

University of California, San Francisco
CURRICULUM VITAE

Name: Maurice Marcel Garcia, MD, MAS.

Position: Associate Clinical Professor in Residence
Director, Transgender Surgery Program
Division of Urology
Cedars-Sinai Medical Center
Los Angeles, California

Associate Professor (Adjunct)
Department of Urology
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EDUCATION

1987 - 1992	University of California at Berkeley	Bachelor of Arts	Psychology
1992 - 1993	Columbia University, New York, N.Y.	Graduate	Premedical studies
1994 - 1995	Universidad Automoma de Guadalajara, Mexico	Graduate	History and premedical science
1995 - 1996	Georgetown University School of Medicine	Experimental Scholars Program	Premedical studies
1996 - 2000	Georgetown University School of Medicine	M.D.	

2000 - 2001	University of California at San Francisco, Department of Surgery	Surgical Internship		
2001 - 2002	University of Southern California, School of Medicine, Department of Urology	Urology Research Fellow		
2002 - 2003	Tulane University School of Medicine, Department of Surgery	Surgical Resident		
2003 - 2006	University of California San Francisco, Department of Urology	Resident		
2003 - 2007	University of California San Francisco, Department of Urology	Urology Residency		
2007 - 2008	University of California San Francisco, Department of Urology	Fellowship	Erectile Dysfunction and Neurourology	(Tom F. Lue, M.D.)
2008 - 2010	University of California San Francisco, Department of Biostatistics and Epidemiology	MAS	Clinical Research	
2013 - 2014	University College London/Institute of Urology	Fellowship	Transgender Surgery	David Ralph, FRCS, and Philip Thomas, FRCS

LICENSES, CERTIFICATION

2003	Medical Licensure, California; #A83386
2011	American Board of Urology, February 2011
2013	California Board of Radiology Fluoroscopy Operator Licensure; September, 2013

PRINCIPAL POSITIONS HELD

07/2008 - 06/2010	University of California San Francisco	Clinical Instructor	Urology
07/2010 - present	University of California San Francisco	Assistant Professor In Residence	Urology
2017 -	Cedars Sinai Medical Center	Director: Transgender Surgery Program	Urology

HONORS AND AWARDS

- 1995 Georgetown Experimental Medical Studies Program Tuition Scholarship; Georgetown University School of Medicine
- 1996 Georgetown University School of Medicine Department of Biochemistry Summer Research Internship Scholarship (Biochemistry/Study of cellular Aging) University of Aarhus, Aarhus, Denmark
- 1997 Distinguished Teaching Commendation: Human Gross Anatomy (undergraduate course); Georgetown University School of Medicine
- 1997 Georgetown University School of Medicine Department of Immunology Summer Research Internship Scholarship (Pediatric Immunology) University of Catania School of Medicine, Catania, Italy
- 2008 American Urologic Association Western Section James L. Goebel Award, Best Moderated Poster Presentation, Grand Prize, Adipose-Derived Stem Cells for the Treatment of Diabetic Erectile Dysfunction in the ZDF Type-II Diabetic Fatty Rat
- 2008 American Urologic Association Western Section, Best Poster, Adipose-Derived Stem Cells for the Treatment of Diabetic Erectile Dysfunction in the ZDF Type-II Diabetic Fatty Rat
- 2009 American Urological Association meeting, Best Moderated Poster Presentation (Infertility Section): A Novel non-invasive, motility-independent sperm sorting method and technology to assay and retrieve viable sperm for use with ICSI (Maurice M. Garcia, Aaron Ohta, Thomas Walsh, Alan Shindel, James F. Smith, Justin K. Valley, Lia Banie, Guiting Lin, Ming Wu, and Tom F. Lue)
- 2009 Sexual Medicine Society of North America: Research Scholarship (\$4,000): In-vivo study of survival, differentiation, and dispersion of autologous adipose-tissue derived stem cells using a rat model
- 2009 American Urological Association Western Section, Joseph F. McCarthy Essay Contest (Physicians), Second Place, (A Novel non-invasive, motility-independent sperm sorting method to assay and retrieve viable sperm for use with intracytoplasmic sperm injection (ICSI) (Maurice M. Garcia, Aaron Ohta, Thomas Walsh, A, Guiting Lin, Ming Wu, and Tom F. Lue)
- 2010 American Urologic Association 2010, First Prize: Physician's Essay Contest (Basic Research); A Novel non-invasive, motility-independent sperm sorting method to assay and retrieve viable sperm for use with intracytoplasmic sperm injection (ICSI) (Maurice M. Garcia, Aaron Ohta, Thomas Walsh, A, Guiting Lin, Ming Wu, and Tom F. Lue)
- 2010 Western Section-American Urologic Association (WSAUA) 2010 Annual Meeting, Joseph F. McCarthy Physician's Essay Contest, SECOND PLACE award; Light-Induced Dielectrophoresis for the Identification of Viable, Optimal Quality Sperm Within an Un-washed Semen Sample: Feasibility and Safety Studies; Maurice M. Garcia, Aaron T. Ohta, Lia Banie, Justin K. Valley, Tom F. Lue, and Ming C. Wu

- 2010 Western Section-American Urologic Association (WSAUA) 2010 Annual Meeting; Bodner Stegmann Award (Best Presentation of Session); Do We Really Understand How Foley Catheters Work? How they Should, and Should Never, Be Used; Maurice M. Garcia
- 2011 NIH / American Society of Andrology (ASA) Trainee Award: 2011 ASA Annual Meeting, Montreal, Canada (April 5-7). Presentation: Light-Induced Dielectrophoresis: A Novel Non- Invasive Assay to Identify Viable, Optimal Quality Non-Motile Sperm-Feasibility and Safety Studies; Garcia, MM. A., Ohta, AT., Banie, L., Valley, J., Boscardin, J., Lue, TF., and Wu, M. C.
- 2011 UCSF Scholarship Award to attend the American Association of Medical Colleges (AAMC) Minority Faculty Career Development Seminar, Sept. 16-19, Philadelphia, PA.
- 2012 Nominated by the American Urologic Association to give a podium presentation of my current research at the 2012 Annual AUA Meeting Research Forum: Use of Optoelectronic Tweezers to Guide Sperm and Embryo Selection for In-Vitro Fertilization: The Evolution of Two Novel Complementary Strategies to Improve IVF Outcomes
- 2012 Western Section-American Urologic Association (WSAUA) 2012 Annual Meeting, Best of Session (moderated presentation) award; Endoscopic Gold Fiduciary Marker Placement into the Bladder Wall to Optimize Radiotherapy Targeting for Bladder- Preserving Management of Muscle-Invasive Bladder Cancer; (M. Garcia, A. Gottschalk; B. Konety, and P. Carroll)
- 2012 Western Section-American Urologic Association (WSAUA) 2012 Annual Meeting, Joseph F. McCarthy Physician's Essay Contest, SECOND PLACE award; Endoscopic Gold Fiduciary Marker Placement into the Bladder Wall to Optimize Radiotherapy Targeting for Bladder-Preserving Management of Muscle-Invasive Bladder Cancer; (M. Garcia, A. Gottschalk; B. Konety, and P. Carroll)
- 2012 Western Section-American Urologic Association (WSAUA) 2012 Annual Meeting, Joseph F. McCarthy Physician's Essay Contest, THIRD PLACE award; OET Assay of Non-Motile Mouse Sperm Predicts 2-Cell Embryo Development After Mouse ICSI, and Live-Birth Rates Following Embryo Transfer; M. Garcia; A. Ohta, S. Moisyadi, S. Ward, R. Yanagimachi, and J. Marh.
- 2014 2014 Best Affordable Technology Award; A novel urethral catheter design to guide safer placement and both prevent and minimize risk of urethral balloon-inflation injury; Societe Internationale de Urologie; Glasgow, Scotland
- 2014 2014 Best Moderated Poster Award; A smartphone App for actual (not relative) length, girth, and angle measurements of the erect penis by patients and surgeons; Societe Internationale de Urologie; Glasgow, Scotland

