Eleventh Annual
Obstetrics, Gynecology & Women’s Health
Resident Research Day
3rd Year Residents

May 3, 2006

University of Hawaii
John A. Burns School of Medicine
Department of Obstetrics, Gynecology and Women’s Health
1319 Punahou Street, #824
Honolulu, Hawaii 96826
cover:
Photo courtesy of Hawaii Visitors and Convention Bureau
Eleventh Annual
Obstetrics, Gynecology & Women’s Health
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Department of Obstetrics, Gynecology and
Women’s Health

The Willows
901 Hausten Street
Honolulu, Hawaii
Welcome to the Eleventh Annual Resident Research Day for our third year residents being held by the University of Hawaii Department of Obstetrics, Gynecology and Women’s Health. Medical research is a critical component of medicine. As one of my professors used to put it: “Half of what we teach you is wrong, half of what you will do in practice is wrong…only research can tell us which half is right and which half is wrong!”

An integral part of training for our residents is an understanding of medical research. In discovering how to question, how to structure a protocol, how to maneuver through an Institutional Review Board approval, how to enroll patients, how to assess information and data, our residents develop an awareness of good science. This knowledge and the ability to critically read a journal article will serve these physicians well throughout their careers. We thank everyone on the faculty and in the community who have helped guide our residents at each “how to” step. We applaud our third year residents for the hurdles they have cleared.
Welcome to our Annual Residents Research Day. During their past three years with us each of our third year residents has developed or collaborated on an original research project. This program was initiated to help educate our residents regarding study design, data collection and analysis, and paper writing and editing. Understanding the process of different types of clinical and basic science research will enable our residents to be critical readers of scientific literature and help them to become well-educated physicians practicing evidence-based medicine. We appreciate all the support from attending physicians and fellow residents who enroll their patients in these trials and for coming today to hear the presentations.
During the past 18 years, my research interest has concentrated on maternal fetal medicine. I have continued my interests in Doppler ultrasound research. However, my interests have expanded to include the assessment of pre-term labour and its treatment. The Randomised Nitric Oxide Tocolysis Trial (RNOTT), funded by the NHMRC, which was a multicentre randomised controlled trial coordinated from Newcastle and includes the Mater Hospital (Brisbane), the KK Hospital (Singapore), University of Singapore Hospital and the Prince of Wales Hospital (Hong Kong) is now completed. As well as my research interests, I am active in the subspecialty of maternal fetal medicine in New South Wales and am an executive member of the NSW Health Department Perinatal Services Network (PSN), ex-chairperson of the PSN High Risk Obstetric Group and Chairperson of the NSW Health Department Subcommittee on Prenatal Diagnoses for the Genetic Services Advisory Committee.

**Wednesday, May 3, 2006**, The Willows
9:10 - 10:00 a.m., “Fibronectin and other Markers of Preterm Delivery”
OB/GYN Research Day Lecture

**Thursday, May 4, 2006**, Kapiolani Medical Center, Room 815
8:00 - 9:00 a.m., “Preterm Labour in Australia”
Research Conference, Pacific Research Center for Early Human Development
2:30 - 4:30 p.m., “Ultrasound Assessment of Multiple Pregnancy”
Lecture/Discussion

**Friday, May 5, 2006**, Kapiolani Medical Center, Room 815
9:00 a.m.- 10:00 a.m., “First and Second Trimester Screening for Aneuploidy”
Lecture/Discussion

**2006 JUDGING PANEL**: Professor Warwick Giles, Kenneth Ward, M.D., & Edwin C. Cadman, M.D.
PAST RESEARCH DAY GUEST SPEAKERS

2006  James M. Roberts, M.D.
Senior Scientist and Director, Magee-Womens Research Institute, Professor and Vice Chair (Research), Obstetrics, Gynecology and Reproductive Sciences, University of Pittsburgh, “Whither Toxaemia”

2005  Robert B. Jaffe, M.D., M.S.
Fred Gellert Endowed Chair in Reproductive Medicine & Biology, University of California, San Francisco, “Angiogenesis and Ovarian Cancer”

2004  Diana W. Bianchi, M.D.
Chief of the Division of Genetics in the Department of Pediatrics at Tufts-New England Medical Center, Natalie V. Zucker Professor of Pediatrics and Obstetrics and Gynecology, “Circulating Fetal Nucleic Acids on Maternal Blood: Origin and Diagnostic Applications”

