

CURRICULUM VITAE

JOHN G. GUMS

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Licensed: South Carolina #6281
Florida #22068

Present Position: 2013 - Present Professor of Pharmacy and Medicine
Associate Dean for Clinical and
Administrative Affairs
College of Pharmacy
Department of Pharmacotherapy and
Translational Research
University of Florida

Past Positions: 1996 - 2013 Professor of Pharmacy and Medicine
Associate Chair for Clinical Programs
Department of Pharmacotherapy and
Translational Research
Director of Clinical Research
in Family Medicine
Department of Community Health and
Family Medicine
University of Florida

1990-1995 Associate Professor of Pharmacy
and Medicine
University of Florida

1993-1994 Research Director of Women's
Medical and Diagnostic Center
and The Climacteric Center, Inc.
Gainesville, Florida

1985-1990 Assistant Professor of Pharmacy
and Medicine
University of Florida

EDUCATION:

| <u>Date</u> | <u>Institution</u> | <u>Degree</u> |
|-------------|--|-----------------------------------|
| 1984-1985 | Medical University of South Carolina Charleston, South Carolina | Fellowship (Family Medicine) |
| 1982-1984 | Medical University of South Carolina Charleston, South Carolina | Doctor of Pharmacy |
| 1978-1982 | University of Wisconsin-Madison Madison, Wisconsin | Bachelor of Science & Pharmacy |
| 1977-1978 | University of Wisconsin-Eau Claire Eau Claire, Wisconsin | None |

PHARMACY PRACTICE EXPERIENCE:

A. Internship/Clerkship:

1. Pharmacy Practice Intern: Oriental Pharmacy of Milwaukee (June 1982 - August 1982).
2. Externship/Out-Patient: University Hospital and Clinics; University of Wisconsin-Madison (January 1982 - May 1982).
3. Externship/In-Patient: University Hospital and Clinics; University of Wisconsin-Madison (October 1981 - December 1981).
4. Externship/In-Patient: Madison General Hospital (November 1981 - December 1981).

B. Clinical:

1. Doctor of Pharmacy Program: Committee Chairman (C. Wayne Weart, Pharm.D.)

C. Work Experience:

1. Charleston Cut-Rate Pharmacy: Relief pharmacist (February 1985 - June 1985).

D. Teaching:

1. Family Medicine Resident Clinical Pharmacology Rotation: University of Florida Family Practice Residency Program (July 1985 – June 2018).
2. Clerkship Preceptor: University of Florida, College of Pharmacy (July 1985 - present).
3. Peptic Ulcer Disease: Physician Assistant Program, University of Florida (October 1985; October 1986; November 1987; November 1988; November 1989; January 1991; November 1991; November 1992; October 1993; October 1994)

4. Cirrhosis: Physician Assistant Program, University of Florida (October 1985; October 1986; November 1987; November 1988; November 1989).
5. Home Health Care: University of Florida, College of Pharmacy (December 1985; September 1986; January 1990; January 1991; January 1992; April 1993; April 1994).
6. Hypertension: University of Florida, College of Pharmacy. (February 1986; November 1986; November 1987; November 1988; January 1990; February 1991; January 1992; January 1993; January 1994; January 1995; January 1996; January 1997; January 1998, April 1999, April 2001).
7. Health Care Accessories: University of Florida - Course Coordinator (1985 - 1996).
8. Geriatric Rounds: College of Medicine, University of Florida (August 1986 - 1996).
9. Self-Monitoring Aids: University of Florida, College of Pharmacy, (October 1986; October 1987; October 1988; January 1990; January 1991; January 1992; January 1993; February 1994).
10. Pharmacogeriatrics: Geriatric Nursing I, College of Nursing, University of Florida (November 1988, September 1989; September 1990; October 1991; February 1994; February 1995, March 1999).
11. Basic Principles of Pharmacokinetics: Physician Assistant Program, University of Florida, PA Pharmacology (October 1990).
12. Antibiotic Case Studies: Pharmacology for Medical Students, BMS 5404 University of Florida, College of Medicine (April 1993; April 1994; April 1995; April 1996; April 1997, April 1998, April 2001).
13. Honors Seminar in Pharmaceutical Research: (PHA 3931), University of Florida (October 1995).
14. Pharmacotherapy I (PHA 5781). University of Florida, College of Pharmacy Course Coordinator (January 1988-2000).
15. Osteoporosis (PHA 5781). University of Florida, College of Pharmacy. (April 1999).
16. Oral Contraceptives (PHA 5782/5783). University of Florida, College of Pharmacy. (April 1999 – 2016).
17. Pharmacotherapy VI (PHA 5788). University of Florida, College of Pharmacy. Course Coordinator (January 2001 – January 2014).
18. Pharmacotherapy VI (PHA 5788). University of Florida, College of Pharmacy. Instructor (January 2015 – May 2018).
19. Hyperuricemia and Gout (PHA5783). University of Florida, College of Pharmacy. (February 2015, February 2016)

20. Oral Contraceptives (MDC 7124). Family Medicine/Geriatrics, University of Florida, College of Medicine, Quarterly (June 2016 - Present).

PROFESSIONAL ORGANIZATIONS:

1. Student American Pharmaceutical Association
From 1982 through 1989
2. Wisconsin Pharmaceutical Association
From 1980 through 1984
3. American Society of Magnesium Researchers(ASMR)
From 1989 through 1997.
4. Ambulatory Care Special Interest Group(ASHP)
From 1986 through 1988
5. Primary Care Special Practice Group(ASHP)
From 1988 through 1998
6. American Pharmaceutical Association
From 1981 through present
7. Rho Chi Honor Society
From 1983 through the present
8. Phi Lambda Sigma Pharmacy Leadership Society - Iota Chapter
From April 1994 through the present
9. American Society of Health-System Pharmacists
From 1986 through the present
10. American College of Clinical Pharmacy (ACCP) (full member)
From 1990 through the present
11. American College of Clinical Pharmacy (ACCP) - Primary Care PRN
From 1990 through the present
12. Florida Pharmacy Association (FPA)
From 2013-Present
13. Florida Society of Health-Systems Pharmacists
(FSHP) From 2013-Present
14. American Association of College of Pharmacy(AACP)
From 2013-Present.

HONORS, AWARDS AND ACTIVITIES:

1. American Academy of Family Physicians Award for Outstanding Research Paper at the 26th Annual National Student Research Forum (April 1985).

2. American Medical Association Award for Outstanding Paper in Clinical Research at the 26th Annual National Student Research Forum (April 1985).
3. Member: Florida Drug Technical Review Panel (1987-2000).
4. Pharmaceutical Manufacturers Association Visiting Faculty Participant, Hoechst-Roussel Pharmaceutical, Inc. (August 1986).
5. Reviewer - Annals of Pharmacotherapy (1985-present).
6. Member: Annals of Pharmacotherapy Editorial Advisory Council - Family Practice/Ambulatory Care Section (1987-2003).
7. Chairman: Annals of Pharmacotherapy Editorial Advisory Council - Family Practice/Ambulatory Care Section (December 1988-1997).
8. Teacher of the Year - 1986 - University of Florida, Department of Family Medicine.
9. Teacher of the Year - 1990 - University of Florida, Department of Family Medicine
10. Chairman: Research Committee, Department of Community Health and Family Medicine, University of Florida (1988-92).
11. Member: Health Center Student Conduct Standards Committee, University of Florida (1989-1996).
12. The Merck, Sharp, and Dome Award for Sustained Scholarly Contributions to Clinical Pharmacy - 1990.
13. Expert Consultant - Heart and Lung: The Journal of Critical Care (1992-2019).
14. Member: State of Florida HRS Pharmacy Services Technical Review Panel (appointed by the governor) 1993-1997.
15. Member: Anticoagulation National Advisory Board, Dupont Pharmaceuticals (1996-2001).
16. American College Clinical Pharmacy (ACCP) Clinical Practice Award (1997).
17. American Heart Association - Fellow, Council for High Blood Pressure Research (1997).
18. National Magnesium Advisory Board (1999-2001).
19. Department of Health and Human Services – Secretary’s Primary Health Care Policy Fellowship (2002).
20. University of Florida, College of Pharmacy. Faculty Recognition Award (2003).
21. Member: Editorial Board: The Annals of Pharmacotherapy- Family Medicine Panel (2003–2014).

22. Fellow, American College of Clinical Pharmacy (ACCP) (2007)
23. Member, National Interdisciplinary Primary Care Practice Based Research Network (PBRN) (2008 – Present).
24. Editor; PharmaNote Monthly Pharmacy Newsletter. Department of Community Health and Family Medicine. A national clinical pharmacology newsletter published monthly for family physicians. State and Federally trademarked January 1999. (October 1985 - present).
25. University of Florida, College of Medicine – Exemplary Teacher Award 2008-2009.
26. Member: Editorial Board: Pharmacotherapy (2010 – Present)
27. Scientific Editor-Pharmacotherapy (2011 – Present)
28. Member: Editorial Panel, The Annals of Pharmacotherapy (Ambulatory Care) (2014-Present)
29. Member: International Committee, University of Florida, College of Pharmacy (2016 – Present).

PUBLICATIONS:

1. **Gums JG**, Weart CW: Diuretic-induced Hypokalemia in Uncomplicated Systolic Hypertension. *American Journal of Cardiology* 54:935, 1984.
2. **Gums JG**, Holly HP: A Case of Cefamandole-induced Knee Effusions. *Southern Medical Journal* 78(10):1268-1269, October 1985.
3. **Gums JG**, Carson DS, Hendrix G, Weart CW, Sarji N, Goodman B: The Effect of Magnesium and Potassium on Cardiac Function: The Role of Spironolactone. *J Pharm Techn* 6:10-14, 1990.
4. **Gums JG**, Carson DS: Root Medicine and Its Implications in Family Medicine. *Southern Medical Journal* 80(2):209-212, 1987.
5. **Gums JG**: The Clinical Significance of Magnesium: A Review. *Drug Intell Clin Pharm* 21(3):240-46, 1987.
6. Grauer K, **Gums JG**: Ventricular Arrhythmias, Part I: Prevalence, Significance and Indications for Treatment. *J of American Board of Family Practice* 1(2):135-142, 1988.
7. **Gums JG**, Robinson JD: Pharmacokinetic Monitoring in the Community Health Care Setting. *Drug Intell Clin Pharm* 21(5):422-426, 1987.
8. **Gums JG**, Lopez LM, Quay GP, Stein GH, McCarley D: Comparative Evaluation of Enalapril and Hydrochlorothiazide in Elderly Patients with Mild to Moderate Hypertension. *Drug Intell Clin Pharm* 22:680-684, 1988.
9. Montes G, **Gums JG**: Phenytoin Dosing in Obese Patients. *Drug Intell Clin Pharm* 22:708-710, 1988.

10. Montes G, Grauer K, **Gums JG**: Counseling the Patient with Ventricular Arrhythmias. *Med Aspects of Human Sexuality* 62-73, May 1989.
11. Curry S, **Gums JG**, Curry RW: Levothyroxine Sodium Tablets: Chemical Equivalency and Bioequivalency. *Drug Intell Clin Pharm* 22:589-591, 1988.
12. Grauer K, **Gums JG**: Ventricular Arrhythmias, Part II: Special Concerns in Evaluation. *J Amer Board of Family Practice* 1:201-206, 1988.
13. Grauer K, **Gums JG**: Ventricular Arrhythmias, Part III: Benefits and Risks of Antiarrhythmic Therapy. *J Amer Board of Family Practice* 1:255-266, 1988.
14. Grauer K, **Gums JG**: Ventricular Arrhythmias, Conclusion: New Agents, Additional Treatment Modalities, and Overall Approach to the Problem. *J Amer Board of Family Practice* 1:267-273, 1988.
15. Skluth HA, Grauer K, **Gums JG**: Newer Agents for the Treatment of Ventricular Arrhythmias. *Postgraduate Medicine* 85(6):137-153, 1989.
16. Marken PA, Weart CW, Carson DS, **Gums JG**, Lopes-Virella MF: Effects of Magnesium Oxide on the Lipid Profile of Healthy Volunteers. *Atherosclerosis* 77:37-42, 1989.
17. Skluth HA, **Gums JG**: Spironolactone: A Re-evaluation. *Drug Intell Clin Pharm: The Annals of Pharmacotherapy* 24:52-59, 1990.
18. Rey AM, **Gums JG**, Grauer K: Clinical Use of Newer Antimicrobial Agents. *Postgraduate Medicine* 88:64-81, 1990.
19. Krick S, **Gums JG**, Grauer K, Cooper G: Verapamil Over-Dose: A Case Report of Sustained-Release Verapamil. *Drug Intell Clinical Pharm* 24:705, 1990.
20. Rey AM, **Gums JG**: Administration of the ACEI Test Sublingually. *DICP: The Annals of Pharmacotherapy* (letter) 24:1116-1117, 1990.
21. Grauer K, Cavallaro D, **Gums JG**: New Developments in Cardiopulmonary Resuscitation. *Amer Fam Physician* 43(3):832-844, 1991.
22. Rey AM, Grauer K, **Gums JG**: Newer Antihypertensive Agents. *Postgraduate Med* 89(5):75-89, 1991.
23. Rey AM, **Gums JG**: Altered Absorption of Digoxin, Sustained-Release Quinidine, and Warfarin with Sulcralfate Administration. *DICP: The Annals of Pharmacotherapy* 25:745-6, 1991.
24. **Gums JG**: Description of Pharmacy Services in a Family Practice Setting. *FL J Hosp Pharm* 11(4):16-21, 1991.
25. **Gums JG**: New Drugs of 1991: Therapeutic and Comparative Categories. *FL Pharm Today* 56(4):6-12, 1992.
26. Grauer K, **Gums JG**: Oral Hypertensive Agent. *J Fam Pract* (letter) 34:397-98, 1992.
27. **Gums JG**: Use of ACE Inhibitors in the Treatment of Cardiovascular Disease. *Amer*

