OBSTETRICS & GYNECOLOGY ANUAL REPORT

MADIGAN HEALTHCARE SYSTEM

Letter from the Chairman

Obstetrics and Gynecology at Madigan Army Medical Center. Our goals are to provide comprehensive women's healthcare to ensure Soldier and Family Member readiness and wellness and to be the nation's leader in women's healthcare including patient safety and clinical and basic science research. In support of the Surgeon General's balanced scorecard measures and the

It is an honor to serve as Chairman of the Department of (ACOG)/Armed Forces District Meeting. In addition, Lt. Col. Michelle Munroe, our midwifery service chief, received the Anita Newcomb McGee Award from the Daughters of the American Revolution, and was named Army Nurse of the Year.

Improve Quality, Outcome-Focused Care and Services.

The department was approved for participation as an ACOG Simulation Consortium site which will provide education and

Army Family Covenant, our focus in 2009 included efforts to improve access and continuity of care, maximize physical and psychological health promotion and prevention, improve training and development of physicians and improve quality, outcome-focused care and services.

Improve Access and Continuity of Care/Maximize Physical and **Psychological Health Promotion** and Prevention.

The department initiated an expanded clinical team approach



Col. Peter E. Nielsen

training using advanced simulation technology for both military and civilian physicians. This national program has the goal of standardizing education and training for obstetricians and gynecologists. TeamSTEPPS[®] (a program developed by the Department of Defense and the Agency for Healthcare Research and Quality) training continued and was expanded to include the use of simulation, making the instruction more realistic. In addition, the department applied for approval by the American Board

to enhance access to care and continuity which resulted in successful implementation of the MEDCOM access to care plan. In addition, a women's health psychologist was added to the clinic in an effort to expand behavioral health consultation services, as well as improve access, especially for our obstetric patients who have increased stressors associated with the significant deployment tempo of units at Fort Lewis.

Improve Training and Development.

The residency program was accredited by the Accreditation Council for Graduate Medical Education for a 5-year cycle, the maximum awarded in the nation. The department also received research grants totaling \$680,645 and published 7 manuscripts in peer-reviewed journals, authored 5 textbook chapters, one textbook and presented 28 abstracts at national meetings. This phenomenal performance of our residents, fellows and staff resulted in the department earning half of all awards presented (8) at the American College of Obstetricians and Gynecologists

of Obstetrics and Gynecology for the Army's first fellowship training program in Reproductive Endocrinology and Infertility.

I invite you to read more about these and the other great accomplishments of the Department of Obstetrics and Gynecology, as well as participate in improving the patient experience at Madigan by joining our patient advisory council. Our department is dedicated to the care of our Soldiers and Family Members, desiring to bring value and inspire trust in all we do.

> Peter E. Nielsen, MD, FACOG Colonel, US Army Chairman, Department of Obstetrics & Gynecology Obstetrics & Gynecology Consultant to The Surgeon General





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DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

MISSION:

Caring in Action • Demanding Excellence Improving Outcomes • Leading Innovation

The Department of Obstetrics and Gynecology (OB/ GYN) provides a comprehensive range of women's healthcare. Our goal is to be the national leader in women's healthcare and the choice for the safest and highest quality women's healthcare. The department strives to improve women's health in our immediate and surrounding communities by taking a leadership role in providing the highest quality obstetrical and gynecological services in a responsible and caring manner. We do this by providing a full range of OB/GYN services, promoting healthy lifestyles, and supporting health-related education. This commitment is realized through an ongoing partnership with Madigan's patients, health care staff, and volunteers.

The OB/GYN Department Provides A Full Range of Obstetrical and Gynecological Care Including:

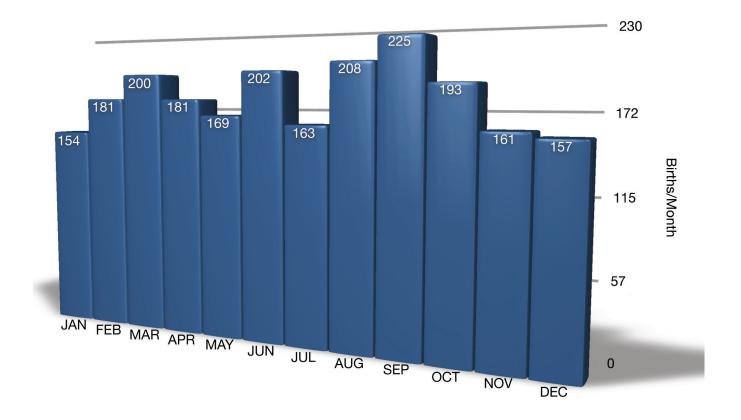
Obstetrics Service

Women may choose to see a general obstetrician/ gynecologist, certified nurse midwife, or nurse practitioner for their prenatal care. Those who develop maternal or fetal complications are seen by our perinatology team consisting of six board certified maternal-fetal medicine physicians and a perinatal nurse practitioner. Our newly-remodeled birth center consists of 8 labor and delivery suites, 3 antepartum rooms, and a hydrotherapy suite. Two well-equipped operating rooms allow the obstetrics team to provide the full spectrum of procedural capability. The Obstetrics Service enhances patient satisfaction and safety through a team approach to care.



Madigan Healthcare System

2,454 Births in 2009



Midwifery Service

The Midwifery Service provides a full scope, 24/7, quality women's health care throughout a woman's lifespan, including antepartum, intrapartum, postpartum, gynecologic and well woman care through clinical excellence, research, and resident and student nurse midwife and nurse practitioner education. Midwifery expertise is available for laboring patients with midwives present on Labor and Delivery for all intrapartum patients. With over 800 preceptor hours, the service is a highly sought after site for graduate nursing students from multiple institutions within Washington, as well as nationally. The service offers a wide range of perinatal care options including Centering Group prenatal care. Madigan is one of only a few military MTF's that offers Water Birth as a delivery option.

Antenatal Diagnostic Center

The center provides full consultation availability of a perinatal subspecialist 24 hours a day, seven days a week; and an ultrasound clinic staffed with 4 ARDMS OB/GYN, NTQR and Fetal echocardiography certified sonographers who perform 8-10,000 ultrasound examinations per year. Examinations performed include anatomic surveys, growth assessments, and fetal echocardiography. The unit has 3-D and 4-D ultrasound capability, Doppler, and color flow Doppler; antepartum testing including NST and biophysical profiles; genetic counseling; amniocentesis, chorionic villus biopsy and percutaneous umbilical blood sampling; as well as consultation services for the Family Practice clinic and outlying referral hospitals (Bremerton, Oak Harbor, and Alaska).