2003  Roy M. Pitkin, M.D.
Former Editor, Obstetrics and Gynecology, Clinical Obstetrics and Gynecology, Emeritus Professor and Chairman of Obstetrics and Gynecology, University of California, Los Angeles School of Medicine, “Obstetric-Gynecologic Research, 1953 - 2002”

2002  James R. Scott, M.D.
Professor, University of Utah, Department of Obstetrics and Gynecology, Editor of Obstetrics & Gynecology, Co-Editor of Clinical Obstetrics and Gynecology, “Pregnancy in Transplant Patients”

2001  William Droegemueller, M.D.
Clinical Professor and Chairman Emeritus, University of North Carolina, Department of Obstetrics and Gynecology, Associate Editor of Obstetrics and Gynecology, “Don’t Look Back...Someone is Gaining on You”, A Discussion of Mentoring

2000  Robert Israel, M.D.
Chief of Gynecology, University of Southern California, Department of Obstetrics and Gynecology, Associate Editor of Obstetrics and Gynecology, “Endometriosis: A Continuing Conundrum”

1999  David A. Grimes, M.D.
Vice President of Biomedical Affairs Family Health International, Associate Editor, Obstetrical and Gynecological Survey, Contraception, Former Professor and Vice-Chairman, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco, “Evidence-based Medicine in Obstetrics and Gynecology: the Paradigm for the Next Century”

1998  Roy M. Pitkin, M.D.
Editor, Obstetrics and Gynecology, Editor, Clinical Obstetrics and Gynecology, Former Professor & Chairman of Obstetrics & Gynecology, University of California, Los Angeles School of Medicine, “The Peer Review System in Medical Publishing”

1997  John T. Queenan, M.D.
Professor and Chairman of Obstetrics and Gynecology, Georgetown University School of Medicine & Chief of Georgetown University Hospital since 1980, Editor-in-Chief of Contemporary Obstetrics and Gynecology

1996  Moon Kim, M.D.
Richard L. Neiling Chair, Professor & Vice-Chairman of Obstetrics and Gynecology, Ohio State University, University Medical Center, Associate Editor, The American Journal of Obstetrics and Gynecology, “Fertility and Environment”
PAST RESEARCH DAY AWARD RECIPIENTS

First Place Award

2006  Renee Sato, M.D.
      “Aentepartum Seafood Consumption and Mercury Levels in Newborn Cord Blood”

2005  Reni A. Y. Soon, M.D.
      “Comparison of Active Phase and Second Stage of Labor in Adolescents and Adults”

2004  Scott D. Eaton, M.D.
      “EKG Changes Occuring with Magnesium Administration for Preterm Labor”

2003  Sapna M. Janas, M.D.
      “Rate of Complication from Third Trimester Amniocentesis Performed at the Fetal Diagnostic Center”

2002  Ian A. Oyama, M.D.
      “Local Anesthetic for use in Colposcopic Biopsies”

Melissa J. Lawrence, M.D.
      “Impact of Fetal Fibronectin Testing at Kapi’olani Medical Center”

2001  Seema Sidhu, M.D.
      “Randomized, Double-Blind Trial of Rectal Misoprostol Versus Oxytocin in Management of the Third Stage of Labor”

2000  Deborah D. Geary, M.D.
      “TDx Surfactant/Albumin Ratio and Lamellar Body Count: Effect of Blood and Meconium Contaminants on Fetal Lung Maturity Assays”

1999  Steven M. Nishi, M.D.
      “Sample Adequacy of Endocervical Curettage (EEC) Compared with Endocervical Brush”

1998  Julie Ann Henriksen, M.D.
      “Nitric Oxide in the Human Placenta”

1997  Cheryl Leialoha, M.D.
      “Uriscree, a Rapid Enzymatic Urine Screening Test for the Detection of Bacteriuria in Pregnancy”

1996  Christine Brody, M.D.
      “Vaginal Birth After Cesarean Section in Hawaii: Experience at Kapiolani Medical Center for Women and Children”
# RESEARCH DAY PROGRAM

