

SUSANNAH DALY COPLAND, MD

Duke Fertility Center
5704 Fayetteville Road
Durham, NC 27713
Phone: 919-572-4673
Fax: 919-484-0461

EDUCATION

- 2005-2006 **Masters of Science in Clinical Research
Clinical Research Curriculum Award Program**
Emory University School of Medicine / Rollins School of Public Health
Atlanta, GA
- 2003 - 2006 **Fellow, Reproductive Endocrinology and Infertility**
Emory University School of Medicine
Atlanta, GA
- 1999 - 2003 **Resident, Obstetrics and Gynecology**
Magee-Womens Hospital
Pittsburgh, Pennsylvania
- 1995 – 1999 **M.D.**
Mayo Medical School
Rochester, Minnesota
- 1991-1995 **B.S. with honors and distinction in Agricultural & Biological Engineering**
Cornell University, College of Agriculture & Life Sciences / Engineering,
Ithaca, New York

SPECIALTY CERTIFICATION

Obstetrics & Gynecology 12/8/2006

LICENSURE

North Carolina License Certificate
Georgia License Certificate

HONORS AND AWARDS

- Fellowship** Clinical Research Curriculum Award (full-tuition scholarship)
- Medical School** Mayo Medical School Dean's Award (full-tuition scholarship)
Burchell Scholarship Award, American Heart Association, Minnesota Affiliate
American Heart Association Student Scholar in Cardiovascular Disease and
Stroke, American Heart Association, National Center
- Undergraduate** Dean's List, 4 years • Merrill Presidential Scholar • National Merit Scholar

PROFESSIONAL ORGANIZATIONS

- 2003 – present **Society for Reproductive Endocrinology and Infertility**, associate member
- 2002 - present **American Society for Reproductive Medicine**, associate member
- 1999 - present **American College of Obstetricians and Gynecologists**, junior fellow

RESEARCH EXPERIENCE

- 2005-2007 **Masters of Science in Clinical Research**
Mentor, Donna Session, Chief, Division of Reproductive Endocrinology & Infertility
 - Optimizing Ovulation Induction in the Poor Responder: A Randomized Clinical Trial of Luteal Phase Estradiol versus Combined Oral Contraceptive Pill on Ovarian Morphology and Biomarkers prior to Ovulation Induction. Clinical trial comparing effect of luteal estradiol to oral contraceptives on follicular synchrony and biochemical markers in poor responders.
 - Male Factor Infertility and In Vitro Fertilization (IVF) with Intracytoplasmic Sperm Injection (ICSI) Outcome: Does Severity Matter? Comparison of IVF outcomes between conventional IVF and ICSI/IVF, including a survival analysis of embryo development in patients with increasing severity of male factor infertility based on sperm morphology.
- 2004-2007 **Fellowship Research**
Mentor, Barry Shur, Chair, Cell Biology, Emory University
 - SED1: Exploring the Role in Human Sperm-Egg Binding. Translational project using sperm and egg coats discarded after in vitro fertilization to determine if SED1, a protein important to mouse sperm-egg binding, is present on human sperm, and is important for human sperm-egg binding.
- 2001-2003 **Resident Research**
Mentor, Elizabeth McGee, Magee-Womens Research Institute, Pittsburgh, PA
 - Immunohistochemical analysis of Smad signaling protein expression in rat endometrium.
- 1997-1999 **Medical School Research**
Mentor, Veronique Roger, Mayo Clinic, Rochester, MN
 - Completed a population-based study of gender differences in cardiology service utilization in the year after an initial stress test.
- 1994-1995 **Undergraduate Research Assistant**
Mentor, Charles Short, Professor, Cornell University, Ithaca, NY
 - Recorded, processed, and analyzed electroencephalogram data in canine anesthesia experiments.
- 1993 **Undergraduate Research Assistant**
Mentor, Carl Hopkins, Professor, Cornell University, Ithaca, NY
 - Developed system for signal analysis of waveforms emitted by electric fish.
- 1992 **Laboratory Assistant**
University at Buffalo Toxicology Research Center, Buffalo, NY
 - Performed PCB extractions on animal serum.

GRANT SUPPORT

Project: Effect of Luteal Phase Hormonal Treatment on Ovarian Morphology: Correlation with Sex Steroid and Insulin Serum Levels

Principal Investigator: Susannah Copland

Funding Source: Resolve of GA

Major Goals: Clinical trial comparing effect of luteal estradiol to oral contraceptives on follicular synchrony and biochemical markers in poor responders.