Medical Genetics Service

The Medical Genetics Service provides a full range of clinical genetics care and genetic counseling services and works closely with the Antenatal Diagnostic Center. The Genetics Service provides clinical and consultative services to patients with known or suspected genetic conditions, family histories of cancer or inherited diseases, as well as pregnant women with abnormal screening

Madigan Healthcare System

and diagnostic tests, ultrasound abnormalities, or who are at increased risk for inherited or genetic disorders. Care of the patient in the Genetics Service includes a detailed review of the patient's medical and family history, evaluation and possible diagnosis of genetic syndromes, genetic counseling with risk assessment for patients at increased risk for hereditary disorders and inpatient consultation as needed. In addition, the Genetics Service provides daily educational sessions to all obstetric patients regarding available prenatal screening options. Services are provided by a board certified medical geneticist and two board certified genetic counselors.

Reproductive Endocrinology and Infertility Service (RE/I)

This service offers state-of-the-art outpatient evaluation of infertility, which includes the diagnostic modalities of vaginal ultrasound, hysterosonography, hysteroscopy and hysterosalpingography. The Division of RE/I also offers evaluation and treatment of abnormalities of the reproductive endocrine systems, such as ovulation defects, hirsutism, amenorrhea, dysfunctional uterine bleeding and reproductive tract developmental anomalies. Inpatient services include operative management of patients undergoing tubal reconstruction and and surgery for a full range of complex anomalies of the female reproductive tract. The latest advances in laparoscopic, microlaparoscopic, laser, and microsurgical reproductive tract procedures. In addition, an active coordination and assistance is available for infertile patients requiring IVF (In-Vitro Fertilization) or other advanced reproductive techniques.

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Robotic/Miniminally Invasive Surgery

Madigan's laparoscopic robot allows surgeons to perform minimally invasive surgery on a variety of difficult cases where traditional laparoscopy is not an option. Without robotic technology these cases require a large abdominal incision, often measured in inches, rather than the 3-5 small incisions associated with laparoscopy. Larger incisions are typically linked to a longer hospital stay and an extended postoperative recovery for the patient (delay in return to normal activities, and lost days from work).



One example of the Department of Obstetrics and Gynecology's use of this technology is robotic laparoscopic hysterectomy. This is quickly becoming the standard for GYN Oncology surgeries for cancer of the uterus and cervix, where lymph node removal and/ or radical surgery is necessary, and quite difficult to do without the features of the robot. The robotic technology has also allowed Madigan's surgeons to perform difficult hysterectomy cases laparoscopically, that otherwise would have been done with an open abdominal approach (large fibroid uterus). Other promising uses of the robot are with sacral colpopexy, myomectomy, and tubal surgery.



Dr. John Bonica

Did you know that Dr. John Bonica, who developed the epidural block to relieve the pain of childbirth, was once the Chief of Anesthesiology at Madigan Army Hospital? Bonica served at Madigan from 1945-1946 and is known around the world as the founding father of the field of pain management.

Published in 1953, Bonica's The Management of Pain is described now by colleagues as "a monumental classic text."

Bonica passed away in 1994.

Department of Obstetrics and Gynecology Annual Report • 2009



(Above) Lt. Col. Michelle Munroe speaks at Madigan Army Medical Center's 2009 Department of OB/GYN National Midwifery Week. (Below) TeamSTEPPS[®] training using a simulator from the Charles A. Andersen Simulation Center.



2009 Highlights...

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Gynecology Service

The Gynecology Service delivers inpatient and outpatient medical evaluation and comprehensive treatment of surgical and non-surgical gynecologic conditions. The service provides routine women's health maintenance, screening, and surveillance to active duty soldiers, Family Members, and the retired population. Definitive patient assessment, clinical and operative diagnostic studies and therapeutic management for all benign gynecologic conditions are available through the service.

Gynecologic Oncology Service

The Gynecologic-Oncology Service provides clinical and consultative services to patients with known or suspected gynecologic malignancies. Care of the gynecologic oncology patient includes: the diagnosis and staging of gynecologic malignancies, performing surgical therapy as appropriate, and providing chemotherapeutic interventions. Candidates for whom radiation therapy is to be incorporated into the treatment regimen are discussed on an individual basis with the Radiation Therapy Service. Patients with unclear diagnoses or other primary tumors involving the pelvis are managed jointly with the service coordinating care.

Urogynecology & Pelvic Reconstructive Surgery Service

The Urogynecology & Pelvic Reconstructive Surgery Service offers diagnosis and therapy for a variety of pelvic floor disorders, including urinary incontinence, pelvic prolapse, overactive bladder, anal incontinence, vaginal fistula, sexual dysfunction, and pelvic pain. Advanced surgical and non-surgical treatment with latest technology is used. A state-of-the-art pelvic floor



REI Service IVF (In-vitro fertilization) program data:

IVF cycle starts

Egg Retrievals: 68

Fresh Embryo Transfers

Frozen Embryo Transfers:



HCG positive from frozen embryo transfers

HCG Positive:39

57.4%

Pregnancy Rate (fresh IVF cycles). (National highest average reported as of 2006 is 40.7%) diagnostic laboratory offers urodynamic studies, endoanal and vaginal ultrasound, and cystoscopy.

Madigan experienced a record number of births in 2009: 2,454. This number of births is the most ever recorded at Madigan Army Medical Center. (See chart on page 5) Seven soldiers deployed in support of OIF in 2009: Lt. Col. (P) Michael Chinn, Lt. Col. Shad Deering, Maj. (P) Jennifer Gotkin, Maj. Jason Pates, Maj Sarah Thomson, Maj Amber Vegh and Spc. Hye Ford.

Col. Jeffrey Clemons was voted one of the "Top 100 Reviewers" for the American Journal of Obstetrics and Gynecology. This honor places him in the top 5% of the nation's medical reviewers.

Initiated application process for approval of ABOG accredited US Army RE/I subspecialty fellowship.

Col. Jeffrey Clemons was promoted to Clinical Associate Professor, University of Washington.

Madigan resident papers were selected for the Founders Award (presented to top paper of 130 submissions) and all three resident awards at the 2009 AFD meeting.

Two Madigan OB/GYN 3rd year residents were selected for Army sponsored RE/I fellowships (2011 start).

Madigan RE/I Division received national validation for ART (Advance Reproductive Technologies) through IVF data reporting to SART (Society for Advanced Reproductive Technologies) and the CDC (Centers for Disease Control).

Lt. Col. Michelle Munroe was the recipient of the Anita Newcomb McGee Award, Army Nurse of the Year 2009 and selected as Member of the Order of Military Medical Merit, December 2009

Col. Jeffrey Clemons established the GYN Robotic surgery program at Madigan Army Medical Center.

Maj. (P) Lisa Foglia, Graduated from the Maternal-Fetal Medicine Fellowship Program and remained on staff as the Associate OB-GYN Residency Program Director, OB Service Chief (Acting), and Maternal Fetal Medicine Staff. Lt. Col. Shad Deering, MD – Medical Director, Andersen Simulation Center and Chairman, Central Simulation Committee.

Col. (Ret) Gregory Chow received Legion of Merit Award for career service to the US Army.