**Wednesday, May 3, 2006**

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<tr>
<th>TIME</th>
<th>PRESENTER</th>
<th>ABSTRACT</th>
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<tr>
<td>8:30 a.m.</td>
<td>Registration/Continental Breakfast/Coffee and Tea Service</td>
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<tr>
<td>8:45 a.m.</td>
<td>Welcome and Introduction of Speaker by Kenneth Ward, M.D., Chair</td>
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<tr>
<td>9:00 a.m.</td>
<td>“Fibronectin and other Markers of Preterm Delivery”, Professor Warwick Giles</td>
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<td>9:45 a.m.</td>
<td>Third-year Residents’ Research Presentations</td>
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<td>9:45 a.m.</td>
<td>Jennifer P. Holzman, M.D.</td>
<td>“Correlation of p16INK4a Staining with Low Grade and High Grade Cervical Cytology: Improving Cervical Pap Smear Screening”</td>
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<tr>
<td>10:00 a.m.</td>
<td>Robert Bryan Murphy, M.D.</td>
<td>“Centrifugation of Vaginal Discharge to Improve the Sensitivity of the Ferning Test”</td>
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<td>10:15 a.m.</td>
<td>Lily A. Mallare, M.D., M.S.</td>
<td>“BNP: A Marker for Cardiogenic Causes of Dyspnea in Pregnant Patients”</td>
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<tr>
<td>10:30 a.m.</td>
<td>Vasiliki A. Tatsis, M.D., M.S.</td>
<td>“Dietary Antioxidant Consumption and Vitamin Supplementation During Pregnancy and Relationship to Periodontal Disease”</td>
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<tr>
<td>10:45 a.m.</td>
<td>Keri Li M.K. Brown, M.D.</td>
<td>“Accuracy of Sonohysterography at Identifying Intrauterine Lesions”</td>
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<td>11:00 a.m.</td>
<td>Angel M. Willey, M.D.</td>
<td>“Risk Factors Associated with Striae Gravidarum”</td>
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<tr>
<td>11:15 a.m.</td>
<td>Reina M. Ahern, M.D.</td>
<td>“Knowledge and Attitudes of Emergency Contraception in Hawaii’s Adolescents”</td>
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<tr>
<td>11:30 a.m.</td>
<td>Buffet Lunch (The Willows) and Judges’ Deliberations</td>
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<tr>
<td>12:30 p.m.</td>
<td>Awards Presentation - Lynnae Millar, M.D. and Professor Warwick Giles</td>
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<tr>
<td>1:00 p.m.</td>
<td>Closing</td>
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Jennifer P. Holzman, M.D.
Jennifer Pualei Holzman, M.D.

John A. Burns School of Medicine, University of Hawaii
Honolulu, Hawaii
Honors/Awards:
* Dr. Hans & Clara Zimmerman Foundation Scholarship
* Clinical Honors in OB/GYN and Pediatrics
* John M. Ohtani Award

B.S. Biology Santa Clara University,
Santa Clara, California
Honors/Awards:
* Cum Laude
* Beta Beta Beta Honor Society
  1994 - Santa Clara Cross Country Academic Achievement Award

Hobbies & Interests: Surfing, hiking, snowboarding, family

Place of Birth: Honolulu, Hawaii

Research Experience:
2002-2003: Research Assistant, Prevalence of Smoking in the Labor and Delivery Population, under Dr. David Kim, University of Hawaii John A. Burns School of Medicine Department of Ob/Gyn.

2002-2003: Research Assistant, TREAT Surgical Residency Curriculum Development for Smoking Cessation, under Dr. Sue Steinemann, University of Hawaii John A. Burns School of Medicine Department of Surgery.

2000: Summer Preceptor Community Study, “Community & Health Care Issues in Two Regions of Nepal”, Amp Pipal and Tansen Hospital, Nepal under Dr. Philip Stiver, Dr. Dave Stengel and University of Hawaii John A. Burns School of Medicine.

1999: Research Associate, Dementia and Sleep Disorders Study, Honolulu Heart Program, under Dr. Kamal Masaki and Dr. Ron White, John A. Burns School of Medicine.

1998-1999: Clinical Assistant, Women’s Health Initiative, under Dr. Kamal Masaki and Dr. Patricia Blanchette, John A. Burns School of Medicine.

1998: Laboratory Technician, Cell and Molecular Biology Laboratory, under Dr. Michael Yaffe. University of California, San Diego.

1995-1996: Research Assistant, Genetics and Molecular Biology Laboratory under Dr. Leilani Miller, Santa Clara University.

Publications/Presentations:


Correlation of p16 INK4a Staining with Low grade and High grade Cervical Cytology: Improving Cervical Pap Smear Screening
Jennifer Holzman, M.D., Jeffrey Killeen, M.D., Lori E. Kamemoto, M.D., M.P.H., Mark T. Wakabayashi, M.D., M.P.H., and Patrick Taw

HYPOTHESIS:
The detection of p16INKa staining on liquid-based cervical cytology specimens correlates with Pap smear results [negative, LGSIL (low grade squamo-intraepithelial lesion) and HGSIL (high grade squamo-intraepithelial lesion)].

