than 125 abstracts and peer reviewed publications in numerous therapeutic areas including women's health.

**20. VALIDATION OF THE INVENTORY OF SEXUAL EVENTS AND DESIRE (ISED)  
DIARY FOR THE STUDY OF LIBIGEL<sup>®</sup> (TESTOSTERONE GEL) IN THE TREATMENT  
OF HSDD**

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**Introduction:** This study was designed to evaluate the ability of a daily patient diary, the Inventory of Sexual Events and Desire (ISED), to discriminate between subjects with HSDD and those without female sexual dysfunction (No FSD).

**Patients and Methods:** Multi-center study of postmenopausal women: HSDD or no FSD. The number of satisfying sexual events (SSEs) in the ISED was completed for 4 weeks, in addition to a baseline and final visit completion of the Female Sexual Function Index (FSFI), the Sexual Function Questionnaire (SFQ) and the Female Sexual Distress Scale-Revised (FSDS-R).

**Results:** The 38 HSDD and 39 no FSD women enrolled reported statistically significant differences ( $P < 0.001$ ) in the total number of SSEs and in the number of SSEs in the sub-groups of intercourse, oral sex, masturbation and other sexual events (each  $P < 0.001$ ). A logistic regression of SSEs by study group was significant ( $P < 0.001$ ). The Pearson product-moment correlation of the number of SSEs with the FSFI desire score was 0.62. The scores of the SFQ desire domain and the FSDS-R also differentiated the study groups ( $P < 0.001$  for each).

**Conclusion:** This study demonstrated the ability of the ISED diary to discriminate between women with HSDD and no FSD in total SSEs, the number of individual types of SSEs and scores in the SFQ desire domain and the FSDS-R distress questionnaires. Results support the discriminate validity and reliability of the BioSante ISED in evaluating sexual function in women with HSDD for use in Phase III studies of LibiGel in the treatment of HSDD, a condition with no current FDA-approved treatment.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Understand the ability of the ISED daily diary to validly discriminate between women with HSDD and those without FSD.

**References:**

- Derogatis, L. R., Rosen, R., Leiblum, S., Burnett, A., & Heiman, J. (2002). The Female Sexual Distress Scale (FSDS): Initial validation of a standardized scale for assessment of sexually related personal distress in women. *Journal of Sex and Marital Therapy*, 28(4), 317-330.
- Quirk, F., Haughie, S., & Symonds, T. (2005). The use of the Sexual Function Questionnaire as a screening tool for women with sexual dysfunction. *Journal of Sexual Medicine*, 2, 469-477.

**Biography:**

Dr. Snabes is a Board Certified Reproductive Endocrinologist who received his Ph.D. in Physiology at the University of Michigan and his M.D. from the University of Texas. He completed both a postdoctoral and clinical fellowship at Baylor College of Medicine in Houston where, in addition, he completed a special NIH Reproductive Scientist Fellowship in addition to being on the faculty of the medical school in the Department of Obstetrics and Gynecology. His most recent faculty appointment was in the Department of Obstetrics and Gynecology at the University Of Chicago Pritzker School Of Medicine. Since 2006 he has been consulting full time in the clinical development of compounds such as LibiGel. He has more than 125 abstracts and peer reviewed publications in numerous therapeutic areas including women's health.

## **21. PSYCHOSEXUAL DIMENSIONS OF GENITAL HERPES: A REVIEW**

**David Goldmeier MD FRCP, Lucy Garvey MRCP**

**David Goldmeier MD FRCP**

Clinical Lead, Jane Wadsworth Sexual Function Clinic  
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Twenty five percent of the population of the USA carries herpes simplex type 2, although only 20% of these suffer from clinical outbreaks of genital herpes (GH). GH is important, not least because its presence can enhance HIV transmission. It can also be associated with much psychosexual morbidity. Although antivirals and condom usage can reduce transmission, passing on the virus at sex remains a substantial problem for patients. There is no prospect currently of an effective preventive vaccine. Psychosexual problems in patients with GH include disclosure of the diagnosis to sexual partners, which is hampered by fear of and actual stigmatization, and is less likely to occur in casual rather than long term relationships and in those who perceive themselves to be depressed. There is also evidence that high and ongoing “stress” can be associated with onset of recurrences, possibly via reduced natural killer cell activity. Conversely, cytokine release (e.g. interleukin 6) early in recurrences can itself have a direct effect on the brain and lead to reduced positive affect. These psychosexual problems and their therapeutic implications will be discussed.

### **Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the prevalence of genital herpes in the USA.
2. Discuss the problems patients have in disclosing that they have genital herpes.
3. Discuss how stress may affect recurrences of genital herpes.

### **References:**

- Cohen, F., Kemeny, M. E., & Kearney, K. A. (1999). Persistent stress as a predictor of genital herpes recurrence. *Archives of Internal Medicine*, 159, 2430-2436.
- Cunningham, A. L., Diefenbach, R. J., Miranda-Saksena, M., Bosnjak, L., Kim, M., Jones, C., et al. (2006). The cycle of human herpes simplex virus infection: Virus transport and immune control. *Journal of Infectious Disease*, 194(suppl 1), S11-S18.
- Goldmeier, D. (1998). Heisenberg revisited. *Sexually Transmitted Infections*, 74, 219-220.
- Goldmeier, D., Johnson, A., Jeffries, D., Walker, G. D., Underhill, G., Robinson, G., et al. (1986). Psychological aspects of recurrences of genital herpes. *Journal of Psychosomatic Research*, 30, 601-608.
- Janacki-Deverts, D., Cohen, S., Doyle, W. J., Turner, R. B., & Treanor, J. J. (2007). Infection induced proinflammatory cytokines are associated with decreases in positive affect, but not increases in negative affect. *Brain, Behaviour, and Immunity*, 21, 301-307.

### **Biography:**

David Goldmeier did his undergraduate and postgraduate training in London- in both internal medicine and psychiatry. He now leads the Jane Wadsworth Sexual Function Clinic at St Mary's Hospital in London and is an honorary Senior Lecturer at Imperial College. His department works in a large sexual health clinic, and apart from sexual dysfunction he has clinical interests in genital herpes, HIV and syphilis. He and his unit have an eclectic approach to sex therapy. He has written 90 peer reviewed scientific articles. He is currently chair of the sexual dysfunction special interest

group of the British Association of Sexual Health and HIV (BASHH) and is on the council of BSSM. He is past Treasurer of ISSWSH. He is associate editor of Sexually Transmitted Infections and his major clinical and research interest is in female sexual dysfunction. He is an avid meditator and bike rider, and has an abiding interest and fascination with aeronautics, planes and nuclear physics.

## 22. SEXUAL CONCERNS OF PEOPLE WITH DISABILITIES

**Helena Juergens, PhD, CRC**

**Helena Juergens, PhD, CRC**

Department of Marriage and Family Therapy

Edgewood College

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This presentation will focus on important factors related to discussing sexuality with people with disabilities. It will provide sex researches, educators and therapists with information about the most common sexual concerns of people with disabilities as well as provide tools to address those concerns. An active discussion about the most common misconceptions about sexuality and disabilities, as well as the barriers to the healthy sexuality of people with disabilities will take place. Topics including the attitudes toward the sexuality of people with disabilities, myths about the sexuality of people with disabilities, and the impact of different congenital and acquired disabilities on a persons' sexuality will be discussed. This presentation will also address how specific physical, emotional and cognitive disabilities can affect a person's sexual functioning. Additionally, useful resources will also be provided to allow professionals to further their knowledge about sexuality and disabilities.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify the most common sexual concerns of people with disabilities.
2. Recognize the most common misconceptions about the sexuality of people with disabilities.
3. Explain how common barriers for the healthy sexuality of people with disabilities can affect a person's sexual well being.

### **References:**

- Alexander, C. J., Sipski, M. L., & Findley, T. W. (1993). Sexual activities, desire, and satisfaction in males pre and post spinal cord injury. *Archives of Sexual Behavior*, 22, 217-228.
- Boyle, P. (1993). Training in sexuality and disability: Preparing social workers to provide services to individuals with disabilities. *Sexuality and disability*. NY: Haworth Press.
- Weerakoon, P. (1992). Sex education for health professionals: A review of programs. *Journal of Sex Education and Therapy*, 18(4), 242-256.

### **Biography:**

Dr. Juergens received her Ph.D. from The University Of Wisconsin-Madison in 2006 and has been a faculty in the Family and Marriage Therapy Department at Edgewood College and the Psychology Department at the Madison Area Technical College in Madison Wisconsin since 2007. She has been teaching human sexuality courses in both Colleges since 2007, and has been conducting research on sexuality since 2004. She has also been receiving training as a Sex Therapist at the Loyola University Sex Clinic since 2004 and is on the process of getting certified as a Sex Therapist and Sex Educator by AASECT.