Dates: 6/2005-

Budget: Unrestricted education grant of \$20,000

TEACHING

February 14, 2007: Fertility Preservation, Duke Oncology Grand Rounds

Reproductive Endocrinology and Infertility Research and Training Conference:

8/24/2006: Finding Fertilization: A Users' Guide to Gametes

7/14/2006: Endocannabinoids and Reproduction

8/11/2005: SED1: Exploring the role in human egg binding

1/13/2005: GnRH Antagonists

1/6/2005: Ovarian Hyperstimulation Syndrome

9/30/2004: Adrenal Function and Disease States

1/29/2004: Thyroid Function and Disease States

June 8, 2006: Infertility, Lecture to physician assistant students
Breast Cancer, Lecture to physician assistant students

May 12, 2006: SED1: Exploring the Role in Human Sperm-Egg Binding
John D. Thompson Resident Research Day

11/2004-4/2006: Organizer, Reproductive Endocrinology & Infertility Journal Club, Topics Included:
Ovarian Reserve Testing & Infertility Treatment Outcome
Clomid versus Metformin for Ovulation Induction in Women with PCOS
Imprinting after Embryo Culture
Metformin Alone versus Metformin with Oral Contraceptive Pill: Effect on Insulin Sensitivity
In Vitro Fertilization & Birth Defects
Progesterone & Preterm Labor Prevention
Morphological Scoring of Pronuclear Zygote & Pregnancy Outcome
Luteinizing Hormone in Controlled Ovarian Hyperstimulation
GnRH Antagonists
Timing of Intracytoplasmic Sperm Injection
Luteal Estradiol Support After Embryo Transfer & Pregnancy Outcomes
Luteal Estradiol Before Ovulation Induction & Follicular Synchrony

7/2004: Male Infertility, Lecture to residency program

7/2003-6/2004: Endometriosis, Lecture to rotating medical students

PUBLICATIONS

Cardiology services after stress testing: Are there sex differences? A population-based study. Daly SC,* Roger VL, Leibson C, Miller TD, Pellikka PA, Bailey K, Jacobsen SJ. *Journal of Clinical Epidemiology* 2000;53:661-668.

*maiden name

Copland, Susannah D; Berga, Sarah L. "Physiology of the Menstrual Cycle (Includes Neuroendocrine)." Clinical Gynecology. Eds. Bieber/Sanfilippo/Horowitz Elsevier, 2006.

ABSTRACTS

SED1 (Secreted protein containing a cleavable signal sequence, N-terminal notch-like type II EGF repeats and C-terminal discoidin / F5/8 complement domains) is expressed on the human sperm plasma membrane. Copland SD, Murphy AA, Shur BS. Accepted for presentation at American Society for Reproductive Medicine Annual Meeting 2006, New Orleans, Louisiana

MCP-1 as a biomarker for oxidative stress in endometriosis. Copland SD, Gross AS, Santanam N, Song M, Kavtaradze N, Murphy AA, Dominguez, CE. Society for Gynecological Investigation Annual Meeting Abstract, 2004, Houston Texas.

Plasma and Peritoneal Fluid Level of RANTES and Its Correlation with Stage of Endometriosis. Gross AS, Copland S, Santanam N, Parthasarathy S, Kavtaradze N, Dominguez CE, Murphy AA. Society for Gynecological Investigation Annual Meeting Abstract, 2004, Houston Texas.

Use of cardiology services after stress testing: Is there sex bias in the community? A population-based study in Olmsted County, Minnesota. Daly SC, Roger VL, Miller TD, Pellikka PA, Jacobsen SJ. *Circulation* October 21, 1997;96(8):1157-158. American Heart Association 70th Scientific Session, 1997, Orlando, Florida

EMPLOYMENT EXPERIENCE

2001-2003

Magee at Passavant Labor and Delivery Unit Physician

- Initiated care for patients in emergency situations pending arrival of patient's attending physician

SERVICE

2001

Wyeth-Ayerst Resident Reporter, ASRM 2001 annual meeting

2000-2002

House Officer Committee, resident representative

1998-1999

Medical School Admissions Committee, student representative

1996-1998

Medical School Education Committee, student representative

1995-1996

AMSA Contraceptive Education Program, youth educator

1994-1995

Committee on Academic Programs, Agricultural & Biological Engineering