OBJECTIVE:
Determine the correlation between p16INKa staining and liquid-based Pap smear results (negative, LGSIL and HGSIL).

SECONDARY OBJECTIVES:
Determine the correlation between p16INKa staining and histologic diagnosis from biopsies taken at time of colposcopy.

Examine the feasibility of performing p16INK4a staining on liquid-based cytology samples.

METHODS:
A total of 60 consecutive Thin Prep Pap smears with the following results were evaluated in this study: 20 negative liquid-based cervical Pap smears, 20 LGSIL and 20 HGSIL Pap smears. Sample left over after Pap smear results were obtained was collected, and p16INK4a staining performed. Subjects with LGSIL and HGSIL Pap smear results should all have had cervical colposcopy (by American Society for Colposcopy and Cervical Pathology guidelines) and these histologic biopsy results were also collected. Correlation analysis will be performed to determine the correlation between these study variables.

RESULTS: Data analysis in progress

CONCLUSION: Pending
Robert B. Murphy, M.D.

Robert Bryan Murphy, M.D.

University of Tennessee College of Health Sciences
Memphis, Tennessee

Honors/Awards:
2001 - Albert Hand Scholar
2000 - Awarded NIH Medical Student Research Fellow
1987 - Inducted to the Order of Gownsmen, (the Academic Honor Society at the University of the South)

B.S. Psychology, University of the South, Sewanee, Tennessee

* photo by Brooks Murphy (3 years old)

Hobbies/Interests: Sports, games, cooking and hanging out with my family

Life Experience:
* Servant Leader House (SLH) member dedicated to serve those in need
* Life & Laughter-Co-organizer and leader of a group of medical students that sponsored events for children receiving treatment at St. Jude’s Hospital
* Volunteer at Sewanee Pediatric Associates
* Recreational Therapist - Hillside Cottages, Atlanta, Georgia
* Automobile Broker - M&M Auto Enthusiasts, Madison, Georgia
* Air Traffic Controller - FAA Atlanta Center, Hampton, Georgia

Place of Birth: Mobile, Alabama

Research Experience:
2001 - NIH Summer Fellowship-creating an anatomical model of Orbicularis Oculi premotor neurons, Memphis, Tennessee. Mentor: Mark Ledoux, Professor of Neurology
1998 to 1999 - Research Assistant, Chattanooga Orthopaedic Group, Chattanooga, Tennessee
Mentor: Scott Hodges

Publications:


Centrifugation of Vaginal Discharge to Improve the Sensitivity of the Ferning Test

Robert B. Murphy, M.D. and Michael Savala, M.D.

OBJECTIVE:
To determine whether or not centrifugation of vaginal secretions prior to ferning will increase the sensitivity of the “ferning” test in the detection of rupture of membranes.

METHODS:
Subjects included all women presenting to the L&D triage of KMCWC for rule out rupture of membranes. Vaginal secretions were collected during a sterile speculum exam. The traditional ferning test was performed from the secretions. The remainder of the collection was centrifuged. A drop of supernatant was then placed on a slide and dried. Both slides created, before and after centrifugation, were examined for the presence of the characteristic crystal indicative of amniotic fluid. A description of the vaginal secretions for each subject was recorded.

RESULTS:
40 women were evaluated. 19 of these women were clinically ruptured based on gross pooling and/or visualization of the fetus w/o a membrane present. Of these patients, 17 had a positive ferning test using traditional methods. Sensitivity was 89%. After centrifugation, 19 of 19 patients had a positive ferning test for a 100% sensitivity. Of all study participants, there were 7 subjects that were negative using traditional ferning and positive for ferning after centrifugation.

CONCLUSION:
Centrifugation of amniotic fluid and ferning of supernatant improves the sensitivity of the ferning test.

Research should be continued using the newer biochemical markers for detection of amniotic fluid or the dye test as a gold standard to compare ferning after centrifugation in patient’s with mixed results or neg ferning.