## Abstracts for Invited Presentations

**BETTY DODSON – ARTIST AND SEX COACH**  
**Derek C. Polonsky, M.D.**

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This is a film about an artist and her path to the field of sexuality. Betty Dodson has been known as a masturbation coach and a powerful advocate for women taking control of their bodies and for female sexuality over the past 50 years. Before Betty developed her career in sexuality, she was an accomplished artist. This film brings together the two parts of her life. We learn more about her early life and what were some of the factors that influenced her ideas about women and sex. We do not have to speculate on the meaning of her images; she tells us directly what was going on for her at the time, and what she wanted to portray. She has made an important and unique contribution to helping women celebrate their bodies and their sexuality, in particular coaching women for whom orgasms were elusive, and the film provides a rich, graphic history of her work.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Have a perspective about sex therapy that does not encompass insight and conflict resolution.
2. Learn more about the use of art to enhance positive images of women's genitals.
3. Discuss the important historical developments in sexual awareness.

**References:**

Dodson, B. (2002). *Orgasms for Two – The Joy of Partner Sex*. Harmony Books, New York.  
Dodson, B. (1974). *Sex for One: The Joy of Self Loving*. Three Rivers Press, New York.

**Biography:**

Dr. Polonsky graduated from Harvard Medical School in 1970. After completing his medical internship at Mt. Sinai Hospital in New York, he returned to Boston, and trained in Psychiatry at the Beth Israel Hospital. He was co-director of the Couples and Sexual Dysfunction Clinic at New England Medical Center from 1980 – 1984, and has been in private practice since that time. He has been a member of SSTAR since 1981, and has served as Local Events Chairman in 1999 and 2005, was the Treasurer from 1999-2002, and was the Development Officer from 2004-2006



## SEXUAL TECHNOLOGIES AND THE DOUBLE STANDARD

Rachel Maines, PhD

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“Sexual Technologies and the Double Standard” will focus on social and legal responses in the United States to technologies for enhancing sexual experience for men and women, emphasizing the dramatic differences between the medical respectability of Viagra, and the disreputable image of the vibrator. It is illegal to sell the latter in four states, or to own more than five. This paper will show how the long-term historical context of vibrators and other massage therapies reflect medical and social double standards for male and female sexual function that predate the Hippocratic corpus.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Understand the heteronormative quality of social responses to sexual technologies.
2. Contrast the acceptability of technologies for men, such as Viagra, with those for women, such as vibrators.
3. Discuss the historical context of these developments.

### **References:**

Laqueur, T. (1992). *Making sex: Body and gender from the Greeks to Freud*. London: Harvard University Press.

Lindemann, D. J. (2006). Pathology full circle: A history of anti-vibrator legislation in the United States. *Columbia Journal of Gender & Law*, 15, 326ff.

Maines, R. (1999). *The technology of orgasm: “Hysteria,” the vibrator, and women’s sexual satisfaction*. Baltimore, MD: Johns Hopkins University Press.

### **Biography:**

Dr. Maines received her Ph.D. from Carnegie-Mellon University in 1983, and has been at Cornell University since 1999. In addition to the book listed in the references, she is the author of *Asbestos and Fire: Technological Tradeoffs and the Body at Risk* (Rutgers University Press, 2005), and *Hedonizing Technologies: Trajectories of Pleasure in Hobbies and Leisure* (forthcoming from Johns Hopkins University Press), as well as a number of articles and essays on technology, sexuality, and material culture.

## **PREVALENCE, IMPACT, AND TREATMENT OF SEXUAL PROBLEMS EXPERIENCED BY WOMEN IN LATER LIFE**

**Stacy Tessler Lindau, MD, MAPP, FACOG**

**Stacy Tessler Lindau, MD, MAPP, FACOG**

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Despite the aging of the population, little is known about the sexual behaviors and sexual function of older women. We recently reported the prevalence of sexual activity, behaviors, and problems in a national probability sample of 2005 U.S. adults (1550 women and 1445 men) 57 to 85 years of age, and we describe the association of these variables with age and health status. The unweighted survey response rate for this probability sample was 74.8% and the weighted response rate was 75.5%. The prevalence of sexual activity declined with age (73% among respondents who were 57 to 64 years of age, 53% among respondents who were 65 to 74 years of age, and 26% among respondents who were 75 to 85 years of age); women were significantly less likely than men at all ages to report sexual activity. Among respondents who were sexually active, about half of both men and women reported at least one bothersome sexual problem. The most prevalent sexual problems among women were low desire (43%), difficulty with vaginal lubrication (39%), and inability to climax (34%). Among men, the most prevalent sexual problems were erectile difficulties (37%). Fourteen percent of all men reported using medication or supplements to improve sexual function. Men and women who rated their health as being poor were less likely to be sexually active and, among respondents who were sexually active, were more likely to report sexual problems. A total of 38% of men and 22% of women reported having discussed sex with a physician since the age of 50 years.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Adopt an understanding on how therapists and physicians can work together to address women's sexual health.
2. Integrate knowledge from basic and population science to counter myths and improve patient counseling and treatment.
3. Regularly incorporate patient sexuality into decision-making when treating the mental or physical health of a patient.

### **References:**

Lindau, S. T., et al. (2007). A national study of sexuality and health among older adults in the U.S. *New England Journal of Medicine*, 357(8), 762-774.

Lindau, S. T., Laumann, E. O., Levinson, W., & Waite, L. J. (2003). Synthesis of scientific disciplines in pursuit of health: The Interactive Biopsychosocial Model. *Perspectives in Biology & Medicine*, 46(3 Suppl), S74-86.

### **Biography:**

Dr. Lindau received her MD and graduated with highest honors from the Brown University School of Medicine in 1996 and has been on faculty in the Department of Obstetrics and Gynecology and Medicine (Geriatrics) at the University of Chicago Pritzker School Of Medicine since 2002. Dr.

Lindau also received her MAPP from the University of Chicago Harris Graduate School Of Public Policy in 2002. She is an Assistant Professor in the Departments of Ob/Gyn and Medicine – Geriatrics and the University of Chicago Cancer Research Center and is Core Faculty in the MacLean Center on Clinical Medical Ethics and an Associate of the Department of Health Studies. Her research aims to decipher biological mechanisms through which social processes and relationships affect health and illness (e.g. HIV, cancer risk and cancer survivorship) throughout the female life course. In addition, her work addresses policy and educational issues of relevance to women’s health. She is Co-Principal Investigator of the National Social Life, Health and Aging Project, the nation’s first study of social relationships, sexuality and health at older ages and is Director of the University of Chicago Center on Aging Core on Biomarkers in Population-Based Health and Aging Research. Dr. Lindau’s focus is to advance knowledge about and advocacy for the health of aging women, particularly as women transition to and grow in the post-reproductive phase of their lives.

## **SEX AND SEXUAL ORIENTATION DIFFERENCES IN THE SPECIFICITY OF SEXUAL AROUSAL**

**Meredith L. Chivers PhD**

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Sexual orientation refers to the direction of an individual's sexual interests: Homosexual people are sexually attracted to members of their own sex, and heterosexual people are sexually attracted to members of the other sex. In men, sexual orientation is reflected in their sexual responses to female and male sexual stimuli. Gay men are much more sexually aroused to sexual stimuli containing only men, compared with sexual stimuli containing only women, and heterosexual men show an opposite pattern (e.g., Freund, 1963). The close link between sexual orientation and patterns of sexual arousal is referred to as a *category specific* pattern of sexual arousal, in that men's sexual arousal is significantly greater to the category of sexual stimuli (male or female) that matches his sexual orientation (see Chivers, 2005).

Research examining female sexual orientation and sexual response has suggested that the relationship is not as straightforward for women. Whereas men's sexual responses are category-specific, women's genital responses are nonspecific: Women genitally respond to both preferred and nonpreferred categories of sexual stimuli, with regard to their self-reported sexual orientation (Chivers, Rieger, Latty, & Bailey, 2004; Chivers & Bailey, 2005; Chivers, Seto, & Blanchard, in press; Suschinsky, Lalumière, & Chivers, under review; Chivers, 2005). Women do, however, report being more sexually aroused by stimuli that correspond with their sexual orientation. In other words, the physiological and psychological components of sexual arousal can be relatively independent in women, a pattern that has been observed in other research on female sexual psychophysiology (Chivers, Seto, Lalumière, Laan, & Grimbos, under review). These findings indicate that women's sexual response and sexual orientation differs fundamentally from that of men, and suggests that models of sexual response and sexual orientation primarily developed using data from males may not be correct for women.