- 2015 2015 Societe Internationale de Urologie (SIU) international meeting, Melbourne, Australia; BEST OF SESSION Award: Use of a novel digital photography based smartphone App (MedMeasure!) to make penile length measurements both during and after hypospadias surgery: A validation study
- 2016 UCSF Excellence and Innovation Award in Graduate Medical Education (for founding and leading UCSF's genital gender affirming surgery program)

KEYWORDS/AREAS OF INTEREST

Reconstructive urology; Sexual Medicine; Andrology; Gender Confirming Surgery (GCS); Erectile dysfunction; Voiding dysfunction; Incontinence; Translational Research; Stem cell research; induced pluripotent cells (iPC); Assisted reproductive technology (ART); Sperm quality; Embryo quality; Optoelectronic Tweezers (OET); In Vitro Fertilization (IVF); Intracytoplasmic sperm injection (ICSI); ART outcomes; Animal research models; Medical device development; Biomedical engineering; Biomedical physics; Clinical trial design; Catheter related urinary tract infections (CAUTI); Urethral catheters and iatrogenic urethral trauma; Mobile health Apps/devices

CLINICAL ACTIVITIES SUMMARY

I see patients and perform surgical and diagnostic procedures in my clinic on the UCSF Medical Center Ambulatory Clinical Care Center 3 days per week.

For the last 4 years, I have been providing urologic care to transgender patients.

In 2014, I founded UCSF's multi-disciplinary genital transgender surgery program following completion of my fellowship in this field.

At the San Francisco VA Medical Center I see patients and staff a general and urologic oncology clinic 1 day per week, and perform surgery an additional 1 day per week. I also provide transgender gender confirming surgeries covered by the VA medical benefits syetem at this site

MEMBERSHIPS

- 2003 - present American Urological Association (AUA)
- 2003 - present Western Section American Urologic Association
- 2011 - present World Professional Association for Transgender Health (WPATH)
- 2013 - present Societe Internationale de Urologie (SIU)
- 2012 - present UCSF Center of Excellence (COE) for Transgender Health
- 2007 - present Clinical and Translational Health Sciences Institute (CTSI), UCSF
- 2008 - 2014 K-Scholars Program / UCSF Clinical and Translational Science Training (CTST) program
- 2008 - present European Association of Urology (EAU)
- 2008 - 2013 Engineering in Urology (AUA society)

- 2007 - present International Society of Sexual Medicine (ISSM)
- 2009 - present American Society of Andrology (ASA)
- 2010 - 2013 Society for Clinical and Translational Science (SCTS)

SERVICE TO PROFESSIONAL ORGANIZATIONS

- 2003 - present American Urologic Association Moderator Clinical and Basic Science sessions; Contributor to AUA publications
- 2003 - present American Urologic Association (AUA) Western Section Program Chair (Sexual Medicine and Pediatric Urology); Scientific Program Moderator
- 2013 - present World Professional Association for Transgender Health Member, Moderator and Presenter at meetings
- 2013 - present UCSF School of Medicine Transgender Health student group Speaker
- 2013 - present Societe Internationale de Urologie Moderator, program committee
- 2012 - present UCSF Center of Excellence (COE) for Transgender Health Affiliate, speaker and medical advisor
- 2010 - 2013 American Society of Andrology (ASA) Presenter at International Meetings 2010-2012; Member of governing committee (Membership, 2011)
- 2009 - present American Society of Andrology Membership Committee; Publications Committee
- 2011 - 2013 Engineering in Urology (AUA society) Presenter at AUA national meetings
- 2010 - 2013 Society for Clinical and Translational Science (SCTS) Presenter at national meeting\
- 2015-present Western Section of the American Urologic Assoc. Program Chair: Sexual Medicine and Pediatric Urology Sections
- 2014 – present World Professional Association for Transgender Health (WPATH) Lecturer. 2017 USPATH meeting Scientific Committee program Co-Chair
- 2017 WPATH Global Education Initiative (GEI) program Transgender surgery and care Course Director

SERVICE TO PROFESSIONAL PUBLICATIONS

- 2006 - present Journal of Urology

2006 - present Urology
 2009 - present Journal of Sexual Medicine
 2009 - present Fertility and Sterility
 2010 - present Journal of Andrology
 2010 - present Asian Journal of Andrology
 2010 - present Advances in Urology
 2010 - present PloSOne
 2010 - present Journal of Physical Medicine and Rehabilitation
 2013 - present PLoSMedicine
 2013 - present Translational Journal of Andrology and Urology (TAU)

INVITED PRESENTATIONS - INTERNATIONAL

2010 World Association of Reproductive Medicine (WARM 2010) Annual Meeting: Invited Lectures: Use of Optoelectronic Tweezers to Predict Sperm and Embryo Quality; Moscow, Russia (October 10-14, 2010)

2011 ASA Annual Meeting, Montreal, Canada (April 5-7). Presentation: Light-Induced Dielectrophoresis: A Novel Non- Invasive Assay to Identify Viable, Optimal Quality Non-Motile Sperm-Feasibility and Safety Studies; Garcia, MM. A., Ohta, AT., Banie, L., Valley, J., Boscardin, J., Lue, TF., and Wu, M. C.

2014 Pfizer Rising Stars Latin America: Men's Health Summit; Mexico City, Mexico. Clinical research in urology and manuscript preparation

2014 Pfizer Rising Stars Latin America: Men's Health Summit; Puerto Vallarta, Mexico. State of the Art Lecture: Erectile Dysfunction

2014 Societe Internationale de Urologie; Glasgow, Scotland, October 6, 2014. A Smart-Phone App for Actual (Not Relative) Length, Girth and Angle Measurements of the Erect Penis by Patients and Surgeons

2014 Societe Internationale de Urologie; Glasgow, Scotland, October 5, 2014. Endoscopic Gold Fiducial Marker Placement into the Bladder Wall to Optimize Radiotherapy Targeting for Bladder-Preserving Management of Muscle-Invasive Bladder Cancer: Clinical Outcomes in Our Series of 27 Patients

2014 Societe Internationale de Urologie; Glasgow, Scotland, October 6, 2014. A Novel Urethral Catheter Design to Guide Safer Placement and Both Prevent and Minimize Risk of Urethral Balloon-Inflation Injury

2015 Pfizer Rising Stars Latin America: Clinical Research and Career Development Symposium; Mexico City, February 28, 2015

- 2015 European World Professional Association for Transgender Health (EPATH) International Conference, Ghent Belgium (March 12-14, 2015): Multidisciplinary Workshop: "Challenges in Transgender Health"-- Practices and Protocols in Stockholm and San Francisco: Perspectives on Clinical, Research, and Administrative Challenges from Two Multidisciplinary Gender Teams
- 2015 European World Professional Association for Transgender Health (EPATH) International Conference, Ghent Belgium (March 12-14, 2015): Podium Presentation-- Light touch, erogenous neophallus sensation, sexual function, durability of neophallus dimensions, and pre/post op satisfaction following 3-stage phalloplasty genital gender confirming surgery
- 2015 American Urologic Association Meeting, New Orleans, LA.; Design and Early Clinical Experience with a Tactile Feedback Driven Pelvic Floor Muscle Training Smartphone App (Oral Presentation)
- 2015 Societe Internationale de Urologie (SIU) meeting, Melbourne, Australia; Use of a novel digital photography based smartphone App (MedMeasure!) to make penile length measurements both during and after hypospadias surgery: A validation study (Oral Presentation)
- 2015 Societe Internationale de Urologie (SIU); A novel surgical approach to the plane between Denonvillier's Fascia and the prostate for vaginoplasty in male to female transsexuals and for rectourinary fistula repair: a human cadaveric study and clinical outcomes (Oral presentation)
- 2015 AUA Western Section Annual Meeting: State of the Art lecture: Genital Gender Confirming Surgery (GCS):Background, Overview of Surgeries, and the Building of an Academic Multidisciplinary Surgery Program;
- 2015 Grand Rounds (Cedars Sinai Medical Center, Los Angeles, CA): Genital Gender Confirming Surgery (GCS):Background, Overview of Surgeries, and the Building of an Academic Multidisciplinary Surgery Program
- 2015 Grand Rounds (Stanford University Medical Center, Stanford, CA.): Genital Gender Affirming Surgery (GAS): Surgeries, The Role of the Urologist, and Building of an Academic Multidisciplinary Surgery Program
- 2016 World Professional Association for Transgender Health (WPATH) International Meeting, Amsterdam, Holland, (June 2016) : Presentations on basic science and clinical outcomes research related to transgender surgeries
- 2017 European Professional Association for Transgender Health (EPATH) international meeting (Belgrade, Serbia, March 5-9, 2017): 2 podium & 3 Moderated Poster presentations related to proposed transgender surgical techniques, surgical devices and clinical outcomes