- Pharmacy* 32(6):62-71, 1992.
28. Robinson JD, **Gums JG**: Pharmacokinetic Monitoring of Ambulatory Outpatients. *Pharmaguide* 5(2):1-5, 1992.
 29. **Gums JG**, Curry RW, Montes de Oca G, Skluth H, Reynolds LR: Treatment of Type I Diabetes with a Combination of Glyburide and Insulin. *Ann Pharmacotherap* 26:757-62, 1992.
 30. Levin AC, **Gums JG**, Grauer K: Update on the Treatment of Tuberculosis. *Postgraduate Med* 93(3):46-60, 1993.
 31. Rust GS, Hatch R, **Gums JG**: Carisoprodol as a Drug of Abuse. *Arch Fam Med* 2:429-32, 1993.
 32. Goode MA, **Gums JG**: Therapeutic Drug Monitoring in Ambulatory Care. *Ann Pharmacotherap* 27:502-5, 1993.
 33. Goode MA, Grauer K, **Gums JG**: Infectious Vaginitis: Selecting Therapy and Preventing Recurrence. *Postgraduate Med* 96:85-98, 1994.
 34. Altura BM, Brodsky MA, Elin RJ, **Gums JG**, Resnick LM, Seelig MS: Magnesium: Growing in Clinical Importance. *Patient Care* 28:130-150, 1994.
 35. Levin AC, **Gums JG**: The Elderly Diabetic Patient with Hypertension: Guidelines for Prescribing Anti-hypertensive Therapy. *Amer J Geriatric Cardiology* 3(5):37-46, 1994.
 36. Altura BM, Brodsky MA, Elin RJ, **Gums JG**, Resnick LM, Seelig MS: Magnesium Therapy: Coming of Age? *Patient Care* 28:79-94, 1994.
 37. **Gums JG**: Empathy to Apathy: A Consequence of Higher Education? *Pharmacotherapy* 14(2):250-51, 1994.
 38. Wilt VM, **Gums JG**, Notelovitz M: Oral Contraceptives and Coagulation Problems. *Fertility Control Reviews* 3(1):3-10, 1994.
 39. **Gums JG**: Hormone-Drug Interactions. *Women's Health Digest* 1(1):50-53, 1995.
 40. **Gums JG**: Recent Advances: Ambulatory Care. *Ann Pharmacotherapy* 29:716-718, 1995.
 41. Wilt VM, **Gums JG**, Ahmed O, et al.: Pharmacist Managed Anticoagulation: Outcome Analysis. *Pharmacotherapy* 15(6): 732-739, 1995.
 42. Cauffield JS, **Gums JG**, Curry RW: Alpha-Blockers: A Reassessment of Their Role in Therapy. *Amer Fam Phy* 54(1): 263-270, 1996.
 43. Cauffield JS, **Gums JG**, Curry RW: Alpha-Blockers, Diuretics, and Beta-Blockers for Hypertension (letter to the editor). *Amer Fam Phys.* 55(7): 2432, 1997.
 44. Wilt VM, **Gums JG**: Treatment of Isolated Low High-Density Lipoprotein Cholesterol: A Review. *Ann Pharmacotherapy* 30: 89-97, 1997.
 45. **Gums JG**: New Methods of Diagnosis and Treatment of Osteoporosis. *U.S. Pharmacist*

46. Cauffield JS, **Gums JG**, Grauer K: The Serum Digoxin Concentration: Ten Questions to Ask. *Amer Fam Phy* 56(2): 495-503, 1997.
47. **Gums JG**, Cardiovascular Disease Therapy: Innovations in Calcium Channel Blockers An Introductory to T-Channel Science. *Drug Topics* 141(14): 53-512, 1997.
48. Grauer K, Curry CL, **Gums JG**. Management of Uncontrolled Hypertension. *American Family Physician Continuing Education Monograph*, 1998 (May: 1-24).
49. Smith JD, Chang K, **Gums JG**: Possible Lansoprazole-Induced Eosinophilic Syndrome. *Annals of Pharmacotherapy*, 1998, 32:196-200.
50. Nguyen BN, **Gums JG**, Grauer K: Pharmacologic Management of Hypertension: Beyond Lowering the Blood Pressure. *Fam Pract. Recertif.*, 1998; 20(10):55-58, 61, 65-70, 73-76.
51. Thornhill, LP, Nayak RA, Berado, DH, **Gums, JG**, Russell, W, Segal R. An assessment of osteoporosis risk factors: A computer-aided strategy to identify and evaluate patient risk factors using a clinic database. *Proceedings from the Third National Women's Health and Research Conference*, 1998:201-05.
52. **Gums, JG**, Yancey, RW, McKenna CA, Kubilis PS: A Randomized Prospective Study Measuring Outcomes Following Antibiotic-Therapy Intervention by a Multidisciplinary Consult Team. *Pharmacotherapy*, 1999, 19(12):1369-1377.
53. Nguyen BN, **Gums JG**: Results of Pharmacy Intervention on Lipid Profiles of Hyperlipidemic Patients in a Family Practice Clinic Setting. *Pharmacotherapy*, 1998; 18(5): 1168-69.
54. Lewis, JR, **Gums JG**, Dickensheets DL. Levofloxacin-induced Bilateral Achilles Tendonitis. *Ann Pharmacotherapy*, 1999, 33:792-5.
55. Terpening C, **Gums JG**, Grauer K. Management of Essential Hypertension *Exp. Opin. Pharmacother*, 1999, 1:1-10.
56. Niezabitowski L, **Gums JG**, Nguyen BN: A case report of Procardia XL-induced Bezoar One Year after Discontinuation. *Ann of Pharmacotherapy*, 2000:34:862-4.
57. Smith JD, Terpening CM, Schmidt SD, **Gums JG**. Relief of Fibromyalgia Symptoms Following Discontinuation of Dietary Excitotoxins. *Ann of Pharmacotherapy*, 2001;35:702-6.
58. **Gums, JG**. Current Issues and Trends in Antimicrobial Resistance. *AM J Health-Syst Pharm* (Guest Editor) 2002;59(3):S3-S19.
59. **Gums, JG**. Assessing the Impact of Antimicrobial Resistance. *AM J Health Syst Pharm* 2002;59(3):S4-S6.
60. **Gums, JG**. NCCLS Perspectives in Changing Susceptibility Breakpoints for Antimicrobial Drugs. *International Journal of Antimicrobial Agents* 22 (2003); S3-S13.

61. Tovar, JM, **Gums, JG**. Tezosentan in the Treatment of Acute Heart Failure. *Annals of Pharmacotherapy* 2003;37:1877-83.
62. Weitzel K, **Gums, JG**. A Post-Clerkship Pharmacotherapy Course. *AM J PharmEd* 2004;67(4):1-8.
63. **Gums JG**. "Redefining 'Appropriate' Use of Antibiotics: The Necessity for Targeted Therapy." *Amer Fam Phys*, 2004;69 (January 1):35-37.
64. Tovar JM, **Gums JG**. "New Monitoring Guidelines for COPD and Asthma" *Pharmacotherapy*, 2004;38(1):126-133.
65. **Gums JG**. "Magnesium in Cardiovascular and Other Disorders" *AM J Health-SystPharm* 2004;61:1569-76.
66. Epstein BJ, **Gums JG**, Drlica K. "The Changing Face of Antibiotic Prescribing: The Mutant Selection Window" *Ann Pharmacother* 2004;38:1675-82.
67. **Gums JG**, Epstein BJ. "Update on Resistance Among Respiratory Tract Pathogens: Results of the Antimicrobial Resistance Management Program. *Hospital Pharmacy* 2004;39(11):1050-1057.
68. Epstein BJ, **Gums JG**. "Are ARB's ACE-Inhibitors Without the Cough?" *Today in Cardiology* 2004 (September):27-28.
69. Epstein BJ, **Gums JG**. "Angiotensin Receptor Blockers versus ACE Inhibitors: Prevention of Death and Myocardial Infarction in High-Risk Populations. *Ann Pharmacother* 2005;39:470-80.
70. Epstein BJ, **Gums JG**. "Can the Renin-Angiotensin System Protect Against Stroke? A Focus on Angiotensin II Receptor Blockers. *Pharmacother* 2005;25(4):531-539.
71. **Gums JG**, Epstein BJ. Update on Resistance Among Nosocomial Gram-Negative Pathogens to Extended-Spectrum Cephalosporins and Fluoroquinolones: Results of the Antimicrobial Resistance Management (ARM) Program. *Hospital Pharmacy* 2005;40:405-414.
72. **Gums JG**, Epstein BJ. "Fluoroquinolone- and Methicillin-Resistant Staphylococcus aureus: Insights from the Antimicrobial Resistance Management Program." *J Pharm Technol* 2005;21:123-8.
73. Epstein BJ, **Gums JG**. "Ongoing National Surveillance of Antimicrobial Resistance: www.armprogram.com. *Florida Pharm Today* 2005; July:14-19.
74. Epstein BJ, **Gums JG**. Optimal Pharmacological Therapy for Community-Acquired Pneumonia: The Role of Dual Antibiotic Therapy. *Drugs* 2005;65(14):1949-1971.
75. **Gums JG**, Epstein BJ, Molina E. Newer Agents for the Management of Overactive Bladder. *Amer Fam Phys* 2006;74(12):2061-68.
76. Dickerson LM, Kraus CK, Kuo GM, Weber CA, Bazalduo OV, Tovar JM, Humr AL, Ives TJ, **Gums JG**, Carter BL. Formation of a Primary Care Pharmacist Practice-Based Research

77. Epstein B, **Gums J**, Turner P. Integrating Susceptibility Data from Two Surveillance Programs with Unique Methodological Techniques: The Antibigram Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study Group. *Hospital Pharmacy*. 2007;42(4):337-344.
78. Epstein BJ, **Gums JG**, Molina E. Newer Agents for the Management of Overactive Bladder (Continuing Professional Development article) *SA Fam Pract* 2007;49(2):19-25.
79. Epstein BJ, **Gums JG**, Turner PJ, Feldgarden M, Hou W. Integrating Susceptibility Data from Two Surveillance Programs with Unique Methodological Techniques: The Antibigram Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study Group. *Hospital Pharmacy*. 2007;42(5):435-446.
80. **Gums JG**, Boatwright DW, Totti N, Martinez M. Antimicrobial Resistance in 11 hospitals in Puerto Rico: Results of an Antimicrobial Resistance Management (A.R.M.) Program. *PRHSJ* 2007;26(3):181-189.
81. **Gums JG**, Boatwright DW, Camblin M, Halstead DC, Jones ME, Sanderson R. Differences Between Ceftriaxone and Cefotaxime: Microbiologic Inconsistencies. *Ann Pharmacotherapy* 2008;42:71-79
82. **Gums JG**, Pelletier EM, Blumentals WA. Oseltamirir and Influenza-related Complications. *Expert Opinion on Pharmacotherapy* 2008;9(2):1-11
83. **Gums JG**, Anderson S. Ceftobiprole: an Extended-Spectrum Anti-Methicillin-Resistant Staphylococcus aureus Cephalosporin. *The Annals of Pharmacotherapy* 2008;42:806-16.
84. Johnson JA, Boerwinkle E, Zineh I, Chapman AB, Bailey K, Cooper-DeHoff RM, **Gums JG**, Curry RW, Gong Y, Beitelshes AL, Schwartz G, Turner ST. Pharmacogenomics of Antihypertensive Drugs: Rationale and Design of the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study, *Am Heart J* 2009;157:442-9.
85. Smith SM, Anderson SD, Wen S, Gong Y, Turner ST, Cooper-DeHoff RM, Schwartz GL, Bailey K, Chapman AB, Hall, KL, Feng H, Boerwinkle E, Johnson JA, **Gums JG**. Lack of Correlation Between Thiazide-Induced Hyperglycemia and Hypokalemia: Subgroup Analysis of Results from the Pharmacogenomic Evaluation of Antihypertensive Response (PEAR) Study. *Pharmacotherapy* 2009;29(10):1157-1165.
86. Johnson JA, Gong Y, Bailey KR, Cooper-DeHoff RM, Chapman AB, Turner ST, Schwartz G, Campbell K, Schmidt S, Beitelshes AL, Boerwinkle E, **Gums JG**. Combination Antihypertensive Therapy with Hydrochlorothiazide and Atenolol: Effect of Initiation Order. *Clin. Pharmacol. Therap.* 2009;86(5):533-539.
87. Cooper-DeHoff RM, Wen S, Beitelshes AL, Zineh I, **Gums JG**, Turner ST, Gong Y, Hall K, Parekh V, Chapman AB, Boerwinkle E, Johnson JA. Impact of Abdominal Obesity on Incidence of Adverse Metabolic Effects Associated with Antihypertensive Medications. *Hypertension* 2010;55:61-68.
88. Smith SM, **Gums JG**. Fexofenadine: Biochemical, Pharmacokinetic, and Pharmacodynamic Properties and its Unique Role in Allergic Disorders. *Exp Opin. Drug Toxicol.* 2009;5(7):1-