In this talk, I will provide an overview of my program of research on sex and sexual orientation differences in the specificity of sexual arousal and present results of a new sexual psychophysiology study examining the specificity of female sexual response. The results of this program of work suggest that nonspecific sexual response, with respect to gender, is more characteristic of heterosexual than lesbian women. The capacity for heterosexual women to experience sexual responses to both women and men may underlie the more flexible expression of female sexuality. The implications of women's nonspecific sexual response for understanding women's sexual orientation and the determinants of women's sexual response will also be discussed.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the multidimensional nature of sexual orientation and sexual attraction.
2. Identify differences in women's and men's sexual psychophysiology.

3. Relate the results from this program of research to current models of women's sexual functioning.

**References:**

- Chivers, M. L. (2005). Leading comment: A brief review and discussion of sex differences in the specificity of sexual arousal. *Sexual and Relationship Therapy, 4*, 377– 390.
- Chivers, M. L., & Bailey, J. M. (2005). A sex difference in features that elicit genital response. *Biological Psychology, 70*, 115 – 120.
- Chivers, M. L., Rieger, G., Latty, E., & Bailey, J. M. (2004). A sex difference in the specificity of sexual arousal. *Psychological Science, 15*, 736 – 744.
- Chivers, M. L., Seto, M. C., & Blanchard, R. (in press). Gender and sexual orientation differences in sexual response to the sexual activities versus the gender of actors in sexual films. *Journal of Personality and Social Psychology*.
- Chivers, M. L., Seto, M. C., Lalumière, M. L., Laan, E., & Grimbos, T. (under review). *Agreement of genital and subjective measures of sexual arousal: A meta-analysis*.
- Freund, K. (1963). A laboratory method for diagnosing predominance of homo- or hetero-erotic interest in the male. *Behaviour Research and Therapy, 1*, 85 – 93.
- Suschinsky, K., Lalumière, M. L., & Chivers, M. L. (under review). *Sex differences in patterns of genital arousal: Measurement artifact or true phenomenon?*

**Biography:**

Dr. Chivers received her Ph.D. in clinical psychology from Northwestern University in 2003. Since 2004, she has been a research fellow at the Centre for Addiction and Mental Health (Toronto, Canada) studying women's sexual psychophysiology and practicing clinical sexology. In the fall of this year, Dr. Chivers will join the Psychology faculty at Queen's University (Kingston, Canada) as a Queen's National Scholar. Her research focuses on women's sexuality and sex differences in sexuality, including sexual psychophysiology, sexual orientation, and sexual functioning.

**DESIRES AND DIVISIONS: THE PARTITION OF SELF AND SEXUALITY IN A  
PAKISTANI MAN  
Kathryn Hall, PhD**

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In 1947/48 the Indian subcontinent was partitioned into what is now known as Pakistan and India. Over one million people died in the process. What, if anything, this has to do with sexual problems in a 40 year-old man six decades later is the subject of this case presentation. Hassaan, an American of Pakistani descent has sexual desires he does not understand and feels he cannot control. Every sexual act seems like a momentous moral decision. Is he homosexual or heterosexual? Should he have sex or not? Should he enjoy sex? Should he even look at women? Hasaan is paralyzed and cannot move forward in his life. Estranged from his family, his religion and his culture, he is underemployed, uncommitted and confused. His goal in therapy is to be happy, successful and to put sex back into a manageable place in his life – or maybe to cut it out altogether. He wants a therapist who will help him assimilate more successfully into American culture. This is especially important to him post 9/11. He chooses a therapist with the same deliberate thought and research he puts into all his decisions and he chooses what he believes will be a White American female with a coveted doctorate degree. But when the door opens on our first session, he realizes that something has gone wrong in his calculations. He could not have known when he scheduled his first appointment that our fathers had grown up less than 150 kilometers from each other. The ramifications of this rather unusual coincidence on the therapeutic relationship and the process of therapy will be discussed. Within the larger context of culture and its impact on sexuality, this case presentation will focus on the challenges posed by Pakistani (and other East Asian males) seeking therapy for sexual problems. Whether the decision to encourage Hassaan to embrace his cultural heritage will lead to a successful resolution of his sexual issues remains an open question.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will:

1. Understand the impact of clients' cultural heritage on their sexuality.
2. Be aware of cultural biases inherent in the practice of sex therapy.
3. Know the issues involved in understanding and treating sexual problems in East Asian men.

**Biography:**

Dr. Hall received her Ph.D. from McGill University in 1986. She is the author of *Reclaiming Your Sexual Self: How to Bring Desire Back Into Your Life*, which received the SSTAR Consumer Book Award in 2005. She has a successful private practice in Princeton NJ, consults to the courts and legal system on issues related to sexual abuse and assault and has been a member of SSTAR since 1986.

## **Abstracts for Symposia**

Sexual Pain Disorders: Latest Research and Treatment

*Dr. Bergeron, Dr. Petersen, Ms. Lahaie*

Traditional and Non-Traditional Medical Treatments for Sexual Dysfunctions

*Drs. Saks, Millheiser, McVary*

**A RANDOMIZED COMPARISON OF COGNITIVE-BEHAVIORAL THERAPY AND  
MEDICAL MANAGEMENT IN THE TREATMENT OF PROVOKED VESTIBULODYNIA**  
**Sophie Bergeron, PhD, Samir Khalifé, MD, and Marie-Josée Dupuis, MD**

**Sophie Bergeron, PhD**

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Provoked vestibulodynia, formerly referred to as vulvar vestibulitis syndrome, is a recurrent female genital pain problem with a prevalence of up to 12% in the general population. It is also the main cause of dyspareunia in women of childbearing age. In addition to disrupting sexual functioning, there is preliminary evidence to suggest that this condition can adversely affect general psychological well being and overall quality of life. Despite its high prevalence and associated negative sequelae, there is a dearth of controlled treatment outcome studies focusing on vestibulodynia. The purpose of the present study was to evaluate and compare group cognitive-behavioral therapy (CBT) and medical management in relieving dyspareunia as well as improving psychological adjustment and sexual functioning. Participants were 73 women randomized to one of the two 13-week treatments and assessed at pretreatment, posttreatment and 6-month follow-up via gynecological examinations, structured interviews and standard questionnaires pertaining to pain, sexual function and psychological adjustment. As compared with pretreatment, study completers of both treatment groups reported statistically significant reductions in pain and improvements in sexual functioning at posttreatment. However, global assessment of sexual functioning was significantly better in the CBT group as compared with the medical management group. Further, women having undergone CBT reported significantly less pain catastrophizing – the most robust psychosocial predictor of pain and disability. In terms of treatment satisfaction, participants who took part in CBT were significantly more satisfied than those who were assigned to medical management. Findings suggest that although both treatments were helpful, CBT was more successful regarding satisfaction with treatment, reduction of pain catastrophizing and improvement in sexual functioning. Results support a biopsychosocial conceptualization of dyspareunia, which emphasizes the interdependent roles of cognitive, affective, behavioral, biomedical and relationship factors in the experience of pain and associated sexual dysfunction.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Compare the relative efficacy of CBT and medical management in the treatment of vestibulodynia.
2. Recognize the importance of using a multimodal approach in the treatment of vestibulodynia.
3. Identify the main components of group CBT for dyspareunia.

**References:**

- Arnold, L. D., Bachmann, G. A., Rosen, R., Kelly, S., & Rhoads, G. G. (2006). Vulvodynia: Characteristics and associations with comorbidities and quality of life. *Obstetrics & Gynecology*, *107*, 617-624.
- Binik, Y. M., Bergeron, S., & Khalifé, S. (2007). Dyspareunia and vaginismus: So called sexual pain. In S. R. Leiblum (Ed.), *Principles and practice of sex therapy* (4<sup>th</sup> ed.). New



York, NY: The Guilford Press.

Harlow, B. L., Wise, L. A., & Stewart, E. G. (2001). Prevalence and predictors of chronic lower genital tract discomfort. *American Journal of Obstetrics and Gynecology*, 185, 545-50.

**Biography:**

Sophie Bergeron, Ph.D., is an Associate Professor of Sexology at Université du Québec à Montréal and a Clinical Psychologist at the Sex and Couple Therapy Service of the McGill University Health Centre (Royal Victoria Hospital). She received her Ph.D. in Clinical Psychology from McGill University in 1999 under the supervision of Dr. Irv Binik. The author and co-author of several articles, chapters, and conferences on the topics of dyspareunia and vestibulodynia, Dr. Bergeron's current research focuses on the treatment outcome of dyspareunia as well as on the role of dyadic variables in the experience of genital pain. She is a member of the Society for Sex Therapy and Research and was the Scientific Program Chair for the SSTAR 2004 meeting held in Washington, D.C.

