



Summary of Medical Research and Writing Accomplishments

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Medical Writing

CME articles, clinician education, symposia presentations, training programs

- Content development, including manuscript, pre- and post-tests for an interactive CME chapter on non-metastatic castration resistant prostate cancer
- Review of literature, and development of a 3-part manuscript on the evolving science of genetic carrier screening, including the design of expanded screening panels (analytical validity, clinical validity, clinical utility and panel constitution), cost effectiveness, and application to clinical practice
- Review of literature, and development of a manuscript on NTRK gene fusions as novel targets for tumor-agnostic cancer therapy
- Content development, including manuscript, pre- and post-tests for an interactive CME chapter on diagnosing bipolar disorder
- Content development, including manuscript, case studies, pre- and post-tests for an interactive CME chapter on relapsed/ refractory multiple myeloma
- Design structure and content, develop manuscript, case studies, self-assessment questions, glossary, and direct graphic and figures development for 3 comprehensive training modules for pharmaceutical sales representatives on the immunopathophysiology of (i) plaque psoriasis, (ii) psoriatic arthritis and (iii) ankylosing spondylitis, and (iv) the pharmacology of biologics and small-molecule immunomodulators in these 3 conditions
- Review of literature, slide content development and design, development of patient case studies, primer and 3 mini newsletters for the treatment of moderate to severe atopic dermatitis, including place in therapy of new immunotherapies
- Content development, including manuscript, case studies, pre- and post-tests for an interactive CME chapter on COPD management
- Develop summaries targeted to pharmacy benefit management on the clinical, economic and patient burden of osteoporosis.

- Design structure and content for an interview with KOLs from 2 pharmacy benefit management companies regarding value-based partnerships with a pharmaceutical company
- Review of literature and article update for 3 interactive CME programs on Parkinson's disease with motor fluctuations
- Review of literature, slide content development and design, and development of patient case studies for treatment guidelines for atopic dermatitis, including place in therapy of new immunotherapies
- Review of literature, slide content development and design for a series of 4 presentations on epidemiology of cryptogenic stroke, diagnostic tests, cardiac monitoring for atrial fibrillation, and prevention of stroke recurrence, for a major national heart association
- Review of literature, slide content development and design for a new opioid with a novel molecular mechanism for abuse deterrence for presentation at Pain Week
- Content development, including manuscript, case studies, pre- and post-tests for a CME chapter concerning current guidelines on ER/LA opioids
- Review and slide content creation describing the American Society of Clinical Oncology Value Framework for a key opinion leader meeting
- Content development, including online case studies and expert commentary characterizing the opportunities and evidence-based implementation steps for physician-initiated dietary interventions for an American Heart Association online interactive CME program
- Online training curriculum for pharmaceutical team on women's health (9 chapters on the epidemiology, pathophysiology, diagnosis, treatment and monitoring for menopause, osteoporosis, postmenopausal hormone therapy, hyperlipidemia and hypertension, coronary artery disease, cerebrovascular disease and stroke, prevention of cardiovascular disease, sexually transmitted disease and other gynecological problems, endocrine disorders), as well as male and female anatomy.
- Review of literature, and slide content development for the epidemiology, pathogenesis, risk factors, treatment and monitoring for metabolic syndrome in reproductive-age women for presentation at an international symposia

