

CURRICULUM VITAE

MARK ROBERT BUSH, MD, FACOG, FACS

12/27/10

President and Medical Director,
Conceptions Reproductive Associates, PC

Board Certified in Obstetrics and Gynecology
Board Certified in Reproductive Endocrinology & Infertility
Fellow, American College of Obstetricians and Gynecologists
Fellow, American College of Surgeons

PERSONAL

Date of birth
July 4, 1962, San Mateo, California

Wife & children
Christine S. Bush, married for 22 years
Cameron Michael, sixteen
Alexis Victoria, fourteen

OFFICES

Conceptions Reproductive Associates
300 Exempla Circle, Suite 370
Lafayette, CO 80026
(303) 449-1084

Conceptions Reproductive Associates
271 West County Line Road
Littleton, CO 80129
(303) 794-0045

Conceptions Reproductive Associates
4500 E. 9th Avenue, #630
Denver, CO 80220
(303) 720-7887

EDUCATION

B.A. in Biology
May 1985, University of California, Berkeley
Berkeley, California

M.D.
May 1991, Georgetown University School of Medicine
Washington, D.C.

PROFESSIONAL TRAINING

July 1991 to June 1995
Resident in Obstetrics and Gynecology, William Beaumont AMC
El Paso, Texas

July 1995 to June 1998
Fellowship in Reproductive Endocrinology and Infertility, Duke University Medical
Center, Durham, North Carolina

CURRENT PROFESSIONAL

President and Medical Director,
Conceptions Reproductive Associates, PC
Lafayette, Littleton and Denver, Colorado

Member, American Fertility Association (AFA) Physician Network

Advisory Board, InterNational Council on Infertility Information Dissemination, Inc.
(INCIID)

Shareholder, Gene Security Network

ADMITTING AND OPERATING PRIVILEGES

Avista Adventist Hospital, Broomfield
Littleton Adventist Hospital
Rose Medical Center, Denver
Swedish Medical Center, Englewood

GUEST OPERATING PRIVILEGES GRANTED FOR SURGICAL TEACHING

Longmont United Hospital
North Suburban Medical Center
St. Anthony North Hospital
St. Anthony Central Hospital

ACADEMIC APPOINTMENTS

Director, Walter Reed Reproductive Endocrinology and Infertility Division
Department of Obstetrics and Gynecology
Walter Reed AMC, Washington, DC, 20307
July 1, 2001 – April 30, 2004

Associate Professor, Department of Obstetrics and Gynecology, F. Edward Hebert
School of Medicine, Bethesda, Maryland 20814
August 5, 2003 – June 30, 2004

Director, Madigan Reproductive Endocrinology and Infertility Division
Department of Obstetrics and Gynecology
Madigan AMC, Tacoma, WA 98431
July 1998 to June 2001

Clinical Assistant Professor, Department of Obstetrics and Gynecology
University of Washington School of Medicine, Seattle, WA 98105
January 1, 1999 to June 30, 2001

Guest Researcher, Laboratory of Molecular Carcinogenesis, National Institute
of Environmental Health Sciences, National Institutes of Health,
Research Triangle Park, North Carolina, June 1, 1997 to June 30, 1998

Attending Faculty, Department of Obstetrics and Gynecology, Duke University
Medical Center, July 1995 to June 1998

Associate, Division of Reproductive Endocrinology and Infertility, Department of
Obstetrics and Gynecology, Duke University Medical Center, July 1995 to June 1998

Attending Faculty, Women's Health Center, Durham Veterans Administration Medical
Center, Durham, North Carolina, July 1995 to June 1998

CERTIFICATIONS

Advanced Cardiac Life Support (ACLS), 2010

Fellow, American College of Surgeons, effective October 16, 2005

Diplomate of the American Board of Obstetrics and Gynecology, Subspecialty Certification in Reproductive Endocrinology and Infertility, effective April 23, 2001 through December 31, 2009. Recertified 2010.