Lt. Col. Richard Burney, in his capacity as director of translational research for the Department of Obstetrics and Gynecology, guided the resident research program to a reversal of the ratio of descriptive studies to original research and unprecedented success at the annual Armed Forces District Meeting in Hawaii.

Col. Jeffrey Clemons, Member, Research Committee, American Urogynecolgic Society, 2009 - present

Lt. Col. Richard Burney delivered a presentation entitled "Endometriosis: current concepts" at Obstetrics and Gynecology Grand Rounds at both the University of Washington and the University of South Alabama.

Col. Jeffrey Clemons, Board Member, Seattle Gynecologic Society. Program Committee member for the 2010 Annual Meeting.

Lt. Col. Richard Burney was named assistant professor at the Uniformed Services University of the Health Sciences.

Lt. Col. Richard Burney served on the ACOG Clinical Document Review Panel – Obstetrics.

Lt. Col. Richard Burney developed, organized and moderated a multidisciplinary educational forum on "Ectopic Pregnancy" for 90 attendees representing the departments of emergency medicine, family medicine and OB/GYN presented in April 2009.

Lt. Col. Richard Burney served as vice-chair, Institutional Review Board at Madigan.

Rebecca Cypher, MSN, PNP. Elected to AWHONN-Board of Directors, Jan 2010 through Dec 2011.

Certifications:

Col. (Ret) Gregory Chow, Col. Peter Nielsen, Col. Peter Napolitano, Col. Jeffrey Clemons, Lt. Col. Richard Burney passed annual American Board of Obstetrics and Gynecology recertification.

Awards: National Faculty Award for Excellence in Teaching

Lt. Col. Richard Burney, MD, MSc, FACOG, was awarded the **National Faculty Award for Excellence in Teaching**; American College of Obstetricians and Gynecologists and the Council on Resident Education in Obstetrics and Gynecology, June, 2009.

Armed Forces District 2009 Founders Award

Best scientific paper on a basic science project; also selected as best overall paper at the meeting and will be forwarded for consideration for the national award at the Annual Clinical Meeting of ACOG

Title: Calprotectin as an endometrial biomarker for the diagnosis of endometriosis

Authors: Cpt. Sarah Estrada MD, Cpt. Jonathan Stallings PhD, Mary Jo DeHart, Col. (Ret) Gregory Chow MD, Lt. Col. Richard Burney MD, MSc

Armed Forces District 2009 Resident Award

One of three awards presented to papers submitted from a teaching institution with a resident as primary author

Title: Elective single embryo transfer vs. double embryo transfer: an institutional comparison of pregnancy and multiple gestation rates

Authors: Cpt. Ryan Heitmann DO, Lt. Col. Richard Burney MD, MSc, Col. (Ret) Gregory Chow MD

Armed Forces District 2009 Resident Award

One of three awards presented to papers submitted from a teaching institution with a resident as primary author

Title: Tubal sterilization is associated with reduced ovarian reserve

Authors: Cpt. Melissa Grant MD, Lt. Col. Jason Parker MD, Col. (Ret) Gregory Chow MD, Lt. Col. Richard Burney MD, MSc

Armed Forces District 2009 Resident Award

One of the three best scientific papers from those in residency training

Title: Persistent pulmonary hypertension of the newborn is associated with mode of delivery and not with maternal use of selective serotonin re-uptake inhibitors

Authors: Cpt. Karen Wilson MD, Cdr. Craig Zelig MD, Lt. Col. John Harvey MD, Cpt. Bethany Cunningham MD, Maj. Brad Dolinsky MD, Col. Peter Napolitano, MD

Armed Forces District 2009 Fellow Award

Presented to one of the three best scientific papers from those in fellowship training

Title: Glycosylation of maternal plasma proteins attenuates monocyte chemotaxis in the first trimester

Authors: Cpt. Sarah Estrada MD, Cpt. Jonathan Stallings PhD, Mary Jo Dehart, Col. (Ret) Gregory Chow MD, Lt. Col. Richard Burney MD, MSc

Armed Forces District 2009 Fellow Award

One of the three best scientific papers from those in fellowship traing

Title: The effect of magnesium sulfate on activity of matrix metalloproteinase-9 in fetal cord plasma and human umbilical cord vein endothelial cells

Authors: Maj. Brad Dolinsky MD, Danielle Ippolito PhD, Cpt. Jonathan Stallings PhD, Cdr. Craig Zelig MD, Col. Peter Napolitano MD.

Military OB/GYN Award

Presented to best clinical paper involving military population

Title: Results of postpartum depression screening in a military treatment facility

Authors: Lt. Col. Michelle Munroe CNM, Cpt. Denise Smith CNM, Maj. Lisa Foglia MD, Col. Peter Nielsen MD, Lt. Col. Shad Deering MD

Publications:

Vink J, Hickey K, Ghidini A, Deering SH, Mora A, Poggi S. *Earlier gestational age at ultrasound evaluation predicts adverse neonatal outcomes in the preterm AGA fetus with idiopathic oligohydramnios.* Amer J Perinatology, Jan 2009, 26(1):21-25.

Deering SH, Rosen MA, Salas E, King HB. Building team and technical competency for obstetric emergencies: The "Mobile Obstetric Emergencies Simulator (MOES) System." Sim in Healthcare 2009, 4:166-173.

Zelig C, Deering SH, Napolitano P. Improved Ultrasound Estimation of Birth Weight in the Macrosomic Infant by Application of a Correction Factor to the Gestation-Adjusted Projection (GAP) Method. J Ultrasound Med (in press)

Deering SH, Michael C, Hodor J. Benedetti T, Mandel L, Goff, B. *Use of a postpartum hemorrhage simulator for instruction and evaluation of residents.* Journal of Grad Med Educ (in press)

Burney RO, Hamilton AE, Aghajanova, L, Vo KC, Nezhat CR, Lessey BA, Giudice LC. *MicroRNA expression profiling of eutopic secretory endometrium in women with versus without endometriosis*. Mol Human Reprod. 2009;15:625-31.

Nielsen PE, Murphy CS, Schulz J, Deering SH, Truong V, McCartin T, Clemons JL. *Female soldiers' gynecologic healthcare in Operation Iraqi Freedom: a survey of camps with echelon three facilities.* Mil Med 2009;174:1172-6.

Lukban JC, Clemons JL, Morrill MY, Smilen S, Rogers RG. *New Guidelines for Use of Vaginal Graft in Repair of Pelvic Organ Prolapse. Female Patient.* 2009; 11 vol 34.

Published Abstracts:

Zelig CM, Deering SH, Napolitano PG. Improved ultrasound estimation of birth weight in the macrosomic infant by application of a correction factor to the gestation-adjusted projection (GAP) method. Amer J Obstet Gyn, 2009; 199(6A): S145.

Book Chapters:

Deering, S. Seiken, G. Acute renal failure in pregnancy. In: *Critical Care Obstetrics 5th ed.*, Clark S, Editor, Blackwell Science, Inc, (in press).