- Detailed review of literature and slide content development for gender differences in pathophysiology and cardiovascular disease prevention for presentation at a national continuing education symposia
- Detailed review of literature and slide content development for an education program on the epidemiology, pathophysiology, treatment, monitoring of polycystic ovary syndrome for presentation at a national continuing education symposia
- Educational content, instructional design and slide content development for prescription contraceptives and hormone therapy for a training program for obstetric and gynecology medical residents
- Slide content development and continuing education program on infertility treatments for women with polycystic ovary syndrome for presentation at a national continuing education symposia
- Slide content development and continuing education program for updates on new lipid lowering treatment guidelines for presentation at a regional symposia
- Slide content development and detailed review of diagnosis and treatment of cardiovascular disorders for a pharmacist geriatric board certification review course
- Review of literature and slide content development for new technologies for coronary risk assessment at a national continuing education symposia
- Slide content development and detailed review of new heart failure therapies for physicians and nurses at a regional CME symposia
- Slide content development and review of new drug therapies in acute decompensated heart failure at a regional continuing education symposia
- Slide content development and continuing education program for new drug therapies in acute coronary syndromes at a regional continuing education symposia
- Detailed review of current literature and slide content development for a pharmacist CE program on heart failure pharmacotherapy
- Educational content, instructional design, case studies development and slide content development for community acquired pneumonia diagnosis, associated pathogens, treatment algorithm and monitoring
- Educational content, instructional design, case studies development and slide content development for a review on gestational diabetes

- Detailed review of clinical trials and results and slide content development on current and emerging therapy for acute coronary syndrome for presentation at a regional continuing education symposia

Original research manuscripts (peer-reviewed journals)

- Effect of FDA advisory warning on atypical antipsychotic utilization and health outcomes among patients with dementia, prepared for submission to *Alzheimer's & Dementia*
- Treatment pattern and biologics effectiveness in patients with Crohn's disease, prepared for submission to *Alimentary Pharmacology & Therapeutics*
- Pakyz AL, Cheang KI*, Stultz J, Moczygemba LR. Building population health management skills for pharmacy students: implementation of needs assessment and program evaluation activities. *Am J Pharm Educ* [epub ahead of print]
- Cheang KI*, Sistrun SN, Morel KS, Nestler JE. Effect of insulin-stimulated release of D-chiro-inositol-containing inositolphosphoglycan mediator during weight loss in obese women with and without polycystic ovary syndrome. *Int J Endocrinol* 2016;2016:7631804.
- Cheang KI*, Nguyen TT, Karjane NW, Salley KES. Raspberry leaf and hypoglycemia in gestational diabetes mellitus. *Obstet Gynecol* 2016;128(6):1421-1424.
- Pau CT†, Cheang KI†, Modi BP, Kasippilai T, Keefe CC, Shulleta M, Evans WS, Pal L, Strauss 3rd JF, Nestler JE, Welt CK. The role of variants regulating metformin transport and action in women with polycystic ovary syndrome. *Pharmacogenomics*. [epub ahead of print]
- Adeniji AA, Essah PA, Nestler JE, Cheang KI*. Metabolic effects of a commonly used combined hormonal contraceptive in women with and without polycystic ovary syndrome. *J Womens Health* 2016; 25(6): 638-645.
- Siddiqui MS, Cheang KI, Luketic VA, Boyett S, Idowu MO, Patidar K, Puri OP, Matherly S, Stravitz RT, Sterling RK, Sanya AJ. Nonalcoholic steatohepatitis (NASH) is associated with a decline in pancreatic beta cell (B-cell) function. *Dig Dis Sci* 2015; 60: 2529-2537.
- Brady MA, Carroll AW, Cheang KI, Straight C, Chelmow D. Sequential compression device compliance in postoperative obstetrics and gynecology patients. *Obstet Gynecol* 2015;125(1):19-25.
- Zreikat HH, Harpe, SE, Slattum PW, Mays DP, Essah PA, Cheang KI*. Effect of renin-angiotensin system inhibition on cardiovascular events in older