Fellow, American College of Obstetricians and Gynecologists, effective September 30, 2000

Diplomate of the American Board of Obstetrics and Gynecology, effective November 12, 1999 through December 31, 2009. Recertified 2010.

Passed, Oral Boards of the American Board of Obstetrics and Gynecology Subspecialty Examination in Reproductive Endocrinology and Infertility, April 23, 2001

Passed, Oral Boards of the American Board of Obstetrics and Gynecology Principal Examination in Obstetrics and Gynecology, November 12, 1999

Passed, Written Boards of the American Board of Obstetrics and Gynecology Subspecialty Examination in Reproductive Endocrinology and Infertility, June 28, 1999

Passed, Written Boards of the American Board of Obstetrics and Gynecology Principal Examination in Obstetrics and Gynecology, June 26, 1995

Diplomate of the National Board of Medical Examiners, #397059, July 1, 1992

PROFESSIONAL SOCIETY MEMBERSHIPS

Member, Boulder County Medical Society

Member, Denver Medical Society

Member, Colorado Medical Society

Member, Society for Gynecologic Investigation

Member, Pacific Coast Reproductive Society

Member, The Society for Reproductive Endocrinology & Infertility, Inc.

Member, The American Society for Reproductive Medicine

Member, The Society of Reproductive Surgeons

Fellow, The American College of Surgeons

Fellow, The American College of Obstetricians and Gynecologists

LICENSURE

Colorado, #DR 42370

AWARDS

The Joyce M. Vargas M.D. Visionary Award, as presented at The American Fertility Association Illuminations, Denver, Colorado, March 4, 2011

The American College of Obstetricians & Gynecologists (ACOG) Council on Resident Education in Obstetrics and Gynecology (CREOG) National Faculty Award for Excellence in Resident Education, June 2001

Fourth Annual Parke-Davis Resident Educational Program Winner, as presented at the American College of American College of Obstetricians and Gynecologists Annual Clinical Meeting 1999, Philadelphia, PA, for Burney RO and Bush MR: A model for direct steroidogenic effects of troglitazone on the ovary

First Place, Fellows, Resident's Day, Duke University Medical Center, June 3, 1998, for Bush MR, Mele JM, Couchman GM, Walmer DK: Evidence of juxtacrine signaling for transforming growth factor alpha in human endometrium

Best Scientific Paper on Reproductive Endocrinology Award at the 35th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Nashville, Tennessee, October 1996 for Bush MR, Walmer DK, Bachus KE, Haney AF, Bossert NL, Couchman GM: The number of motile sperm after swim-up predicts fertilization in IVF cycles

Outstanding Scientific Paper Award at the 32nd Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Seattle, Washington, November 1993 for Bush MR, Rosa C: Azithromycin and erythromycin in the treatment of cervical chlamydial infection during pregnancy

Physician's Recognition Award, American Medical Association, Nov 1 2003 - Nov 1 2006

Physician's Recognition Award, American Medical Association, Nov 1 2006 - Nov 1 2009

Physician's Recognition Award, American Medical Association, Nov 1 2009 - Nov 1 2012

Biographical Listing in Marquis Who's Who in America, 54th edition, 2000

Biographical Listing in Marquis Who's Who in America, Who's Who in the South and Southwest, 26th edition, 1999-2000

Top 10% nationally on three sittings of the yearly Council on Resident Education in Obstetrics and Gynecology (CREOG) examination, including 97th percentile overall score as a senior obstetrics and gynecology resident

Best Teaching Resident, Department of Obstetrics and Gynecology, 1993-1994

At the University of California, Berkeley, graduated with High Honors, performed Honors research in cellular regulation, a member of Phi Beta Kappa and a member of the Mortar Board National Honor Society

RECENT PRESENTATIONS

The Midwest Reproductive Symposium, Chicago, IL, June 2010

IVF Protocols: Hyper & Hypo-Responders, Implantation
Mark R. Bush, MD, Oral Presentation

Optimizing IVF Protocols

Mark R. Bush, MD, Postgraduate Workshop

Impact of IVF Protocol Selection

Invited lectures given in 2009 in Las Vegas, NV, Birmingham, AL, Ft. Lauderdale, FL, Boston, MA, La Jolla, CA, Honolulu, HI, and Los Angeles, CA.