Deering, S. Seiken, G. Dialysis in pregnancy. In: *Critical Care Obstetrics 5th ed.*, Clark S, Editor, Blackwell Science, Inc, (in press).

Cypher, R. (2009). Assessment of Fetal Oxygenation and Acid-Base Status. In A. Lyndon & L. Usher Ali (Eds.), AWHONN Fetal Monitoring Principles and Practices (4th ed.). Iowa : Kendal-Hunt Publishers.

Cypher, R. (2009). Case Study Exercises. In A. Lyndon & L. Usher Ali (Eds.), *AWHONN Fetal Monitoring Principles and Practices (4th ed.)*. Iowa : Kendal-Hunt Publishers.

Cypher, R. (2009). Advanced Case Study Exercises. In A. Lyndon & L. Usher Ali (Eds.), *AWHONN Fetal Monitoring Principles and Practices (4th ed.)*. Iowa : Kendal-Hunt Publishers.

Books:

Deering SH.

A Practical Manual to Labor and Delivery for Medical Students and Residents. 2009. Xlibris.com ISBN 978-1-4363-8831-3

Research Grants:

Deering S. Expansion of the Mobile Obstetric Emergencies Simulator project. Tricare Management Activity. (\$250,000) 2008-2009.

Deering S. Use of the Mobile Obstetric Emergencies Simulator to validate the PIPS clinical teamwork scale. AHRQ (\$310,000) 2008-2009.

Deering S. Expansion of the Mobile Obstetric Emergencies Simulator project. Tricare Management Activity. (\$665,000) 2009-2010.

Research/Presentations:

Results of postpartum depression screening in a military treatment facility. Authors: Lt. Col. Michelle Munroe CNM, Cpt. Denise Smith CNM, Maj. Lisa Foglia MD, Col. Peter Nielsen MD, Lt. Col. Shad Deering MD; AFD 2009

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Glycosylation of maternal plasma proteins attenuates monocyte chemotaxis in the first trimester. Authors: Maj. Shannon Flood-Nichols, Danielle Ippolito PhD, Cpt. Jonathan Stallings PhD, Maj. Lisa Foglia MD, Maj. Jennifer Gotkin MD, Col. Peter Napolitano MD. AFD 2009.

Factors affecting knowledge of maternal screening tests in pregnancy. Authors: Maj. Lisa M. Foglia MD, Dana Knutzen, Katie Stoll, Lt. Col. Shad Deering MD. AFD 2009.

Perez CJ, Clemons JL. Prevalence, Risk Factors, and Common Organisms in Urinary Tract Infections in Urogynecologic Patients.

(Poster presentation, at the American Urogynecologic Society annual meeting, Hollywood, Florida, September, 2009.)

(Oral presentation at the ACOG Armed Forces District meeting, Honolulu, Hawaii, October, 2009.)

The effect of a prenatal screening options class on knowledge and uptake of maternal screening tests in pregnancy. Authors: Dana Knutzen MS, Katie Stoll MS, Lt. Col. Shad Deering MD, Maj. Lisa Foglia MD, AFD 2009.

Zelig CM, Deering SH,

Napolitano PG. Improved ultrasound estimation of birth weight in the macrosomic infant by application of a correction factor to the gestation-adjusted projection (GAP) method. 29th Annual Meeting Society for Maternal-Fetal Medicine. San Diego, CA, Jan 26-31, 2009. (Poster Presentation)

Rosen, M, Salas E, Deering SH, King, H. Team Debrief in Simulation-based Training: An Integrative Framework, Strategies, and Tips. Society of Simulation

in Healthcare, Lake Buena Vista, FL, Jan 10-14, 2009. (Poster Presentation)

Weeks L, Benedetti T, Deering S. Evaluating and training providers on force used during shoulder dystocia using simulation training. 12th Annual Madigan Research Day, Tacoma, WA, 24 April, 2009. (Oral Presentation) **Winner**, Outstanding Presentation, Winner, Medical Education Research Session

Fowler M, Mauer D, Colt R, Deering S. Medical Simulation to Teach Family Medicine residents proper response to obstetric emergencies. Waco/McClennan County Residency Research Day, May 2009, Waco, TX.



(Poster Presentation)

Rosen M, Salas E, Deering SH, King H. Building team briefing cycles in healthcare: A full-spectrum approach. The Interservice/Industry Training, Simulation and Education Conference, Nov 30-Dec 3, 2009, Orlando, FL.

Deering SH. Simulation Training Drills for Obstetrics. ACOG District II Annual Meeting, 22-24 Oct, 2009, New York City, NY. (Invited presentation)

Deering SH, Tobler K, Cypher R. Improvement in documentation utilizing an electronic checklist for shoulder dystocia deliveries. ACOG Armed Forces District

Annual Meeting, 15-18 Nov 2009, Honolulu, HI. (Oral Presentation)

Miller N, Deering SH. Educating residents in patient counseling for amniocentesis with simulation: Validity of measurement tools. ACOG Armed Forces District Annual Meeting, 15-18 Nov 2009, Honolulu, HI. (Poster Presentation)

Foglia L, Knutzen D, Stoll K, Deering SH. Baseline knowledge of prenatal genetic screening tests. ACOG

Armed Forces District Annual Meeting, 15-18 Nov 2009, Honolulu, HI. (Oral Presentation)

Knutzen D, Stoll K, Deering SH, Foglia L. Assessment of prenatal genetic screening knowledge: Does standardized counseling make a difference? ACOG Armed Forces District Annual Meeting, 15-18 Nov 2009, Honolulu, HI. (Oral Presentation)

Munroe M, Smith D, Foglia L, Nielsen P, Deering SH. Results of postpartum screening in a military treatment facility. ACOG Armed Forces District Annual Meeting, 15-18 Nov 2009, Honolulu, HI. (Oral Presentation) **Winner**, Outstanding paper on a military topic.

Heitmann RJ, Burney, RO. Successful pregnancy in a patient with threatened miscarriage and inappropriately rising QhCG levels supplemented with progesterone. Presented at 2009 Armed Forces District. Honolulu, HI. 15-18 Nov 2009. (Poster presentation)

Heitmann RJ, Burney RO, Chow GE. Endometrial appearance in the presence of hydrosalpinx: before and after surgical intervention. Presented at 2009 Madigan Research Day. 24 Apr 2009. (Poster presentation)

Estrada S, Stallings JD, DeHart MJ, Chow GE, Burney RO. Calprotectin as an endometrial biomarker for the diagnosis of endometriosis. Presented at the 2009 Armed Forces District meeting of ACOG, Honolulu, HI, 15-18 Nov 2009.

Received Founders Award for best overall paper (of 130 submissions) at 2009 AFD meeting.

Grant MA, Parker JD, Chow GE, Burney RO. Evaluation of ovarian reserve following tubal sterilization using anti-müllerian hormone. Presented at the 2009 Armed Forces District meeting of ACOG, Honolulu, HI, 15-18 Nov 2009.

