

CLAY WALKER MECHLIN

PERSONAL INFORMATION

PLACE OF BIRTH: COLUMBIA, MO
CITIZENSHIP: UNITED STATES OF AMERICA

EDUCATION

Fellowship	Andrology and Male Reconstructive Surgery Albany Medical College Urological Institute of Northeastern New York	2012-2013
Residency	Albany Medical College, Urology Residency	2008-2012
Internship	Albany Medical College, General Surgery	2007-2008
MD	Saint Louis University School of Medicine	2003-2007
MS	Saint Louis University, M.S. (Research) Anatomy Advisor: Dr. Gregory Smith Ph.D.	2001-2003
BS	University of Missouri-Columbia, Biology Honors in Biological Sciences	1996-2000

EMPLOYMENT

Urologist
Urology Associates of Central Missouri
105 N Keene Street
Columbia, MO 65201
Office Phone: 573-499-4990
Office Fax: 574-442-2120
July 2013-Present

Attending Urologist
Dept. of Surgery, Division of Urology
The Urology Institute of Northeast New York
Albany Medical Center, South Clinical Campus
23 Hackett Blvd. Albany, NY 12208
July 2012-June 2013

Attending Urologist
Samuel S. Stratton VA Medical Center
Department of Surgery, Division of Urology
113 Holland Ave. Albany, NY 12208
July 2012-June 2013

BOARD CERTIFICATION

USMLE Step 1: June, 2005 - Passed

USMLE Step 2: March, 2006 - Passed

USMLE Step 3: December, 2008 – Passed

American Board of Urology Qualifying Exam (Part 1): July, 2012 - Passed

Research and Professional Appointments

Active Research Projects:

- Retrospective review of hypogonadal men undergoing treatment with exogenous testosterone replacement, aromatase inhibitors, or both. We are investigating the effects estrogen inhibition on testosterone and gonadotropin levels over time. 2011-Present.
- Prospective randomized controlled trial comparing the effects of clomiphene citrate and anastrozole on semen parameters and male hormones (testosterone, FSH, LH, and estradiol) in infertile men with hypogonadism. We started accruing patients in February of 2013.
- Evaluating the use of the Da Vinci Robotic system in microsurgical reconstructive procedures pertaining to male infertility. We are currently reviewing our surgical outcomes, surgical operative times, and performing a cost analysis for varicocele repairs, vasectomy reversals, and microsurgical testicular sperm extraction.
- We are studying the effects of low testosterone on corporal hypoxia and urethral stricture disease. We have found that very low levels of testosterone are associated with decreased penile oxygenation (a surrogate for blood flow) and that men with severe urethral stricture disease have a much higher incidence of hypogonadism. These two studies are completed and pending publication.

Appointments:

- Attending Urologist. Samuel S. Stratton VA Medical Center. Department of Surgery, Division of Urology. Albany, NY. July 2012-Present.
- Attending Urologist. Albany Medical Center. Department of Surgery, Division of Urology. Albany, NY. July 2012-Present.

Professional Associations:

American Urological Association

Sexual Medicine Society of North America, Member

Honors, Grants, and Awards:

- Best Resident in Research for 2011-2012. Albany Medical College, Department of Urology.
- First Place for Basic Science Research. Upstate New York Urological Associations' Resident Day Competition - 2009.
- Best Resident in Research for 2008-2009. Albany Medical College, Department of Urology.
- Medical student of the year - 2007. Saint Louis University, Department of Surgery.
- First Place, Medical Student Section. Oral Presentation of Original Research in Surgery. "The American opossum: A model for the study of fetal compensatory renal growth and the role of insulin-like growth factor". Missouri Chapter of American College of Surgeons Annual Conference. 2004.
- Saint Louis University AOA Summer Research Fellowship. \$3,500 stipend for research in basic sciences. 2004.
- Graduate Teaching Assistantship and Scholarship. Department of Anatomy, Saint Louis University. \$8,000 stipend and paid 10-month tuition. 2002-2003.

Teaching:

Professional (residents):

- Lab Instructor: Hands on robotic microsurgery training lab for Surgeons. Robotic Assisted Microsurgical & Endoscopic Society International Meeting (RAMSES). November 2012.
- Constructed and directed a microsurgical teaching lab for residents and students at the VA medical center. Residents practiced anastomosing synthetic vas deferens (Syndaver labs) with 9-0 and 10-0 suture. They used three platforms: The Da Vinci robot, operating microscope, and loops. Fall 2012.
- Supervised Resident teaching conferences covering topics relating to erectile dysfunction, hypogonadism, infertility, and urethral stricture disease. 2012-2013.
- Lectured and supervised resident conferences involving case discussion on complex erectile dysfunction cases. Cases included diagnostic and surgical approaches in patients with peyronies disease, congenital anomalies, traumatic AV fistulas, priapism, vascular disease, and venous leak. We also covered the basics of penile doppler ultrasounds and reviewed images with these cases.