33rd National Primary Care Practitioner Symposium, Keystone, CO, July 2008

Fertility Care Update for Nurse Practitioners
Mark R. Bush, MD, FACOG, FACS, Oral Presentation

The American Society for Reproductive Medicine Annual Meeting, Washington, DC, October 2007

Selective cut-back protocol for in-vitro fertilization (IVF) ovarian stimulation in patients with polycystic ovary syndrome (PCOS)
M.R. Bush, Poster Presentation

Pacific Coast Reproductive Society 2006 Annual Meeting Program and Postgraduate Courses Page

LH Activity: When and How Much?
Mark Bush, MD, Oral Presentation
Fertility and Sterility
April 2006 (Vol. 85, Page S3)

PEER REVIEWED PUBLICATIONS

1. **Effects of Advanced Maternal Age are Abrogated in 122 Patients Undergoing Transfer of Embryos with Euploid Microarray Screening Results at Cleavage Stage**
M. Rabinowitz, A. Beltsos, D. Potter, M. Bush, C. Givens, D. Smotrich
Fertility and Sterility
September 2010 (Vol. 94, Issue 4, Page S80)
2. **Efficacy of Vaginal Progesterone Inserts (Endometrin) Compared to Intramuscular Progesterone in Oil for Luteal Support in IVF Patients**
C.E. Miller, K.J. Doody, E. Zbella, B.Webster, M.R. Bush, J. Scobey
Fertility and Sterility
September 2010 (Vol. 94, Issue 4, Page S20)
3. **Menopur® versus rFSH in GnRH antagonist cycles**
C.E. Miller, E. Zbella, B.W. Webster, K.J. Doody, M.R. Bush, S.F. Dorfman
Fertility and Sterility
September 2009 (Vol. 92, Issue 3, Page S150)
4. **Selective cut-back protocol for in-vitro fertilization (IVF) ovarian stimulation in patients with polycystic ovary syndrome (PCOS)**
M.R. Bush, M.S. Swanson, S. Stephan, B.H. Albrecht
Fertility and Sterility
September 2007 (Vol. 88, Page S293)
5. **Pacific Coast Reproductive Society 2006 Annual Meeting Program and Postgraduate Courses Page**
LH Activity: When and How Much?
Mark Bush, MD
Fertility and Sterility
April 2006 (Vol. 85, Page S3)
6. **Treatment with gonadotropin-releasing hormone (GnRH) antagonists in women suppressed with GnRH agonist may avoid cycle cancellation in patients at risk for ovarian hyperstimulation syndrome**
Robert L. Gustofson, Frederick W. Larsen, Mark R.Bush, James H. Segars
Fertility and Sterility
January 2006 (Vol. 85, Issue 1, Pages 251-254)
7. **The novel use of ganirelix to rescue hyperresponding stimulation cycles from cancellation in patients treated with microdose lupron**
R.L. Gustofson, M.R. Bush, J.H. Segars, F.W. Larsen
Fertility and Sterility
September 2004 (Vol. 82, Pages S32-S33)
8. **The role of fallopian tube anastomosis in training fellows: A survey of current reproductive endocrinology fellows and practitioners**
Alicia Armstrong, Adrienne B Neithardt, Ruben Alvero, Fady I Sharara, Mark Bush, James Segars
Fertility and Sterility
August 2004 (Vol. 82, Issue 2, Pages 495-497)