Received Resident Award for best resident paper at 2009 AFD meeting.

Heitmann RJ, Kenyon D, Chow GE, Burney RO. Is cycle day one counted from spotting or full flow? – the association between premenstrual spotting and endometriosis. Presented at the 2009 Armed Forces District meeting of ACOG, Honolulu, HI, 15-18 Nov 2009. Heitmann RJ, Burney RO, Chow GE. Elective single embryo transfer (eSET) versus double embryo transfer (DET): evaluation of pregnancy and multiple gestation rates. Presented at the 2009 Armed Forces District meeting of ACOG, Honolulu, HI, 15-18 Nov 2009.

Received Resident Award for best resident paper at 2009 AFD meeting.

Cypher R. CAOS in the Preterm Patient: A Case Study Involving Chronic Abruption-Oligohydramnios Sequence. AWHONN National Meeting, Connecting The Heart and Science of Caring, June 2009 in San Diego, CA (poster presentation)

Cypher R. Terrorism and The Obstetrical Patient: A Success Story From Iraq. AWHONN National Meeting, Connecting The Heart and Science of Caring, June 2009 in San Diego, CA (poster presentation)

Cypher R. Intrauterine Growth Restriction: Clinical Guidelines and Options for Management" presented at the AWHONN Washington Section annual meeting. 20 October 2009; Blaine, Washington. (conference presentation)

Cypher R. Intrauterine Growth Restriction: Clinical Guidelines and Options for Management" presented at the National Association of Neonatal Nurses annual meeting 24 September 2009: Austin, Texas. (conference presentation)

Cypher R. Cervical Ripening and Labor Induction: Providing Safe and Evidence Based Care" presented as AWHONN Webinar. 15 Sept 2009. (conference presentation)

Cypher R. "Pilot to Co-Pilot, We Have a Problem in the Cockpit": Get Your Checklist for Interesting Fetal Monitoring Cases" presented at AWHONN National Meeting. 30 June, 2009: San Diego, CA. (conference presentation)

Cypher R. "The Rebirth of an Old Medication: Progesterone Therapy for Preterm Birth Prevention", presented at King's Daugher Medical Center's Annual Maternal-Child Health conference 23 February 2009: Ashland, KY. (conference presentation)

INNOVATIVE PROGRAMS



Patient and Family-Centered Care (PFCC) can be best defined as "an innovative approach to the planning, delivery, and evaluation of healthcare that is grounded in mutually beneficial partnerships among patients, families, and providers." Information sharing and collaboration between patients, families and healthcare staff are the cornerstones of patientand family-centered care. Individuals and families are encouraged to participate in experiences which help define policy and program development. They bring different perspectives and timely feedback and ideas to the table, which benefit everyone.

The Institute For Family-Centered Care (IFCC)

is a nonprofit organization based in Bethesda, Maryland. This institute has contracted to assist military treatment facilities in advancing the practice of Patient and Family Centered Care. The IFCC offers several conferences each year which teach these principles. Each year they host a seminar. More information about the Institute for Family Centered Care can be found on their website: www.familycenteredcare.org

The Stork Advisory Council consists of OB-GYN staff, patients, and families who volunteer their time to promote positive relationships, and bring about improvements within the OB/GYN Department. They work to encourage a family-centered care atmosphere in order to achieve their goals and objectives. Patients conduct their own meetings with staff members functioning as advisors.

CenteringPregnancy® Program or Group Prenatal Care alters routine prenatal care by placing women in groups for appointments based on similar due dates. Women have their intake into obstetric care in the usual manner, then are invited to join with 8-12 other expectant mothers with similar due dates in meeting together regularly throughout their pregnancy. The Centering group participates in discussing topics of interest related to pregnancy, childbirth, parenting, and personal growth. Meeting with the same group has many advantages, with the sharing and development of a support network that often extends well into the childrearing period.

A Different Kind of Reunion

By Julie Blakely

The dance floor was replaced with a handmade quilt. Attendees snacked on baby formula instead of the traditional dinner buffet. And there was no DJ – just the gentle sound of a soothing lullaby. This was the scene at the reunion for graduates of the most recent CenteringPregnancy Program at Madigan Army Healthcare System. At their first prenatal appointment, Madigan beneficiaries are given the choice of traditional prenatal care or the CenteringPregnancy Program. They are also given the choice of midwifery care versus general obstetrics care.

Col. (Dr.) Peter Nielsen, Madigan's Department of Ob/

The graduates were mothers and newborns who had recently completed The Centering-Pregnancy Program, an alternative to traditional prenatal care where pregnant women receive risk assessment, support and education regarding pregnancy in a group setting. Women are placed into groups of eight to 12 based on their predicted due date, and they are encouraged to share and talk to one another about their experiences.

"We find that this is an effective model for delivery," said Roxanne Piecek, a certified nurse midwife with Madigan's CenteringPregnancy Program. "It provides an advantage to women."



GYN chief and the consultant to The Army Surgeon General, said that there is some data suggesting that this type of prenatal care may reduce the risk for preterm birth in some patients, and Piecek contends that women who chose CenteringPregnancy over traditional prenatal care are likely to have less medical intervention during their labor.

"There tends to be more patients who want less intervention," said Piecek. "Overall, it has to do with personal preference and whether or not the mother is low-risk."

An Unexpected Experience

At this reunion, there were eight new moms with their babies, with new

CenteringPregnancy was developed by a midwife in the mid-1990s, and has since spread to more than 100 medical facilities nationwide. Madigan is the second Military Treatment Facility and one of only three medical facilities in the nation to receive an accreditation for CenteringPregnancy. William Beaumont Army Medical Center at Fort Bliss, Texas, also carries an accreditation. dads learning how to park strollers as well. The babies ranged in age from two weeks to two months, and if there was a consistent theme about each new mom's labor, it was that nothing went as any of them expected it would.

Every woman attending the group had decided that a natural birth was what they wanted, meaning no drugs

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A different kind...

Continued from page 15

and no medical intervention unless it was necessary. Every one of the new moms eventually received medication for pain, and a handful had to have caesarean sections.

Mia Davis's husband left for deployment the day her

labor contractions began. Finally, after not being able to sleep for three days because of her contractions, she came to Madigan to get some medication for her pain. While she was being admitted, her water broke, and she had the shortest labor in the group at only six hours.

Vanessa Sumpter's husband was en route from Kuwait to see his daughter's birth, but there was a travel delay, and he didn't make it in time. Sumpter's labor was uneventful, but as a result of breastfeeding, she developed an

abscess in her breast and a fever, and had to be readmitted to the hospital for five days. Doctors had to make a small incision in her breast to drain the abscess, and she has almost fully recovered.

Heidi Cristel's husband was not present during her delivery, but not because he was deployed. He was sick with the flu, and even though he had brought her to the

"It's definitely not what you think it's going to be" -Heidi Cristel

hospital, he had to return home because he was throwing up. When her daughter, Isabella, was born, Cristel's husband was on the speakerphone in her delivery room.