- hypertensive patients with metabolic syndrome. *Metabolism* 2014; 63(3): 392-399.
- Nestler JE, Reilly ER, Cheang KI, Bachmann LM, Downs RW. A pilot study: effects of decreasing serum insulin with diazoxide on Vitamin D levels in obese women with polycystic ovary syndrome. *Trans Am Clin Climatol Assoc* 2012; 123:209-220.
 - Karjane NW, Cheang KI, Mandolesi GA, Stovall DW. Persistence with oral contraceptive pills vs. metformin in women with polycystic ovary syndrome. *J Womens Health* 2012; 21:690-694.
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 - Essah PA, Arrowood JA, Cheang KI, Adawadkar SS, Stovall DW, Nestler JE. Effect of combined metformin and oral contraceptive on metabolic factors and endothelial function in overweight and obese women with polycystic ovary syndrome. *Fertility & Sterility* 2011;96:501-504.
 - Cheang, KI*, Essah PA, Sharma S, Wickham EP, Nestler JE. Divergent Effect of a combined hormonal oral contraceptive on metabolic factors in lean versus obese women. *Fertility & Sterility* 2011;96:353-359.
 - Wickham EP, Cheang KI, Clore JN, Baillargeon JP, Nestler, JE. Total and High-Molecular Weight Adiponectin in Women with the Polycystic Ovary Syndrome. *Metabolism: Clinical and Experimental* 2011;60:366-72.
 - Cheang KI, Huszar JM, Best AM, Sharma S, Essah PA, Nestler JE. Long-term effect of metformin on metabolic parameters in the polycystic ovary syndrome. *Diab Vasc Dis Res* 2009;6:110-9.
 - Cheang KI*. Effect of Learner-Centered Teaching on Motivation and Learning Strategies in a Third-Year Pharmacotherapy Course. *Am J Pharm Educ* 2009 73(3); Article 42; 1-8.
 - Carter O, Zebrack J, Gilbert ME, Cheang KI*. Effect of beta-blockers on glucose homeostasis in heart failure. *J Pharm Technol* 2009;25:71-78.
 - Cheang KI, Baillargeon JP, Essah PA, Ostlund RE, Apridonize T, Islam L, Nestler JE. Insulin-stimulated release of D-*Chiro*-inositol-containing inositolphosphoglycan mediator correlates with insulin sensitivity in women with polycystic ovary syndrome. *Metabolism: Clinical and Experimental* 2008;57; 1390–1397.
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1094.

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- Monien, BH, Cheang KI, Desai UR. Mechanism of poly(acrylic acid) acceleration of antithrombin inhibition of thrombin: implications for the design of novel heparin mimics. *J Med Chem* 2005;48(16):5360-5368.
- Ng TMH, Cheang KI, Munger MA, Callahan KS. Neurohormonal activation does not explain elevated monocyte tissue factor expression in heart failure. *Thromb Haemost* 2002;87:176-177.

* denotes corresponding author; †denotes equal contribution

Guidelines and review of literature (peer-reviewed)

* denotes corresponding author

- Witchel SF, Recabarren SE, Gonzalez F, Diamanti-Kandarakis E, Cheang KI, Duleba AJ, et al. Emerging concepts about prenatal genesis, aberrant metabolism and treatment paradigms in polycystic ovary syndrome. *Endocrine* 2012;42:526-34.
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- Salley KES, Wickham EP, Cheang KI, Essah PA, Karjane NW, Nestler JE. Position Statement: Glucose Intolerance in Polycystic Ovary Syndrome—A Position Statement of the Androgen Excess Society. *J Clin Endocrinol Metab* 2007; 92:4546-4556.
- Cheang KI*. Cardiovascular risk reduction. *Consultant Pharmacist* 2006; 21:493-499.
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- Cheang KI*. Multiple cardiovascular considerations in a 76-year-old man. *Consultant Pharmacist* 2005; 20: 519-524.
- Cheang KI, Nestler JE. Should insulin-sensitizers be used in Polycystic Ovary Syndrome? *Reprod BioMed Online* 2004;8:440-447.

- Essah PA, Cheang KI, Nestler JE. The pathophysiology of miscarriage in women with polycystic ovary syndrome. Review and proposed hypothesis of mechanisms involved. *Hormones* 2004;3:221-227.
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- Cheang KI, Essah PA, Nestler JE. A paradox: the roles of inositolphosphoglycans in mediating insulin sensitivity and hyperandrogenism in the polycystic ovary syndrome. *Hormones* 2004;3:244-251.