9. Richards RG, Klotz DM, Bush MR, Walmer DK, DiAugustine RP: Estradiol-induced degradation of uterine insulin receptor substrate-2: Requirement for an IGF-I stimulated, proteosome-dependant pathway. *Endocrinology*. 2001; 142 (9): 3842 – 3849.
10. Bush MR, Mele JM, Couchman GM, Walmer DK: Evidence of juxtacrine signaling for transforming growth factor alpha in human endometrium. *Biology of Reproduction*. 1998; 59: 1522-1529.
11. Bush MR, Walmer DK, Couchman GM, Haney AF: Evaluation of the postcoital test in cycles involving exogenous gonadotropins. *Obstetrics and Gynecology*. 1997; 89: 780-784.
12. Bush MR, Rosa C: Azithromycin and erythromycin in the treatment of cervical chlamydial infection during pregnancy. *Obstetrics and Gynecology*. 1994; 84: 61-63.
13. Bush MR, Soisson AP: Postoperative bilateral parotitis requiring endotracheal intubation after gynecologic surgery. *Hospital Physician*. 1997; 33: 52-54.
14. Webb JC, Bush MR, Wood MD, Park GS: Hematosalpinx with pelvic pain after endometrial ablation confirms the postablation-tubal sterilization syndrome. *Journal of the American Association of Gynecologic Laparoscopists*. 1996; 3: 419-421.
15. Durand DB, Bush MR, Morgan JG, Weiss A, Crabtree GR: A 275 basepair fragment at the 5' end of the interleukin-2 gene enhances expression from a heterologous promoter in response to signals from the T cell antigen receptor. *Journal of Experimental Medicine*. 1987; 165: 395-407.
16. Durand DB, Shaw JP, Bush MR, Replogle RE, Belagage R, Crabtree GR: Characterization of antigen receptor response elements within the interleukin-2 enhancer. *Journal of Molecular and Cellular Biology*. 1988; 8: 1715 -1724.

ABSTRACTS/PRESENTATIONS

M. Rabinowitz, A. Beltsos, D. Potter, M. Bush, C. Givens, D. Smotrich: Effects of Advanced Maternal Age are Abrogated in 122 Patients Undergoing Transfer of Embryos with Euploid Microarray Screening Results at Cleavage Stage. Oral presentation, 66th Annual Clinical Meeting of the American Society of Reproductive Medicine, Denver, Colorado, October 2010.

C.E. Miller, K.J. Doody, E. Zbella, B.Webster, M.R. Bush, J. Scobey: Efficacy of Vaginal Progesterone Inserts (Endometrin) Compared to Intramuscular Progesterone in Oil for Luteal Support in IVF Patients. Oral presentation, 66th Annual Clinical Meeting of the American Society of Reproductive Medicine, Denver, Colorado, October 2010.

D.S. Johnson, K. Ditmore, C. Khoury, D. Potter, R. Ross, D. Smotrich, S. Thormahlen, M. Bush, M. Rabinowitz: Mechanism of Aneuploidy is Predictive of Embryo Viability. Poster presentation, 65th Annual Clinical Meeting of the American Society of Reproductive Medicine, Atlanta, GA, October 2009.

C.E. Miller, E. Zbella, B.W. Webster, K.J. Doody, M.R. Bush, S.F. Dorfman: Menopur® versus rFSH in GnRH antagonist cycles. Poster presentation and Book of Abstracts, 65th Annual Clinical Meeting of the American Society of Reproductive Medicine, Atlanta, GA, October 2009.

Bush MR, Swanson MS, Stephan S, Albrecht BH: Selective Cut-Back Protocol for In-Vitro Fertilization (IVF) Ovarian Stimulation in Patients with Polycystic Ovary Syndrome (PCOS). Poster presentation and Book of Abstracts, 63rd Annual Clinical Meeting of the American Society of Reproductive Medicine, Washington DC, October 2007.

Bush MR: LH Activity: When and How Much? Oral presentation, Pacific Coast Reproductive Society Annual Meeting, Palm Springs, CA, April 2006.