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89. Turner ST, Schwartz GL, Chapman AB, Beitelshes AL, **Gums JG**, Cooper-DeHoff RM, Boerwinkle E, Johnson JA, Bailey KR. Plasma Renin Activity Predicts Blood Pressure Responses to Beta-Blocker and Thiazide Diuretic as Mono and Add-On Therapy for Hypertension. *AM. J. Hypertension* 2010;23(9):1014-22.
90. Wu M, Jermaine C, Ranka S, Song X, **Gums JG**. A Model-Agnostic Framework for Fast Spatial Anomaly Detection. *J. Trans Knowledge Disc Data* 2010;2(3):1-28.
91. **Gums JG**. You Don't Know What You've Got Till It's Gone. (Invited Editorial) *Pharmacotherapy* 2010;30(3):221-23.
92. Beitelshes AL, Gong Y, Bailey KR, Turner ST, Chapman AB, Schwartz GL, **Gums JG**, Boerwinkle E, Johnson JA. Comparison of Office, Ambulatory, and Home Blood Pressure Antihypertensive Response to Atenolol and Hydrochlorothiazide. *J. Clin. Hypertension* 2010;12(3):14-21.
93. **Gums JG**, Johnson JA. Combination Antihypertensive Treatment: Is Initiation Order Important? (Invited Editorial) *J. Clin Hypertension* 2010; 12(8):565-567.
94. Duarte JD, Lobmeyer MT, Wang Z, Chapman AB, **Gums JG**, Langaee TY, Boerwinkle E, Turner ST, Johnson JA. Lack of Association between Polymorphisms in STK39, a Putative Thiazide Response Gene, and Blood Pressure Response to Hydrochlorothiazide. *Pharmacogenetics and Genomics* 2010; 20(8):516-519.
95. Smith SM, **Gums JG**. Antivirals for Influenza: Strategies for Use in Pediatrics. *Pediatr Drugs* 2010;12(5):285-299.
96. Lobmeyer MT, Wang L, Zineh I, Turner ST, **Gums JG**, Chapman AB, Cooper-Dehoff RM, Beitelshes AL, Bailey KR, Boerwinkle E, Pepine CJ, and Johnson JA. Polymorphisms in Genes Coding for GRK2 and GRK5 and Response Differences in antihypertensive-Treated Patients. *Pharmacogenetics and Genomics*; 2011, Jan;21(1):42-9
97. Bovio J, Smith SM, **Gums JG**. Dabigatran Etextilate: A Novel Oral Thrombin Inhibitor for Thromboembolic Disease. *Ann Pharmacother* 2011 (45):603-14.
98. **Gums JG**. Place of Dabigatran in Contemporary Pharmacotherapy. *Pharmacotherapy* 2011;31(4):335-337.
99. Shafiu M, Johnson RJ, Turner ST, Langaee T, Gong Y, Chapman AB, **Gums JG**, Johnson JA. Urate Transporter Gene SLC22A12 Polymorphisms Associated with Obesity, and Metabolic Syndrome in Caucasians with Hypertension. *Kidney Blood Press Res* 2012;35(6):477-482.
100. **Gums JG**. Ceftaroline Fosamil: A Broad-Spectrum Cephalosporin with Methicillin-Resistant Staphylococcus aureus Activity. *Infect Dis Clin Pract* 2012;20:122-130.
101. Duarte J, Zinch I, Burkley B, Gong Y, Langaee TY, Turner ST, Chapman AB, Boerwinkle E, **Gums JG**, Cooper-DeHoff RM, Beitelshes AL, Bailey KR, Fillingim RB, Kone BC, Johnson JA. Effects of Genetic Variation in H3K79 Methylation Regulatory Genes on Clinical Blood Pressure and Blood Pressure Response to Hydrochlorothiazide. *J. Transl.*

- Med.* 2012, Mar 22;10:56-65.
102. Vandell AG, Lobmeyer MT, Gawronski BT, Langae TY, Gong Y, **Gums JG**, Beitelshes AL, Turner ST, Chapman AB, Cooper-DeHoff RM, Bailey KR, Boerwinkle E, Pepine CJ, Liggett SB, Johnson JA. G Protein Receptor Kinase 4 (GRK4) Polymorphisms: Beta-Blocker Pharmacogenetics and Treatment-Related Outcomes in Hypertension. *Hypertension* 2012, Oct; 60(4):957-64.
 103. Turner ST, Schwartz GL, Chapman AB, Beitelshes AL, **Gums JG**, Cooper-DeHoff RM, Boerwinkle E, Johnson JA, Bailey KR. Power to Identify a Genetic Predictor of Antihypertensive Drug Response Using Different Methods to Measure Blood Pressure Response. *J. Transl. Med.* 2012, 10:47.doi 10-1186/1479-5876-10-47.
 104. Duarte J, Turner ST, Tran B, Chapman AB, Bailey KR, Gong Y, **Gums JG**, Langae TY, Beitelshes AL, Cooper-DeHoff RM, Boerwinkle E, Johnson JA. Association of Chromosome 12 Locus with Antihypertensive Response to Hydrochlorothiazide May Involve Differential YEASTS4 Expression. *The Pharmacogenomics Journal (Advance online Publication)* 21 February 2012; doi:10.1038/tpi.2012.4
 105. Smith SM, Gong Y, Turner ST, Cooper-DeHoff RM, Beitelshes AL, Chapman AB, Boerwinkle E, Bailey KR, Johnson JA, **Gums JG**. Blood Pressure Responses and Metabolic Effects of Hydrochlorothiazide and Atenolol. *Amer J Hyperten* March 2012;25(3):359-65.
 106. Gong Y, McDonough C, Wang Z, Hou W, Copper-DeHoff R, Langae T, Beitelshes A, Chapman A, **Gums J**, Bailey K, Boerwinkle E, Turner S, Johnson J. Hypertension Susceptibility Loci and Blood Pressure Response to Antihypertensives- Results from the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. *Circ Cardiovasc Genet.* 2012; 5:686-91.
 107. Dietrich E, **Gums J**. Intranasal Fentanyl Spray: A Novel Dosage Form for the Treatment of Breakthrough Cancer Pain. *Ann Pharmacother* 2012; 46:1382-91.
 108. Karnes JH, McDonough CW, Gong Y, Vo TT, Langae TY, Chapman AB, **Gums JG**, Beitelshes AL, Bailey KR, Boerwinkle E, Pepine CJ, Turner ST, Johnson JA, Cooper-DeHoff RM. Association of KCNJ1 Variation with Change in Fasting Glucose and New-Onset Diabetes during HCTZ Treatment. *Pharmacogenomics J.* 2013; 13(5):430-36.
 109. Ganesh S, Tragante V, Hou W, **Gums, J**, et al. Loci Influencing Blood Pressure Identified Using a Cardiovascular Gen-centric Array. *Human Molecular Genetics* 2013;22(8)1663-78. doi:10.1093/hmg/dds555.
 110. Le MT, Lobmeyer MT, Campbell M, Cheng J, Wang Z, Turner ST, Chapman AB, Boerwinkle E, **Gums, JG**, Gong Y, Johnson RJ, Johnson JA. Impact of Genetic Polymorphisms SLC2A2, SLC2A5, and KHK on Metabolic and Herrodynamic Phenotypes in Hypertensive Individuals. *Plus One* 2013: 8(1): e52062 doi:10.1371/journal.pone.0052062.
 111. Tragante V, Barnes MR, Ganesh SK, Lanktree MB, Guo W, Franceschini N, Smith EN, Johnson T, Holmes MV, Padmanabhan S, Karczewski KJ, Almoguera B, Barnard J, Baumert J, Chang YP, Elbers CC, Farrall M, Fischer ME, Gaunt TR, Gho JM, Gieger C, Goel A, Gong Y, Isaacs A, Kleber ME, Leach IM, McDonough CW, Meijs MF, Melander O, Nelson CP, Nolte IM, Pankratz N, Price TS, Shaffer J, Shah S, Tomaszewski M, van der

- Most PJ, Van Iperen EP, Vonk JM, Witkowska K, Wong CO, Zhang L, Beitelshes AL, Berenson GS, Bhatt DL, Brown M, Burt A, Cooper-Dehoff RM, Connell JM, Cruickshanks KJ, Curtis SP, Davey-Smith G, Delles C, Gansevoort RT, Guo X, Haiqing S, Hastie CE, Hofker MH, Hovingh GK, Kim DS, Kirkland SA, Klein BE, Klein R, Li YR, Maiwald S, Newton-Cheh C, O'Brien ET, Onland-Moret NC, Palmas W, Parsa A, Penninx BW, Pettinger M, Vasani RS, Ranchalis JE, Ridker P, Rose LM, Sever P, Shimbo D, Steele L, Stolk RP, Thorand B, Trip MD, van Duijn CM, Verschuren WM, Wijmenga C, Wyatt S, Young JH, Zwinderman AH, Bezzina CR, Boerwinkle E, Casas JP, Caulfield MJ, Chakravarti A, Chasman DI, Davidson KW, Doevendans PA, Dominiczak AF, Fitzgerald GA, **Gums JG**, Fornage M, Hakonarson H, Halder I, Hillege HL, Illig T, Jarvik GP, Johnson JA, Kastelein JJ, Koenig W, Kumari M, März W, Murray SS, O'Connell JR, Oldehinkel AJ, Pankow JS, Rader DJ, Redline S, Reilly MP, Schadt EE, Kottke-Marchant K, Snieder H, Snyder M, Stanton AV, Tobin MD, Uitterlinden AG, van der Harst P, van der Schouw YT, Samani NJ, Watkins H, Johnson AD, Reiner AP, Zhu X, de Bakker PI, Levy D, Asselbergs FW, Munroe PB, Keating BJ. Gene-centric meta-analysis in 87,736 individuals of European ancestry identifies multiple blood pressure related loci. *Am J Hum Genet.* 2014 Feb 19. doi:pii: S0002-9297(13)00613-7. 10.1016/j.ajhg.2013.12.016. [Epub ahead of print] PubMed PMID: 24560520.
112. McDonough C, Burbage S, Duarte J, Gong Y, Langae T, Turner S, **Gums J**, Chapman A, Bailey K, Beitelshes A, Boerwinkle E, Pepine C, DeHoff R, Johnson J. Association of Variants in NEDDAL with Blood Pressure Response and Adverse Cardiovascular Outcomes in Hypertensive Patients Treated with Thiazide Diuretics. *J. of Hypertension.* 2013. (April); 31(4):698-704.
113. **Gums JG**. Changing the Direction of Clinical Pharmacy Outside the United States: Time to Step Up. (Editorial) *Pharmacotherapy* 2013; 33(2): 122-125.
114. Dietrich E, **Gums JG**. Intranasal Fentanyl Spray (Letter). *Ann Pharmacother* 2013; 47:doi: 10.1345/aph.1R069C.
115. Gong Y, McDonough CW, Beitelshes AL, O'Connell JR, Karnes JG, Turner ST, Chapman AB, **Gums JG**, Bailey K, Boerwinkle E, Johnson JA, Cooper-DeHoff RM. Prox I Gene Variant is Associated with Fasting Glucose Change After Antihypertensive Treatment. *Pharmacotherapy* 2014;34(2):123-130. doi 10.1002/phar.1355.
116. McDonough CW, Gillis NK, Alsultan A, Chang SW, Kawaguchi-Suzuki M, Lang JE, Shahin MHA, Buford TW, El Rouby NM, Sá ACC, Langae TY, **Gums JG**, Chapman AB, Cooper-DeHoff RM, Turner ST, Gong Y, Johnson JA. Atenolol-Induced HDL-C Change in the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. *PLoS One* 2013;8(10):e76984. doi 16.137/journal.pone.0076984
117. Turner ST, Boerwinkle E, O'Connell JR, Bailey KR, Gong Y, Chapman AB, Beitelshes AL, Schwartz GL, **Gums JG**, Padmanabhan S, Hiltunen TP, Cihario L, Donner KM, Hedner T, Lanzani C, Melando O, Saarela J, Ripattis, Wahlstrand B, Manunta P, Kuntulak K, Dominiczak AF, Cooper-DeHoff RM, Johnson JA. Genomic Association Analysis of Common Variants Influencing Antihypertensive Response to Hydrochlorothiazide. *Hypertension* 2013;62:391-97.
118. Del-Aguila JL, Beitelshes AL, Cooper-DeHoff RM, Chapman AB, **Gums JG**, Baley K, Gong Y, Turner ST, Johnson JA, Boerwinkle E. Genome-Wide Association Analyses Suggests NELL1 Influences Adverse Metabolic Response to HCTZ in African Americans.

- Pharmacogenomics J.* (2014) 14,35-40 doi: 10.1038/tpj.2013.3.
119. Vandell A, McDonough CW, Gong Y, Langae TY, Lucas AM, Chapman AB, **Gums JG**, Beitelshes AL, Bailey KR, Johnson RJ, Boerwinkle E, Turner ST, Cooper-DeHoff RM, Johnson JA. Hydrochlorothiazide-Induced Hyperuricemia in the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. *J. Internal Med* 2014 Feb 12 PMID 24612202
 120. Chapman AB, Cotsonis G, Parekh V, Schwartz GL, Gong Y, Bailey KR, Turner ST, **Gums JG**, Beitelshes AL, Cooper-Dehoff R, Boerwinkle E, Johnson JA. Night Blood Pressure Responses to Atenolol and Hydrochlorothiazide in Black and White Patients with Essential Hypertension. *Amer. J. Hypertension* doi:20.2093/ajh/hpt124.
 121. Karnes J, Gong Y, Arwood MJ, **Gums JG**, Hall KL, Limacher M, Johnson JA, Cooper-Dehoff R, Alteration in Fasting Glucose After Prolonged Treatment with a Thiazide Diuretic. *Diabetes Research and Clinical Practice* 2014;104:363-69.
 122. Cooper-DeHoff R, Hou W, Baille R, Beitelshes A, Gong Y, Shahin M, Turner S, Chapman A, **Gums J**, Boyle S, Zhu H, Wikoff W, Boerwinkle E, Fiehn O, Frye R, Kaddurah-Daouk R, Johnson J. Is a Diabetes-Linked Amino Acid Signature Associated with Beta-Blocker-induced Impaired Fasting Glucose. *Circ. Cardiovasc Genetics* 2014 (April);7(2):199-205. doi:10.1161/circgenetics.113.000421.
 123. Hamadeh IS, Langee TY, Dwivedi R, Garcia S, Burkley BM, Chapman AB, **Gums JG**, Turner ST, Gong Y, Cooper-Dehoff RM, Johnson JA. Impact of CYP2D6 Polymorphisms on Clinical Efficacy and Tolerability of Metoprolol Tartrate. *Clin. Pharmacol. Therp.* 2014 March 17. doi: 10.1038/clpt.2014.62
 124. Rosenwasser RF, Shah NK, Smith SM, Wen X, Gong Y, **Gums JG**, Nicholas WW, Chapman AB, Boerwinkle E, Johnson JA, Epstein B. Baseline Predictors of Central Aortic Blood Pressure: A PEAR Substudy. *J. Amer. Soc. Hyperten* 2014;8(3):152-158.
 125. Del-Aguila J, Cooper-Dehoff RM, Chapman AB, **Gums JG**, Beitelshes A, Bailey K, Turner ST, Johnson JA, Boerwinkle E. Trans Ethnic Meta-Analysis Suggests Genetic Variation in the HEME Pathway Influences Potassium Response in Patients Treatment with Hydrochlorothiazide. *Pharmacogenomics J.* 2014;1-5 (Sept 9) doi:10.1038/tpj.2014.46.
 126. Moore MJ, Gong Y, Hou W, Hall K, Schmidt S, Curry R, Beitelshes A, Chapman AB, Turner ST, Schwartz G, Bailey K, Boerwinkle E, **Gums JG**, Cooper-Dehoff R, Johnson JA. Predictors for Glucose Change in Hypertensive Participants Following Short-Term Treatment with Atenolol or Hydrochlorothiazide. *Pharmacotherapy* 2014;34(11):1132-40. Doi:10.1002/phar.1483.
 127. Carris NW, Taylor JR, **Gums JG**. Combining a GLP-1 Receptor Agonist and Basal Insulin: Study Evidence and Practical Considerations. *Drugs* 2014;74(18):2141-2152. doi:10.1007/S40265-014-0325-2.
 128. Funtana V, McDonough CW, Gong Y, El Roubi NM, Sá ACC, Taylor KD, Chen Y-DI, **Gums JG**, Chapman AB, Turner ST, Pepine CJ, Johnson JA, Cooper-Dehoff RM. Large-Scale Gene-centric Analysis Identifies Polymorphisms for Resistant Hypertension. *J. American Heart Association.* November 10,3(6); 2014 doi:10.1161/JAHA.114.001398