INVITED PRESENTATIONS - NATIONAL

- 2007 Animal Models of Metabolic Disease And Complications Conference; The ZDF Type II Diabetic Rat: A Novel Model For Erectile Dysfunction, June 16, 2007, Boston, MA.
- 2008 American Urologic Association Annual Meeting: Engineering and Urology Society, Optimizing Foley Catheter Drainage Orlando, Florida. May 17, 2008.
- 2008 Ethicon, Research and Development Department, Animal Models of Urinary Incontinence: Neurogenic Injury and Chronic Diabetes, Ethicon Corporate Headquarters, Trenton, N.J., May 23, 2008
- 2008 American Diabetes Association (Annual meeting, June 1, 2008) Animal models of type-II diabetes related erectile dysfunction, bladder over activity, and infertility.
- 2008 UCSF Department of Medicine, Division of Endocrinology, Residents and Fellows Teaching Conference series: Endocrinology in Urology
- 2009 UCSF School of Medicine, Urology Teaching Module, Male exam, erectile dysfunction and BPH (2009 & 2010)
- 2010 UCSF Clinical and Translational Science Institute (CTSI); A proposed strategy and database platform to facilitate translational science at UCSF
- 2010 UCSF School of Medicine, Clinical Teaching Module: Understanding the dynamics and proper use of drainage catheters in medicine
- 2010 UCSF Department of Medicine, Clinical Teaching Conference: Urinary catheters: Use, Pitfalls, and Catheter-related UTI's
- 2011 UCSF Department of Medicine, Division of Endocrinology, Residents and Fellows Teaching Conference series: Endocrinology in Urology
- 2011 AUA Western Section Annual Meeting (Vancouver, Canada): Scientific Section (Sexual Medicine) Moderator
- 2011 Grand Rounds, Department of Urology, University of California Los Angeles; Light-Induced Dielectrophoresis (OET): A Potential Approach to Cell and Embryo Selection and Sorting for Assisted Reproductive Technology?
- 2011 Interdisciplinary Grand Rounds, Kaiser Permanente Northern California (Oakland), Do we really understand how Foley urinary catheters work? How they should, and should never, be used
- 2011 American Society of Andrology Annual Meeting, Montreal, Canada. Presentation: Light-Induced Dielectrophoresis: A Novel Non-Invasive Assay to Identify Viable, Optimal Quality Non-Motile Sperm-Feasibility and Safety Studies
- 2011 UCSF Scholarship Award to attend the American Association of Medical Colleges (AAMC) Minority Faculty Career Development Seminar, Sept. 16-19, 2011; Philadelphia, PA.
- 2012 AUA Annual Meeting Research Forum: Use of Optoelectronic Tweezers to Guide Sperm and Embryo Selection for In-Vitro Fertilization: The Evolution of Two Novel Complementary Strategies to Improve IVF Outcomes

- 2012 Guest Lecturer: Living On Living Well: A Day Retreat for Cancer Survivors;" Sexual functioning among men and their partners after cancer treatment. UCSF Osher Center for Integrative Medicine; November 4, 2012
- 2012 Grand Rounds speaker, Kaiser Oakland; Foley Catheters: Do we understand How they Actually Work, and How They Can Contribute to Catheter Associated UTI's?
- 2012 Grand Rounds speaker, UCLA Department of Urology; Use of Optoelectronic Tweezers to Guide Sperm and Embryo Selection for In-Vitro Fertilization: The Evolution of Two Novel Complementary Strategies to Improve IVF Outcomes
- 2013 Invitation to deliver Grand Rounds: Sutter Hospital Novato: Understanding and preventing urinary catheter related infections and injuries.
- 2013 Invitation to present a novel bladder fiducial marker device and technique I developed for clinical use to the Radiation Therapy Oncology Group (RTOG) GU Cancers Steering Committee meeting (Philadelphia, PA., June 14, 2013)
- 2013 Invitation to speak at a Bay Area men's prostate cancer support group ("Man to Man"), about erectile dysfunction and urinary incontinence management options to men with prostate cancer
- 2013 Grand Rounds speaker; UCSF Department of Medicine, Division of Endocrinology; Genital Gender Confirming Surgery and the need for a multidisciplinary clinical model February, 2014
- 2014 Grand Rounds Speaker; Kaiser Oakland; Oakland, CA. Building a University Based Transgender Surgery Program. June, 2014
- 2014 Grand Rounds Speaker; Kaiser San Francisco, Department of Gynecology. Oakland, CA. Building a University Based Transgender Surgery Program. October, 2014
- 2015 Western Section American Urologic Association; A novel surgical approach to the plane between Denonvillier's Fascia and the prostate for vaginoplasty in male to female transsexuals and for rectourinary fistula repair: a human cadaveric study and clinical outcomes (Podium Presentation)
- 2015 Western Section American Urologic Association annual meeting; Use of a novel digital photography based smartphone App (MedMeasure!) to make penile length measurements both during and after hypospadias surgery: A validation study (Podium Presentation)
- 2015 Western Section American Urologic Association, annual meeting; Design and Early Clinical Experience with a Tactile Feedback Driven Pelvic Floor Muscle Training Smartphone App (Podium Presentation)
- 2015 Western Section American Urologic Association, annual meeting; Transgender Surgery: A university based program model at UCSF (Sexual Medicine session: State of the Art Lecture)

- 2016 American Association of Human Anatomists Course: Transgender Surgery and Anatomy: A didactic teaching and cadaver based symposium (role: Course Director and Spaker)
- 2016 Western Section of the American Urologic Association (WSAUA) Annual Meeting (October 23-29, 2016). Three Podium presentations related to transgender surgery and basic research
- 2017 World Professional Association for Transgender Health (WPATH) Inaugural U.S. national meeting: 5 podium presentations related to transgender surgery techniques, novel surgical devices and outcomes
- 2017 American Urologic Association (AUA) Annual Meeting (May 12, 2017). Podium presentation; Pre-vaginoplasty bilateral orchiectomy for transgender women: an efficient surgical technique that preserves collateral tissues and sensation

INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

- 2007 UCSF School of Nursing Continuing Education Lecture, Diagnosis and Management of Erectile Dysfunction: New Trends, April 26, 2007
- 2008 UCSF Department of Medicine, Division of Endocrinology, Residents and Fellows Teaching Conference series: Endocrinology in Urology, March 2008
- 2009 UCSF School of Medicine, Urology Teaching Module, Male exam, erectile dysfunction and BPH, March 2009, March 2010
- 2009 UCSF Clinical and Translational Science Institute (CTSI); A proposed strategy and database platform to facilitate translational science at UCSF, November 22, 2009
- 2010 UCSF School of Medicine, Clinical Teaching Module: Understanding the dynamics and proper use of drainage catheters in medicine; May 2, 2010 (Scheduled)
- 2016 UCSF Mini-Medical School program course lecture: Sexual function after surgery and medical treatment among men, women, and transgender people
- 2016 UCSF Mini-Medical School Course Co-Chair: LGBT Health and Transgender Surgery (Nov 2-23, 2016)