Needs Assessment

- Needs assessment for American Heart's Association EPI/ Lifestyle 2018 Scientific Sessions
- Needs assessment for an online CME program on cardiovascular events and sodium-glucose co-transporter 2 (SGLT2) inhibitors
- Needs assessment for an online CME program on PARP inhibitors in breast cancer
- Needs assessment for an online CME program on anaphylaxis and advantages and disadvantages of current epinephrine autoinjectors
- Needs assessment for American Heart's Association 10-day Seminar on Epidemiology and Prevention of Cardiovascular Disease and Stroke
- Needs assessment for American Heart's Association Scientific Sessions 2018 electrophysiology tract
- Needs assessment for American Heart's Association 2018 International Stroke Conference

Scientific Posters / Abstracts

- Abstract on nutrition quality and outcomes of in-vitro fertilization, submitted to American Society of Reproductive Medicine 2018 Scientific Congress
- Scientific poster submitted to American Academy of Dermatology 2018 Annual Meeting on proof-of-concept results concerning the use of a dermatology-

- specific longitudinal EMR database for research in psoriasis, actinic keratosis, atopic dermatitis, acne, basal cell carcinoma, and squamous cell carcinoma
- Hylton J, Milton S, Cheang KI, Sima A, King E. Necessity for short interval intrauterine device string check. American College of Obstetrics and Gynecology 2017 Annual Clinical and Scientific Meeting, San Diego, CA. May 9, 2017.
 - Cheang KI, Modi B, Shulleeta M, Evans WS, Pal L, Strauss JF III, Nestler JE. Genetic polymorphisms and ovulatory responsiveness to metformin in women with polycystic ovary syndrome. Poster presentation at Endocrine Society's 97th Annual Meeting, San Diego, CA, March 5, 2015.
 - Brady MA, Carroll A, Cheang KI, Straight CI, Chelmow D. Sequential Compression Device Compliance in Post-Operative Obstetric and Gynecology Patients. *J Minim Invasive Gynecol* 2014; 21 (2):S38. Poster presentation at the 40th Annual Society of Gynecologic Surgeons Scientific Meeting, Scottsdale, AZ, March 24, 2014.
 - Cheang KI, Arrowood JA, Wickham EP 3rd, Abbate A, Nestler JE. Insulin resistance and cardiovascular risk factors during oral contraceptive use in Black vs. White women. Poster presentation at American Diabetes Association 73th Scientific Sessions. *Diabetes* 2013;62 (Suppl 1) 2019-P.
 - Hill AJ, Talreja N, Cheang KI, Gill E, Carroll AW. Correlation of endoanal ultrasound findings and clinical symptomatology following anal sphincter laceration repair. Podium presentation at American Urogynecologic Society 2012 Scientific Meeting. *Female Pelvic Medicine & Reconstructive Surgery* 2012; 18(5 Supp):S108.
 - Hill AJ, Talreja N, Cheang KI, Gill E, Carroll AW. Correlation of endoanal ultrasound findings and clinical symptomatology following anal sphincter laceration repair. *Int Urogynecol J* 2013; 24(Supp 1):S139. Oral Poster presentation at the International Urogynecological Association 38th Annual Meeting, Dublin, Ireland, June 1, 2013.
 - Cheang KI, Xu X, Veenstra T, Nestler JE. Estradiol Metabolites and Changes in Insulin Sensitivity. The Endocrine Society 94th Annual Meeting 2012, Houston, TX, SAT-16.
 - Cheang KI, Lucidi RS, Baillargeon JP, Essah PA, Nestler JE. Racial difference in insulin resistance between African-American and Caucasian women with polycystic ovary syndrome. Annual Meeting of the American Society for Reproductive Medicine, Orlando FL, Oct 17, 2011. *Fertility & Sterility* 2011(3 Suppl1):S128-S129.
 - Cheang KI, Arrowood JA, Essah PA, Lucidi RS, Nestler JE. Racial differences in endothelial function between African-American and Caucasian women with

PCOS. Poster presentation at the 9th Annual Meeting of Androgen Excess & PCOS Society, October 13, 2011, Orlando, FL.