"It's definitely not what you think it's going to be," Cristel said, discussing how she expected her husband to be present during her delivery.

Baby Boom

Nielsen states that Madigan has increased the number of certified nurse midwives to seven in order to provide coverage to pregnant women seeking services like CenteringPregnancy. With an average of 209 babies born

> every month at Madigan, this year, the hospital will deliver more than 2,500 babies – the largest number ever in its history.

The OB/GYN department has also increased the number of providers for traditional prenatal care, and recently the department was honored with seven of 14 research awards at the annual Armed Forces district meeting of the American College of Obstetrics and Gynecology. For more information about the awards, visit Kudos Page seven.

"I am extremely proud of

the faculty, fellows and residents in our department," Nielsen said. "Their dedication to patient care, education and research exceeds some of the nation's leading civilian academic medical centers."

CenteringPregnancy groups meet on the same schedule as traditional prenatal care appointments, so members gather about every four weeks until late in the pregnancy when the group starts to meet more frequently.

Piecek states there have been women that began with traditional prenatal care and then transfer to the Centering-Pregnacy program. Women have also developed complications while attending CenteringPregnancy, and they have been permitted to stay in the group while receiving additional care through the OB/GYN clinic. "Once they come to the groups, they don't want to leave," Piecek said.

CenteringPregnancy began their 28th group last week, and their goal is to begin two new groups every month. For more information, contact Centering Pregnancy at (253) 968-1143.



Madigan nurse midwife named 'Army Nurse of the Year'

By Lorin T. Smith

A Madigan Army Medical Center nurse midwife with more than 17 years in the Army was named the 2009 Daughters of the American Revolution Anita Newcomb McGee "U.S. Army Nurse of the Year" award recipient July 10 at Constitution Hall in Washington, D.C.

Lt. Col. Michelle Munroe, 39, is the chief of Madigan's Nurse Midwifery Service.

The Anita Newcomb McGee Award honors the memory of Dr. McGee, who organized the Army Nurse Corps during the Spanish-American War.

The award is sponsored yearly by the DAR, and is given to an active-duty Army Nurse Corps officer, with the grade of captain or above in a career status, selected by Army Surgeon General Lt. Gen. Eric B. Schoomaker, as the "U.S. Army Nurse of the Year."



Ms. Linda Gist Calvin, President General (left), Daughters of the American Revolution presents the 2009 Anita Newcomb McGee/U.S. Army Nurse of the Year at Constitution Hall in Washington, D.C.

Munroe received the award

primarily for the work she did integrating an evidencebased teamwork system called TeamSTEPPS (Team Strategies and Tools Enhance Performance and Patient Safety) into many of the medical units deployed to Iraq in 2008.

The program optimizes patient outcomes by improving communication and other teamwork skills among health care professionals promoting a culture of safety. TeamSTEPPS has contributed to providing a better level of care for patients, Munroe said.

She has also taken an active role increasing Madigan's nurse midwifery services. Nurse midwives specialize in low-risk pregnancies and natural childbirth.

> "People use midwives because they don't want to have running IVs; we give patients the freedom to move around, get a massage or take a shower," Munroe said.

> Her boss, Col. Peter Napolitano, the director of the Maternal-Fetal Medicine Fellowship, said that Munroe's efforts overseas and at Madigan have made both the TeamSTEPPS and nurse midwifery programs more successful.

> "Not only has she done wonders in her own profession, but she has

made such a difference in the lives of the people we have helped through patient safety," Napolitano said.

"Her work will continue to improve the quality of care that we provide," he said.

Munroe joins Col. Elizabeth Mittelstaedt, chief of Madigan's Consolidated Education, as the only other Anita Newcomb McGee/"U.S. Army Nurse of the Year" recipient working at Madigan.

Charles A. Andersen Simulation Center



Training Today Saves Lives Tomorrow

The Charles A. Andersen Simulation Center (Andersen Sim Center or sim center) has a dual mission to support Graduate Medical Education/Nursing and Medic training in the Madigan Healthcare System through simulation based medical training. The sim center also supports the training of health care professionals within the Western Region Medical Command.

Established in May of 2002 the simulation center's success and the training of deploying medical personnel

has required an increased in size from 1,100 square feet to over 8,000 square feet of training space within the original Madigan General Hospital structure (also known as the Madigan Annex).

"Research and the advancement of the simulation field is a major focus at the Andersen Simulation Center."

More than 29,000 medical personnel have received training at the Andersen Sim Center since its inception, and more than 6,800 in 2008 alone. Training at the sim center ranges from basic medical skills training to full blown trauma scenarios including ACLS, ATLS, and PALS training programs. The center's staff also supports off-site training to units during field exercises. Professionals at Madigan Army Medical Center also work with the Medical Simulation Training Center (MSTC) in combined training activities to address transfer of care of the wounded soldier across the various echelons of care.

Andersen Simulation Center objectives:

- Promoting patient safety through realistic simulated training.
- Providing simulated training that enhances efficiency and competency.
- Instill confidence and increase skill levels in medical treatment for deploying soldiers.
- Increase communication, teamwork and critical thinking skills by promoting Crisis Resource Management (CRM) training.
- Instill confidence and increase skill levels in medical treatment for deploying soldiers.
- Oversee the implementation of the Central Simulation Committee to provide cutting edge GME training as ReDeployment opportunities for returning providers.



Mobile Obstetric Emergencies Simulator (MOES)

The Andersen Simulation Center has been designated a Center of Excellence by Tricare Management Activity (TMA) for its work in the integration of simulation and TeamSTEPPS[®] training. With funding from TMA, Madigan has developed a Mobile Obstetric Emergencies Simulator (MOES) for which the Army has filed a patent application.

This MOES simulator facilitates a variety of validated obstetric emergency simulations in the Labor and Delivery unit. The scenarios improve readiness and increases patient safety for both the mother and infant. MOES integrates evidence-based practice recommendations with TeamSTEPPS' principles of communication and teamwork, involving the entire patient care team.

The success of the Andersen Sim Center's MOES led to the deployment of eight additional units to facilities within the DoD by the end of 2007. This effort earned Madigan the 2007 DoD Patient Safety Award for Technology.

This project alone received over \$1.5 million dollars in funding, and now all 54 sites that provide obstetric care within the Army, Navy and Air Force have been trained on and have received the MOES system.

Central Simulation Committee:

The Andersen Sim Center embarked on an initiative to create a Central Simulation Committee (CSC) for 10 different medical specialties that trains residents at the 10 Army Military Treatment Facilities. This was proposed as a method to address new GME training requirements as well as the pressing needs of our providers returning from Deployment with regards to skills degradation. In addition to creating a standardized state-of-theart simulation curriculum and centralized electronic evaluation system, the CSC will also assist in the redeployment training of Army providers ensuring that any retraining issues are addressed in the safety of a simulation rather than with live patients.