**Lily A. Mallare, M.D., M.S.**  
*Lily Ann Mallare, M.D., M.S.*

*University of Texas Medical School at San Antonio, Texas*

**M.S. Biological Sciences, California State University, Sacramento, California**

**Honors/Awards:**
- 1993 to 1994 - Graduate Equity Fellowship
- 1994 to 1995 - Albert Delisle Family Scholarship
- 1995 - Phi Kappa Phi National Honor Society

**B.S. Biology University of California, Riverside California**

**Honors/Awards:**
- *Dean's Honor List: Fall 1986, Fall 1988, Spring 1989*

**Language Fluency:** Ilocano

**Hobbies & Interests:** Piano, gardening, cooking, reading and downhill skiing

**Place of Birth:** San Fernando, Philippines

**Research Experience:**
- 1999 - Mutation analysis of HET, a novel nuclear matrix protein that binds to and influences activity of the HSP27 promoter in human breast cancer cells with Steffi Oesterreich, Ph.D., at University of Texas School of Medicine, San Antonio, Division of Oncology.

- 1994 to 1996 - Isolating and sequencing a fragment from the **Golgi α-mannosidase II** gene homolog in High 5, a cell line derived from the cabbage looper, *Trichoplusia ni*. M.S. thesis. California State University, Sacramento. Research done with Don Jarvis, Ph.D. at Texas A & M University, Department of Entomology.


- 1989 to 1990 - Efficiency of xylem water transport during summer drought in two chapparal shrubs, *Rhus laurina* and *Ceanothus megacarpus*. NSF research intern with Steve Davis, Ph.D. at Pepperdine University, Division of Biological Sciences, Malibu, California. Poster presented at the Ecological Society of American Conference, Snowbird, Utah.

**Presentations:**
- “Substance abuse in pregnancy.” Presented at the Native Hawaiian Center of Excellence 2005 Summer Conference (Continuing Medical Education Conference), Univ. of Hawaii, John A. Burns School of Medicine; July 16, 2005.

- The ice age revisited.” Presented at Grand Rounds for Dept of OB/GYN, Univ. of Hawaii, John A. Burns School of Medicine; January 19, 2005.
BNP: A Marker for Cardiogenic Causes of Dyspnea in Pregnant Patients?

*Lily Mallare, M.D., M.S., and Tod C. Aeby, M.D.*

**BACKGROUND:**
Brain natriuretic peptide (BNP) is a cardiac neurohormone secreted predominantly from the cardiac ventricles in response to volume expansion and pressure overload. BNP is known to be a sensitive and specific marker for the diagnosis of congestive heart failure in non-pregnant patients with dyspnea. It has also been shown to reflect acute changes in pulmonary capillary wedge pressures in a non-pregnant population with heart failure.

BNP has potential utility in evaluating causes of dyspnea in pregnant patients however; only a few studies have been done in this population. Recent investigations have shown that BNP levels remain relatively constant until term when there is a slight increase. It is further increased and progressively rises during the late postpartum period. Elevated BNP values have been demonstrated in pregnant patients with preeclampsia and in preeclamptic patients with left ventricular enlargement. Elevated BNP levels have also been found in pregnant women with hypertensive disease, being most pronounced in those patients that were multigravid.

BNP testing could have broad application in the management of laboring women. These patients routinely experience rapid fluid shifts and intravascular volume changes. In particular, determining BNP levels associated with cardiogenic causes of dyspnea in pregnant women could be useful in streamlining the evaluation of these challenging patients.

**OBJECTIVES:**
The purpose of this study was to determine whether pregnant patients with cardiac causes of dyspnea have elevated BNP levels when compared to similar patients with normal cardiovascular functioning. As a secondary outcome, this study examined the correlation between net fluid balance and BNP values.

**METHODS:**
A retrospective chart review was performed on all pregnant patients who had BNP levels drawn at Kapiolani Medical Center for Women and Children between January 1, 2003 and January 31, 2006. For each patient demographic information, admission and discharge diagnoses, vitals signs, fluid balance data, diagnostic test results, medications, and BNP levels were obtained. Correlational data was analyzed using an analysis of variance and means were compared using either the Student’s T-test or the Wilcoxon Signed-Rank test as appropriate.