129. Langae T, Hamadeh I, Chapman A, Turner S, **Gums J**, Johnson J. A Novel Method for Determining CYP2D6 Gene Copy Number and Identifying Alleles) with Duplication/Multiplication. *PLUS ONE* 2015. doi:10.1371/journal.pone.0113808 (Jan 27, 2015).
130. Funtana V, McDonough CW, Gong Y, El Rouby NM, Sá ACC, Taylor KD, Chen Y-DI, **Gums JG**, Chapman AB, Turner ST, Pepine CJ, Johnson JA, Cooper-Dehoff RM. Large-Scale Gene-centric Analysis Identifies Polymorphisms for Resistant Hypertension. *J. American Heart Association*. September 2014;3(6).
131. Hiltunen TP, Donner KM, Sarin AP, Saarela J, Ripatti S, Chapman AB, **Gums JG**, Gong Y, Cooper-Dehoff RM, Frau F, Glorioso V, Zaninello R, Salvi E, Glorioso N, Boerwinkle E, Turner ST, Johnson JA, Kontula KK. Pharmacogenomics of Hypertension: A Genome-Wide Placebo-Controlled Cross-Over Study, Using Four Classes of Antihypertensive Drugs. *J. Amer. Heart Assoc* 2015;4:e001521 doi:10.1161/JAHA.114.001521.
132. Boerwinkle E, Del-Aguila J, Cooper-DeHoff R, Chapman A, **Gums JG**, Beitelshes A, Bailey K, Turner ST, Johnson JA. Trans Ethnic Meta-Analysis Suggests Variation in the Heme Pathway Influences Potassium Response in Patients Treated with Hydrochlorothiazide. *Pharmacogenomics J*. 2015 Apr;15(2):153-7. doi: 10.1038/tpj.2014.46. Epub 2014 Sep 9. PMID: 25201287
133. Gong Y, McDonough CW, Beitelshes AL, El Rouby N, Hiltunen TP, O'Connell JR, Padmanabhan S, Langee TY, Hall K, Schmidt SDF, Curry RW, **Gums JG**, Donner KM, Kontula KK, Bailey KR, Boerwinkle E, Takahashi A, Tanaka T, Kubo M, Chapman AS, Turner ST, Pepine CJ, Cooper-Dehoff RM, Johnson JA, PTPRD Gene Association with Blood Pressure Response to Atenolol and Resistant Hypertension. *J. Hypertension* 2015; 33(11): 2278-85
134. Weng L, Eoin Q, Gong Y, Beitelshes A, Shahin M, Turner ST, Chapman AB, **Gums JG**, Johnson JA, Frye R, Garrett T, Cooper-Dehoff R. Association of Branched and Aromatic Amino Acids Levels with Metabolic Syndrome and Impaired Fasting Glucose in Hypertension Patients. *Met. Synd. Related Dis* 2015 Jun;13(5):195-202. doi: 10.1089/met.2014.0132. Epub 2015 Feb 9. PMID: 25664967
133. Carris N, Spinelli A, Pierini D, Taylor J, Vogel-Anderson K, Sando K, Powell J, Rosenberg E, Zumberg M, Smith S, **Gums JG**, Dietrich E. Feasibility of Extended-Interval Follow-Up for Patients Receiving Warfarin. *Cardiovascular Therapeutics* 2015, 33:98-103. (doi:10.1111/1755-5922.12115).
134. Smith SM, Carris NW, Dietrich E, **Gums JG**, Uribe L, Coffey, CS, Gums TH, Carter BL. Physician – Pharmacist collaboration versus usual care for treatment-resistant hypertension *J. Amer. Soc. Hypertension* 2016 (January 18): 1-11.
135. Gong Y, Wang Z, Beitelshes AL, McDonough CW, Langae TY, Hall K, Schmidt SO, Curry RW, **Gums JG**, Bailey KR, Boerwinkle E, Chapman AB, Turner ST, Cooper-DeHoff RM, Johnson JA. Pharmacogenomic Genomic-Wide Meta-Analysis of blood pressure response to beta-blockers in hypertensive African Americans. *Hypertension* 2016 March 67(3): 556-63.
136. Chang SW, Gong Y, McDonough CW, Langae TY, Kenari NN, Beitelshes AL, **Gums JG**, Chapman AB, Turner ST, Johnson JA, Cooper-DeHoff RM. Melatonin Pathway and

- Atenolol – Related Glucose Dysregulation – Is There a Correlation? *Clin Transl Sci* 2016;9:114-122.
137. Hwang A, **Gums JG**. The Emergence and Evolution of Antimicrobial Resistance: Impact on a Global Scale. *J. Bioorganic & Medicinal Chemistry* 2016; 24:6440-45 doi.org/10.1016/j.bmc.2016.04.027
138. Shahin MH, Gong Y, McDonough CW, Rotroff DM, Beitelshes AL, Garrett T, **Gums JG**, Motsinger-Reif A, Chapman AB, Turner ST, Boerwinkle E, Frye RF, Fiehn O, Cooper-DeHoff RM, Kaddurah-Daouk R, Johnson JA. A Genetic Response Score for Hydrochlorothiazide Use: Insights from Genomics and Metabolomics Integration. *Hypertension* (2016); 68:621-29 doi:10.1161/hypertensionaha.116.07328
139. Shahin MH, Sa AC, Webb A, Gong Y, Langae T, McDonough CW, Riva A, Beitelshes AL, Chapman AB, **Gums JG**, Turner ST, Boerwinkle E, Scherer SE, Sadee W, Cooper-DeHoff RM, Johnson JA. Genome-Wide Prioritization and Transcriptomics Reveal Novel Signatures Associated with Thiazide Diuretics Blood Pressure Response. *Circ Cardiovasc Genet* 2017. 10:001404. doi:10.1161/circgenetics.116.001404
140. Carris NW, Hwang AY, Smith SM, Taylor JR, Sando K, Powell J, Rosenberg EI, Zumber MS, **Gums JG**, Dietrich EA, Vogel-Anderson K. Patient satisfaction with extended-internal warfarin monitoring. *J. Thromb Thrombolysis* 2016; 42:486-93 doi:10.1007/s11239-016-1385-9
141. Oliveira F, Shahin M, Gong Y, McDonough C, Beitelshes A, **Gums JG**, Chapman A, Boerwinkle E, Turner S, Frye R, Fiehn O, Kaddurah-Daouk R, Johnson J, Cooper-Dehoff R. Novel plasma biomarker of atenolol-induced hyperglycemia identified through a metabolomics-genomics integrative approach. *Metabolomics* 2016; 12(8) doi:10.1007/s11306-016-1076-8
142. Gharaibeh KA, Turner ST, Hamadah AM, Chapman AB, Cooper-Dehoff RM, Johnson JA, **Gums JG**, Bailey KR, Schwartz GL. Comparison of Blood Pressure Control Rates Among Recommended Drug Selection Strategies for Initial Therapy of Hypertension. *Amer. J. Hyper.* 2016; 29(10):1186-1194. doi:10.1093/ajh/hpw067
143. Weng L, Gong Y, Culver J, Gardell SJ, Petucci C, Morse AM, Frye RF, Turner ST, Chapman A, Boerwinkle E, **Gums JG**, Beitelshes A, Borum PR, Johnson JA, Garrett TJ, McIntyre LM, Cooper-Dehoff RM. Presence of Arachidonoyl-Carnitine is Associated with Adverse Cardiometabolic Responses in Hypertensive Patients Treated with Atenolol *Metabolomics* 2016 12:160 doi.org/10.1007/S11306-016-1098-2
144. Hwang AY, Gums TH, **Gums JG**. The Value of the Physician-Pharmacist Collaborative Care Model in Primary Care. *J Family Practice* 2017; 66(12): E1-E8
145. Conway SE, Hwang AY, Ponte CD, **Gums JG**. Laboratory and Clinical Monitoring of Direct Oral Anticoagulants: What Clinicians Need to Know *Pharmacotherapy* 2017; 37(2):236-48. doi:10.1002/phar.1884
146. Sa AC, Webb A, Gong Y, McDonough C, Datta S, Langae T, Turner S, Beitelshes A, Chapman A, Boerwinkle E, **Gums J**, Scherer S, Cooper-DeHoff R, Sadee W, Johnson J. Whole transcriptome sequencing analyses reveal molecular markers of blood pressure response to thiazide diuretics. *Nature Scientific Reports* 2017; 7:16068

147. Margranjav O, Gong Y, McDonough C, Chapman A, Turner S, **Gums J**, Bailey K, Boerwinkle E, Beitelshes A, Tanaka T, Kubo M, Pepine C, Cooper-DeHoff R, Johnson J. Genetics variants associated with uncontrolled blood pressure on thiazide diuretic/ β -blocker combination therapy in the PEAR (Pharmacogenomics Evaluation of Antihypertensive Response) and INVEST (International Verapamil–SR Trandolapril Study) trials. *J Am. Heart Assoc.* 2017; 6:e006522 doi:10.1161/JAHA.117.006522
148. Mehanna M, Gong Y, McDonough C, Beitelshes A, **Gums J**, Chapman A, Schwartz G, Johnson J, Turner S, Cooper-DeHoff R. Blood pressure response to metoprolol and chlorthalidone in European and African Americans with hypertension. *J. Clin Hypertens* 2017; 19:1301-08 doi:10.1111/jsc.13094
149. Shahin M, Conrado D, Gonzalez D, Gong Y, Lobmeyer M, Beitelshes A, Boerwinkle E, **Gums J**, Chapman A, Turner S, Cooper-DeHoff R, Johnson J. Genome-wide association approach identified novel genetic predictors of heart rate response to β -blockers. *J. Amer. Heart Assoc.* (February) 2018; 7:e006463 doi:10.1161/JAHA.117.006463
150. Garland SG, DeRemer CE, Smith SM, **Gums JG**. Betrixaban: A New Oral Factor Xa Inhibitor for Extended Venous Thromboembolism Prophylaxis in High-Risk Hospitalized Patients. *Am Pharmacotherapy.* (January) 2018 doi:10.1177/1060028018754383
151. McDonough C, Magvanjav O, Sa A, El Roubay N, Deitchman A, Kawaguchi-Suzuki M, Mei W, Shen Y, Singh R, Solayman M, Bailey K, Boerwinkle E, Chapman A, **Gums J**, Webb A, Scherer S, Sadee W, Turner S, Cooper-DeHoff R, Gong Y, Johnson J. Genetic variants influencing plasma renin activity in hypertensive patients from the Pharmacogenomic Evaluation of Antihypertensive Response (PEAR) study *Circulation: Genomic and Precision Medicine* (April) 2018; 11 (4) doi.org/10.1161/CIRCGEN.117.001854
152. Singh S, McDonough C, Gong Y, Alghamdi W, Arwood M, Bargal S, Dvmeny L, Wen-Yi L, Mehanna M, Stockland B, Yang G, de Oliveira F, Fredette N, Shahin M, Bailey K, Beitelshes A, Boerwinkle E, Chapman A, **Gums J**, Turner S, Cooper-DeHoff R, Johnson J. Genomic wide association study identifies the HMGCS2 locus to be associated with chlorthalidone-induced glucose increase in hypertensive patient. *J Amer. Heart Assoc.* March 2018; 9;7(6) doi:10.1161/JAHA.117.007339
153. Shahin MH, Gong Y, Frye RF, Rotroff DM, Beitelshes AL, Chapman AB, **Gums JG**, Turner ST, Boerwinker E, Motsingerp-Reif A, Fiehn O, Cooper-DeHoff RM, Han X,
154. Kaddurah –Daouk R, Johnson JA. Sphingomyelin Metabolic Pathway Impacts Thiazide Diuretic Blood Pressure Response; Insights from Genomics, Metabolomics, and Lipidomics. *J. Am. Heart Assoc.* January 2018;7:E006656 doi:10.1161/JAHA.117.006656
155. Hwang AY, Carris NW, Dietrich EA, **Gums JG**, Smith SM. Evaluation of SAME – TT₂R₂Score on Predicting Success with Extended – Interval Warfarin Monitoring *Annals Pharmacotherapy* 2018; 52 (11): 1085-1090 doi: 10.1177/1060028018779774
156. Sa AC, Webb A, Gong Y, McDonough CW, Shahin MH, Datta S, Langae TY, Turner ST, Beitelshes AL, Chapman AB, Boerwinkle E, **Gums JG**, Scherer SE, Cooper-DeHoff RM, Sadee W, Johnson JA. Blood pressure signature genes and blood pressure response to thiazide diuretics; results from the PEAR and PEAR-2 studies. *BMC Medical Genetics*