The CSC was given \$2.88 million in initial funding through the Advances in Medical Practice (AMP) program from the Office of the Surgeon Generl in April 2007. The CSC was formed, met, purchased a standard set of simulators for each specialty and facility, agreed upon a format for the curriculum, and conducted the initial implementation training. The ten MTFs went on to hire the simulation administrators and training was initiated at all sites in 2008 with over 12,000 personnel trained during that calendar year. In 2009 that number grew to approximately 23,000 personnel.

Simulation Center... continued from page 19

Funding for the CSC has been secured for the next several years with the annual inclusive sustainment costs are expected to be approximately \$1.5 million dollars per year to cover all ten sites.

Publications & Presentations:

Since 2002, the sim center's staff has contributed to more than 30 peer-reviewed publications and participated in over 80 presentations at local and national meetings relating to medical simulation and education. Madigan's staff and educators have been invited to conduct simulation training workshop national meetings in Family Medicine, OB/GYN, and Internal Medicine. In addition, the Andersen Simulation Center has managed over \$6 million in grants and special projects, and supports an annual Simulation Research Award at Madigan's Annual Research Day.

The Andersen Simulation Center is also working with several national specialty organizations in the field of simulation. It was recently selected by the American Urologic Association as one of only six sites in the U.S. to be a test site for a





new laparoscopic nephrectomy simulator. In addition, the sim center was accepted as an official member of the American College of Obstetrics and Gynecology's Simulation Consortium in October 2009.

The Obstetrics & Gynecology Residency Program at Madigan Army Medical Center (MAMC) is one of the premier post-graduate medical teaching centers in the military.

The Andersen Simulation Center recently became the first DoD institution to be accredited by the American College of Surgeons as a Level I Educational Center, one of only approximately 40 worldwide to receive this honor. OB/GYN GRADUATE MEDICAL EDUCATION combination of conferences and lectures provided by staff, residents, and renowned guest lecturers through the Visiting Professor Program. Residents participate in about ten surgery/skill labs per year with state of the art models and equipment at the Anderson Simulation Center.

With the large active-duty, Family member and retiree population in the area, our residents see many complicated obstetric and gynecologic cases. The majority of the residency rotations take place at Madigan. Residents also rotate at Tacoma General Hospital and

The OB/GYN Residency program at Madigan has a long tradition of training exceptional physicians. It has been continuously accredited for 53 years and the most recent ACGME accreditation cycle was for five years, training four residents per year. The program maintains a strong emphasis on clinical medicine and research.

At the 2009 ACOG Annual Armed Forces District Meeting, Madigan won 50% of the awards, including the best research project.

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The Department of Obstetrics and Gynecology is dedicated to providing the highest quality of care to all DOD beneficiaries, while simultaneously training our residents in the principles of Obstetrics and Gynecology. The training experience at Madigan combines didactic education with exposure to a broad spectrum of outpatient and inpatient experiences. Wednesday mornings are devoted to didactic learning. The sessions involve a

Swedish Medical Center, in Seattle, for twelve weeks each.

Madigan boasts a world class Maternal-Fetal Medicine Fellowship. This fellowship has been continuously accredited for the past 31 years and the most recent accreditation by the American Board of Obstetrics and Gynecology was for 5 years. Our residents have the opportunity to work one-on-one with these fellows in performing procedures using state-of-the-art equipment. Residents gain exceptional experience with obstetric and gynecologic ultrasound through personal instruction with MFM faculty in the DoD's only America Institute Ultrasound Medicine accredited OB/GYN ultrasound facility.

All residents are required to perform a research project prior to graduation. This activity is well supported at the service and hospital level. This support includes funding to present papers at national meetings.

Military medical students interested in applying for Madigan's OB/GYN Residency are strongly encouraged to rotate on site. The selection process depends greatly on the opportunity to evaluate the candidate's knowledge base, commitment, work ethic, and communication skills. The optimal time to perform clinical rotations is May through October each year.

TeamSTEPPS



The TeamSTEPPS Approach: Higher Quality, Safer Patient Care

TeamSTEPPS is a teamwork system designed to improve quality, safety, and efficiency of health care; offering a powerful solution to improving patient safety within an organization.

TeamSTEPPS is an evidence-based teamwork system aimed at optimizing patient outcomes by improving communication and other teamwork skills among healthcare professionals. TeamSTEPPS includes a comprehensive suite of ready-to-use materials and training curricula necessary to successfully integrate teamwork principles into all areas of a healthcare system.

TeamSTEPPS was developed by the Department of Defense (DoD) Patient Safety Program, in collaboration with the Agency for Healthcare Research and Quality (AHRQ).

The goal of TeamSTEPPS is to produce highly effective medical teams that optimize the use of information, people, and resources to achieve the best clinical outcomes for their patients. TeamSTEPPS is scientifically-rooted in more than 20 years of research and lessons learned from the application of teamwork principles identified to Crew Resource Management (CRM) and within High-Reliability Organizations (HROs).

TeamSTEPPS comprises four teachable-learnable skills: Leadership, Situational Monitoring, Mutual Support and Communication. By learning these skills knowlege is improved through a "shared mental model". Attitude can be impacted by improving mutual trust amongst healthcare providers and changing focus their focus from individual task to a "Team Orientation". Through

these a team improves performance (incresed adaptability, accuracy, productivity, efficiency and safety).

No other hospital in the United States, civilian or military, has accomplished more, trained more and led the way with new initiatives in this area of healthcare than Madigan Amry Medical Center.

1991

Col. Bill Hurely, Program Director of the Emergency Medicine Residency became the first in the nation to incorporate Crew Resource Management (an Aviation Safety based program) into a healthcare system.

1996

Col. Matt Rice, Chair, Department Emergency Medicine led the way by establishing Madigan Army Medical Center as lead medical center in the DoD MEDTEAMSTM project.

2002

Col. Peter Nielsen, Chair, Dept OB/GYN, co-authored the first multicenter randomized clinical trial study introducing MEDTEAMS training into labor and delivery units. This study demonstrated a dramatic decrease in "time from first calling a cesarean to delivery of baby from 25 to 17 minutes." Patient and employee satisfaction survey results also saw significant improvements.

2005-2009

Madigan Army Medical Center has the longest recorded of self sustained medical teamwork training of any medical center in the country with more than 1,500 staff trained, 5 inpatient units including the first TeamSTEPPS Neonatal Intensive Care Unit and soon Madigan will have the first Pharmacy unit in the nation trained in TeamSTEPPS.

"TeamSTEPPS is a teamwork system designed to improve quality, safety, and efficiency of health care; offering a powerful solution to improving patient safety within an organization."

OCT 2008

The University of Washington Medical Center approached Madigan to train their first inpatient unit (Labor and Delivery). This endeavor earned the University of Washington Agency for Healthcare Research and Quality.