**RESULTS/CONCLUSION:** Pending final analysis.
Vasiliki A. Tatsis, M.D., M.S.
Vasiliki Athanasiou Tatsis, M.D., M.S.

Previous Residency: Albert Einstein College of Medicine, New York- Department of Obstetrics and Gynecology PGY1
Honors/Awards:
2003-2004 - Excellence in Medical Student Teaching Award

University of California, San Diego School of Medicine, San Diego, California
Honors/Awards:
2000, 2002 - James Vamvas Scholarship Award
2000 - Preventive Medicine Scholarship, Golden Key National Honor Society

M.S. Human Nutrition, Columbia University, New York, New York
Honors/Awards:
1999 - James Vamvas Scholarship Award

B.A. Biology California State University, Fullerton, California
Honors/Awards:
* College Graduation with Honors
  1996 - Outstanding Senior Volunteer Coordinator and Team Leader, UCI Family Health Center

Language Fluency: Greek, Spanish

Hobbies & Interests: Traveling, reading, swimming

Life Experience:
* DOC AIDS Coordinator, UCSD School of Medicine
* Organ Physiology Course Committee Class Representative, UCSD
* Volunteer with Flying Doctors of Mercy-LIGA International(Sinaloa, Mexico)
* Hospice Care of California Volunteer

Place of Birth: Athens, Greece


“Prevalence of Interstitial Cystitis in a Fixed Population of Young Females”, Dr. Lowell Parsons, Department of Urology, UCSD, 2002. Medical school independent study project.


Dietary Antioxidant Consumption and Vitamin Supplementation During Pregnancy and Relationship to Periodontal Disease

Vasiliki Tatsis, M.D., M.S., Lynnae Millar, M.D., Jim Davis, and Steven Offenbacher, D.D.S.

OBJECTIVES:
1. To determine the incidence of periodontal disease in our clinic population
2. To analyze the association with dietary antioxidant consumption and vitamin supplementation with periodontal disease during pregnancy.

STUDY DESIGN:
Fifty women from the resident clinic were recruited into the study after 32 weeks gestation. Exclusion criteria included diabetics, multiple gestations, chronic antibiotic use, and immunosuppression. Each subject completed a demographics form and a comprehensive validated dietary survey by the National Institute of Health. Subjects then underwent a complete oral examination in the immediate postpartum period by trained dental hygienists. The presence or absence of periodontal disease was assessed with a standardized dental scoring system. Oral plaque specimens were collected for future evaluation.

RESULTS:
Data analysis is in progress. Data analysis will be done using a statistical package that will correlate dietary supplementation of Vitamins A/beta carotene, E, D, and C to oral health. Multiple logistic regression will be used to control for multiple confounding variables.

CONCLUSIONS:
Final conclusions are pending. We expect that subjects who consume more fruits, vegetables, and antioxidant vitamin supplements will have less periodontal disease. This would have important implications on counseling for routine antepartum dental maintenance and recommendations for vitamin supplementation.
Keri Li M. K. Brown, M.D.
Keri Li MoMi Kiyotoki Brown, M.D.

Creighton University School of Medicine,
Omaha, Nebraska
Honors/Awards:
* Disadvantaged Minority Scholarship, 4 years conferred
* Full Clerkship Honors in: Cardiology, High-Risk Obstetrics, Obstetrics & Gynecology, Obstetrical Ultrasound
* Clinical Honors in Obstetrics & Gynecology, Pediatrics, Psychiatry
* Academic Honors in Humane Treatment of Patients
* Academic Honors in Case Studies in Medicine

B.S. Biology Creighton University,
Omaha, Nebraska
Honors/Awards:
* Magna Cum Laude
* Dean’s Honor List (4 semesters)
* National Biological Honor Society (Induction April 1999)
* Carl Reinert Scholarship, 4 years conferred

Hobbies & Interests: Cooking, snowboarding, surfing, shopping, traveling, movies

Life Experience:
* Youth Health Extravangaza-performed school physical exams for disadvantaged children
* Habitat for Humanity-helped build homes for disadvantaged families
* Volunteer, AMSA Halloween Carnival - A miniature carnival with games and food to benefit handicapped and critically ill children
* Volunteer, St. Francis House, a local shelter for the homeless and recovering substance abusers
* Volunteer, Special Olympics Christmas Gift Wrap and Adopt-A-Family Christmas Project
* Body Basics-educated elementary school children about basic human anatomy and physiology
* Chairman, Make-A-Wish Run Course Committee
* Volunteer, Hawaii Children’s Cancer Foundation

Place of Birth: Honolulu, Hawaii

Research Experience:
Department of Preventive Medicine and Public Health, Creigton University – Omaha, NE
Research Assistant, Summer 2000
Responsibilities included designing family pedigrees; interviewing family members; collecting, organizing and analyzing medical records; participating in family counseling and blood draw sessions with Dr. Henry T. Lynch and associates
Accuracy of Sonohysterography at Identifying Intrauterine Lesions  
*Keri Li M. K. Brown, M.D., and Raydeen Busse, M.D.*

**BACKGROUND:**
Evaluation of the female pelvis can be accomplished using several different modalities developed over the last 40 years. Common indications to evaluate the pelvis include pelvic pain, infertility, abnormal uterine bleeding, habitual abortion and congenital anomalies. Less invasive means to evaluate the female pelvis have been developed over the years of which include transvaginal sonography (TVUS) and saline infusion sonography (SIS). An easily performed, well tolerated and minimal cost procedure, SIS is indicated in situations in which conventional TVUS is unable to assure a normal uterine cavity or when an abnormality is detected but its specific nature unable to be defined.