- 2018; 11: 55 doi.org/10.1186/512920-018-0370-x
157. Mehana M, Wang Z, Gong Y, McDonough CW, Beitelshes AL, Gums JG, Chapman AB, Schwartz GL, Bailey KR, Johnson JA, Turner ST, Cooper-DeHoff RM. Plasma renin activity is a predictive biomarker of blood pressure response in European but not in African Americans with uncomplicated hypertension. *Amer J. Hyper* 2019 (June):32(7):668-675 doi: 10.1093/ajh/hpZ022
158. Dietrich E, **Gums JG**. Incident-to billing for Pharmacists. *J. Managed Care Pharmacy*, 2018; 24 (12); 1273-1276
159. Singh S, Wang Z, Shahin MH, Langaee TY, Gong Y, Turner ST, Chapman AB, **Gums JG**, McDonough CM, Bailer KR, Beitelshes AL, Cooper-DeHoff RM, Scherer SE, Boerwinkle E, Johnson JA. Targeted sequencing identifies missense variant in the BEST 3 gene associated with anti-hypertensive response to hydrochlorothiazide. *Pharmacogenetics and Genomics* 2018; 28(11) 251-255 doi.10.1097/FPC.000000000000353 (November)
160. Garland SG, Smith SM, **Gums JG**, Erenumab: A First-in-Class Monoclonal Antibody for Migraine Prevention. *Annals Pharmacotherapy* 2019; 53(9):933-939 (September) doi.org/10.1177/1060028019835166
161. Singh S, El Rouby N, McDonough CM, Gong Y, Bailey K, Boerwinkle E, Chapman AB, **Gums JG**, Turner ST, Cooper-DeHoff, RM, Johnson JA. Genomic Association Analysis Reveals Variants Associated with Blood Pressure Response to Beta-Blockers in European Americans. *Clinical Translational Science* 2019 (September) 12(5):497-504. Doi.org/10.1111/cts.12643
162. Soleyman MH, Langaee TY, Gong Y, Shahin MH, Turner ST, Chapman AB, **Gums JG**, Boerwinkle E, Beitelshes AL, El-Hamamsy M, El-Wakeel L, Cooper-DeHoff RM, Badary OA, Johnson JA. Effect of plasma MicroRNA in antihypertensive response to beta-blockers in the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Studies. *Eur. J. Pharm. Sciences* 2019; 131:93-98 (April) doi.org/10.1016/j.ejps.2019.02.013
163. Shahin MH, Rouby N, Conrado DJ, Gonzalez D, Gong Y, Lobmeyer MT, Beitelshes AL, Boerwinkle E, **Gums JG**, Chapman A, Turner ST, Pepine CJ, Cooper-DeHoff RM, Johnson JA. β_2 -Adrenergic Receptor Gene Affects the Heart Rate Response of β -blockers: Evidence from 3 Clinical Studies. *J. Clin. Pharm.* 2019 (May). Doi:10.1002/jcph.1443.
164. Singh S, McDonough CW, Gong Y, Bailey K, Boerwinkle E, Chapman A, **Gums JG**, Turner ST, Cooper-DeHoff RM, Johnson JA. Genome-wide Analysis Approach Suggests Chromosome 2 Locus to be Associated with Thiazide and Thiazide-like Diuretics Blood Pressure Response. *Sci. Rep.* 9, 17323 (2019) (November). doi.org/10.1038/s41598-019-53345-5
165. Cunningham PN, Wang Z, Grove M, Cooper-DeHoff RM, Beitelshes AL, Gong Y, **Gums JG**, Johnson JA, Turner ST, Boerwinkle E, Chapman AB. Hypertensive APOL1 Risk Allele Carriers Demonstrate Greater Blood Pressure Reduction with Angiotensin Receptor Blockade Compared to Low-Risk Carriers. *PLoS ONE* 14(9); e0221957. Doi.org/10.1371/journal.pone.022195.

166. Weitzel KW, Duong BQ, Arwood MJ, Owusu-Obeng A, Abul-Husn NS, Bernhardt BA, Decker B, Denny JC, Dietrich E, **Gums JG**, Madden EB, Pollin TI, Wu RR, Haga SB, Horowitz CR. A Step-wise Approach to Implementing Pharmacogenetic Testing in the Primary Care Setting. *Pharmacogenomics* 2019;20(15) (October) doi.org/10.2217/pgs-2019-0053
167. Yang J, Asico LD, Beitelshes AL, Feranil JB, Wang X, Jones JE, Armando I, Cuevas SG, Schwartz GL, **Gums JG**, Chapman AB, Turner ST, Boerwinkle E, Cooper-DeHoff RM, Jhanson JA, Felder RA, Weinman EJ, Zeng C, Jose PA, Villar VA. Sorting Nexin 1 Loss Results in Increased Oxidative Stress and Hypertension. *FASEB journal* 2020;34:7941-7957 (April 2020) doi.org/10.1096/fj.201902448R
168. Arwood MJ, Dietrich EA, Duong BQ, Smith DM, Cook K, Elchynski A, Rosenberg EI, Huber KN, Nagoshi YL, Wright A, Budd HT, Holland NP, Maska E, Panna D, Elsey AR, Cavallari LH, Wiisanen K, Johnson JA, Gums JG. Design and implementation successes and challenges of a pharmacogenetics consult clinic. *J. Clin. Med.* 2020(July);9:2274. doi.org/10.3390/jcm9072274
169. Thomas CD, Mosley SA, Kim S, Lingineni K, El Roubay N, Langae TY, Gong Y, Wang D, Schmidt SO, Binkley PF, Estores DS, Feng K, Kim H, Kinjo M, Li Z, Fang L, Chapman AB, Cooper-DeHoff RM, Gums JG, Hamadeh IS, Zhao L, Schmidt S, Frye RF, Johnson JA, Cavallari LH. Examination of metoprolol pharmacokinetics and pharmacodynamics across CYP2D6 genotype-derived activity scores. *CPT Pharmacometrics Syst. Pharmacol.* 2020 (December 9);12:678-85.doi:10.1002/psp4.12563
170. Piszcztoski C, Gums JG. Ervebo (Ebola Zaire Vaccine, Live/RVSVΔG-ZEBOV-GP): The first licensed vaccine for the prevention of ebola virus disease. *J. Pharm. Tech* 2020. doi:10.1177/8755122520950692
171. Chekka LMS, Chapman AB, Gums JG, Cooper-Dehoff RM, Johnson JA. Race-specific comparisons of antihypertensive and metabolic effects of hydrochlorothiazide and chlorthalidone. *Am. J. Med.* 2021 (January) 5002-9343(21). doi:10.1016/amjmed.2020.015

PUBLICATIONS FOR CONTINUING EDUCATION:

1. **Gums JG:** Treatment of Angina: Focus on Nitrates, Beta-Blockers, and Calcium Modulators. *Pharmacy Power Pack*, May 1990.
2. **Gums JG:** Electrolyte Disorders: Focus on Potassium and Magnesium. *Pharmacy Power Pack*, July 1990.
3. **Gums JG:** Pharmacology and Pharmacokinetics of the Organic Nitrates: An Overview. *Pharmacy Power Pack*, January 1991.
4. **Gums JG:** Electrolyte Disorders in Congestive Heart Failure: Focus on Potassium and Magnesium. *Pharmacy Power Pack*, March 1991.
5. **Gums JG:** Potassium Supplementation: How To Do It. *Pharmacy Power Pack*, October 1991.
6. **Gums JG:** Case Studies in Potassium Replacement Therapy. A series of continuing

- education videos: Converting IV to Oral Potassium.
7. **Gums JG:** Case Studies in Potassium Replacement Therapy. A series of continuing education videos: Managing Hypokalemia in the Elderly.
 8. **Gums JG:** Case Studies in Potassium Replacement Therapy. A series of continuing education videos: Managing Hypokalemia in Congestive Heart Failure.
 9. **Gums JG:** Angina Pectoris: A Review of the Pathophysiology and Medical Management: Part I: Pathophysiology. Pharmacy Power Pack, October 1992.
 10. **Gums JG:** Treatment of Angina Pectoris: Focus on Isosorbide-5-Mononitrate. Pharmacy Power Pack, October 1992
 11. **Gums JG:** Treatment of Refractory Potassium Repletion. Pharmacy Power Pack, October 1992.
 12. **Gums JG:** Ventricular Arrhythmias: The Role of Potassium and Magnesium Supplementation. Pharmacy Power Pack, September 1992.
 13. **Gums JG:** Angina Pectoris: A Review of the Pathophysiology and Medical Management: Part II: Medical Management. Pharmacy Power Pack, November 1992.
 14. **Gums JG:** Ambulatory Care: Successful Models in Pharmaceutical Care. Continuing Education Video, March 1995. Sponsored by CSHP, PSHP, FSHP, and ASHP. Nationally distributed by Marion-Merrell Dow.
 15. **Gums JG:** C.A.R.E. - Continuing Allergy Respiratory Education: Impact of Allergies and Antihistamines on Performance Skills. DesignWrite, June 1997.
 16. **Gums JG:** C.A.R.E.-Continuing Allergy Respiratory Education: Impact of Allergies and Antihistamines on Performance Skills, 1998.
 17. **Gums JG:** Propecia: APHA New Therapeutics Bulletin, 1998, Continuing Education Series.
 18. Nguyen, BN, **Gums JG:** Therapeutic Advances in Hypertension. Pharmacy PowerPak, October 1998.
 19. Smith J, **Gums JG:** From Residency to Reality. AAFP CE Monograph Series. Kansas City, Missouri (December 1998).
 20. **Gums JG,** Wolf AM: Redefining Obesity as a Disease. Applied Clinical Communications 1999:1-18.
 21. Weart CW, Bosso JA, **Gums JG.** Adverse Consequences of Inappropriate Drug Substitution. Skin and Aging. (supplement) 1999:3-15.
 22. **Gums JG,** Wolf AM: Obesity Treatments: A Pharmacologic Update Applied Clinical Communications, 2000:3-28.

BOOK CHAPTERS:

1. **Gums JG**: Disorders of the Adrenal Gland in Pharmacotherapy: A Pathophysiological Approach, 1st ed., 1989, Elsevier Science Publishing Co., New York, New York; pg. 822-834.
2. **Gums JG**: Disorders of the Adrenal Gland in Pharmacotherapy: A Pathophysiologic Approach, 2nd ed., 1992, Elsevier Science Publishing Co., New York, New York; pg. 1168-1182.
3. Grauer K, **Gums J**, Cavallaro D: Essential Drugs and Treatment Modalities in ACLS: Certification Preparation, 3rd ed., 1993, Mosby Year Book, Inc., pg. 43-71.
4. Grauer K, **Gums J**, Cavallaro D. A Compendium of Additional Drugs Used in Emergency Cardiac Care in ACLS: A Comprehensive Review, 3rd ed., 1993, Mosby Year Book, Inc., pg. 471-488.
5. Hatch R, Grauer K, **Gums JG**: Cardiac Arrhythmias in Family Medicine: Principles and Practice, 4th ed., (ed. Taylor RB) Springer-Verlag, New York, New York; pp 601-616, 1993.
6. **Gums JG**, Wilt VM: Disorders of the Adrenal Gland in Pharmacotherapy: A Pathophysiologic Approach, 3rd ed., Elsevier Science Publishing Co., New York, New York, 1996; pg 1547-63.
7. **Gums JG**, Wilt VM: Adrenal Disorders in Endocrinology Module: Pharmacotherapy Self-Assessment Program (PSAP II), 2nd ed., American College of Clinical Pharmacy, Kansas City, MO, 1996: pp1-27.
8. **Gums, JG**, Smith J: Cushings Disease-Case Studies and Solutions in Pharmacotherapy: A Patient-Focused Approach. 1999;224-226.
9. **Gums JG**, Smith J: Disorders of the Adrenal Gland in Pharmacotherapy: A Pathophysiologic Approach. 4th Ed., Elsevier Science Publishing Co., New York, New York, 1999:1265-80.
10. Terpening C, **Gums JG**. Cushing's Syndrome: When One Gland Affects Another (Level (II). Pharmacotherapy CaseBook: A Patient-Focused Approach. 5th Ed., McGraw-Hill Companies. New York, NY, 2002:224-226.
11. **Gums JG**, Terpening CM. "Adrenal Gland Disorders" Pharmacotherapy: A Pathophysiologic Approach 5th Ed., McGraw-Hill Companies, New York, NY, 2002:1379-1394.
12. **Gums JG**, Tovar JM. "Hypothalamic, Pituitary, and Adrenal Disorders" Drug-Induced Diseases: Prevention, Detection and Management., ASHP, Tisdale and Miller, Bethesda, Maryland, 2005; Chapter 30 (Hypothalamic, Pituitary, and Adrenal Disorders):393-408.
13. **Gums JG**, Tovar JM. "Adrenal Gland Disorders" Pharmacotherapy: A Pathophysiologic Approach 6th Ed., McGraw-Hill Companies, New York, NY, 2005; Chapter 74 (Adrenal Disorders):1391-1406.
14. Terpening C, **Gums JG**. Cushing's Syndrome: When One Gland Affects Another (Level (II). Pharmacotherapy CaseBook: A Patient-Focused Approach. 6th Ed., McGraw-Hill Companies. New York, NY, 2005:225-226.