GOVERNMENT AND OTHER PROFESSIONAL SERVICE

- 2015 - present MediCare / CMS Advisor to MediCare/CMS about Transgender genital surgery procedures and care

2012 – present	San Francisco Veterans Administration Medical Center	Clinical provider and Clinical Lead for transgender genital surgery
2015 – present	U.S. Federal Bureau of Prisons	Advisor for transgender care in prison
2017	U.S. Society of Government Urologists	Advisor: Transgender care and post-surgery care guidelines during active duty

SERVICE ACTIVITIES SUMMARY

I founded the UC System's first transgender genital gender confirming surgery program in 2014. For this, gathered a group of clinical care providers within UCSF from a spectrum of disciplines to pledge support to the multidisciplinary program I proposed; I applied for privileges from the UCSF Credentialing Committee; and, I presented the proposed program to the UCSF Executive Medical Board. I provided in-service teaching to staff in all OR and clinic settings that would interface with transgender surgical patients. I have continued to work closely with UCSF's Compliance office, Contract's office, Legal department, and other campus leadership - to further develop and support our program. Two key focus areas for me has been assisting the Contracts office establish service contracts with managed MediCal groups that cover UCSF sex reassignment surgery costs, and, assisting MediCare/CMS-Noridian by providing advisory information about transgender surgery services, to assist MediCare establish eligibility guidelines and sex reassignment surgery reimbursement rates.

I *continue* to teach and lecture for the San Francisco Veterans Administration Medical Center in the area of transgender surgery and surgical care. I am the clinical lead for transgender surgical services at the SFVAMC.

CEDARS-SINAI MEDICAL CENTER and UCSF CAMPUSWIDE

2004 - present	Ad-hoc UCSF Faculty Reviewer	Speaker, Reviewer
2009 - 2010	UCSF Regulatory Knowledge Support (RKS) Faculty Advisory Committee	Committee Member
2011 - present	Annual invitation to speak at the UCSF Mt. Zion Cancer Center prostate and bladder cancer patient and spouse's support group about sexual function after cancer treatment	Speaker, educator

SCHOOL OF MEDICINE

2006 - present	UCSF School of Medicine, annual medical student small-group leader for urology lecture series	Speaker, small-group leader
2012 - present	UCSF School of Medicine student elective group course ("Transgender Health") about urologic care and research related to transgender patients at UCSF, the San Francisco VA Medical Center, and San Francisco General Hospital	Speaker, small-group leader

2013 - present UCSF Catheter Associated UTI Prevention Taskforce Advisor,
lecturer

DEPARTMENTAL SERVICE

2008 - present UCSF Department of Medicine / Endocrinology, annual speaker to UCSF Endocrinology Fellows: erectile dysfunction and endocrinology Lecturer

COMMUNITY AND PUBLIC SERVICE

- 2000 - 2002 Volunteers In Parole program (mentorship program to a youth on parole)
- 2005 - 2008 Men's Health / Annual Prostate Cancer Screening, Glide Memorial Church, San Francisco
- 2005 - 2008 Universities Allied for Access to Essential Medicines and Medical Devices [This program is sponsored by the California State Bar association, and is designed to pair volunteer lawyers with promising parolees. I was the only non-lawyer mentor.]
- 2011 - present Science research and career-development mentor to a San Ramon, CA. High-School (12th grade) student (Roy Ki Wan Park). Research activities include mentored research in my lab.
- 2011 - present Channel 4 Univision, San Francisco (Spanish language morning news show, *Al Despertar*): Guest speaker, Public Health television interview presentations: Erectile Dysfunction, BPH, Prostate Cancer, Urinary continence.
- 2013 - San Francisco County District Attorney's Office, volunteer Expert Witness

RESEARCH AND CREATIVE ACTIVITIES SUMMARY

RESEARCH NARRATIVE:

Contributions to Science:

1. Transgender surgery in the U.S. is relatively new in U.S. academic medicine. I believe that practice should be by evidence-based and peer-reviewed. For this, translational scientific studies are essential. My research focus is diverse – including clinical outcomes research, surgical device design, and basic scientific research. Currently, for example, there is no consensus about many aspects of transgender surgery, such as quality metrics or best practices. I contribute with the publications listed below, and others related to ongoing research.

Surgical devices such as penile prosthetics, or vaginal dilators and douche devices – are all manufactured for natal men's and women's anatomy, respectively—and not transgender anatomy. Hence, these devices are *not* equally suitable for transgender patients. I have submitted two U.S. Patent Applications and have one *issued* U.S. Patent for surgical and medical devices designed specifically for transgender patients. I am a consultant to the two leading penile prosthetic manufacturers in the U.S.

I also believe that education of residents, fellows, and attending physicians is also essential- in part, to build capacity in our cities to provide quality care to transgender patients. To move this goal forward, I dedicate a substantial amount of time teaching medical students at UCSF and UCLA, teaching and mentoring residents at Cedars-Sinai Medical Center (CSMC), UCSF and UCLA, and am preparing a transgender surgery fellowship at CSMC. I also lead surgery training courses, sponsored in part by the World Professional Association for Transgender Health (WPATH), attended by fellows and faculty nationwide.

- a. **Garcia, M.M.**, Porten, S., Lue, T.F.; Expert Opinions on Challenging Cases: Commentary on Refractory Ischemic Priapism; *Translational Andrology and Urology*; March 1, 2012)
- b. **Garcia, M.M.**, Christopher, Nim A.; DeLuca, Francesco, Spilotros, Marco; Ralph, David J.; Overall satisfaction, sexual function, and the durability of neophallus dimensions following staged female to male genital Gender Confirming Surgery: The Institute of Urology, London, UK experience. *Translational Andrology and Urology*, July, 2014
- c. **Garcia MM.** Editorial Comment. *Urology*. 2015 Dec;86(6):1135. doi: 10.1016/j.urology.2015.07.055. PubMed PMID: 26719117.
- d. Zhang, W.R., Garrett, G., Arron, S., and **Garcia, M.M.**; Laser hair removal for genital gender affirming surgery; *Transl Androl Urol*. 2016, June (epub. Ahead of print)
- e. **Garcia MM.** Men's health and transgender surgery: a urologist's perspective. *Transl Androl Urol*. 2016 Apr;5(2):225-7. doi: 10.21037/tau.2016.01.09. PubMed PMID: 27141451; PubMed Central PMCID: PMC4837315.
- f. Jason Neidleman, Joseph C. Chen, Nargis Kohgadai, Janis A. Müller, Anders Laustsen, Karthiga Thavachelvam, Christina M. Stürzel, Avantika Chitre, Ma Somsouk, **Maurice M. Garcia**, James F. Smith, Ruth M. Greenblatt, Jan Münch, Martin R. Jakobsen, Linda C. Giudice, Warner C. Greene, and Nadia R. Roan; Mucosal Stromal Fibroblasts potentially enhance HIV infection of CD4+ T cells; *PloS Medicine*; 2016

2. I have a long-standing interest in medical device design as a means to improve safety and efficiency or to yield new, novel outcomes. I am particularly attracted to translational science, which unifies design and implementation challenges, and yet also offers the satisfaction of seeing a created device be implemented for clinical benefit. I designed the bladder fiducial markers we will use in the present study when I discovered that the radiation oncology colleagues to whom we send patients for radiotherapy could not ever visualize the tumor/tumor resection site. I manufactured our prototypes and have placed close to 200 markers into over 32 patients – with excellent outcomes. The devices and methods I designed have U.S. Patents pending. I have trained all members of the study team to place these markers.