Medical Students:

- **Instructor.** Suture workshop for 3rd yr medical students. Saint Louis University. 2006.

- **Assistant Coordinator.** Laparoscopic training lab. Guided medical students in training exercises. Saint Louis University. 2006.
- **Teaching Assistant – Gross Lab,** Department of Anatomy. Saint Louis University Medical School, Saint Louis, MO (2003-2004). Supervised 2nd year medical students in identifying gross structures during bone and connective tissue, lung, and cardiovascular modules.
- **Teaching Assistant – Cell Biology,** Department of Anatomy. Saint Louis University Medical School, Saint Louis, MO (2002-2003). Prepared instructional material for histology labs for 1st year medical students and supervised histology labs facilitating identification of relevant structures with microscopy.
- **Teaching Assistant – Gross Anatomy,** Department of Anatomy. Saint Louis University Medical School, Saint Louis, MO (Fall Semester 2002). Responsibilities included cadaver demonstrations, supervising dissections, preparing prosections, generating and grading lab exam questions. Also held tutor and review sessions.
- **Tutor – Gross Anatomy.** Department of Anatomy. Saint Louis University Medical School, Saint Louis, MO (2002-2003). Coordinated review sessions for Groups of 1st yr medical students. Pinpointed student difficulties and strengthened their ability to locate clinically relevant structures.
- **Teaching Assistant – Histology Lab.** Saint Louis University Medical School, Saint Louis, MO. Aided 2nd yr medical students in identifying important cellular structures during multiple modules including male reproductive, lung, and endocrine modules. Assisted in histology labs for 1st yr medical students and weekend review sessions. 2003-2004.

Graduate School Students:

- **Teaching Assistant – Human Systems Neurobiology.** Prepared specimens and governed graduate student lab sessions. This course was centered on the gross and microscopic identification of human neurological pathways. Reinforced clinical significance of disruptions in these neurological pathways. Fall Semester 2003.
- **Teaching Assistant – Physical Therapy Review Courses.** Department of Anatomy. Saint Louis University. Aided physical therapist in identifying structures on cadaver dissections during weekend courses. 2003.

Academic Services and Committees:

Clinical Services:

- Residency Supervising Practitioner for the residency training program in urology at the Samuel S. Stratton VA Medical Center and Albany Medical Center, sponsored by the Albany Medical Center, Albany, NY. July 2012-June 2013.

Publications:

Mechlin CW, Kogan BA. "What Lessons Can Be Learned From Testicular Histology in Undescended Testicles?" J. of Translational Andrology and Urology. December 2014 (published ahead of print).

Welliver RC Jr, Mechlin C, Goodwin B, Alukal JP, McCullough AR. "A pilot study to determine penile oxygen saturation before and after vacuum therapy in patients with erectile dysfunction after radical prostatectomy." J Sex Med. 2014 April; (4):1071-7.

Mechlin CW, Levesque J, Feustel P, Kogan BA. Mast cell numbers negatively correlate with fibrosis in cryptorchid testes. J Pediatr Urol. 2014 Jun;10(3):527-31.

Mechlin CW, Frankel J, McCullough A. "Coadministration of anastrozole sustains therapeutic testosterone levels in hypogonadal men undergoing testosterone pellet insertion." J Sex Med. 2014 Jan;11(1):254-61.

Mechlin, C.W. and Kogan, B.A. "Mast Cells, Estrogens, and Cryptorchidism: A Histological Based Review." Translational Andrology and Urology. April 2012.

Mechlin, C.W., Kalorin, C., Asplin, J., White, M.D. "Splenda® Improves Tolerance of Oral Potassium Citrate Supplementation for Prevention of Stone Formation: Results of a Randomized Double Blind Trial." J. of Endourology, 2011 Sept; 25 (9): 1541-1545

Mechlin CW, Tanner MJ, Chen M, Buttyan R, Levin RM, Mian BM. "Gli2 expression and human bladder transitional carcinoma cell invasiveness," J of Urol., 2010 Jul;184(1):344-51.

Abstracts:

Abstract Poster Presentation, "Does Hypogonadism Contribute to Recurrent Urethral Stricture Disease?" Annual Fall Scientific Meeting of Sexual Medicine Society of North America. New Orleans, LA. November 2013.

Abstract Poster Presentation, "Hypogonadism is Associated with Increased Penile Corporal Hypoxia." Annual Fall Scientific Meeting of Sexual Medicine Society of North America. New Orleans, LA. November 2013.

Abstract Poster Presentation, "Use of Anastrozole For Male Hypogonadism in Urologic Practice." Annual Fall Scientific Meeting of Sexual Medicine Society of North America. New Orleans, LA. November 2013.