15. Epstein BJ, **Gums JG**, Hall KL. "Osteoarthritis" in Pharmacotherapy Principles and Practice, Chisholm MA, Schwinghammer TL, Wells BG, et. al. eds. McGraw-Hill Companies, New York, NY, 2006:(Chapter 55):879-890.
16. Terpening C, **Gums JG**. Cushings Syndrome: When One Gland Affects Another (Level II) in: Schwinghammer TL, Koehler JM, eds. Pharmacotherapy Casebook: A Patient-Focused Approach. 7th ed. (ISBN 9780071608923) New York: McGraw-Hill,2008.
17. **Gums JG**, Anderson S "Adrenal Gland Disorders" in Pharmacotherapy: A Pathophysiologic Approach. 7th ed. McGraw-Hill, New York (Chapter 79)2008.
18. **Gums JG**, Anderson S. "Hypothalamic, Pituitary and Adrenal Disorders" Drug-Induced Diseases: Prevention, Detection and Management., 2nd Ed, ASHP, Tisdale and Miller, Bethesda, Maryland, 2010;(Chapter 32):605-628
19. Smith SM, Epstein BJ, **Gums JG**. "Osteoarthritis" in Pharmacotherapy Principles and Practice, 2nd ed., Chisholm-Burns MA, Schwinghammer TL, Wells BG, Malone PM, Kolesar JM, DiPiro JT. McGraw-Hill Companies, New York, NY, 2010:997-1009.
20. **Gums JG**, Smith SM. Adrenal Gland Disorders. In: Dipiro JT, Talbert RL, Yee GC,Matzke GR, Wells BG, Posey LM, eds. Pharmacotherapy: A Pathophysiologic Approach. 8th ed. New York: McGraw-Hill, 2011 (Chapter 85):1327-1344.
21. Smith SM, **Gums JG**. Osteoarthritis In: Katz M, Matthias SK, eds. Pharmacotherapy Principles and Practice Study Guide. New York: McGraw-Hill,2011:247-49.
22. Smith SM, **Gums JG**, Cushing's Syndrome. In: Schwinghammer TL, Koehler JM, eds. Pharmacotherapy Casebook: A Patient-Focused Approach. 8th ed. New York: McGraw-Hill, 2011 (ISBN 978-0-07-174626-7).
23. Smith SM, Dietrich E, **Gums JG**. Osteoarthritis in: Chisholm-Burns MA, Wells BG, Schwinghammer TL, Malone PM, Kolesar JM, DiPiro JT, eds. Pharmacotherapy Principles and Practice. 3rd ed. New York: McGraw-Hill, 2013 (Chapter 58):1041-1053.
24. Smith S, **Gums JG**, Dietrich E. "Osteoarthritis" in Pharmacotherapy Principles and Practice Study Guide 3rd ed. McGraw-Hill, New York, NY (Chapter 65) 2013:265-67.
25. Dietrich E, Smith S, **Gums JG**. Adrenal Gland Disorders. In: Dipiro JT, Talbert RL, YEE GC, Matzke GR, Wells BG, Posey LM, eds. Pharmacotherapy: A Pathophysiologic Approach. 9th ed. McGraw-Hill, (Chapter 59) 2014: 1217-1236.
26. Dietrich E, Smith S, **Gums JG**. Cushings Syndrome. In: Schwinghammer TL, Koehler JM, eds. Pharmacotherapy Case Book: A Patient-Focused Approach. 9th ed. New York: McGraw-Hill 2014 (ISBN-13: 978-0071830133).
27. Carris N, Smith S, **Gums JG**. Osteoarthritis. In: Chisholm-Burns MA, Schwinghammer TL, Wells BG, Malone PM, Kolesar JM, DiPiro JT, eds. Pharmacotherapy Principles & Practice. 4th ed. New York: McGraw-Hill, (Chapter 58) 2016: 889-899.(ISBN-978-0-07-183502-2).
28. Hwang AY, Smith SM, **Gums JG**. Cushing Syndrome. In Schwinghamer TL, Koehler JM eds. Pharmacotherapy Case Book: A Patient-Focused Approach, 10th ed. (Chapter 88) New

- York, New York, McGraw-Hill 2017 p.235-38 ISBN 978-1-259-64091-9
29. Hwang AY, Smith SM, **Gums JG**. Adrenal Gland Disorders in Pharmacotherapy: A Pathophysiologic Approach, 10th ed. (Chapter 76) New York, New York, McGraw-Hill 2017 p.1207-1226 ISBN 978-1-259-58748-1
 30. Hwang A, **Gums JG**, Smith S. Hypothalamic, Pituitary, and Adrenal Disorders (Chapter 32) in Drug-Induced Diseases: Prevention, Detection, and Management, 3rd ed. Tisdale, ed. Bethesda, Maryland 2018; p729-756 ISBD: 978-1-58528-530-3
 31. Smith SM, Garland SG, **Gums JG**. Cushing Syndrome In Schwinghammer TL, Koehler JM eds. Pharmacotherapy Case Book: A Patient-Focused Approach. 11th ed., New York, McGraw-Hill; 2020, Chapter 93. p.1294-1312. ISBN: 978-1-260-11681-6
 32. Garland SG, Smith SM, **Gums JG**. Cushing Syndrome. In Schwinghammer TL, Koehler JM eds. Pharmacotherapy Case Book: A Patient-Focused Approach. 11th ed., New York, McGraw-Hill; 2020, Chapter 88. ISBN 978-1-260-11667-0
 33. Piszczatoski C, Smith SM, Gums JG. Osteoarthritis. In Chisolm-Burns MA, Schwinghammer TL, Well BG, Malone PM, Kolesar JM, DiPiro JT eds. Pharmacotherapy Principles and Practice. 6th ed., New York, McGraw-Hill; (Chapter 58); 2020 (submitted)

ABSTRACTS/POSTERS:

1. McKenna CA, **Gums JG**: Antimicrobial Intervention Program. *Pharmacotherapy Abstract*, AACP 1996 Winter Practice, and Research Forum, Monterey, California, (February 1996).
2. Yancy R, McKenna C, **Gums JG**, Kubilis P: Length of Stay and Mortality Effects of a Multidisciplinary Antimicrobial Therapy Teams (abstract): Infectious Disease Society of America, 35th Annual Meeting, San Francisco, Ca 1997.
3. **Gums JG**. Antimicrobial Susceptibility Trends from 1990-2000: Preliminary results of the Antimicrobial Resistance Management (ARM) Program. (abstract) *Pharmacotherapy* 2001;21(10):1300-01.
4. **Gums JG**. Antimicrobial Susceptibility Trends from 1990-2000: Preliminary results of the Antimicrobial Resistance Management (ARM) Program. (abstract). ACCP 2001 Annual Meeting, Tampa, Florida (October 2001).
5. **Gums, JG**. National and Regional Susceptibility Patterns of Staphylococcus aureus and Methicillin-Sensitive and Methicillin-Resistant Staphylococci: Results of the Antimicrobial Resistance Management (ARM) Program. (Abstract). CDC: International Conference on Emerging Infectious Disease, Atlanta, GA (March 2002)
6. **Gums, JG**. Similarities and differences of Escherichia coli and Klebsiella pneumoniae susceptibility to cephalosporins and fluoroquinolones from 1987-2001: results of the Antimicrobial Resistance Management (ARM) Program. (Abstract). ACCP. 2002 Spring Practice and Research Forum and Updates in Therapeutics: Savannah, GA (April 2002).
7. **Gums, JG**. National and regional susceptibility of gram-negative organisms to extended-spectrum cephalosporin and fluoroquinolone antibiotics: results of the Antimicrobial Resistance Management (ARM) Program. (Abstract) 12th European Congress of Clinical Microbiology and Infectious Disease, Milan, Italy (April 2002).

8. **Gums, JG.** Streptococcus Pneumoniae Susceptibility from 1995-2000: Results of the Antimicrobial Resistance Management (ARM) Program. (Abstract) American Thoracic Society (ATS) 2002 Meeting, Atlanta, GA (May 2002).
9. **Gums, JG.** Streptococcus Pneumoniae Susceptibility from 1995-2001: Results of the Antimicrobial Resistance Management (ARM) Program (Abstract) ACCP 2002 Annual Meeting, Albuquerque, New Mexico, Pharmacotherapy 2002, 22(10):1361.
10. University of Florida – College of Medicine, Celebration of Research (Posters)
 - a. **Gums, JG.** Antimicrobial Susceptibility Trends from 1990-2000: Preliminary Results of the Antimicrobial Resistance Management (ARM) Program (April 2002)
 - b. **Gums, JG.** National and Regional Susceptibility Patterns of Staphylococcus Aureus and Methicillin-Sensitive and Methicillin – Resistant Staphylococci: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2002).
 - c. **Gums, JG.** Similarities and Differences of Escherichia coli and Klebsiella pneumoniae susceptibility to Cephalosporins and Fluoroquinolones from 1987-2001: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2002)
 - d. **Gums, JG.** Streptococcus Pneumoniae Susceptibility from 1995-2001: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2003)
 - e. **Gums, JG.** National and regional susceptibility of gram-negative organisms to extended-spectrum cephalosporin and fluoroquinolone antibiotics: results of the Antimicrobial Resistance Management (ARM) Program. (April 2003)
 - f. **Gums, JG.** National and Regional Susceptibility of Streptococcus pneumoniae and Gram-Negative Isolates to Third-Generation Cephalosporin Antibiotics, 1994-2001: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2004)
 - g. **Gums JG.** Resistance of Gram-Negative Organisms to Extended-Spectrum Cephalosporin and Fluoroquinolone Antibiotics, 1990-2002: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2004)
 - h. **Gums JG.** Resistance of Nosocomial Pathogens to Fluoroquinolones, 1995-
 - i. 2003: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2005)
 - j. **Gums JG.** www.armprogram.com- Online US Surveillance of Antimicrobial Resistance. (April 2005)
 - k. **Gums JG.** Integrating Susceptibility Data From Two Surveillance Programs with Unique Methodological Techniques: The Antibigram Method or Isolate-Based Resistance Monitoring (ARMOR) Study (April 2006).
 - l. **Gums JG.** Heterogenous Variations in Antimicrobial Resistance within The State of Florida: Results of the Antimicrobial Resistance Management (ARM) Program (April 2006).
 - m. **Gums JG.** Regional Heterogeneity of Nosocomial Pathogen Resistance to Fluoroquinolones: Results of the Antimicrobial Resistance Management (A.R.M.) Program (March 2007).
 - n. **Gums JG.** Antibiotic Utilization and Resistance Trends within an Institution: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2008)
 - o. **Gums JG.** Identifying Heterogenous Gram-Negative Resistance to Imipenem in

- Florida Hospitals: Results of the Antimicrobial Resistance Management (ARM) Program. (April 2008)
- p. **Gums JG.** Outcomes Associated with the Implementation of a National Antibiotic Surveillance Program (April 2009)
 - q. **Gums JG.** Correlation of Thiazide-Induced Potassium Changes with Glucose Changes (April 2009).
 - r. Karnes JH, Gong Y, McDonough CW, Langae TY, **Gums JG**, Johnson JA, Cooper-DeHoff RM. Association of the Alpha Adducin-1 GLY460TRPSNP with Increased Fasting Glucose and Impaired Fasting Glucose Drug Hydrochlorothiazide Therapy (March 2012)
11. **Gums JG.** Increased *E Faecium* Resistance to Vancomycin Correlates with Declining Susceptibility to Antianaerobic Antibiotics Among Gram-Negative Organisms: Results of the Antimicrobial Resistance Management (ARM) Program. (Abstract). IDSA 41st Annual Meeting in San Diego, CA (April 2003).
 12. **Gums, JG.** Strepococcus Pneumoniae Susceptibility to Cefotaxime and Ceftriaxone, 1994- 2001: Results of the Antimicrobial Resistance Management (ARM) Program (Abstract) American Thoracic Society Annual Meeting, Seattle, Washington, (May 2003).
 13. **Gums, JG.** Increased Fluoroquinolone Resistance to Gram-Negative and Staphylococcus aureus Isolates Between 1994-2001: Results of the Antimicrobial Resistance Management (ARM) Program (Abstract) National Foundation for Infectious Disease Annual Meeting, Bethesda, Maryland (June 2003).
 14. **Gums, JG.** The Changing Face of Empiric Therapy in Skin and Skin Structure Infections: *Staphylococcus aureus*. Results of the Antimicrobial Resistance Management Program. (Abstract) ACEP Annual Meeting, Boston, MA (October 2003). *Annals Emergency Medicine* 2003;42(4):S99-100.
 15. **Gums, JG.** Update on Resistance Among Respiratory Tract Infection Pathogens: Results of the Antimicrobial Resistance Management (ARM) Program. (Abstract) CHEST Annual Meeting, Orlando, Florida (October, 2003).
 16. **Gums, JG.** National and Regional Susceptibility of Streptococcus pneumoniae and Gram-
 17. Negative Isolates to Third-Generation Cephalosporin Antibiotics, 1994-2001: Results of the Antimicrobial Resistance Management (ARM) Program. (Abstract). ACCP Fall Meeting, Atlanta, GA (November, 2003). *Pharmacotherapy* 2003;23(10):1356.
 18. **Gums JG.** Resistance of Gram-Negative Organisms to Extended-Spectrum Cephalosporin and Fluoroquinolone Antibiotics, 1990-2002: Results f the Antimicrobial Resistance Management (ARM) Program. ASHP Annual Meeting, New Orleans, LA. (December 2003).
 19. **Gums JG.** Nosocomial Respiratory Pathogens: Trends in Antibiotic Resistance, 1995-2003. Results of the Antimicrobial Resistance Management (ARM) Program. *CHEST* 2004;126(4):7175.
 20. **Gums JG.** Resistance of Nosocomial Pathogens to Fluoroquinolones, 1995-2003: Results of the Antimicrobial Resistance Management (ARM) Program. Infectious Disease Society of

- America (IDSA) Annual Meeting, Boston, MA (October 2004)
21. **Gums JG.** www.armprogram.com- Online US surveillance of Antimicrobial Resistance. Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) Washington DC (November 2004)
 22. **Gums JG.** Ongoing National Surveillance of Antimicrobial Resistance: www.armprogram.com. American Society of Health-System Pharmacists (ASHP) Mid-Year Clinical Meeting, Orlando, FL (December 2004)
 23. **Gums JG.** www.armprogram.com- Online US surveillance of antimicrobial resistance. First Coast Infectious Disease/Clinical Microbiology Symposium, St. Augustine, FL (February 2005)
 24. **Gums JG.** www.armprogram.com- Online US surveillance of Antimicrobial Resistance. Interscience Conference on Antimicrobial Agents and Chemotherapy, Get Smart Conference, Atlanta, GA (April 2005)
 25. **Gums JG.** Resistance of Nosocomial Pathogens to Fluoroquinolones, 1995-2003: Results of the Antimicrobial Resistance Management (ARM) Program. Making a Difference in Infectious Diseases (MAD-ID), Carefree, AZ (May 2005)
 26. **Gums JG.** Comparison of National and Regional Nonsusceptibilities of *Staphylococcus aureus*, *Escherichia coli*, and *Pseudomonas aeruginosa* to Community Prescribed Antibiotics: Results of the Antimicrobial Resistance Management (ARM) Program, 1997-2004. Infectious Disease Society of America (IDSA) 43rd Annual Meeting, San Francisco, California (September 2005)
 27. **Gums JG.** Correlation between Antibiotic Utilization and Resistance Rates within a Hospital System: Results of the Antimicrobial Resistance Management (ARM) Program (#462), American College of Clinical Pharmacy (ACCP) Annual Meeting, San Francisco, CA (October 2005)
 28. **Gums JG.** Comparison of National, Regional, and State Susceptibilities of *Streptococcus Pneumonia* Isolates to Clindamycin and Erythromycin: Results of the Antimicrobial Resistance Management (ARM) Program, American College of Chest Physicians (ACCP) Annual Meeting, Montreal, Quebec, Canada (November 2005)
 29. **Gums JG.** Heterogenous Variations in Antimicrobial Resistance within the State of Florida: Results of the Antimicrobial Resistance Management (ARM) Program (#670), American Society of Health-System Pharmacist (ASHP) Annual Clinical Midyear Meeting, Las Vegas, NV (December 2005)
 30. **Gums JG.** Antimicrobial Resistance documented at www.armprogram.com. American Society for Microbiology 45th Annual ICAAC Meeting, Washington DC (December 2005)
 31. Epstein B, **Gums J**, Turner P. Integrating Susceptibility Data from Two Surveillance Programs with Unique Methodological Techniques: The Antibigram Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study (#P1381) 16th European Congress of Clinical Microbiology and Infectious Disease (ECCMID), Nice, France (April 2006).
 32. Epstein B, **Gums J**, Turner P, Anderson S. Integrating Susceptibility Data from Two Surveillance Programs with Unique Methodological Techniques: The Antibigram

- Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study. (#06-08) MAD-ID Conference, Orlando, Florida (May 2006).
33. **Gums J.** Validating the Accuracy of Cumulative Susceptibility Testing Studies in Antibiotic Resistance: The Antibigram Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study (K-1422) 46th Annual ICAAC Meeting. San Francisco, CA (September 2006).
 34. **Gums J.** Utilizing Intrastate Surveillance to Determine Antimicrobial Resistance Patterns for Staphylococcus aureus: Results from the Florida Cohort of the Antimicrobial Resistance Management (ARM) Program. (K-0795). 46th Annual ICAAC Meeting. San Francisco, CA (September 2006).
 35. **Gums J, Boatwright W, Totti N, Martinez M.** Antimicrobial Resistance Among Hospitals in Puerto Rico: Results of the Antimicrobial Resistance Management (ARM) Program (#215) ACCP Annual Meeting, St. Louis, MO (October 2006).
 36. **Gums J.** Trends in Gram-Negative Isolate Resistance to Imipenem: Results of the Antimicrobial Resistance Management (ARM) Program (#042). 44th Annual IDSA meeting. Toronto, Ontario (October 2006).
 37. **Gums J.** Antibiotic Susceptibility of Pseudomonas aeruginosa and Staphylococcus aureus Isolates from US Hospital Intensive Care Units (ICU's): Result of the Antimicrobial Resistance Management (ARM) Program, 1997-2005 (C#3667) 72nd Annual American College of Chest Physicians (CHEST). Salt Lake City, UT (October 2006).
 38. Epstein B, **Gums J, Turner P.** Changes in Antimicrobial Susceptibility of Escherichia coli and Klebsiella pneumoniae Documented by Antibigrams and Isolates: The Antibigram Resistance Method or Isolate-Based Resistance Monitoring (ARMOR) Study (#127). ACCP Annual Meeting. St. Louis, MO (October 2006).
 39. Anderson S, **Gums JG.** Heterogeneous Variations in Antimicrobial Resistance to Escherichia coli within the State of Florida: Results From the Antimicrobial Resistance Management (A.R.M.) Program. FSHP Annual Meeting, Orlando, FL (August 2007)
 40. Anderson S, **Gums JG, Krishnaswamy A, Ng V.** Antibiotic Utilization and Resistance Trends within an Institution: Results of the Antimicrobial Resistance Management (A.R.M.) Program (#K-2142) 47th Annual ICAAC Meeting, Chicago, IL (September 2007)
 41. **Gums JG, Ranka S, Jermaine CM.** Significant Heterogeneity Found in Resistance Trends Among Hospitals: Results of the Antimicrobial Resistance Management (A.R.M.) Program (#K-2161) 47th Annual ICAAC Meeting, Chicago, IL (September 2007).
 42. **Gums JG, Pelletier EM, Blumentals WA.** Impact of Oseltamirir for the Treatment of Influenza on Secondary Complications and Healthcare Costs. (#108) ACCP Annual Meeting, Denver, CO (October 2007).
 43. Anderson S, **Gums JG.** Heterogeneous Variations in Gram-Negative Pathogen Susceptibility to Fluoroquinolones within the State of Florida: Results of the Antimicrobial Resistance Management (A.R.M.) Program (#115) ACCP Annual Meeting, Denver, CO (October 2007)

44. **Gums JG.** Trends in Antimicrobial Resistance Documented at www.armprogram.com (#195) ACCP Annual Meeting, Denver, CO (October 2007).
45. **Gums JG.** Utilizing Intrastate Surveillance to Determine Antimicrobial Resistance Patterns for Staphylococcus aureus: Results from the Florida Cohort of the Antimicrobial Resistance Management (A.R.M.) Program (#196E) ACCP Annual Meeting, Denver, CO (October 2007).
46. Anderson S, **Gums JG**, Ng V. Institutional Resistance Trends: Results of the Antimicrobial Resistance Management (A.R.M.) Program (#306) CHEST 2007. Chicago, IL (October 2007).
47. **Gums JG.** National, Regional, and Local Trends in Streptococcus Pneumonia Resistance: Results of the Antimicrobial Resistance Management (A.R.M.) Program. CHEST 2007. Chicago, IL (October 2007).
48. **Gums JG**, Ranka S, Jermaine CM. Can a Hospital's Personality Help Define the Utility of Antimicrobial Stewardship? IDSA 45th Annual Meeting, San Diego, CA (October 2007).
49. **Gums JG.** Identifying Heterogeneous Gram-Negative Isolate Resistance to Imipenem in Florida Hospitals: Results of the Antimicrobial Resistance Management (A.R.M.) Program (#106) ASHP Midyear Clinical Meeting, Las Vegas, NV (December 2007).
50. Song, X, Jermaine C, Sanjay R, **Gums JG.** A Bayesian Mixture Model with Linear Regression Mixing Proportions (#340). The 14th ACM SIGDD International Conference on Knowledge Discovery & Data Mining, Las Vegas, NV (August 2008)
51. Smith SM, **Gums JG**, Anderson SD, Johnson J, DeHoff R. Correlation of Thiazide-Induced Potassium Changes with Glucose Changes (#81). ACCP Annual Meeting, Louisville, KY (October 2008)
52. Smith SM, **Gums JG**, Jermaine C, Ranka S. The Implications of Phenotypic Clustering of Antimicrobial Resistance Patterns on Predicting Future Trends (#2716). 48th Annual ICAAC/46th Annual IDSA Meeting, Washington DC (October 2008)
53. Smith SM, **Gums JG**, Ng V. Outcomes Associated with the Implementation of a National Antibiotic Surveillance Program (#2611) 48th Annual ICAAC/46th Annual IDSA Meeting, Washington DC. (October 2008)
54. Smith SM, **Gums JG**, Anderson SD, Johnson JA, Cooper-DeHoff RM. Correlation of Thiazide-Induced Potassium Changes with Glucose Changes (#8E) 2009 ACCP/ESCP International Congress on Clinical Pharmacy, Orlando, FL (April 2009)
55. Smith SM, **Gums JG**, Ng V. Outcomes Associated with the Implementation of a National Antibiotic Surveillance Program (#64E) 2009 ACCP/ESCP International Congress on Clinical Pharmacy, Orlando, FL (April 2009)
56. Smith SM, **Gums JG**, Jermaine C, Rank S. Implications of Phenotypic Clustering on Predicting Future Trends of Antimicrobial Resistance Patterns (#63E) 2009 ACCP/ESCP International Congress on Clinical Pharmacy, Orlando, FL (April 2009)
57. Rosenzweig J, **Gums JG.** Influenzae Prevention and Management on College Campuses. 2009 American College Health Association Annual Meeting, San Francisco, CA (May

58. Wu M, Jermaine C, Ranka S, **Gums JG**. A LRT Framework for Fast Spatial Anomaly Detection. 15th Annual ACM SIGKDD Conference on Knowledge Discovery and Data Mining, Paris, France (June 2009)
59. Smith SM, **Gums JG**, Alessandrini J, Kaufman D, Ng V. Can an Individualized Educational Stewardship Program Affect Prescribing Patterns and Reduce Antimicrobial Resistance? (#1716) 47th Annual Meeting, IDSA, Philadelphia, PA (October 2009)
60. Moore MJ, Chik VPW, Gong Y, Langaee T, Chapman AB, Schwartz GL, Turner ST, **Gums JG**, Cooper-DeHoff RM, Beitelshes A, Johnson JA. Association Between Melatonin Receptor 1B Single Nucleotide Polymorphisms (SNPs) and response to antihypertensive drugs. ASCPT 111th Annual Meeting, Atlanta, GA (March 2010) *Clin Pharmacol Ther* 2010; FEB (87):1:545.
61. Duarte JD, Tran B, Langaee TY, Chapman AB, **Gums JG**, Boerwinkle E, Turner ST, Johnson JA. YEATS4 Gene Region Polymorphisms Associate with Antihypertensive Response to Hydrochlorothiazide in African Americans (Abstract) *Clinical Pharmacol Therap*. 2010;FEB:87(51):546.
62. **Gums JG**, Smith SM, Tyrol K, Patel R, Adelman DN, Ng V, Pratt LE. A National Antibiotic Surveillance Program: 3-Year Follow-up Study. (#981) 50th Annual ICAAC Meeting, Boston, MA (September 2010).
63. Yancey RW, **Gums JG**, Klinker K. Impact of an Antibiotic Stewardship Program (ASP) on Length of Stay (LOS). The Society for Healthcare Epidemiology of America (SHEA) (#4748) Dallas, TX (April 2011).
64. Vandell AG, Lobmeyer MT, Gawronski B, Langaee TY, Gong Y, Beitelshes AL, **Gums JG**, Turner ST, Chapman AB, Cooper-DeHoff RM, Liggett SB, Johnson JA. Influence of G Protein Receptor Kinase (GRK4) Polymorphisms on Blood Pressure Response to the β -blocker Atenolol. American Society of Clinical Pharmacology and Therapeutics Annual Meeting, Dallas, TX (March 2011)
65. Karnes JH, Vo TT, Gong Y, Langaee TY, Beitelshes AL, Turner ST, Chapman AB, **Gums JG**, Bailey KR, Boerwinkle E, Pepine CJ, Johnson JA, Cooper-DeHoff RM. KCNJ1 SNPs Are Associated with Increased Fasting Glucose and Risk of New Onset Diabetes During HCTZ Therapy. American Society of Clinical Pharmacology and Therapeutics Annual Meeting, Dallas, TX (March 2011).
66. **Gums JG**. Infectious Disease Outcomes Project (iDOP): Determining Susceptibility to Antimicrobial Agents. (#31493); 49th Annual Meeting IDSA; Boston, MA (October 2011)
67. Gong Y, McDonough CW, Wang Z, Cooper-DeHoff RM, Langaee TY, Beitelshes AL, Turner ST, Chapman AB, **Gums JG**, Bailey KR, Boerwinkle E, Johnson JA. Hypertension Susceptibility Loci and Blood Pressure Response to Antihypertensives- Results from the Pharmacogenomic Evaluation of Antihypertensive Response (PEAR) Study. *Clin Pharmacol Ther* 2012;91 (S1):S16.
68. Moore MJ, Gong Y, Schmidt S, Hall K, Chapman AB, Langaee TY, **Gums JG**, Cooper-DeHoff RM, Johnson JA. Antihypertensive Medication Exposure and Adverse Glycemic

- Effects: An Evaluation of Fasting and Stimulated Glucose. *Clin Pharmacol Ther* 2012;91(S1):S25.
69. Moore MJ, Gong Y, Hou W, Chapman AB, Langae TY, Schwartz GL, Turner ST, **Gums JG**, Bailey K, Boerwinkle E, Beitelshes AL, Cooper-DeHoff RM, Johnson JA. Clinical Predictors of Dysglycemic Effects Associated with Use of Beta Blockers and Thiazide Diuretics. *Clin. Pharmacol. Ther.* 2012;91(1):S24-25.
 70. Vandell AG, McDonough CW, Langae TY, Burkley B, Gong Y, Turner ST, **Gums JG**, Chapman AB, Beitelshes AL, Cooper-DeHoff RM, Johnson JA. Association of *FTO* with Hydrochlorothiazide (HCTZ)-induced elevation in uric acid (UA) in African American (AA) hypertensives in the Pharmacogenomic Evaluation of Antihypertensive Response (PEAR) Study. *Clin Pharmacol Ther* 2012;91 (S1): S59.
 69. Cooper-DeHoff R, Hou W, Baillie R, Beitelshes A, Gong Y, Chapman A, **Gums J**, Turner S, Boyle S, Zhu H, Wikoff W, Fiehn O, Frye R, Kaddurah-Daouk R, Johnson J. Pharmametabolomics Reveals a Novel Signature for Predicting Beta-Blocker Associated Impaired Fasting Glucose. American Heart Association Annual Meeting; Los Angeles, CA (November 2012).
 70. Gong Y, Moore, MJ, Karnes JH, McDonough CW, Wang Z, Langae TY, Beitelshes AL, Turner ST, Chapman AB, **Gums JG**, Bailey K, Boerwinkle E, Johnson JA, Cooper-Dehoff RM, Fasting Glucose Loci Associated with Glucose Response to Antihypertensive-Results from the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. *Clin Pharmacol Ther* 2013; 93(S1):S28.
 71. Carris N, Deitrich E, Schultz A, Alessendri J, Summers L, **Gums JG**. Tracking Thrombosis and Pain Metrics in a Status-Post Orthopedic Surgical Population: Results from the Surgical Outcomes Project. American College of Clinical Pharmacy, Annual Meeting, Albuquerque, NM (October 2013)
 72. Langae T, Hamadeh I, Chapman A, Turner S, **Gums J**, Johnson J. A Novel Method for Determining CYP2D6 Gene Copy Number and Identifying Alleles) with Duplication/Multiplication. *Amer Soc of Clin Pharm and Thera.* Annual Meeting (September 2013)
 73. Gong Y, McDonough CW, Wang Z, Langae TY, Beitelshes AL, **Gums JG**, BaileyKR, Boerwinkle E, Chapman AB, Turner ST, Cooper-Dehoff RM, Johnson JA. Genome-wide Association Analysis (GWAS) of Blood Pressure Response to Atenolol: Results from the Pharmacogenomic Evaluation of Antihypertensive Response Study. *Clin Pharmacol Ther* 2014;95(51):S16 (March 2014).
 74. Moore MJ, Gong Y, Hou W, Hall K, Schmidt SO, Curry RW, Beitelshes AL, Chapman AB, Turner ST, Schwartz GL, Bailey K, Boerwinkle E, **Gums JG**, Cooper-DeHoff RM, Johnson JA. Predictors for Glucose Change in Hypertensive Participants Following Short-term Treatment with Atenolol or Hydrochlorothiazide. *Pharmacotherapy.* (2014) (In Press)
 75. Sá AC, Webb A, Gong Y, Langae T, TurnerS, Chapman A, **Gums JG**, Scherer S, Cooper-Dehoff R, Sadee W, Johnson JA. Identifying Genes Differentially Expressed Associated with Extreme Blood Pressure Response to Hydrochlorothiazide Monotherapy (#732M) American Society of Human Genetics, 64th Annual Meeting, San Diego, CA (October 2014)