**BOTOX THERAPY FOR WOMEN DIAGNOSED WITH VESTIBULODYNIA  
A RANDOMIZED, PLACEBO CONTROLLED STUDY  
C.D. Petersen MD, E. Kristensen MD, L. Lundvall MD, A. Giraldi PhD MD**

**C.D. Petersen MD**

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**Purpose:** Provoked vulvodynia known as vestibulodynia is defined as vulvar dysaesthesia or pain on vestibular provocation. The condition has many implications for women in regard to sexual health. Many treatments are used in order to help the women, not all based on evidence and no specific cure exists. One of the treatments described in case stories is injection of BOTOX in the vestibulum. The aim of this double blinded, randomised, placebo controlled investigation was to study the effect of BOTOX, injected into the female vestibule on women diagnosed with vestibulodynia, by monitoring the level of pain with a Visual Analogue Scale (VAS) and to describe their sexual function prior to and post treatment.

**Methods:** Sixty-four women referred to a specialized vulva clinic and diagnosed with vestibulodynia. All women were randomised to Botox (20 units) or saline (0,9 % NaCl/ H<sub>2</sub>O, 0,5 mL). Prior to treatment, the women completed a set of questionnaires including the Female Sexual Function Index (FSFI), Derogatis Distress scale (FSD) and a visual analog scale (VAS) for assessment of pain. The VAS was repeated every 4 weeks and FSFI/ FSD every 3 months until one year post treatment. Sexual dysfunction was defined as a cut-off score at 26,55 points on the FSFI scale and > 15 points on the FSD.

**Results:** The study will be completed in July 2008. Data on the results of 6 months follow up will be presented at the SSTAR meeting in March 2008.

**Conclusion:** Several pilot studies have emphasized that treatment with Botox is a new and promising way of treating patients with vestibulodynia. This study will add knowledge to the few clinical and evidence based treatments on vulvodynia.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify, diagnose and treat women diagnosed with vestibulodynia with Botox.
2. Recognize the complexity of the disease vulvodynia and the need for multidisciplinary treatments.
3. Recognize the importance of evidence-based treatment of vulvodynia.

**References:**

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### **Biography:**

Christina Damsted Petersen is currently a medical doctor and a PhD student at the department of Sexological Research and the department of Gynaecology and Obstetrics, Rigshospitalet University Hospital in Copenhagen, Denmark. She received her medical degree at the University Hospital of Odense, Denmark in 1997 and has since pursued to become a specialist in Gynaecology and Obstetrics. She is also a certified counsellor in sexology and has been conducting group psychotherapy for women diagnosed with dyspareunia at the Department of Sexology in Copenhagen. She has initiated the Danish Society for the Study on Vulvar Diseases and is currently finishing a randomized trial on treatment with Botox on vulvodynia in Copenhagen. Dr. Petersen has served as chair of the young Danish Gynaecologists and Obstetricians from 2005 until 2007 after serving as a board member for several years. She has served as referee on national and international journals. In 2006 Dr. Petersen was awarded the European Society for Sexual Medicine grant for Medical research.

## FEAR AND PAIN VS MUSCLE SPASM AS THE MAIN DIAGNOSTIC CRITERIA FOR VAGINISMUS

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The DSM-IV-TR (APA, 2000) classifies vaginismus as a sexual pain disorder characterized by involuntary spasm of the pelvic muscles surrounding the outer third of the vagina. Interestingly, the few studies that have investigated the validity of the vaginal muscle spasm criterion concluded that the current conceptualization of vaginismus lack in validity and reliability (Reissing et al., 2004; van der Velde & Everaerd, 1999, 2001). Although the legitimacy of the vaginal spasm criterion has been questioned, there are a number of characteristics which are specific to women with vaginismus. These are avoidance behaviors and defensive reactions to vaginal penetration, chronic hypertonicity of the pelvic floor muscles, and genital pain (Reissing et al., 2004). The aim of the present study was to examine whether genital pain and fear should play an important role in the diagnosis of vaginismus. One hundred and twenty women (40 vaginismus, 40 vestibulodynia, 40 controls) between the ages of 18 and 40 participated in a 3-hour session which included: 1) a semi-structured interview and standardized questionnaires; 2) physiological monitoring; 3) a sensory testing session; and 4) a gynecological examination. The results demonstrated that unlike the vaginal muscle spasm, genital pain and fear should be considered as important diagnostic criteria in the diagnosis of vaginismus.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the role that pain and fear play in vaginismus.
2. Discuss whether pain/anxiety behaviors should play an important role in the diagnosis of sexual pain disorder.

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**Biography:**

Marie-Andrée Lahaie is in the final stages of her PhD in clinical psychology at McGill University. She completed a pre-doctoral internship at the Sex and Couple Therapy Service of the Allan Memorial Institute, Royal Victoria Hospital and is currently conducting another pre-doctoral internship at the Chronic Pain Center of the Montreal General Hospital. Marie-Andrée's research interests focus on the role played by pain and fear in the development and maintenance of sexual pain disorders as well as on the characteristics that distinguish vaginismus from dyspareunia.

## TRADITIONAL TREATMENTMENTS FOR FEMALE SEXUAL DYSFUNCTION

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The objective of this presentation is to appreciate what medication changes and additions help which women with sexual difficulties. The biochemistry of female sexual function must be viewed in context of new understanding of female sexual response and new understanding of female "sex receptors" or biochemistry of sexual desire. Pharmacodynamics of Dopamine, Serotonin, Prolactin, Nitric Oxide, (Testosterone and Estrogen) will be discussed. Antidepressant, antipsychotic and other medications will be reviewed regarding mechanisms of action and resulting chemical influence on sexual function. Comparison studies between Paroxetine, Escitalapram and Venlafaxine XR will be presented. Pharmacologic treatment: oral and topical, for women with sexual dysfunction will be discussed including use of Bupropion XL, Mirtazapine, Buspirone, Modafinil, 5-phosphodiesterase inhibitors, testosterone, Alprostadil cream, and "Natural Enhancers." In conclusion, for sexual desire, arousal and orgasm, women need emotional readiness as well as enough dopamine, testosterone, estrogen and nitric oxide and not too much prolactin or serotonin 5-HT2 stimulation. This balance can be medically enhanced by choosing medications wisely.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discriminate which medications may be contributing to sexual dysfunction.
2. Understand what medication changes or additions can be used to improve desire, arousal, and orgasm.

### **References:**

- Heiman, J. R., Gittelman, M., Costabile, R., Guay, A., Friedman, A., Heard-Davidson, A., et al. (2006). Topical alprostadil (PGE1) for the treatment of female sexual arousal disorder: In-clinic evaluation of safety and efficacy. *Journal of Psychosomatic Obstetrics and Gynecology*, 27, 31-41.
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- Saks, B. R., & Gillespie, M. (2002). Psychotropic medication and sexual function in women: An update. *Archives of Women's Mental Health*, 4, 139-144.

### **Biography:**

Dr. Saks received undergraduate and medical degrees from Brown University. She completed an internship in medicine at Montefiore Hospital in New York and did residency training in obstetrics/gynecology and then psychiatry at Yale University. She was subsequently a clinical instructor at Yale in both departments. She also completed a sex therapy fellowship at Yale sponsored by the National Institute of Mental Health. Dr. Saks is now a Clinical Professor of

Psychiatry at the University of South Florida in Tampa. She lectures nationally and medication and sexual function.

## **NON-TRADITIONAL MEDICAL TREATMENT FOR DESIRE DISORDERS IN FEMALES: OB/GYN PERSPECTIVE**

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**Introduction:** Approximately 40 million people in the United States are currently taking herbal supplements. Therefore, it is not surprising that many women have chosen to pursue herbal and alternative therapies for their low sexual desire, especially given the lack of FDA-approved medications. However, limited information is available regarding the safety profiles of many herbal formulations marketed for the treatment of female sexual disorders.

**Objective:** To review the safety and efficacy data of several herbal therapies and a medical device marketed for the treatment of female sexual disorders and to apply these findings to the clinical setting.

**Methods/Results:** Several herbal therapies for women including ArginMax, Zestra, and black cohosh, as well as the NuGyn Eros™ Therapy device have been proven effective in the treatment of low sexual desire in randomized controlled trials. These therapies have been shown to improve various aspects of sexual functioning, including desire, overall satisfaction, central and peripheral arousal, orgasm, and pain.

**Conclusions:** Non-traditional therapies for low sexual desire in women are a reasonable option in the appropriate patient population. However, further prospective research is warranted in this area.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the impact of herbal therapies on the treatment of female sexual disorders.
2. Identify women who are appropriate candidates for herbal therapies.
3. Explain the data supporting non-pharmacologic therapies for the treatment of female sexual disorders.
4. Recommend herbal therapies and/or a medical device that have been shown to be safe and effective in the treatment of low sexual desire in women.