Abstract Poster Presentation, “The Aromatase Inhibitor Anastrozole Increases Duration of Therapeutic Testosterone Levels after Pellet Insertions.” Annual Fall Retrospective Longitudinal Study.” Fall Scientific Meeting of Sexual Medicine Society of North America. New Orleans, LA. November 2013.

Abstract Poster Presentation, “Adding The Aromatase Inhibitor Anastrozole to Testosterone Pellet Therapy Prolongs Therapeutic Testosterone Levels and Time Between Pellet Insertion: An Observational Retrospective Study.” Annual Fall Scientific Meeting of Sexual Medicine Society of North America. New Orleans, LA. November 2013.

Podium Presentation. “Does Hypogonadism Contribute to Recurrent Urethral Stricture Disease?” American Urological Association North Central Meeting. Naples, FL. Oct. 8-12, 2013.

Video Abstract Presentation, “Robotic Microsurgical Varicocele Repair: Initial Experience and Surgical Outcomes from a Single Academic Center.” American Urological Association National Meeting in San Diego, CA. May 7, 2013.

Video Abstract Presentation, “Robotic Microsurgical Vasectomy Reversal: Initial Experience and Surgical Outcomes from a Single Academic Center.” American Urological Association National Meeting in San Diego, CA. May 7, 2013.

Abstract Poster Presentation, “Prevention of Pituitary Gonadotropin Suppression During Exogenous Testosterone Replacement By Concomitant Aromatase Inhibitor Administration.” American Urological Association NE Section. Niagara Falls, Ontario. September, 2012.

Abstract Poster Presentation, "The Effect of Aromatase Inhibitors on Estrogen Levels in Men Receiving Testosterone Pellets." World Meeting of Sexual Medicine (Sexual Medicine Society of North America). Chicago, IL. August, 2012.

Abstract Poster Presentation, "Prevention of Pituitary Gonadotropin Suppression During Exogenous Testosterone Replacement by Concomitant Aromatase Inhibitor Administration." World Meeting of Sexual Medicine (Sexual Medicine Society of North America). Chicago, IL. August, 2012.

Abstract Poster and Podium Presentation, “Sonic Hedgehog Pathway Expression Correlates with Muscle Invasion in Bladder Cancer.” Albany Medical Center Research Day Resident Competition. Albany, NY 2011. One of top 6 posters selected for a podium presentation.

Abstract Poster Presentation, “Mast Cell Number Correlates with Fibrosis in Cryptorchid Testes.” American Urologic Association NE Section Meeting in New Orleans, LA. October 2011.

Abstract Poster Presentation, “Splenda® Improves Tolerance of Oral Potassium Citrate Supplementation for Prevention of Stone Formation: Results of a Randomized Double Blind Trial.” Endourological Society National Meeting. Chicago, IL. September 2010.

Abstract Poster Presentation, “The Sonic Hedgehog Transcription Factor Gli-2 Correlates with Invasion in Human Transitional Cell Carcinoma Cell Lines,” American Urologic Association National Meeting. Chicago, IL. April 2009.

Abstract Poster Presentation, “The Effect of COX-II Inhibitors on Prostate Cell Proliferation,” Experimental Biology. Washington D.C. 2007.

Extramural Lectures and Seminars:

- **Invited Speaker**, “Surgery for ED: The Role of the Implant.” Men’s Health Conference: Update in Men’s Health for Primary Care Providers. Urologic Institute of NE NY. Approved by Albany Medical College for CME. Albany, NY. June 1st, 2013.
 - **Invited Speaker**, “ Bone Health and Testosterone.” Men’s Health Conference: Update in Men’s Health for Primary Care Providers. Urologic Institute of NE NY. Approved by Albany Medical College for CME. Albany, NY. June 1st, 2013.
 - **Invited Speaker**, “Robotic Vasectomy Reversal & Varicocelelectomy: The Albany Experience”. 2nd Annual Robotic Assisted Microsurgical & Endoscopic Society Meeting (RAMSES). Tampa, Fl. November 2012.
 - **Speaker**, Nephrolithiasis (Spring semester 2012) 1 hour lecture for PA students on diagnosis, treatment, and prevention of stone disease from a urologist perspective.
 - **Speaker. Surgical clerkship orientation** for 3rd yr medical students. Department of surgery. Saint Louis University. 2006.
 - **Guest Lecturer. U101 undergraduate course**, Saint Louis University. Lectured on what it takes to get into medical school, how it is financed, and how it differs from graduate school studies. 2006.
 - **Lecturer**. Taught and demonstrated introductory suture techniques and concepts to underprivileged high school students for AHEC (area health education centers) through the department of community and family medicine. Saint Louis University. 2006.
 - **Lecturer. Adventures in Medicine and Science**. Performed cadaver presentations to groups of 25-30 high school students, guided high school students in fetal pig dissections. Lectured to high school teachers on GI physiology and anatomy. 2002-2006.
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