**OBJECTIVE:**
There have been a few published articles attesting to the accuracy of sonohysterography when compared with the gold standard of hysteroscopy. This study attempts to evaluate the accuracy of sonohysterography for detection of uterine cavity diseases in comparison to the gold standard hysteroscopy and/or laparoscopy in the general obstetric and gynecology population.

**MATERIAL and METHODS:**
A retrospective chart review was conducted at Kapiolani Medical Center for Women and Children from July 1, 2004 thru June 30, 2005, examining all patients who underwent surgery for the indication of an abnormal sonohysterography. The nature of the sonohysterography abnormality, intraoperative findings and pathological findings were recorded. Also recorded were the patients’ characteristics such as age, weight, ethnicity, parity and history of prior surgical procedures. Data was then analysed for sensitivity, specificity, positive and negative predictive values.

**RESULTS:**
Data collection is in progress

**CONCLUSION:**
Final conclusions are pending. We expect sonohysterography when compared with transvaginal sonography to accurately confirm intrauterine lesions at the same sensitivity and specificity in previous studies (96% to 94% respectively). If our data proves our hypothesis to be accurate we hope to then evaluate the accuracy of 3-D sonohysterography at detecting intrauterine lesions.
Angel M. Willey, M.D.
Angel Melanie Willey, M.D.

University of Oklahoma College of Medicine, Oklahoma City, Oklahoma

Honors/Awards:
* Class Historian
* AMWA Secretary
* Foundation 2000 Secretary
* Founder Diabetes Education Training for Medical Students

B.S. Physiology, Oklahoma State University, Stillwater, Oklahoma

Honors/Awards:
* Dean’s List
* Presidents Honor Roll
* Mortar Board Honor Society
* Golden Key National Honor Society
* Blue Key
* Alpha Epsilon Delta- Pre-Med Society
* Alpha Chi Omega Social Sorority
  -Vice President

Language Fluency: Some Spanish

Hobbies & Interests: Reading, shopping, going to the beach, swimming, S.C.U.B.A, flute, piano

Place of Birth: Amarillo, Texas

Research Experience:
Oklahoma Medical Research Foundation- Preceptor Dr. Yashige Kotake, “Free Radical Biology and Aging Department” Worked in the research lab performing studies to understand the mechanism by which natural and synthetic antioxidants function as preventive agents against inflammation, cancer, type 1 diabetes and aging. The synthetic antioxidant and free radical trap phenyl N-tert-butyl nitrophenyl (PBN) was the focus of our research.

Department of Obstetrics & Gynecology; Department of Biostatistics & Epidemiology; Department of Medicine, Cardiovascular Section; Oklahoma University Health Sciences Center (O.U.H.S.C.), Oklahoma City, Oklahoma Preceptor Robert Wild, M.D., M.P.H. Worked in the Department of Obstetrics and Gynecology performing a systemic review on Polycystic Ovarian Syndrome and a correlation to breast and ovarian cancer and worked with preceptor to determine performance characteristics of Ferriman Gallwey Self-Scoring in women with the Polycystic Ovary Syndrome.
Risk Factors Associated with Striae Gravidarum
Angel M. Willey, M.D., and David S. Kim, M.D.

BACKGROUND:
Striae gravidarum is a common disfiguring condition, which can result in physical discomfort and cause psychological stress in patients. There is very little written literature on the epidemiology of stretch marks. In one Australian study group, 60% of the pregnant women had striae gravidarum (1).

In more recent studies, attempts have been made to assess possible risk factors for striae gravidarum. Until epidemiologic risk factors for striae gravidarum can be clarified, further research into advancing the science for treatment or prevention of striae gravidarum will be difficult.