### **Biography:**

Dr. Millheiser received her MD from Northwestern University School of Medicine in 1999 and completed her residency in Obstetrics and Gynecology at Stanford University in 2004. She received a Women's Reproductive Health Research scholarship from the NIH in 2004 in order to pursue her interest in the field of female sexual health. Her research has centered on the comparison of peripheral and central sexual arousal in healthy women and women with hypoactive sexual desire disorder. She currently has a female sexual medicine practice within the Division of Gynecologic Specialties at the Stanford University Medical Center.



**UPDATE ON TRADITIONAL AND NON-TRADITIONAL MEDICAL TREATMENTS FOR  
SEXUAL DYSFUNCTION  
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ED was once considered psychogenic in origin and frequently neglected by healthcare providers. In recent years, increased recognition and attention has been placed on treatment options for ED as part of a larger focus to improve the general quality of life. Currently, both the National Institutes of Health Consensus Panel and the World Health Organization recognize ED as an important public health problem. ED is a highly prevalent disease among older males; when treated appropriately, its resolution can greatly improve patients' quality of life, self-esteem and the ability to maintain intimate relationships

Goal-directed treatment is essential for the proper management of ED. This takes into account that the patient and partner are involved in the clinical decision making process. It also necessitates a physician understanding that treatment preference and expectations may vary from patient to patient. Currently there are five major categories of therapies that are currently employed for the treatment of ED: 1) oral therapies, 2) injection therapies, 3) testosterone therapy, 4) penile devices and 5) psychological therapy.

Phosphodiesterase type 5 inhibitors (PDE5i) are considered the first line therapy for the treatment of ED. The mechanisms-of-action are well studied, influencing erection by elevating penile cGMP, resulting in SMC relaxation. All of the competitive PDE5i available (sildenafil, tadalafil and vardenafil) appear to have equal efficacy.

Another therapy for ED involves the intracavernous or transurethral injection of vasoactive medications. Alprostadil is a stable form of PGE<sub>1</sub> that exerts its action by increasing cAMP concentration and decreasing the intracellular calcium concentration resulting in SMC relaxation. Despite the uncertainties associated with the diagnosis and the low quality of evidence, it is recommended that healthcare providers offer replacement therapy to men with low testosterone and ED.

The choice of penile prosthesis is dependent upon patient preference and should be related to the body habitus and manual dexterity. Due to the permanence of prosthetic devices, patients should be advised to first consider less invasive options for ED treatment. Although there are no systematic reviews available, expert opinion consensus and limited evidence suggests that patients and partners are highly satisfied.

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the importance of PDE5i therapy.
2. Discuss the prevalence of sexual dysfunction.

3. Compare the efficacy of treatment of sexual dysfunction between the various therapies.

**Biography:**

Dr. McVary received his M.D. from Northwestern University in 1983 and has been on the faculty in the Department of Urology at Northwestern University since 1989. He has been conducting federally funded basic science and clinical trials on prostatic disorders and erectile dysfunction continuously since 1989.

## **Abstracts for Paper Sessions**

Theoretical and Practical Issues in Sexual Health  
*Dr. Katz, Ms Rosenbaum, Dr. Metz, Dr. Perelman*

Hot Topics in Student Research  
*Ms Kukkonen, Ms Lykins, Ms Woo*

Painful intercourse: Predictors, Correlates, and Development  
*Ms Donaldson, Ms Smith, Ms Desrochers, Ms Sutton*

## ERECTILE DYSFUNCTION AND PROSTATE CANCER

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The treatments for prostate cancer all have significant impact on erectile functioning. While the onset and trajectory of erectile difficulties following surgery, radiation therapy, cryotherapy, and other emerging treatment modalities differ, the end result is often a man who is disappointed, frustrated and depressed at this loss. The impact of erectile difficulties on the partner is also significant and while most relationships are described as being strengthened by the experience of cancer, many relationships will show strain as the couple attempts to cope with changes in their sexual life and a new way of functioning in the light of these changes.

This presentation will describe the sexual difficulties experienced by men and their partners following diagnosis and treatment of prostate cancer. It will also highlight the emerging field of penile rehabilitation as well as present some therapeutic strategies for the therapist treating the couple who have been impacted.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the sexual side effects of treatment for prostate cancer.
2. Discuss treatment modalities for this problem.
3. Identify relationship issues secondary to erectile dysfunction in the man treated for prostate cancer.

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Schover, L. R., Fouladi, R. T., Warneke, C. L., Neese, L., Klein, E. A., Zippe, C., et al. (2002). The use of treatments for erectile dysfunction among survivors of prostate carcinoma. *Cancer*, 95, 2397-2407.

**Biography:**

Anne Katz is the sexuality counselor at CancerCare Manitoba. She received her PhD from the University of Manitoba in 2000, is the editor of *Nursing for Women's Health*, and contributing editor to the *American Journal of Nursing* where she publishes a quarterly column called Sexually Speaking. She is the author of *Breaking the Silence on Cancer and Sexuality: A Handbook for Health Care Providers*.

# PELVIC FLOOR INVOLVEMENT IN MALE AND FEMALE SEXUAL DYSFUNCTION AND THE ROLE OF PELVIC FLOOR REHABILITATION IN TREATMENT

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**Introduction:** The sphincteric and supportive functions of the pelvic floor are fairly well understood and pelvic floor rehabilitation, a specialized field within the scope and practice of physical therapy, has demonstrated effectiveness in the treatment of urinary and fecal incontinence. The role of the pelvic floor in the promotion of optimal sexual function has not been clearly elucidated.

**Aim:** To review the role of the pelvic floor in the promotion of optimal sexual function and examine the role of pelvic floor rehabilitation in treating sexual dysfunction.

**Main Outcome Measure:** Review of peer-reviewed literature.

**Results:** It has been proposed that the pelvic floor muscles are active in both male and female genital arousal and orgasm, and that pelvic floor muscle hypotonus may impact negatively on these phases of function. Hypertonus of the pelvic floor is a significant component of sexual pain disorders in women and men. Furthermore, conditions related to pelvic floor dysfunction, such as pelvic pain, pelvic organ prolapse, and LUTS (lower urinary tract symptoms), are correlated with sexual dysfunction.

**Conclusions:** The involvement of the pelvic floor in sexual function and dysfunction is examined as well as the potential role of pelvic floor rehabilitation in treatment. Further research validating physical therapy intervention is necessary

## **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the importance of the pelvic floor in sexual function.
2. Recognize the relationship between pelvic pain, LUTS, and sexual dysfunction.
3. Discuss the literature researching pelvic floor exercise in the treatment of sexual dysfunction.

## **References:**

Rosenbaum, T. Y. (2007). Pelvic floor involvement in male and female sexual dysfunction and the role of pelvic floor rehabilitation in treatment: A literature review. *Journal of Sexual Medicine*, 4(1), 4-13.

## **Biography:**

Talli Rosenbaum is a urogynecological physiotherapist and AASECT certified sexual counselor. She is the chair of the AASECT counselor certifications committee and a member of several sexual health organizations.

## ELEMENTS IN MEN'S SEXUAL HEALTH: MAKING SENSE OF COMPLEXITY

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Men's sexuality is commonly oversimplified, teased, even vilified as crudely focused on sex performance or function. Within an integrative, biopsychosocial, multidimensional model, this presentation addresses several key cognitive-behavioral-emotional elements for understanding and working well with men (and couples) in clinical practice who present with sexual problems.

Important elements include:

1. using the biopsychosocial model for appreciating the complexity of men's sexuality;
2. addressing the problem of men's "sexual silence" -- especially in couple therapy.
3. explaining 3 biopsychosocial learnings that help men and couples grow as an "intimate team": (a) respect the power of the biological imperative; (b) integrate sex "objectification" with "personalization"; and (c) develop emotional sophistication to balance the tendency to "sexualize emotions".
4. accepting yet challenging men's adherence to the "perfect intercourse" model and encouraging his and his partner's adopting the "Good Enough Sex" model.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Discuss the biopsychosocial dimensions of men's sexuality.
2. Explain the importance of clinically addressing "men's sexual silence" in couple therapy.
3. Outline 3 biopsychosocial learnings that help men and couples grow as an "intimate team";

### **References:**

McCarthy, B. W., & Metz, M. E. (2007). *Men's sexual health: Fitness for satisfying sex*. NY: Routledge.

Metz, M. E., & McCarthy, B. W. (2007). The Good-Enough Sex Model for couple sexual satisfaction. *Sexual and Relationship Therapy*, 22(3), 351-362.