- Reilly ER, Cheang KI, Downs Jr, RW, Bachmann LM, Nestler JE. Effect of lowering serum insulin with diazoxide on vitamin D levels in obese women with and without polycystic ovary syndrome. American Clinical and Climatological Association Annual Meeting 2011, Sarasota, FL.
- Vinluan C, Villanueva J, Zreikat H, Cheang KI. Comparison of different metabolic syndrome definitions in prediction of future cardiovascular events in the elderly. American Society of Health System Pharmacists Midyear Meeting 2010, Poster 2-190.
- Cheang KI, Morel KS, Kelly S, Sistrun SN, Nestler JE. Predictors of weight loss in obese women with polycystic ovary syndrome as compared to obese normal women. American Society for Reproductive Medicine Annual Meeting 2010, Denver, CO, O-242.
- Cheang KI, Kelly S, Sistrun SN, Nestler JE. Eating Behavior as Assessed by the Three-Factor Eating Questionnaire and Weight Loss Success in Obese Women With and Without the Polycystic Ovary Syndrome. The Endocrine Society 92th Annual Meeting 2010, San Diego, CA, P3-429.
- Cheang KI, Kelly S, Sistrun SN, Nestler JE. Baseline Insulin Sensitivity And Weight Loss Success in Obese Women With and Without the Polycystic Ovary Syndrome. The Endocrine Society 92th Annual Meeting 2010, San Diego, CA, P3-386.
- Mayer SD, Cheang KI, Moczygemba LR. "Development and implementation of a safety-net diabetes intensive care program." Poster presentation at the American College of Clinical Pharmacy 2010 Spring Practice and Research Forum, April 2010, Charlotte, NC.
- Mayer SD, Moczygemba LR, Cheang KI. "Development and Implementation of a Safety-Net Diabetes Intensive Care Program." VCU Council for Community Engagement Celebration, Richmond VA, April 2010.
- GD Cook, RL Polo-Reasor, KI Cheang, SF Fredrickson, JE Nestler, JR Levy. Insulin Sensitivity, Metabolic Syndrome, and Cardiovascular Disease in an Elderly, Obese Population. The Endocrine Society 92th Annual Meeting 2010, San Diego, CA, P2-531.
- Cheang KI, Essah PA, Nestler JE. "Metabolic effects of an oral contraceptive in women with polycystic ovary syndrome, compared to lean and obese normal women." Androgen Excess & PCOS Society 7th Annual Meeting, Washington DC, June 2009.

- Cheang KI, Essah PA, Wickham EP III, Sharma SU, Nestler NE. Effect of a Commonly Used Combined Oral Contraceptive on Metabolic Risk Factors in Obese vs. Lean Women. The Endocrine Society 91th Annual Meeting 2009, Washington DC, P2-404.
- Cheang KI, Baillargeon JP, Nestler JE. Comparison of a newer mathematic index, $ISI_{0,120}$, to the minimal model in assessing insulin sensitivity in women with and without polycystic ovary syndrome. The Endocrine Society 91th Annual Meeting 2009, Washington DC, P2-302.
- Cheang KI, Baillargeon JP, Nestler JE. "Comparison of Mathematic Indices to assess Insulin Sensitivity in Women with and without Polycystic Ovary Syndrome" at American Society of Clinical Pharmacology and Therapeutics Annual Meeting, Washington DC, March 19, 2009. *Clin Pharmacol Ther* 85S: S13 PI-18.
- Cheang KI, Zreikat HH, Villanueva J. "Relative Importance of the Metabolic Syndrome vs. Hypertension in the Elderly: Risk of Cardiovascular Disease" at the American Society of Clinical Pharmacology and Therapeutics Annual Meeting, Washington DC, March 19, 2009. *Clin Pharmacol Ther* 85S: S13 PI-17.
- Cheang KI, Best AM, Huszar JM, Nestler JE. Long-term metabolic effect of metformin in women with polycystic ovary syndrome with and without the metabolic syndrome. The Endocrine Society's 90th Annual Meeting 2008, San Francisco, CA; P1-592.
- Cheang KI, Villanueva J, Zreikat HH, Nestler JE. Relative importance of obesity, insulin resistance and metabolic syndrome in the elderly: risk of cardiovascular events. The Endocrine Society's 90th Annual Meeting 2008, San Francisco, CA; P3-467.
- Cheang KI, Nestler JE, Futterweit W. Risk of coronary artery disease in mothers of women with the Polycystic Ovary Syndrome. The Endocrine Society's 89th Annual Meeting 2007; P3-282.
- Cheang KI, Huszar JM, Sharma S, Wickham E, Essah PA, Nestler JE. Long-term effect of metformin on metabolic syndrome parameters in women with the polycystic ovary syndrome. 5th Annual World Congress on the Insulin Resistance syndrome. *Diabetes Vasc Dis Res* 2007;4:264-5.
- Cheang KI, Baillargeon JP, Essah PA, Apridonize T, Islam L, Nestler JE. Putative insulin mediator D-*chiro*-inositol and inflammatory markers in polycystic ovary syndrome. American College of Clinical Pharmacy Annual Meeting, October 15, 2007, Abstract 394.