OBJECTIVE:
To identify risk factors associated with striae gravidarum

METHODS:
This is a cross-sectional study to evaluate risk factors associated with striae gravidarum. Study subjects were women recruited from the Kapiolani Center for Women and Children Ob/Gyn clinic, after their 28th week of pregnancy or during their postpartum period. This study was powered for 48 enrolled subjects. A goal of 60 subjects was set for an anticipated 20% attrition rate. The subjects were scored using a modified scoring system used by Davey (2). Davey divided the abdomen into 4 quadrants. Each quadrant was scored 0 for clear skin, 1 for a moderate number of striae and 2 for many striae.

RESULTS:
Data analysis is in progress.

CONCLUSION:
Final conclusions are pending. The dependent variable analyzed will be the presence or absence of striae gradarium as stratified by the scoring system. The independent variables analyzed will include age, ethnicity, gravida, parity, birth weight, maternal BMI at delivery, gestation age at formation of striae, family history, and history of breast or thigh striae.


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Honors/Awards:
2002 - Nominated for the National Medical Student
Conference in Psychiatry in Neuroscience,
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2000 - Certificate awarded by the Native Hawaiian Center
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Research Experience: 2000-2002- Research Assistant, Loren G. Yamamoto, MD, MPH, MBA. Developed and conducted a clinical trial comparing
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Spring 2001-Research Assistant, Earl S. Hishinuma, PhD. Department of Psychiatry, University of Hawaii at Manoa. Conducted a literature search and
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Summer 2000-Quentin N. Burdick Rural Health Project, Kenton Kramer, PhD. Facilitated community capacity building for the rural island of Molokai,
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Spring/Summer 1998-Howard Hughes Undergraduate Research Associate, Douglas Granger, PhD. Department of Biobehavioral Health, Penn State Uni-
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Publications/Presentations: Ahern RM, Frattarelli LC. Update on Emergency Contraception. Presentation at Obstetrics and Gynecology Grand
Rounds, Kapiolani Medical Center For Women and Children. August, 2005.

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Acute Jellyfish (Carybdea alata). Am J Emerg Med. (Accepted for publication Oct 2002). Presented the abstract of this study at the National Conference
Knowledge and Attitudes of Emergency Contraception in Hawaii’s Adolescents

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BACKGROUND:
Hawaii has the twelfth highest teen pregnancy rate and sixth highest abortion rate in the nation. Recent developments in Hawaii, including pharmacy-based access, may improve adolescents’ access to emergency contraception (EC) and decrease the teen pregnancy rate. Although implementation of educational programs about EC started in 2005, knowledge among adolescent women is still likely to be limited or filled with misconceptions. With targeted education of adolescents about EC, awareness of this service could significantly increase utilization and decrease the rate of teenage pregnancies and abortion.

OBJECTIVES:
The purpose of this descriptive pilot study is to determine the baseline knowledge and attitudes of EC among adolescents in Hawaii. Secondary objectives include determining baseline sexual health knowledge and identifying factors that might predict knowledge of EC. The study compares EC and sexual health knowledge in two populations of teens, those at high risk for a subsequent pregnancy (pregnant/postpartum) with those who are actively seeking reproductive health services (contraception, STD screening).

METHODS:
A convenience sample of adolescent females aged 14 through 19 presenting to Kapiolani Medical Center Labor and Delivery, Kapiolani Medical Center Women’s Health Clinic, and the University of Hawaii Obstetrics, Gynecology, and Women’s Health Group were offered an anonymous questionnaire about EC and sexual health knowledge. The paired T-test was used to calculate the difference between knowledge scores between the two adolescent populations. The T-test was also used to evaluate continuous variables related to factors predicting EC knowledge and attitudes, and discrete variables were evaluated by chi-square analysis.

RESULTS:
Ninety eight adolescents fulfilling the inclusion criteria returned the survey within the six month period of data collection (October, 2005 through March, 2006). Approximately half of adolescents surveyed (56%) identified that they knew “if anything they could do to prevent pregnancy after unprotected intercourse.” Of these teens, only thirty six (65%) correctly described EC. While the most commonly cited source for learning about EC was through family/friends (53%) or from school (55%), only eight teens (22%) learned about EC from their physician (ob-gyn, pediatrician). Fourteen of the adolescents surveyed had used EC in the past, with most reporting few or no side effects (71%). Results are pending for comparisons between the pregnant/postpartum adolescents and those actively seeking reproductive health services.

CONCLUSION:
The information gained from this study will be useful in identifying educational needs with intent to develop programs to increase EC awareness and access in adolescents. Improved awareness and access should improve use which would reduce pregnancy and abortion rates. Future research goals include following changes in adolescents’ knowledge and attitudes over time after effective educational programs on EC and pharmacy-based access.