### **Biography:**

Michael E. Metz, PhD, is in private practice in Minneapolis/St. Paul, MN as a psychologist and marital & family therapist treating individuals and couples, and is adjunct assistant professor with the University of Minnesota's Department of Family Social Science. For 12 years, Dr. Metz served on the faculty of the University of Minnesota Medical School. He is the author with Barry McCarthy of *Men's Sexual Health*, 2007; *Coping with Premature Ejaculation*, 2003; and *Coping with Erectile Dysfunction*, 2004 (given the 2007 SSTAR best consumer sexual health book award). He is also the author of the *Styles of Conflict Inventory* (1993) to assess couple interaction patterns. Barry W. McCarthy, Ph.D. is a professor of psychology at American University. He practices individual, couple, and sex therapy at the Washington Psychological Center. Dr. McCarthy has published many professional articles, 18 book chapters, and co-authored 12 books. In addition, he has presented over 200 workshops nationally and internationally.

**THE FUTURE IS NOW:  
AN INTEGRATED SEX THERAPY FOR THE NEW MILLENNIUM  
Michael A. Perelman, PhD**

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There has been considerable recent discussion, if not dissension and confusion within our own ranks, regarding our identity as sex therapists in the new millennium. Sex therapy is not dead! Yet, sex therapists must embrace knowledge gleaned from our colleagues in urology, gynecology, endocrinology, primary, and family practice with the same enthusiasm and fervor, which we chastised them for not appreciating our wisdom, which had accumulated from Freud to Zilbergeld. The real threat is in retreating to a narrow view of sex therapy, that ignores advances in biology, gene therapy, pharmaceuticals and other areas of medical science. We can thrive and continue to provide professional services with integrity to individuals/couples with sexual concerns, by unifying ourselves behind a new Integrated Sex Therapy (*IST*). The purpose of this presentation is to describe an *IST* for the diagnosis and treatment of sexual concerns, for both men and women, singles and couples. This model integrates the use of the new sexual pharmaceuticals within existing sex therapy theory and practice. In the last decade, sex therapists have written numerous articles published in medical journals calling attention to the psychosocial balance to the sexual medicine equation. The focus of these articles is different than those manuscripts criticizing the medicalization of sexual concerns and disorders. Many sex therapists have already described various treatments where physicians would combine sexual education and counseling with the pharmaceuticals, they prescribe, in order to optimize efficacy and obtain more satisfactory long-term results. We should continue these efforts. However, in more complicated cases with greater psychosocial obstacles to success, merely adding education while necessary, will not be sufficient to obtain a successful outcome. We must embrace our unique ability to manage complex matrices of variables, which dynamically shift the sexual equilibrium. This requires more time than the typical prescribers of sexual pharmaceuticals have available during an office visit. Fortunately, thoughtful examination and sustained effort while still appreciating treatment duration is part of our legacy as sex therapists.

An *IST* is not as much a new approach, as an extension of our early professional history and teachings. Behaviorist, Jack Annon's PLISSIT model anticipated this need and has been part of our lexicon for over a generation. PLISSIT can be effectively fused with Helen Kaplan's "Cornell Model." Kaplan adapted Masters and Johnson's bio-psychosocial approach and structured sexual exercises, but she also emphasized the skillful management of resistance to facilitate an individual's psychological and sexual improvement. *IST* fuses these historical approaches with appropriate and discerning use of the new sexual pharmaceuticals. We can do this best! A tremendous opportunity exists today for sex therapists (both physicians and nonphysician alike) to reassume a position of leadership in the field of sexual medicine. Sex therapists will have multiple roles as educators and counselors, but our identity will be re-stabilized and enhanced by our unique ability to treat individuals /couples who suffer from more complex psychosocial obstacles to success. There are an extremely high proportion of individuals who discontinue pharmaceuticals prescribed for sexual difficulties. It is no surprise to us that restoring sexual capacity often does not create and/or restore a



satisfactory sexual life for single or especially, coupled individuals. While many of these individuals discontinue their medications for reasons of efficacy and safety concerns, there is no question that psychosocial factors are also a major determination. Examining discontinuation and pharmaceutical non-responders provides an emerging opportunity to demonstrate the robust power of an IST to successfully assist individuals with sexual concerns where a pharmaceutical monotherapy or polyceutical approach has failed. This presentation will describe an IST model, which operates within a biopsychosocial framework. Timing of therapeutic interventions, follow-up, “weaning” and relapse prevention strategies will be discussed. The relevance of the Sexual Tipping Point™ model within an IST will also be described.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify opportunities for a sex therapist’s professional development in the new millennium.
2. Describe an Integrated Sex Therapy approach for the treatment of male and female sexual disorders.
3. Explain the Sexual Tipping Point™ model.

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### **Biography:**

Dr. Michael A. Perelman is a Clinical Associate Professor of Psychiatry, Reproductive Medicine, and Urology at Weill Medical College of Cornell University. He is the Co-Director of the Human Sexuality Program, Payne Whitney Clinic of the New York Presbyterian Hospital in New York City. Dr. Perelman has served on several society boards of directors and is a member of over 25 national and international professional organizations. He has been a member of SSTAR for over 30 years and the current President-Elect. He was recently elected a fellow of the Sexual Medicine Society of

North America (SMSNA), and was appointed to the Sexual Function Advisory Council of the American Urological Association Foundation.

## THE HEAT IS ON: APPLYING THERMOGRAPHY TO HEALTHY AND CLINICAL POPULATIONS

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Current physiological measures of sexual arousal do not correlate highly with subjective measures, are intrusive, hard to compare between genders and quantitatively problematic (Janssen, 2001). In addition, the required genital manipulation and output measures of available instruments make it difficult to establish diagnostic criteria for sexual arousal difficulties in a clinical setting. Data from two studies examining the reliability and validity of thermographic imaging are presented to provide support for this technology as a possible solution to these problems.

Two studies were conducted to provide support for the use of thermography in the measurement of sexual arousal. In a first study, 78 healthy young participants (38 men, 40 women, mean age = 21.15 years) viewed a neutral film clip after which they were assigned to view one of four other videos: 1) neutral ( $n = 19$ ); 2) humor ( $n = 19$ ); 3) anxiety provoking ( $n = 20$ ); 4) sexually explicit ( $n = 20$ ). Genital and thigh temperature were continuously recorded using a TSA ImagIR thermographic camera. Subjective measures of sexual arousal, humor and relaxation were assessed using Likert-style questions prior to showing the baseline video and following each film. Using the same procedure, a second study was conducted with eighty 30-45 year olds (40 men, 40 women, mean age = 37.05 years) to generalize the findings from the first study.

Repeated measures ANOVAs followed by statistical tests of simple main effects on the group of 78 young participants demonstrated that both men and women viewing the sexually arousing video had significantly greater genital temperature ( $m = 33.50$  °C) than those in the humor ( $m = 31.95$  °C), anxiety ( $m = 32.13$  °C) or neutral ( $m = 32.15$  °C) conditions. Furthermore, genital temperature was significantly and highly correlated with subjective ratings of sexual arousal (range  $r = 0.55$  to  $0.65$ ,  $p < .001$ ). There were no significant differences in thigh temperature between experimental conditions or within each condition, indicating that temperature increases during sexual arousal were specific to the genital region. Preliminary analyses for the second study of 30-45 year olds suggest highly similar results to those in the younger population whereby participants in the erotic condition had significantly greater genital temperature ( $m = 33.01$  °C) than those in the humor ( $32.10$  °C), anxiety ( $32.01$  °C), or neutral ( $31.98$  °C) conditions, with significant correlations between the subjective and physiological measures (range  $r = .25$  to  $.44$ ,  $p < .05$ ). Analyses examining the similarities and differences between men and women, as well as the two age groups, is also underway.

A third pilot study is now examining important clinical issues regarding the use of thermography as a diagnostic tool for Erectile Dysfunction (ED) by comparing it to the current clinical gold standard, penile color Doppler ultrasonography (Connolly et al., 1996). In addition, the clinical usefulness of thermography for the physiological assessment of women with Persistent Genital Arousal Disorder (PGAD) (Leiblum et al., 2007) is also underway.

Thermal imaging is a promising technology for the assessment of physiological sexual arousal in both men and women. Further development will provide information on the potential of thermography as a tool for the diagnosis and treatment evaluation of sexual arousal difficulties such as Erectile Dysfunction (ED), Female Sexual Arousal Disorder (FSAD), and Persistent Genital Arousal Disorder (PGAD).

**Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify the advantages of remote temperature recording during sexual arousal.
2. Discuss the similarities in patterns of sexual arousal between men and women.
3. Recognize the clinical and research implications of measuring sexual arousal via thermal imaging.

**References:**

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**Biography:**

Ms. Kukkonen is currently completing her Ph.D. in Clinical Psychology at McGill University in Montreal, Quebec, Canada, under the supervision of Dr. Y. M. Binik.