- Cheang KI, Baillargeon JP, John E. Nestler. Release of the D-*chiro*-inositol-containing inositolphosphoglycan (DCI-IPG) mediator correlates with insulin sensitivity in women with polycystic ovary syndrome. The Endocrine Society's 88th Annual Meeting 2006; P2-514, also presented as encore presentation at American College of Clinical Pharmacy, 2006.
- Cheang KI, Reiss JH, Nestler JE. Assay validation for *Myo*-inositol-containing insulin mediator isolated from human serum. The Endocrine Society's 88th Annual Meeting 2006; P1-580.
- Cheang KI, Vardeny O, Zebrack JS, Munger MA, Gilbert EM. Effects of B2 genetic polymorphisms on glucose dynamics during beta-blocker titration in heart failure. *Clin Pharmacol Ther* 2006;79:P35.
- Vardeny O, Cheang KI, Zebrack JS, Munger MA, Gilbert EM. Effects of B2 genetic polymorphisms on glucose dynamics during beta-blocker titration in heart failure. *Pharmacotherapy* 2006;26:E52.
- Cheang KI, Carter, O, Zebrack JS, Munger MA, Gilbert EM. B2-mediated glucose production during carvedilol and metoprolol titration in heart failure. *Clin Pharmacol Ther* 2005;77:P54.
- Cheang KI, Shuford VP, Deihl S. Virtual learning of hemodynamic concepts in an advanced cardiovascular pharmacotherapy course. *Pharmacotherapy* 2005;25:291.
- Cheang KI, Carter, O, Zebrack JS, Munger MA, Gilbert EM. B2-mediated glucose production during carvedilol and metoprolol titration in heart failure. *Pharmacotherapy* 2005;25:1444.
- Cheang KI, Baillargeon JP, John E. Nestler. Putative insulin mediator, D-*chiro*-inositol-containing inositolphosphoglycan (DCI-IPG) and insulin sensitivity in women with polycystic ovary syndrome. *Pharmacotherapy* 2005;25:1455.
- Cheang KI, Horne, BD, Muhlestein JB, Carlquist JF, Anderson JL, Hoidal JR, Terry CM. Tissue factor promoter polymorphisms and risk of coronary artery disease. *Arterioscler Thromb Vasc Biol* 2003;23:P99.
- Terry CM, Kling SJ, Hoidal JR, Cheang KI, Rodgers GM. Polymorphisms in the 5'UTR of the tissue factor (TF) gene are associated with differences in total and surface clotting activity and TF mRNA of endothelial cells. International Society on Thrombosis and Haemostasis XIX Congress and 49th Annual SSC Meeting, July 16, 2003.
- Cheang KI, Sturgill HM, Slattum PW, Clore JN. Tissue factor polymorphisms in postmenopausal women. *Pharmacotherapy* 2003;23:1374.