MAY 2009

The Department of Surgery and Anesthesia/Operative Service initiates its interest with subsequent training of over 400 personnel in the medical center focusing on morning OR briefs, SBAR and debriefs. Madigan Army Medical Center is now the first in the country to have an online debrief checklist tool. This innovative tool identifies specific cases from the debrief which require follow up so improvements may be prospectively implemented.

JUN 2009

Major General Patricia Horoho adopts TeamSTEPPS sending a command brief requesting that the medical center, and eventually the entire Western Region Medical Command, undergo TeamSTEPPS training. With this initiative, Madigan and the Western Region Medical Command are established as the first regional training effort in the nation, with Madigan as the train-the-trainer site.

Madigan is also the first facility to establish pre-training outcomes for all subsequent unit training to help assist each unit with plans for quarterly reports and post training evaluation.

TEAM-UP

TEAM-UP is a pilot program currently under IRB protocol. TEAM-UP will introduce and teach Madigan's patients to directly participate in their care.

Simulation Training

Madigan Army Medical Center is also the first to completely integrate TeamSTEPPS, the fundamentals class with simulated clinical scenarios integrated with the Anderson Simulation Center.

Operational Medicine

In 2008 Madigan trainers Col. Peter Napolitano and Lt. Col. Michelle Munroe were the first to introduce TeamSTEPPS training in the Iraq Theater of Operations. Since that time more than 2,500 personnel have been trained. During one CSH deployment TeamSTEPPS training, introduced midcycle, resulted in a 38% reduction of incident reports, 67% reduction in communications errors, 70% reduction of needle sticks and 83% reduction in medication errors.

DEPARTMENT FACULTY



Department Chairman: Col. Peter Nielsen, MD, USA

Asst Department Chair & Residency PD Col. Michael Chinn, MD, USA

Assoc. Residency PD and MFM Staff: Maj.(P) Lisa Foglia, MD, USA

MFM Fellowship Director: Col. Peter Napolitano, MD, USA

Chief, GYN Oncology Division: Lt. Col. Jan Sunde, MD, USA

Associate Fellowship Director: Lt. Col. Jennifer Gotkin, DO, USA **Chief, OB Service:** Maj. Jason Pates, MD, USA

Chief, GYN Service: Maj. Alison Batig, MD, USA

Chief, Ambulatory Care Service: Dr. Ingrid Chamales, MD

Chief, Antepartum Diagnostic Center: Maj. (P) Jennifer Gotkin, DO, USA

Chief, Urogynecology Division: Col. Jeffrey Clemons, MD, USA

Reproductive Endocrinology & Infertility Division:

Lt. Col. Rick Burney MD, USA, Chief Dr. Gregory Chow MD, Staff

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Chief, Simulation Center:

Lt. Col. Shad Deering, MD, USA

Chief, Midwifery Service: Lt. Col. Michele Munroe, CNM

Assistant Chief, Midwifery Service: Ms. Roxanne Piecek, CNM

Certified Nurse Midwife Staff:

Cpt. (USN Ret.) Mary-Paul Backman, CNM Ms. Amber Knoche, CNM Ms. Barbara Shaffer, CNM Ms. Alexandra Michel, CNM Ms. Rachel Suria-Ramos, CNM

Chief, Medical Genetics: Lt. Col. (USAF Ret.) Michael McClellan, MD

Genetic Counselors:

Ms. Katie Stoll Ms. Dana Knutzen

Staff Physicians:

Lt. Col. Charles Pattan, MD, USA: Maj. Sara Thomson, MD, USA Cpt. Timothy Batig, MD, USA Dr. Melodie Icasiano Dr. David Magelssen Dr. Acquinette Bryant Dr. Daniel Szekely

Fellows MFM (third year): Lt. Cmdr. Craig Zelig, MD, USN

MFM (second year): Maj. Brad Dolinsky, MD, USA

MFM (first year): Maj. Shannon Flood, MD, USA

Nurse Practitioners:

Ms. Rebecca Cypher, MSN, PNP Ms. Ann Yeo, NP Ms. Diane Lee, NP Ms. Eileen Owen-Williams, NP Ms. Helen McGregor, NP Ms. Carol Jasaitis, NP

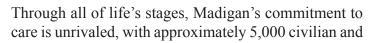






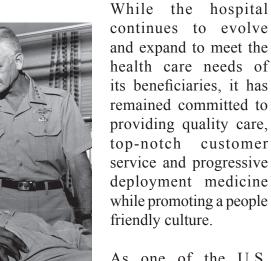
Charged with providing care to more than 100,000 beneficiaries through a network of healthcare facilities located in Washington, Oregon and California, the Madigan Healthcare System is a state-of-the-art healthcare organization in the U.S. Army Medical Command.

At its heart is Madigan Army Medical Center, an ever-expanding care facility occupying more than 120 acres of land on Joint Base Lewis-McChord in Tacoma. Washington. With 57,000 beneficiaries, the medical center's tri-service mission encompasses active duty, family members and military retirees residing in its 40-mile catchment area.



military doctors, nurses, residents, interns and fellows providing world-class care every day. Madigan also benefits from a robust internal American Red Cross program; about 200 volunteers donate thousands of hours monthly.

Since its opening in 1944 as a temporary hospital for war wounded, Madigan has grown to include a full spectrum of specialty and subspecialty services for adult and pediatric patients to include Developmental Pediatrics, Hematology and Oncology, and Radiation Therapy.



As one of the U.S. Army's most technically advanced medical

centers, the hospital is one of only three designated Level II trauma centers throughout the U.S. Medical Command (MEDCOM). Additionally, Madigan's



Andersen Simulation Center, which helps train thousands of doctors, nurses and medics each year, holds the distinction of being the first educational institution in the Department of Defense accredited by the American College of Surgeons. Finally, Madigan continues to consistently be named among the "100 Most Wired Hospitals and Health Systems" by Hospitals and Health Networks magazine.

In keeping with its reputation as an unparalleled teaching facility and modern research platform, Madigan also



boasts outstanding Graduate Medical and Nursing Education Programs. Residents and fellows enrolled in Madigan's Graduate Medical Education program consistently score in the 90th percentile on state and national examinations. Furthermore, Madigan Army Medical Center has or is currently performing research across the entire spectrum of clinical trials, from phase I to phase IV, allowing critical safety and efficacy data to be collected for health interventions.

Madigan continues its tradition of leading the way in patient care through initiatives such as TeamSTEPPS, a teamwork system developed at the hospital designed to improve quality, safety and efficiency of health care. The hospital also brings its "Care with Compassion" to the far corners of the globe with an average of 40 Soldiers deployed at any given time through the Army Medical Department's Professional Filler System.

As part of the Western Regional Medical Command, the largest of three regions the U.S. Army Medical Command, Madigan Healthcare System is perfectly poised to deliver the support the command needs to perform its mission of providing synchronized command and control, resource allocation and oversight to the nine Medical Treatment Facilities and two detachments under its control, ensuring a healthy military community and ready adaptive force.

Madigan Healthcare System