## SEX DIFFERENCES IN VISUAL ATTENTION TO EROTIC AND NON-EROTIC STIMULI

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It has been suggested that sex differences in the processing of erotic material (e.g., memory, genital arousal, brain activation patterns) may also be reflected by differential attention to visual cues in erotic material. To test this hypothesis, we presented 20 heterosexual men and 20 heterosexual women with erotic and non-erotic images of heterosexual couples and tracked their eye movements during scene presentation. Results supported previous findings that erotic and non-erotic information was visually processed in a different manner by both men and women. In addition, we found sex differences such that men looked at opposite sex figures significantly longer than did women, and women looked at same sex figures significantly longer than did men. Within-sex analyses suggested that men had a strong visual attention preference for opposite sex figures as compared to same sex figures, whereas women appeared to disperse their attention evenly between opposite and same sex figures. These differences, however, were not limited to erotic images but evidenced in non-erotic images as well. No significant sex differences were found for attention to the contextual region of the scenes. Results are interpreted as potentially supportive of recent studies showing a greater non-specificity of sexual arousal in women. This interpretation assumes there is an erotic valence to images of the sex to which one orients, even when the image is not explicitly erotic. It also assumes a relationship between visual attention and erotic valence.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Describe the pattern of gender differences in visual attention to erotic and non-erotic material.
2. Discuss how these results relate to gender differences in sexual arousal patterns.

### **References:**

- Chivers, M. L., Rieger, G., Latty, E., & Bailey, J. M. (2004). A sex difference in the specificity of sexual arousal. *Psychological Science, 15*, 736-744.
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- Lykins, A. D., Meana, M., & Kambe, G. (2006). Detection of differential viewing patterns to erotic and non-erotic stimuli using eye-tracking methodology. *Archives of Sexual Behavior, 35*, 569-575.

### **Biography:**

Amy Lykins is a doctoral candidate at the University of Nevada, Las Vegas working under the research supervision of Dr. Marta Meana. She is currently completing her clinical internship at the Centre for Addiction and Mental Health in Toronto, Ontario, under the supervision of Drs. Ray Blanchard and Ken Zucker.

## **DOES ACCULTURATION AFFECT PARTICIPATION IN SEXUAL PSYCHOPHYSIOLOGY RESEARCH IN CANADIAN ASIAN WOMEN?**

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Recent studies have revealed the importance of exploring acculturation when studying sexuality in East Asian individuals. This is a topic of importance, considering the potential role of sexual attitudes as a barrier to Pap testing in East Asian women. The purpose of this study was to explore the role of acculturation, sexual attitudes, and sexual behaviours in predicting whether or not Canadian East Asian women might participate in physiological sexual arousal research using the vaginal photoplethysmograph. Euro-Canadian ( $n = 8$ ) and East Asian ( $n = 17$ ) female university students completed a battery of questionnaires in private in exchange for course credit. They were then informed about the opportunity to participate in a second phase of the study, in which they would view neutral and erotic audiovisual films while their vaginal blood flow patterns were monitored, and that they would be compensated monetarily. We hypothesized that there might be ethnic differences in women who participated in the psychophysiological phase, and that level of acculturation might be related to this decision among the East Asian women. Specifically, we hypothesized that Euro-Canadian women, and East Asian women who were more acculturated to Western culture would be more likely to consent to the physiological sexual arousal testing. Subjective measures of affect and self-reported sexual arousal were taken immediately before and after the films in addition to measuring vaginal pulse amplitude (VPA). Twenty-five per cent of Caucasian women and 41% of East Asian women who participated in phase 1 agreed to participate in phase 2. Caucasian women had significantly more accurate sexual knowledge and higher levels of sexual response (e.g., desire, arousal, orgasmic function) than Asian women, however there were no significant differences between those women choosing to participate in phase 2 and those declining on any measure of sexual response or frequency of sexual behaviour. Among the East Asian women alone, acculturation to Western culture was not related to election to participate in phase 2, nor was it correlated with level of VPA. Further, we found no significant differences on measures of physiological and subjective arousal between Euro-Canadian and Asian women. Overall, these data replicate prior findings of ethnic differences in sexual behaviour and response. However, a novel finding in this study was the lack of a significant difference between Asian women who did versus those who did not participate in sexual psychophysiological testing. Interestingly, East Asian women were more likely than Caucasian women to participate in the psychophysiological phase, contrary to our hypotheses. These findings suggest that East Asian women are not less likely to participate in sexual psychophysiological research despite less sexual openness than their Euro-Canadian counterparts. The data have implications for educating East Asian women on the importance of Pap smear testing, despite attitudes towards sexuality that might be acting as a barrier to such health behaviours.

### **Behavioural Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the importance of taking acculturation into account when studying sexuality in different cultures.
2. Discuss the similarity between the ethnic groups in the proportion of women who elected to participate in the sexual psychophysiological study.

**References:**

- Brotto, L. A., Chik, H. M., Ryder, A. G., Gorzalka, B. B., & Seal, B. N. (2005). Acculturation and sexual function in Asian women. *Archives of Sexual Behavior, 34*, 613-626.
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- Woo, J. S. T., & Brotto, L. A. (2007). *Cancer-screening behaviours, attitudes towards sexuality, and acculturation*. Paper presented at the 32<sup>nd</sup> Annual Meeting of the Society for Sex Therapy and Research, Atlanta, GA.

**Biography:**

Jane Woo received her MA in Economics from the University of British Columbia in 2002. She decided early in her banking career that her true interest lay in how culture impacts sexuality and has been conducting research in this area since 2005. She is currently enrolled in the MA program in Clinical Psychology at the University of British Columbia under the supervision of Dr Brotto. She has been a member of SSTAR since 2007.

## **FROM ONSET TO TREATMENT SEEKING: A COGNITIVE-BEHAVIORAL MODEL OF EARLY DYSpareunia**

**Robyn L. Donaldson, MA, Marta Meana, PhD, and Jennifer Fernandez, BA**

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Attempts to fill the gap in knowledge about the psychosocial experience of women with dyspareunia have 1) been limited to less than a handful of studies, and 2) lack an accurate account from the women themselves as to how they have been impacted. Using a semi-structured interview, college women were asked in an open-ended fashion about how having dyspareunia has affected their lives. Grounded theory methodology was utilized to identify emergent themes, their interrelations, and build a meaningful theory of experience of early dyspareunia. As a result, a cognitive-behavioral theory of early dyspareunia emerged accounting for the process that occurs from the onset of pain to the decision point of seeking treatment. After the onset of pain, young women struggle to understand what they are experiencing and why and they attempt to control the pain by personal means. As these lay attempts at pain-control falter, women start to suffer from compounded consequences personally and in their relationships. At some point they must make a decision about professional treatment-seeking. This decision involves a cost-benefit analysis in which incentives to treatment are weighed against barriers. In this sample of women, incentives to seek treatment were relatively non-existent while the barriers were multiple, resulting in resignation and a decision to suffer in silence. The emergent theory proposes that the extent to which women perceive and understand their experience of dyspareunia may be a determinant in whether they seek medical treatment.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Identify difficulties involved in the experience of early dyspareunia.
2. Describe the process of early dyspareunia from onset of pain to treatment-seeking behavior.

### **References:**

- Martin, R., Rothrock, N., & Leventhal, H. (2003). Common sense models of illness: Implications for symptom perception and health-related behaviors. In J. Suls, & K. A. Wallston (Eds.), *Social psychological foundations of health and illness* (pp.199-225). Malden, MA, US: Blackwell Publishing.
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- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.

### **Biography:**

Ms. Donaldson received her B. S. from the College of Charleston in 2002 and her Master's in Psychology from the University of Nevada, Las Vegas in 2007, where she is currently a doctoral candidate in the Clinical Psychology Program working under the research supervision of Dr. Marta Meana. She has been a member of SSTAR since 2006.