I am committed to improving clinical outcomes for our patients treated with multi-modal therapy and to validate and further develop evidence-based protocols for ancillary technologies, such as diagnostic multi-parametric Diffusion-Weighted MRI before/after treatment. I find projects that require collaboration with colleagues and scientists outside of my field especially satisfying. To date, I have been able to use the clinical and basic science research training afforded to me by my Master's Degree in Clinical Research, UCSF's K-Scholars Group, and NIH K08 award, to develop a collaborative research plan with the Co-investigators and Other Significant Contributors named in my research plan. I have successfully competed for research

funding from the American Cancer Society, and I have used my K08 award funds to pursue ongoing research studies using our markers such as my current NIH R01 Award.

a. **Garcia, M.M.**, Gottschalk, A., Speight, J., Konety, B., Carroll, P.R.; Feasibility study: a novel ultra-small fiducial marker design and delivery protocol to improve conformal radiation therapy for bladder cancer; J Urology, Apr 2011; Vol. 185, Issue 4, e641–e642

b. **Garcia M.M.**, Gottschalk AR, Brajtbord J, Konety BR, Meng MV, Roach M, Carroll PR. Endoscopic gold fiducial marker placement into the bladder wall to optimize radiotherapy targeting for bladder-preserving management of muscle-invasive bladder cancer: feasibility and initial outcomes. PLoS One. 2014; 9(3):e89754. PMID: 24594774. PMCID: PMC2893016

c. Raleigh, D., Chang, A. , **Garcia, M.**, McGuinness, C., Pinnaduwagge, D., Chen, J., Descovich, M., Braun, E., and Roach 3rd; Gold fiducial marker tracking to optimize radiotherapy for organ-preserving treatment of muscle Invasive bladder cancer; Journal of Radiation Oncology (Accepted for publication June 2015; publication pending)

3. My colleague/mentor, Marshall Stoller, and I were the first to describe how otherwise patent urinary catheters are often associated with undrained urine. I described the nature for this (functional) obstruction: air-locks that develop within the drainage tubing connected to the drainage bag. I believe that the undrained urine caused by air-locks contributes to catheter-related UTI rates and patient discomfort. Based on my work, at UCSF, it is now standard practice to place urinary drainage bags on the ground – as this eliminates the dependent loops that result in air-locks. Also, I have designed a drainage bag with a urometer designed for placement flat on the ground (U.S. Patents Pending). I translated my findings with urinary catheters to show that thoracostomy drainage tubing is also subject to air-locks that result in diminished net negative-pressure to the chest tube. I demonstrated this using an ex-vivo model and then in a clinical trial with ICU patients.

a. **Garcia, M.M.**, Gulatti, S., Liepmann, D., Stackhouse, G.B., Greene, K., and Stoller, M.; Traditional Foley Drainage Systems: Do They Drain the Bladder?; Journal of Urology, Jan, 2007; PMID: 17162043

b. **Garcia, M.M.**, Bullock, T., Vittinghoff, E., and Hill, A.C.; How dependent loops along thoracostomy drainage tubes impede drainage: an ex vivo model and clinical trial; Journal of the American College of Surgeons, Volume 217, Issue 3, Supplement, September 2013

4. During my fellowship, I collaborated with colleagues from UC Berkeley's Electrical Engineering department to re-purpose a light-based technology (Optoelectronic Tweezers) that they had developed for use in medicine/urology as a non-invasive assay of sperm cell-viability and cell-quality. I led the design of assay chips and cell-sorting devices that UCSF applied for U.S. Patents for (pending), and which have already been licensed by a local-area biotech company (Berkeley Lights, LLC).

a. **Garcia M.M.**, Ohta A.T., Walsh T.J., Vittinghof E, Lin G, Wu M.C., Lue T.F.; A noninvasive, motility independent, sperm sorting method and technology to identify and

retrieve individual viable nonmotile sperm for intracytoplasmic sperm injection; J Urol. 2010 Dec;184(6):2466-72. doi: 10.1016/j.juro.2010.08.026. Epub 2010 Oct 16. PMID: 20952004

- b. Valley J.K., Swinton P, Boscardin W.J., Lue T..F, Rinaudo P.F., Wu M.C., **Garcia M.M.**; Preimplantation mouse embryo selection guided by light-induced dielectrophoresis; PLoS One. 2010 Apr 13;5(4):e10160. doi: 10.1371/journal.pone.0010160. PMID: 20405021
- c. Ohta, A. *, **Garcia, M.M.***, Banie, L, Valley, J., Lue, T.F., and Wu, M.C. (* Equal contribution as first authors); Motile and non-motile sperm diagnostic manipulation using optoelectronic tweezers; (Sept 8, 2010; Lab On a Chip) (*Selected for journal issue cover-feature); PMID: 20835428
- d. **Garcia, M.M.**, Valley, J., Espineda, S., Wu, M.; Light-induced dielectrophoresis assay for use in assisted reproduction: Is it safe? A mouse embryo exposure and transfer model; J Urology, Apr. 2011, Vol. 185, Issue 4, e808
- e. **Garcia, M.M.**, Ohta, A., Yanagimachi, R., Ward, S.W., Moisyadi, S., Marh, J.; OET assay of non-motile sperm to predict two-cell embryo and live-birth rates using a mouse ICSI model; J Urology, Apr. 2012;Vol. 187, Issue 4

I am the first-named inventor for a U.S. Patent for OET-based cell sorting chips and techniques based on the listed work. This technology has been licensed by a Biotech company for further development and pre-clinical studies in cancer and infertility.

5. I co-developed a novel urinary catheter designed to prevent a problem with regular occurrence: urethral injury due to intra-urethral balloon inflation. My colleagues and I applied for U.S. Patents for this design, and successfully applied for NIH STTR Phase I funding. We are awaiting a funding decision for Phase II funding.

- a. Aaronson, D.A., Wu, A., Blaschko, S., McAninch, J.W., and **Garcia, M.M.**; National Incidence and Impact of Non-Infectious Urethral Catheter Related Complications on the Surgical Care Improvement Project; J Urol. 2011 May;185(5):1756-60. PMID:21420117
- b. Wu, AK, Blaschko, SD, **Garcia, M**, McAninch, JW, and Aaronson, DS; Safer urethral catheters: how study of catheter balloon pressure and force can guide design; BJU Int., Aug. 2011; PMID: 21871052
- c. Wu AK, Blaschko SD, **Garcia M**, McAninch JW, Aaronson DS. Safer urethral catheters: how study of catheter balloon pressure and force can guide design. BJU Int. 2012 Apr; 109(7):1110-4. PMID: 21871052

This catheter design, for which I am a co-inventor, was awarded a U.S. Patent. Our team was awarded an NIH STTR Grant to further develop this catheter for clinical use.

6. Another key clinical interest of mine is genital reconstruction. One reason I like this field so much is that reconstructive cases are challenging and often unique and often require novel, less straightforward solutions. I have developed devices in this domain as well, including building an App that allows length, angle, and area measurements to be made from a 2-D camera image.