- Cheang KI, Munger MA, Terry CM, Nathisuwan S, Zebrack JS, Gilbert EM, Callahan KS. Enhanced monocyte tissue factor procoagulant activity in heart failure is associated with apoptosis. *J Am Coll Cardiol* 2002;39 Suppl A:128A.
- Ng TMH, Cheang KI, Munger MA, Gilbert EM, Callahan KS. Endothelin-1 enhances tissue factor activity in human monocytes. *J Card Fail* 2001;7 Suppl 2:34.
- Terry CM, Cheang KI, Leffler S, Pradhan S, Hoidal JR, Callahan KS. 5' regulatory region polymorphisms in the tissue factor gene are associated with differences in clotting activity in human endothelial cells. *Circulation* 2001;104 Suppl 2:II-72.
- Cheang KI, Munger MA, Kenney JK, Ng TMH, Gilbert EM, Callahan KS. Is monocyte tissue factor clinically significant in chronic heart failure? *J Card Fail* 2000;6 Suppl 2:60.
- Schroeder SL, Cheang KI, Lonergan TP. Evaluation of pharmaceutical care on hypertension and diabetes control in an urban outpatient medicine clinic. *Pharmacotherapy* 1999;19:1224.
- Cheang KI, Talbert RL, Garcia R. Drug usage evaluation for metformin. *Pharmacotherapy* 1997;17:1128.

Course design

- Design of a virtual online interacting learning module on cardiovascular hemodynamics in heart failure
- Educational content, instructional design, case studies development and slide content development for a 2-credit semester course in women's health for PharmD students
- Educational content, instructional design, case studies development and slide content development for a 2-credit semester course in pharmacoepidemiology for PharmD students
- Educational content, instructional design and case studies development for a 3-credit case-based pharmacotherapy course for PharmD students

Book Chapters (peer-reviewed)

- Borgelt LM, Cheang KI. Polycystic ovary syndrome. In: Women's Health Across the Lifespan: A Pharmacotherapeutic Approach (Hansen LB, O'Connell MB, Smith

J, Calis K, eds.), American Association of Health-System Pharmacists, Bethesda, MD. Chapter 16, pp 235-248.

- Cheang KI. Pharmacogenetics in the Clinic. In: Biopharmaceutical Drug Design and Development. (Wu-Pong S, Rojanasakul Y, eds.), 2nd Edition, Humana Press, Totowa, New Jersey. Chapter 12, pp 253-266.
- Cheang KI, Nestler JE. Use of insulin sensitizers in the polycystic ovary syndrome. In: Androgen Excess Disorders in Women: Polycystic Ovary Syndrome and Other Disorders (Azziz R, Nestler JE, Dewailly D, eds.), 2nd Edition, Humana Press, Totowa, New Jersey, Chapter 38 pp 421-434, 2006.

Book Editor

- American College of Clinical Pharmacy Pharmacotherapy Self-Assessment Program 2016, Book 3 “Women’s and Men’s Health.”

Grant proposals (selected)

- All components of an NIH grant proposal for a study evaluating the role of inositols on insulin sensitivity in women with polycystic ovary syndrome
- All components of a grant proposal to a state agency for a study evaluating the use of molecular lipid species as predictors of success in women undergoing *in vitro fertilization*
- All components of a grant proposal to American Heart Association for a study evaluating the racial differences in insulin resistance and cardiovascular risk profile after estrogen supplementation
- Grant proposal to a state agency for a study evaluating the use of a learner-centered teaching methodology in professional pharmacy students
- All components of a grant proposal to a professional medical society for a study evaluating the effect of oral contraceptives on insulin resistance and metabolic profile among women with different degrees of obesity
- All components of a grant proposal to a professional medical society for a study evaluating genetic polymorphisms of clotting proteins and procoagulant activities in diabetes

- All components of a grant proposal to a pharmaceutical company evaluating the effect of a statin on clotting function in heart failure
- All components of a grant proposal to a national medical society on a study evaluating the relationship between apoptosis and clotting protein expression in monocytes in heart failure