## FEAR OF PAIN AND CATASTROPHIZING AMONG WOMEN WITH VULVODYNIA

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Vulvodynia refers to chronic genital pain in women and is experienced by 15-21% of women in the general population. Women with this condition experience negative consequences associated with the pain, including decreased sexual and psychological functioning and reduced quality of life. Little is known, however, about women's perceptions of and reactions to their pain condition. The purpose of the current study was to examine fear of pain and negative pain-related cognitions (i.e., catastrophizing) among women with vulvodynia. This study is part of an ongoing project, and, to date, 37 women with self-reported vulvodynia of at least six months duration ( $M$  age = 32.38 years) and 48 control women ( $M$  age = 25.29 years) have participated. Women underwent a telephone screening interview to assess eligibility; if eligible, each participant was provided with a unique login id number for a secure online survey and was asked to complete the following standardized questionnaires: 1) the short form of the *Pain Anxiety Symptoms Scale* (PASS-20) (McCracken et al., 2002) to assess overall fear of pain and the subscales of anxiety, avoidance, fearful thinking, and physiological responses; and 2) the *Pain Catastrophizing Scale* (PCS) (Sullivan et al., 1995) to assess overall catastrophizing. Women with vulvodynia completed these measures twice, once in relation to their vulvar pain and once in relation to a regularly experienced non-genital pain (e.g., headaches); in contrast, control women completed these measures only once in relation to a regularly experienced form of pain. Thirty-four women with vulvar pain and 38 controls reported that they regularly experienced a non-genital form of pain. In comparison to controls' experiences with non-genital pain, women with vulvodynia reported significantly increased fearful thinking and more pain catastrophizing in relation to vulvar pain. However, no significant differences were found between groups with regard to non-genital forms of pain. Within the vulvodynia group, participants reported more fear-related thinking associated with vulvar versus non-genital pain. These findings indicate that women with vulvodynia report negative pain-related thinking in response to their condition, and that the experience of vulvar pain is associated with increased fear in comparison to that of other forms of pain. Although these results are preliminary, they suggest that vulvodynia may be associated with maladaptive cognitions. More research is needed to determine the role that fear- and pain-related thoughts play in women's experiences with vulvodynia, as the identification and understanding of such thoughts may have implications for the assessment and management of this condition.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Explain the need to examine fear and catastrophizing in relation to women's genital pain.
2. Discuss the differences found between women with vulvodynia and controls with regard to fear of pain and pain catastrophizing.
3. Recognize the need for further research in this area.

**References:**

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- McCracken, L. M., & Dhingra, L. (2002). A short version of the Pain Anxiety Symptoms Scale (PASS-20): Preliminary development and validation. *Pain Research and Management, 7*, 45-50.
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**Biography:**

Kelly Smith received her B.A. in Honours Psychology from the University of British Columbia (2002) and her M.A. in Clinical Psychology from Queen's University. She is currently completing her Ph.D. in Clinical Psychology at Queen's University under the supervision of Dr. Caroline Pukall. Her research focuses on sexual, relationship, and psychological adjustment among individuals with chronic uro-genital pain conditions. Kelly has been a student member of SSTAR since 2005 and won the SSTAR Student Research Award (SRA) in 2006. She is currently on the SSTAR SRA Committee.

## **THE ROLE OF FEAR OF PAIN, CATASTROPHIZING, HYPERVIGILANCE AND SELF-EFFICACY IN PAIN AND SEXUAL IMPAIRMENT IN VESTIBULODYNIA**

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Provoked vestibulodynia (previously known as vulvar vestibulitis syndrome) is the most common cause of dyspareunia in premenopausal women, with prevalence rates of up to 12% in the general population. Although some studies to date have shown that these women report more psychological distress than non-afflicted women, little research has focused on the role of psychological factors in the experience of pain and associated sexual dysfunction. The present study aimed to determine whether specific psychological variables, previously identified as predictors of chronic pain and disability (e.g. fear-avoidance model), could influence changes in levels of pain during intercourse and associated sexual dysfunction in women with vestibulodynia. Data were obtained from 75 participants who completed a gynecological examination, structured interview, and standardized questionnaires pertaining to pain during intercourse, sexual functioning, fear of pain, self-efficacy, catastrophizing, avoidance, and hypervigilance toward pain. The results of hierarchical regression analyses revealed that the fear-avoidance model variables together predicted 28% of the variation in pain intensity, after controlling for frequency of intercourse. More specifically, higher levels of avoidance, hypervigilance, fear of pain and catastrophizing were associated with more intense pain during intercourse. However, only catastrophizing contributed unique variance to the prediction of pain, and hypervigilance mediated the effect of fear of pain. Results also showed that avoidance and self-efficacy predicted 24% of the variation in women's global sexual functioning, independent of degree of anxiety. Higher levels of avoidance and lower levels of self-efficacy were related to poorer sexual functioning. Findings suggest that psychological factors may play an important role in the exacerbation of pain and associated sexual dysfunction in women with provoked vestibulodynia. Moreover, results are consistent with the fear-avoidance model and suggest that vestibulodynia may be best conceptualized as a pain problem as opposed to a sexual one. From a clinical standpoint, findings support cognitive-behavioral approaches to the treatment of dyspareunia.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Describe the psychological factors that contribute to the exacerbation of pain during intercourse and associated sexual dysfunction.
2. Identify which cognitive and affective factors to target in sex therapy for vestibulodynia.

### **References:**

- Leeuw, M., Goossens, M. E. J. B., Linton, S. J., Crombez, G., Boersma, K., & Vlaeyen, J. W. S. (2006). Fear-avoidance model of musculoskeletal pain: Current state of scientific evidence. *Journal of Behavioral Medicine, 30*(1), 77-94.
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**Biography:**

Geneviève Desrochers, BSc, is a Ph.D. candidate in Clinical Psychology at Université du Québec à Montréal. She is the recipient of a doctoral fellowship from the Fonds pour la recherche en santé du Québec. Her research focuses on psychological predictors of pain and treatment outcome in women with dyspareunia. She recently completed a doctoral internship at the Sex and Couple Therapy Service of the McGill University Health Centre (Royal Victoria Hospital).

## **PSYCHOSOCIAL AND PSYCHOPHYSICAL CHARACTERISTICS OF WOMEN WITH PRIMARY VERSUS SECONDARY PROVOKED VESTIBULODYNIA**

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In much of the previous literature, women with provoked vestibulodynia (PVD) have been treated as a single group of homogenous women with little attention paid to group differences in symptoms and treatment needs. The current study examined differences between women with primary (i.e., penetration has always been painful) and secondary (i.e., a period of pain-free penetration prior to developing pain) PVD. A group of 20 women with PVD (9 primary; 11 secondary) were assessed on measures of thermal quantitative sensory testing (QST) at the arm and the vulva, as well as measures of psychosocial functioning (i.e., catastrophization and sexual self-efficacy). Findings suggest that women with primary PVD are more sensitive to heat detection and heat pain at both the arm and the vulva as compared with women with secondary PVD. In terms of psychosocial functioning, women with primary PVD were found to have lower levels of mental health and social functioning as compared to women with secondary PVD. When compared to women with secondary PVD, women with primary PVD also displayed greater levels of magnification, as measured by the Pain Catastrophizing Scale (PCS). There were no significant group differences in sexual self-efficacy or sexual function, with both groups displaying lower levels than a group of control women. Results from the current study highlight the differences that exist when women with PVD are examined based on a temporal characteristic (primary versus secondary onset) of their pain. These results are consistent with literature suggesting that women with primary PVD may suffer from a more generalized and extensive pain condition than women with secondary PVD. Such findings can be translated into the clinical setting in terms of providing more appropriate treatments to women based on their symptom presentation. For example, while both groups of women may benefit from a variety of therapies, women with primary PVD may require more intensive psychological treatments as well as physical treatments that target central nervous system functioning, such as SSRI medications.

### **Behavioral Learning Objectives:**

After attending this presentation, the participants will be able to:

1. Recognize the difference between primary and secondary PVD.
2. Compare and contrast the psychophysical and psychosocial findings in women with primary versus secondary PVD.
3. Understand the clinical implications of having a diagnosis of primary or secondary PVD.

### **References:**

- Granot, M., Zimmer, E. Z., Friedman, M., Lowenstein, L., & Yarnitsky, D. (2004). Association between quantitative sensory testing, treatment choice, and subsequent pain reduction in vulvar vestibulitis syndrome. *The Journal of Pain*, 5, 226-232.
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**Biography:**

Katherine Sutton received her Honours BA in the Psychology of Gender and Human Sexuality through the Scholar's Electives Program at The University of Western Ontario in 2005. She received her MA in Clinical Psychology from Queen's University in 2007, and she is currently pursuing her PhD in Clinical Psychology at Queen's University under the supervision of Dr. Caroline Pukall. Her research examines psychophysical and psychosocial aspects of vulvodynia and sexual attitudes and behaviours of young adults.

## **Additional Speaker Handouts**

Assessment and Treatment of Male Sexual Dysfunctions

*Presenter: Michael E. Metz, PhD*

Sexual Technologies and the Double Standard

*Presenter: Rachel P. Maines, PhD*

Traditional Treatments for Female Sexual Dysfunction

*Presenter: Bonnie Saks, MD*

From Onset to Treatment Seeking: A Cognitive-Behavioral Model of Early Dyspareunia

R.L. Donaldson MA, M. Meana PhD, J. Fernandez BA

*Presenter: Robyn L. Donaldson, MA*