- a. **Garcia, M.M.**, Porten, S., Lue, T.F.; Expert Opinions on Challenging Cases: Commentary on Refractory Ischemic Priapism; Translational Andrology and Urology; March 1, 2012)
- b. **Garcia, M.M.**; A smart-phone app that allows actual (not relative) length and area measurements from 2-D or 3-D images, for use by patients or during lap/endo/or lap robotic surgery; J. Urol.; Apr 2012; Vol. 187, Issue 4, e607–e608
- c. **Garcia, M.M.**, Christopher, Nim A.; DeLuca, Francesco, Spilotros, Marco; Ralph, David J.; Overall satisfaction, sexual function, and the durability of neophallus dimensions following staged female to male genital Gender Confirming Surgery: The Institute of Urology, London, UK experience. Translational Andrology and Urology, July, 2014

RESEARCH AWARDS - CURRENT

1. 1R01CA201709-01	P.I.		
National Institutes of Health (NIH); National Cancer Institute (NCI)		9/01/2015	8/31/2020
Bladder Fiducial Markers and Diffusion-MRI to Optimize Bladder Chemo-Radiotherapy		\$ 492,276	\$ 2,337,945 total direct/yr 1 direct (year 1-5)

RESEARCH AWARDS - PAST

1. NIH (NICHD) K08	P.I.		Garcia (PI)
NIH K08 Mentored Clinical Scientist Development Award #K08HD069462		7/01/2011	Present
Use of OET to assess mouse implantation quality for uterine transfer		\$ 129,333.33 direct/yr 1	\$ 388,000 total
2.	Awardee: Garcia, Maurice		Carroll (PI)
NIH K12 Grant		2008	2011
Mens Reproductive Health Research (MRHR) (PI: Carroll, P.)			
NIH K12 Faculty Development Award			

2. 1 R41 DK99086-01	Site P.I.		Garcia (PI)
NIH		10/15/2014	4/30/2014
A safer urinary catheter design to reduce catheter trauma and infections		\$ 147,039 direct/yr 1	\$ 147,039 total

Small Business Technology Transfer (STTR) program. This grant funds manufacture of prototypes of the urinary catheter that my colleagues and I invented, and funds large-animal model studies of efficacy

3.	P.I.		Garcia (PI)
	UCSF REAC Academic Senate Intramural Research Award (UCSF Rashen-Tiedemann Intramural Faculty Research Grant)	07/01/2010	6/30/2011
	Preimplantation mouse embryo selection guided by light-induced dielectrophoresis: Does OET assay response predict outcomes following uterine transfer? Intramural Research Grant	\$ 30,000 direct/yr 1	\$ 30,000 total
4.	California Urology Foundation	2010	2010
	A proposed dynamic chemical assay of sperm quality: Can timed rate of sperm survival within a toxic viability stain predict in vitro fertilization outcomes?		\$ 3,000 total
5.	California Urology Foundation	2008	2008
	A proposed simple, non-invasive method and technology to guide embryo selection for In Vitro fertilization procedures		\$ 9,000 total
6.	California Urology Foundation	2007	2007
	Autologous Adipose Derived Stem Cell Therapy for Spinal Injury and Wound Healing: Rat Model		\$ 8,000 total
7.	California Urology Foundation	2006	2006
	A Proposed Method for Urethral Chemotherapy Perfusion and Selective Diagnostic Urethral Lavage		\$ 2,000 total
8.	California Urology Foundation	2005	2005

	Incomplete Bladder Emptying using conventional Foley Catheter Drainage		\$ 1,000 total
9.	California Urology Foundation Prevention of Biopsy Needle Associated Arterio-Venous Fistulas: A novel Bioabsorbable Sheath	2005	2005 \$ 1,000 total
10.	California Urology Foundation A Novel Reversible Closed-System Suction Wound Drainage Device	2005	2005 \$ 1,000 total
11.	Sexual Medicine Society of North America (SMSNA) Basic Science Research; GOALS: Study of differentiation and survival outcomes of ADSC in healthy and diseased rat models of ED.	PI 2009-05-01	2009-05-01
12.	California Urologic Foundation Design and pilot study of a novel modified urinary catheter to deliver intra-urethral BCG therapy in a closed-system fashion to men with urethral recurrence of carcinoma in situ and/or transitional cell urothelial carcinoma.	PI 2006-03-01	2007-03-01
13.	California Urologic Foundation Development and study of a type II diabetic rat model of male bladder over-activity GOALS: To study the effects of type II diabetes upon bladder function and bladder over-activity using a type II diabetic rat model.	PI 2007-03-06	2008-04-06
14.		PI	

California Urologic Foundation/UCSF Department of Urology 2008-06-01 2009-06-01
Pilot study to assess the feasibility of using Optoelectronic Tweezers (OET) to non-invasively distinguish live viable sperm from dead sperm, of IVF.

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15. PI
California Urologic Foundation 2008-06-01 2009-06-01
Pilot study to define the response spectrum of normal healthy mouse embryos to OET, and, to determine whether OET can be used to identify the most developed single embryo from among a cohort of embryos prior to transfer to the uterus during IVF procedures.

PEER REVIEWED PUBLICATIONS

1. Stein JP, Daneshmand S, Dunn M, Garcia M.M., Lieskovsky G, Skinner DG. Continent right colon reservoir using a cutaneous appendicostomy. *Urology*. 2004 Mar; 63(3):577-80; discussion 580.
2. Rubenstein J.N., Garcia M.M., Camargo A.H., Joel A.B., Stoller ML. Novel everting urologic access sheath: decreased axial forces during insertion. *J Endourol*. 2005 Dec;19(10):1216-20.
3. Brant WO, Bella AJ, Garcia M.M., Tantiwongse K, Lue TF. Surgical Atlas. Correction of Peyronie's disease: plaque incision and grafting. *BJU Int*. 2006 Jun;97(6):1353-60. Review. No abstract available.
4. Fandel TM, Bella AJ, Tantiwongse K, Garcia M.M., Nunes L, Thuroff JW, Tanagho EA, Pohl J, Lue TF. The effect of intracavernosal growth differentiation factor-5 therapy in a rat model of cavernosal nerve injury. *BJU Int*. 2006 Sep;98(3):632-6. Epub 2006 Jun 26.
5. Bella AJ, Lin G, Tantiwongse K, Garcia M.M., Lin CS, Brant W, Lue TF. Brain-derived neurotrophic factor (BDNF) acts primarily via the JAK/STAT pathway to promote neurite growth in the major pelvic ganglion of the rat: part I. *J Sex Med*. 2006 Sep;3(5):815-20.
6. Alsikafi NF, McAninch JW, Elliott SP, Garcia M.M. Nonoperative management outcomes of isolated urinary extravasation following renal lacerations due to external trauma. *J Urol*. 2006 Dec;176 (6 Pt 1): 2494-7.
7. Bella AJ, Lin G, Garcia M.M., Tantiwongse K, Brant WO, Lin CS, Lue TF. Upregulation of Penile Brain-Derived Neurotrophic Factor (BDNF) and Activation of the JAK/STAT Signaling Pathway in the Major Pelvic Ganglion of the Rat After Cavernous Nerve Transection. *Eur Urol*. 2006 Oct 30.
8. Brant WO, Bella AJ, Garcia M.M., Tantiwongse K, Dean RC, Lue TF. Isolated septal fibrosis or hematoma--atypical Peyronie's disease? *J Urol*. 2007 Jan;177(1):179-82; discussion 183.