Case studies

- 6 patient case studies, including individualized treatment recommendations concerning a new opioid agonist/ antagonist
- CME case study on patient education and adherence in atopic dermatitis

Study Design / Biostatistics / Epidemiology / HEOR (selected)

- Biostatistical analysis plan, and data analysis for a quasi-experimental study on the effect of thermal pulsation system treatment on keratometry measurements prior to cataract surgery
- Consultation regarding epidemiological study design to describe patterns of biologic use using a national health insurance database in Taiwan
- Sensitivity analysis plan for a real-world evidence manuscript on the use of biologics in Crohn's disease and ulcerative colitis
- Systematic review and meta-analysis design comparing 3 oral agents for relapsing multiple sclerosis
- Development of study design to evaluate cost effectiveness of pre-implantation genetic screening for *in vitro* fertilization.
- Development of data extraction methods and epidemiologic analysis for a study utilizing a nationally representative database to evaluate real world evidence of prescription contraceptive utilization before and after the implementation of the Affordable Care Act.
- Development of data extraction methods and epidemiologic analysis for a study utilizing a nationally representative database to evaluate real world evidence of

opioid prescription trends and associated patient and medical practice characteristics

- Development of data extraction methods from a health system and vendor-operated electronic warehouse, as well as epidemiologic analysis for a study evaluating racial differences in pregnancy outcomes among women with previous infertility
- Design of clinical protocol and enrollment plan for a prospective cohort study of dietary factors and serum markers and pregnancy outcomes in *in vitro fertilization*
- Literature review, summary, and interpretation of findings regarding nutritional supplements and pregnancy outcomes of women undergoing *in vitro fertilization*
- Development of data extraction methods and epidemiologic analysis for a retrospective cohort study to compare various metabolic syndrome definitions and their association with incident cardiovascular events
- Synthesis of final dataset and data analysis for a study evaluating racial differences in pregnancy outcomes among women with previous infertility
- Biostatistic analysis, data interpretation, and summary findings for a study evaluating an insulin sensitizer on incident diagnosis of metabolic syndrome in women with polycystic ovary syndrome
- Development of a research subjects enrollment plan for a weight loss study
- Design of a clinical study protocol to evaluate the physiological effects of weight loss among women with polycystic ovary syndrome as compared to women without the syndrome
- Design of a retrospective study evaluating the association between estrogen metabolites and insulin sensitivity in women prescribed an oral contraceptive
- Data analysis plan, sample size estimation and justification for a study evaluating the physiological effects of weight loss among women with and without polycystic ovary syndrome
- Data analysis for a randomized control trial evaluating the metabolic effects of an oral contraceptive pill with and without an insulin sensitizer in women with insulin resistance
- Research consultant and biostatistician on a grant evaluating deployment of a chronic care model in an underserved population

- Development of a clinical study protocol and recruitment plan for a study evaluating lipid small molecules as predictors of embryo quality and pregnancy rates in women undergoing *in vitro fertilization*
- Design of a clinical study protocol and recruitment plan for a study evaluating the racial differences in insulin resistance and cardiovascular risk profile after estrogen supplementation
- Development of a clinical study protocol for a study evaluating the effect of oral contraceptives on insulin resistance and metabolic profile among women with different degrees of obesity
- Site-coordination for a pharmaceutical company-sponsored multicenter, randomized, double-blind, placebo-controlled, dose ranging study of the safety and tolerability of a selective endothelin A receptor antagonist in heart failure
- Site-coordination for a pharmaceutical company-sponsored prospective, randomized, multinational, double-blind, placebo-controlled study of a dual neutral endopetidase and angiotensin converting enzyme inhibitor in patients with isolated systolic hypertension
- Site-coordination for a pharmaceutical company-sponsored multinational, prospective, randomized, double-blind, active-controlled trial of a angiotensin-II receptor antagonist in patients with essential hypertension
- Site coordination for a pharmaceutical company-sponsored multicenter, double-blind, randomized, parallel-group, forced-titration study of an angiotensin-II receptor antagonist in comparison to an angiotensin converting enzyme inhibitor