Gustofson RL, Bush MR, Segars JH, Larsen FW: The novel use of ganirelix to rescue hyperresponding stimulation cycles from cancellation in patients treated with microdose lupron. Oral presentation and Book of Abstracts, 60th Annual Clinical Meeting of the American Society of Reproductive Medicine, Philadelphia, Pennsylvania, October 2004.

Parker JD, Bush MR, Hibbert ML: Premature ovarian failure in a patient with a balanced chromosomal translocation. Oral presentation and Book of Abstracts, 39th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Norfolk, Virginia, October 2001.

Burney RO, Hibbert M, Bush MR: Thiazolidinediones in the management of insulin resistant polycystic ovary syndrome. Oral presentation and Book of Abstracts, 39th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Cincinnati, Ohio, October 2000.

Burney RO, Bush MR, Brizuela M, Ma W, Hibbert M: Laparoscopic trocar insertion at the left upper quadrant: a case series and description of technique. Oral presentation, video, and Book of Abstracts, 39th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Cincinnati, Ohio, October 2000.

Brizuela M, Bush MR, Perez RP, Hibbert M: Acute pelvic pain at time of menarche: a syndrome of uterus didelphys, obstructed hemivagina, and ipsilateral renal agenesis. Oral presentation and Book of Abstracts, 39th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Cincinnati, Ohio, October 2000.

Dainty LA, Carlson JW, Nielsen P, Bush MR: Gestational trophoblastic disease after an uncomplicated term spontaneous vaginal delivery: a case report. Oral presentation and Book of Abstracts, 39th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Cincinnati, Ohio, October 2000.

Burney RO and Bush MR: A model for direct steroidogenic effects of troglitazone on the ovary. Fourth Annual Parke-Davis Resident Educational Program Winner, American College of American College of Obstetricians and Gynecologists Annual Clinical Meeting 1999, Philadelphia, PA.

Burney RO and Bush MR: Colon cancer presenting in pregnancy. Oral presentation and Book of Abstracts, 38th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, San Antonio, Texas, October 1999.

Bush MR, Mele JM, Couchman GM, Walmer DK: Evidence of juxtacrine signaling for transforming growth factor alpha in human endometrium. Oral presentation and Book of Abstracts, 45th Annual Meeting of the Society for Gynecologic Investigation, Atlanta, Georgia, March 1998.

Bush MR, Mele JM, Couchman GM, Walmer DK: Evidence of juxtacrine signaling for transforming growth factor alpha in human endometrium. First Place, Fellow category, Oral presentation and Book of Abstracts, Resident's Day, Duke University Medical Center, Durham, NC, June 1998.

Bush MR, Walmer DK, Couchman GM, Haney AF: Evaluation of the postcoital test in cycles involving exogenous gonadotropins. Oral presentation and Book of Abstracts, 35th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Nashville, Tennessee, October 1996.

Bush MR, Walmer DK, Bachus KE, Haney AF, Bossert NL, Couchman GM: The number of motile sperm after swim-up predicts fertilization in IVF cycles. Oral presentation and Book of Abstracts, 35th Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Nashville, Tennessee, October 1996.

Bush MR, Soisson AP: Postoperative bilateral parotitis requiring endotracheal intubation after gynecologic surgery. Poster presentation and Book of Abstracts at the 33rd Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Reno, Nevada, November 1994.

Bush MR, Rosa C: Azithromycin and erythromycin in the treatment of cervical chlamydial infection during pregnancy. Georgetown University Medical Center, Department of Obstetrics and Gynecology, July 1994.

Bush MR, Rosa C: Azithromycin and erythromycin in the treatment of cervical chlamydial infection during pregnancy. Oral presentation and Book of Abstracts, 32nd Annual District Clinical Meeting of the American College of Obstetricians and Gynecologists, Seattle, Washington, November 1993.