9. Breyer BN, Brant WO, Garcia M.M., Bella AJ, Lue TF. Complications of porcine small intestine submucosa graft for Peyronie's disease. *J Urol.* 2007 Feb;177(2):589-91.
10. **Garcia, M.M.**, Gulatti, S., Liepmann, D., Stackhouse, G.B., Greene, K., and Stoller, M.; Traditional Foley Drainage Systems: Do They Drain the Bladder?; *Journal of Urology*, Jan, 2007
11. Eisenberg ML, Walsh T.J, Garcia MM, Shinohara K, Turek P.J., Ejaculatory duct manometry in normal men and in patients with ejaculatory duct obstruction. *J Urol.* 2008 Jul;180(1):255-60; discussion 260. Epub 2008 May 21.
12. Ning H, Liu G, Lin G, Garcia M, Li LC, Lue TF, Lin CS. Identification of an aberrant cell line among human adipose tissue-derived stem cell isolates. *Differentiation.* 2009 Feb;77(2):172-80. Epub 2008 Oct 21.
13. Lin G, Garcia M, Ning H, Banie L, Guo Y.L, Lue T.F, Lin C.S. Defining stem and progenitor cells within adipose tissue. *Stem Cells Dev.* 2008 Dec;17(6):1053-63.
14. Garcia MM, Shindel AW, Lue TF. T-shunt with or without tunneling for prolonged ischaemic priapism. *BJU Int.* 2008 Dec;102(11):1754-64. Review. No abstract available.
15. Brant W.O., **Garcia M.M.**, Bella A.J, Chi T, Lue T.F.; T-shaped shunt and intracavernous tunneling for prolonged ischemic priapism; *J Urol.* 2009 Apr;181(4):1699-705. Epub 2009 Feb 23. PMID: 19233430
16. **Garcia, M.**, Fandel, T., Shindel, A.W., Lin, G., Banie, L., and Lue, T.F.; Adipose Tissue Derived Stem Cells for the treatment of diabetic erectile dysfunction in the obese ZDF Type II diabetic rat; (*Journal of Sexual Medicine*, Jan. 2010: 89-98, PMID 20104670)
17. **Garcia M.M.**, Ohta A.T., Walsh T.J., Vittinghof E, Lin G, Wu M.C., Lue T.F.; A noninvasive, motility independent, sperm sorting method and technology to identify and retrieve individual viable nonmotile sperm for intracytoplasmic sperm injection; *J Urol.* 2010 Dec;184(6):2466-72. doi: 10.1016/j.juro.2010.08.026. Epub 2010 Oct 16.
18. **Valley J.K.**, Swinton P, Boscardin W.J., **Lue T.F.**, Rinaudo P.F., Wu M.C., **Garcia M.M.**; Preimplantation mouse embryo selection guided by light-induced dielectrophoresis; *PLoS One.* 2010 Apr 13;5(4):e10160. doi: 10.1371/journal.pone.0010160. PMID: 20405021
19. **Ohta, A.***, **Garcia, MM***, Banie, L, Valley, J., Lue, T.F., and Wu, M.C. (*** Equal contribution as first authors**); Motile and non-motile sperm diagnostic manipulation using optoelectronic tweezers; (Sept 8, 2010; *Lab On a Chip*) (*Selected for journal issue cover-feature)
20. Huang YC, Shindel AW, Ning H, Lin G, Harraz AM, Wang G, **Garcia M.M.**, Lue TF, Lin CS.; Adipose derived stem cells ameliorate hyperlipidemia associated detrusor overactivity in a rat model.; *J Urol.* 2010 Mar;183(3):1232-40. PMID: 20096880
21. **Garcia, M.M.**, Gottschalk, A., Speight, J., Konety, B., Carroll, P.R.; Feasibility study: a novel ultra-small fiducial marker design and delivery protocol to improve conformal radiation therapy for bladder cancer; *J Urology*, Apr 2011; Vol. 185, Issue 4, e641–e642
22. Garcia MM. Men's health and transgender surgery: a urologist's perspective. *Transl Androl Urol.* 2016 Apr; 5(2):225-7. PMID: 27141451. PMCID: PMC4837315

23. **Garcia, M.M.**, Valley, J., Espineda, S., Wu, M.; Light-induced dielectrophoresis assay for use in assisted reproduction: Is it safe? A mouse embryo exposure and transfer model; J Urology, Apr. 2011, Vol. 185, Issue 4, e808
24. Aaronson, D.A., Wu, A., Blaschko, S., McAninch, J.W., and **Garcia, M.M.**; National Incidence and Impact of Non-Infectious Urethral Catheter Related Complications on the Surgical Care Improvement Project; J Urol. 2011 May;185(5):1756-60. PMID:21420117
25. Lin G, Albersen M, Harraz AM, Fandel TM, **Garcia M.M.**, McGrath MH, Konety BR, Lue TF, Lin CS.; Cavernous nerve repair with allogenic adipose matrix and autologous adipose-derived stem cells. Urology. 2011 Jun;77(6):1509.e1-8.PMID: 21492917
26. Harraz, AM, Lin, G, Banie, L, Wang, G, Shindel, AW, Huang, YC, Fandel, TF, **Garcia, M.M.**, Lue, TF, and Lin, C.S.; The effect of adipose-derived stem cells on augmentation iliocystoplasty: a pilot study; Arab Journal of Urology, August, 2011
27. Wu, AK, Blaschko, SD, **Garcia, M**, McAninch, JW, and Aaronson, DS; Safer urethral catheters: how study of catheter balloon pressure and force can guide design; BJU Int., August, 2011
28. Lin G, Albersen M, Harraz AM, Fandel TM, **Garcia M.M.**, McGrath MH, Konety BR, Lue TF, Lin CS.; Cavernous nerve repair with allogenic adipose matrix and autologous adipose-derived stem cells; Urology. 2011 Jun;77(6):1509.e1-8
29. **Garcia, M.M.**, Porten, S., Lue, T.F.; Expert Opinions on Challenging Cases: Commentary on Refractory Ischemic Priapism; Translational Andrology and Urology; March 1, 2012)
30. **Garcia, M.M.**, Tanza, S., Reynolds, S., Pang, J., and Byl; Does lower body positive pressure weight support affect urinary urgency, and can this be utilized for therapeutic benefit?; J Urology, Apr 2012; Vol. 187, Issue 4, e933
31. Wu AK, Blaschko SD, **Garcia M**, McAninch JW, Aaronson DS. Safer urethral catheters: how study of catheter balloon pressure and force can guide design. BJU Int. 2012 Apr; 109(7):1110-4. PMID: 21871052
32. Wu, A.K, Aaronson, D.A, and **Garcia, M.M.**; Novel urethral catheter design modifications for safer outcomes; J. Urology, Apr. 2012; Vol. 187, Issue 4, e799–e800
33. **Garcia, M.M.**, Ohta, A., Yanagimachi, R., Ward, S.W., Moisyadi, S., Marh, J.; OET assay of non-motile sperm to predict two-cell embryo and live-birth rates using a mouse ICSI model; J Urology, Apr. 2012;Vol. 187, Issue 4, e846–e847
34. **Garcia, M.M.**; A smart-phone app that allows actual (not relative) length and area measurements from 2-D or 3-D images, for use by patients or during lap/endo/or lap robotic surgery; J. Urol.; Apr 2012; Vol. 187, Issue 4, e607–e608
35. Chen X, Li X, **Garcia MM**, Gong K, Song Y, He Z, Zhou L. Prognostic factors in chinese patients with penile invasive squamous cell carcinoma. J Androl. 2012 Nov; 33(6):1276-81. PMID: 22744863
36. **Garcia, M.M.**, Cohen, S., Pang, J., Reynolds, S.; Fedulow, I., and Byl, N.N.; Integration of a Lower Body Positive Air Pressure Treadmill System for Gait Training (LBPPTSAAlterG) into a PT Wellness Setting: Recommendations for Quality Practice; (In Review, Neurorehabilitation and Neural Repair)

37. Zhang WR, Garrett GL, Arron ST, Garcia MM. Laser hair removal for genital gender affirming surgery. *Transl Androl Urol.* 2016 Jun; 5(3):381-7. PMID: 27298787. PMCID: PMC4893513
38. Chen XP, Xiong GY, Li XS, Matin SF, **Garcia M**, Fang D, Wang TY, Yu W, Gong K, Song Y, He ZS, He Q, Zhou LQ. Predictive factors for worse pathological outcomes of upper tract urothelial carcinoma: experience from a nationwide high-volume centre in China. *BJU Int.* 2013 Nov; 112(7):917-24. PMID: 23905945.
39. **Garcia, M.M.**, Bullock, T., Vittinghoff, E., and Hill, A.C.; How dependent loops along thoracostomy drainage tubes impede drainage: an ex vivo model and clinical trial; *Journal of the American College of Surgeons*, Volume 217, Issue 3, Supplement, September 2013
40. Kovac JR, Mak SK, **Garcia MM**, Lue TF. A pathophysiology-based approach to the management of early priapism. *Asian J Androl.* 2013 Jan; 15(1):20-6. PMID: 23202699
41. **Garcia M.M.**, Gottschalk AR, Brajtbord J, Konety BR, Meng MV, Roach M, Carroll PR. Endoscopic gold fiducial marker placement into the bladder wall to optimize radiotherapy targeting for bladder-preserving management of muscle-invasive bladder cancer: feasibility and initial outcomes. *PLoS One.* 2014; 9(3):e89754. PMID: 24594774. PMCID: PMC3940667
42. **Garcia, M.M.**, Christopher, Nim A.; DeLuca, Francesco, Spilotros, Marco; Ralph, David J.; Overall satisfaction, sexual function, and the durability of neophallus dimensions following staged female to male genital Gender Confirming Surgery: The Institute of Urology, London, UK experience. *Translational Andrology and Urology*, July, 2014
43. **Garcia, M.M.**, Wu, A.K., Auerbach, A.D., Stannard, D., and Aaronson, D.; Four Decades Later: A call for urethral catheter re-design, to promote safer placement and decrease urethral catheter balloon injury. (In Review; *British Medical Journal*)
44. Garcia MM. Editorial comment. *Urology.* 2014 Oct; 84(4):983.e8-9. PMID: 25260466.
45. Raleigh, D., Chang, A. , **Garcia, M.M.**, McGuinness, C., Pinnaduwagge, D., Chen, J., Descovich, M., Braun, E., and Roach 3rd; Gold fiducial marker tracking to optimize radiotherapy for organ-preserving treatment of muscle Invasive bladder cancer; *Journal of Radiation Oncology*; Aug. 2015
46. **Garcia MM.** Editorial Comment. *Urology.* 2015 Dec;86(6):1135. doi: 10.1016/j.urology.2015.07.055. PubMed PMID: 26719117.
47. Zhang, W.R., Garrett, G., Arron, S., and **Garcia, M.M.**; Laser hair removal for genital gender affirming surgery; *Transl Androl Urol.* 2016, June (epub. Ahead of print)
48. **Garcia MM.** Men's health and transgender surgery: a urologist's perspective. *Transl Androl Urol.* 2016 Apr;5(2):225-7. doi: 10.21037/tau.2016.01.09. PubMed PMID: 27141451; PubMed Central PMCID: PMC4837315.
49. Jason Neidleman, Joseph C. Chen, Nargis Kohgadai, Janis A. Müller, Anders Laustsen, Karthiga Thavachelvam, Christina M. Stürzel, Avantika Chitre, Ma Somsouk, **Maurice M. Garcia**, James F. Smith, Ruth M. Greenblatt, Jan Münch, Martin R. Jakobsen, Linda C. Giudice, Warner C. Greene, and Nadia R. Roan; Mucosal Stromal Fibroblasts potentially enhance HIV infection of CD4+ T cells; *PloS Medicine*; 2016

50. Kefyati, Sarah, Westphalen, A., Change, A., Saloner, D., and **Garcia, M.M.**; Bladder Phantom Multiparametric MRI Study of Gold Fiducial Markers Within the Bladder for Bladder Tumor Targeting; (Submitted & in review: American Journal of Roentgenology)

BOOKS AND CHAPTERS

1. Urologic Emergencies. Emergency Surgery. (Edited by LD Britt, DD Trunkey, CH Organ, DV Feliciano). New York, 2004. Springer-Verlag. Alsikafi NF, Elliott SP, Garcia M, and McAninch JW., Springer-Verlag, 2007. (Textbook chapter)
2. Shunt Operations for Treatment of Priapism: The TT-Shunt. Maurice M. Garcia, Will Brant, Tom F. Lue. British Journal of Urology: International Surgery Atlas. Edited by J.W. Thüroff. 2008. (Surgical Atlas text, in preparation). (Textbook chapter)
3. Vascular Surgery for Erectile Dysfunction. William O. Brant, Anthony J. Bella, Maurice M. Garcia, Tom F. Lue (Textbook chapter)
4. Management of Bladder Cancer: CLINICAL SCENARIO: Small T2 tumor in the bladder dome; Springer-Verlag (Textbook Chapter)

SIGNIFICANT PUBLICATIONS

1.
Garcia, M.M., Gulatti, S., Liepmann, D., Stackhouse, G.B., Greene, K., and Stoller, M.; Traditional Foley Drainage Systems: Do They Drain the Bladder?; Journal of Urology, Jan, 2007

I designed the study and performed the experiments. I co-wrote and co-edited the manuscript.
2.
Garcia M.M., Shindel AW, Lue TF. T-shunt with or without tunneling for prolonged ischaemic priapism. BJU Int. 2008 Dec;102(11):1754-64.

I worked with the illustrationist from this UK journal to designed the atlas images. Together with my co-authors, I wrote the manuscript.
3.
Valley, J., Swinton, P., Boscardin, J., RInaudo, P., Lue, T., Wu, M., and **Garcia, M.M.**; Preimplantation Mouse Embryo Selection for IVF Guided by Light Induced Dielectrophoresis (Manuscript accepted for publication March 22, 2010; PLOSONe)

I conceived the research question, designed the experiments, and, with Justin Valley, performed the experiments. I mentored Justin Valley during this period, when he was a doctoral student in Electrical Engineering at UC Berkeley.

4. **Garcia, M.M.**, Fandel, T., Shindel, A.W., Lin, G., Banie, L., and Lue, T.F., Adipose Tissue Derived Stem Cells for the treatment of diabetic erectile dysfunction in the obese ZDF Type II diabetic rat; (Journal of Sexual Medicine, Jan. 2010: 89-98, PMID 20104670).

I posed the research question - whether type II diabetic rats (as opposed to the more common Type I diabetic animal model) would demonstrate improved erectile function with adipose tissue derived stem cell injection into the penis. I co-designed the experiment protocol with Dr. Lue and my co-authors, and performed all of the animal experiments and tissue analysis.

5. Garcia, MM., Christopher, Nim A., DeLuca, Francesco, Spilotros, Marco, and Rlph, David J.; Overall satisfaction, sexual function, and the durability of neophallus dimensions following staged male to female genital gender confirming surgery: The Institute of Urology, London, U.K. experience

I posed the research question - whether type II diabetic rats (as opposed to the more common Type I diabetic animal model) would demonstrate improved erectile function with adipose tissue derived stem cell injection into the penis. I co-designed the experiment protocol with Dr. Lue and my co-authors, and performed all of the animal experiments and tissue analysis.

ACADEMIC LEADERSHIP

- Founded and Lead UCSF's multi-disciplinary Genital Gender Confirming Surgery Program (January 2014)
- Founder and Director: Cedars-Sinai Medical Center Transgender Surgery and Health Program (January 2017)
- American Urologic Association *Core Curriculum Committee* Lead: Transgender Surgery (May 2017)
- Transgender Clinical Care Taskforce, Cedars-Sinai Medical Center; January 2017 – present

PATENTS ISSUED OR PENDING

1. Method and Apparatus For Deactivating Active Landmines; U.S. Patent # 6,382,070,
2. Method and Apparatus For Detecting Target Objects; U.S. Patent # 6,843,158,
3. System and method for urinary tract cell collection, diagnosis and chemotherapy; USPTO Applic. #20090171241
4. Methods for deriving adipose tissue derived stem cells and therapeutic use thereof; USPTO Applic. #20090304654
5. Drainage system; U.S. Patent # 7,766,886
6. Drainage devices and methods; USPTO Applic. # 20070027433
7. Catheter drainage system; USPTO Applic. # 20100130949; Canadian Patent # 2724624
8. Fiduciary markers and methods of placement; USPTO Applic. # 20140180065
9. Image-based measurement tools; US Patent #: US 20112/061032
10. Methods and devices for sorting cells and other biological particulates; U.S. Patent # 9,079,189
11. Safety urinary catheter; U.S. Patent # 9084868
12. Gravity Independent Medical Drainage Systems; USPTO Applic. # 20160135982

13. Biological Impedance Spectroscopy Methods and Devices; USPTO Applic.
62/347,059
14. Integrated Neovaginal Dilator, Depth Measurement, and Cleansing Device; USPTO
Application number: 62/421,492