76. Carris N, Taylor J, Vogel-Anderson K, Sando K, Spinelli A, Elliott J, Powel J, Pierini D, Cogan P, Smith SM, **Gums JG**, Dietrich E. Feasibility of Extended Duration Follow-Up for Patients Receiving Warfarin (FADE-OUT) ACCP Annual Meeting, Austin, TX (October 2014).
77. Chang S, Gong Y, McDonough CW, Kenari N, Langee T, Beitelshes AL, **Gums JG**, Chapman AB, Turner ST, Johnson JA, Cooper-Cehoff RM. Correlating the Melatonin (MT) Pathway with Atenolol Associated Glucose Dysregulation in the Pharmacogenetic Evaluation of Antihypertensive Responses (PEAR) Study. *Clin. Pharmacol. Ther.* 2015;97:S17. doi:10.1002/cpt. 48.
78. Shahin MH, Rotroff DM, Gong Y, Langee T, McDonough CW, Beitelshes AL, Garrett TJ, Chapman AB, **Gums JG**, Turner ST, Motsinger-Reif A, Frye RF, Schere SE, Sadee W, Fiehn D, Cooper-Cehoff RM, Kaddurah-Daouk R, Johnson JA. Integrating Metabolomics and Genetics Reveals Novel Biomarkers of Hydrochlorothiazide Response in Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study 2015 *Clin Pharmacol Ther* 97:S11-S18. doi:10.1002/cpt 48.
79. Cooper-DeHoff R, McIntyre L, Weng L, Garrett T, Frye R, Culver J, Gardell S, Morse A, **Gums JG**, Beitelshes A, Borum P, Petucci C, Janicki T, Edison A, Johnson JA. Pharmacometabolomics Identifies Acylcarnitines Associated with Beta Blocker-Induced Fasting Glucose Alterations: Findings from RCMRC #U24DK097209. 2015 (July). Metabolomic Society Annual Meeting, San Francisco, CA.
80. Solayman MH, Langae T, Gong Y, El-Hamamsy M, El-Wakeel L, Boerwinkle E, Chapman A, Turner S, **Gums J**, Beitelshes A, Cooper-DeHoff R, Badary O, Johnson J. Association of Plasma MicroRNA with Antihypertensive Response to Beta-Blockers. AACP 2015. *Clinical Pharmacology and Drug Development* 2015;4(51):58-59.
81. Shahin MG, Rotroff DM, Webb A, Gong Y, Langae T, McDonough CW, Beitelshes AL, Garrett T, **Gums JG**, Motsinger-Reif A, Chapman AB, Turner ST, Boerwinkle E, Frye RF, Scherer SE, Sadee W, Fiehn O, Cooper-DeHoff RM, Kaddurah-Daouk R, Johnson JA. Integrating Metabolomics and Genomics Uncovers Novel Pathways and Genetic Signatures Influencing Hydrochlorothiazide Blood Pressure Response: A Genetic Response Score for Hydrochlorothiazide. *Circulation* 2015;132:A13621 (AHA 2015, Orlando, FL).
82. de Oliveira FA, Shahin MG, Gong Y, McDonough CW, Beitelshes AL, **Gums JG**, Chapman AB, Boerwinkle E, Turner ST, Frye RF, Fiehn O, Kaddurah-Daouk R, Johnson JA, Cooper-DeHoff RM. Genomically-metabolomics Integrative Approach Reveals Novel Biomarkers in DPYS-Associated with Higher Glucose Change After Treatment with Atenolol *Circulation* 2015;132:A18338 (AHA 2015, Orlando, FL).
83. Shahin MH, Sa AC, Webb A, Gong Y, Langae T, McDonough CW, Beitelshes AL, Chapman AB, **Gums JG**, Turner ST, Frye RF, Scherer SE, Sadee W, Cooper-DeHoff RM, Johnson JA. Identifying a Novel Hypertension Genetic Signature Influencing the Blood Pressure Response to Hydrochlorothiazide Treated Patients. Abstract #674. 65th Annual Meeting, The American Society of Human Genetics. Baltimore, MD October 7, 2015
84. Sa AC, Webb Y, Gong Y, McDonough CW, Shahin MH, Langae TY, Turner ST, Beitelshes AL, Chapman AB, Boerwinkle E, **Gums JG**, Scherer S, Cooper-Dehoff RM,

- Sadee W, Johnson JA. Hypertension (HTN)/ Blood Pressure (BP) Signature Genes and BP Response to Thiazide Diuretics (TD): Results From PEAR and PEAR-2 Studies. *Clin. Pharmacol. Therap* 2016;99:S19(PT23).
85. Shahin MH, Sa AC, Webb A, Gong Y, Langae T, McDonough CW, Riva A, Beitelshes AL, Chapman AB, **Gums JG**, Turner ST, Frye RF, Scherer S, Sadee W, Cooper-Dehoff RM, Johnson JA. Finding a Needle in the Haystack for Thiazide Response Using Genomics/Transcriptomics in Pharmacogenomic Evaluation of Antihypertensive Response (PEAR) Study. *Clin. Pharmacol. Therap.* 2016;99:S19.
86. Mehanna M, Gong Y, McDonough CW, Beitelshes A, **Gums JG**, Chapman AB, Johnson JA, Turner ST, Cooper-DeHoff R. The role of plasma renin activity for improving precision of antihypertensive drug therapy in European Americans and African Americans *Pharmacotherapy* 2016; 36(12): e214 (#40) Poster presented at the ACCP Annual Meeting, October 2016, Hollywood, FL.
87. Singh S, Alghandi W, Arwood MJ, Bargal SA, de Oliveira F, Dumeny L, Wn-Yi L, Mehanna M, Stockard B, Yang G, Fredette N, Shahin M, Bailey KR, Beitelshes AL, Boerwinkle E, Chapman AB, **Gums JG**, Turner ST, Gong Y, McDonough CW, Cooper-DeHoff RM, Johnson JA, A Genome-Wide Association Study to Identify Pharmacogenomic Variants Associated with Chlorthalidone-Induced Glucose Change in African Americans. *ASCPT 2017 Clin Pharm Therap* 2017; 101:59 (PT-019) Washington DC, March 2017
88. Shahin MH, Michailidis G, Gong Y, Beitelshes AL, Chapman AB, **Gums JG**, Boerwinkle E, Turner ST, Cooper-DeHoff RM, Johnson JA. Thiazide-induced Hyperuricemia: Novel insights from Metabolomics and Genetics Integration in the Pharmacogenomic Evaluation of Antihypertensive Responses 2 (PEAR2) study. *Clin Phar & Therap.* 2017; 101:s13(PT-028) ASCPT Annual Meeting, Washington DC, March 2017
89. Costa Sa A, Webb A, Gong Y, McDonough CW, Shahin MH, Datta S, Langae TY, Turner ST, Beitelshes AL, Chapman AB, Boerwinkel E, **Gums JG**, Scherer SE, Cooper-DeHoff RM, Sadee W, Johnson JA. Rna-Seq Analysis Identify Molecular Markers of Blood Pressure (BP) Response to Thiazide Diuretics (TD) *Clin Pharm & Therap.* 2017; 101: s96 (PWIV-001) ASCPT Annual Meeting, Washington DC, March 2017
90. Hwang A, Smith S, Dietrich E, Carris N, **Gums J**. Evaluation of SAME-TT₂R₂ score on predicting anticoagulation control with extended-interval warfarin monitoring. ACCP Meeting (Phoenix, AZ) October 2017
91. Shahin M, Akoluk A. Singh S, McDonough C, Gong Y, Chapman A, Turner S, **Gums J**, Beitelshes Boerwinkle E, Cooper-DeHoff R, Johnson J. A genome-wide association study identifies novel genetic signatures associated with thiazide diuretics adverse metabolic events. PgmNr 2678/T. Poster presentation at the 67th Annual Meeting of The American Society of Human Genetics, October 19, 2017. Orlando, FL.
92. O. Magvanjav, Y. Gong, C.W. McDonough, A.B. Chapman, S.T. Turner, **J.G. Gums**, K.R. Bailey, E. Boerwinkle, A.L. Beitelshes, T. Tanaka, M. Kubo, C.J. Pepine, R.M. Cooper-DeHoff, J. A. Johnson. Towards precision therapy in hypertension: Genome-wide association study reveals genetic variant associated with uncontrolled blood pressure on thiazide diuretic/beta-blocker combination therapy. American Society of Human Genetics, October 18, 2017. Orlando, FL.

93. Singh s, Gong Y, McDonough C, Bailey K, Beitelshes A, Boerwinkle E, Chapman A, **Gums J**, Turner S, Cooper-DeHoff R, Johnson J. Genome-wide association study reveals novel genetic markers associated with chlorthalidone blood pressure response. PgmNr 2685/F. Poster presentation at the 67th Annual Meeting of The American Society of Human Genetics, October 20, 2017. Orlando, FL.
94. Shah H, **Gums JG**. Extended-duration VTE prophylaxis with betrixaban saves cost compared to standard duration enoxaparin across inpatient and outpatient settings. Poster presented at the Society of Hospital Medicine Annual Meeting (Orlando, FL) April 2018.
95. Shah H, **Gums JG**. Economic benefit for acute-care hospitals through using betrixaban for extended-duration VTE prophylaxis over 35-42 days. Poster presented at the Society of Hospital Medicine Annual Meeting (Orlando, FL) April 2018.
96. **Gums JG**. Economic benefit for acute-care hospital using orally administered betrixaban for extended-duration prophylaxis over 35-42 days. AMCP Annual Meeting (Boston, MA) April 2018.
97. Singh S, Gong Y, McDonough C, Bailey K, Beitelshes A, Boerwinkle E, Chapman A, **Gums J**, Turner S, Cooper-DeHoff R, Johnson J. Genome Wide association study identifies novel pharmacogenetic variants associated with chlorthalidone blood pressure response in African Americans (2018), American Society for Clinical Pharmacology and Therapeutics. Clin. Pharmacol. Ther., 103:S50. Doi:10.1002/cpt.993 (PI-139).
98. Singh S, Wang Z, Shahin M, Langae T, Gong Y, McDonough C, Bailey K, Turner S, Chapman A, **Gums J**, Beitelshes A, Cooper-De-Hoff R, Scherer S, Boerwinkle E, Johnson J. Targeted sequencing identifies missense variants in the BEST3 gene associated with antihypertensive response to thiazide diuretics (2018), American Heart Society for
99. Clinical Pharmacology and Therapeutics. Clin. Pharmacol. Ther., 103:S5
doi:10.1002/cpt.993 (PT-001).
100. Shahin M, Conrado D, Gonzalez D, Gong Y, Lobmeyer M, Beitelshes A, Boerwinkle E, **Gums J**, Chapman A, Turner S, Cooper-DeHoff R, Johnson J. Genome-wide meta-analyses reveal novel predictors of heart rate response to β -blockers in the pharmacogenomics evaluation of antihypertensive response (PEAR) studies. Clinical Pharmacology & Therapeutics 2018; 103: S15.
101. Shahin M, Conrado D, Gonzalez D, Gong Y, Lobmeyer M, Beitelshes A, Boerwinkle E, **Gums J**, Chapman A, Turner S, Cooper-DeHoff R, Johnson JA. B2-adrenergic receptor gene affects the negative chronotropic effects of-blockers in the PEAR and PEAR2 studies. Clinical Pharmacology & Therapeutics 2018; 103: S15. (PI-002).
102. **Gums JG**, Extended-duration VTE prophylaxis with orally administered betrixaban saves cost compared to standard-duration enoxaparin across the inpatient and outpatient settings. ISPOR Annual Meeting (Baltimore, MD) May 2018.
103. Carris N, Smith S, Dietrich E, **Gums JG**. Evaluation of SAME – TT₂R₂ Score on predicting anticoagulation control with extended-interval warfarin monitoring. APhA Annual Meeting, March 2019, Seattle, Washington
104. **Gums JG**. Monitoring of the Newer Anticoagulants: Justification and Significance of a Evidence-based Anticoagulation toolkit. ACCP Annual Meeting, October 2018, Seattle,

105. Arwood M, Dietrich E, Smith B, Rosenberg E, Huber K, Nagoshi N, Wright A, Bvdd J, Elsey A, Cavallari L, Weitzel K, Johnson J, **Gums J**. Implementation of a Pharmacist-led Pharmacogenetics consult service in a primary care setting. ACCP Annual Meeting, October 2018, Seattle, Washington
106. Chekka LMS, Singh S, Langaee TY, Chapman AB, **Gums JG**, Turner ST, Cooper-DeHoff RM, Johnson JA. Systematic, Hypothesis-Driven Approach to Identify circulating MicroRNAs that Predict Blood Pressure Response to Antihypertensive Drugs. ASCPT Annual Meeting, 2019, Washington D.C.
107. Shahin MH, Gong Y, Singh S, Beitelshees AC, Chapman AB, **Gums JG**, Boerwinkle E, Turner ST, Cooper-DeHoff RM, Gariett TJ, Johnson JA. Machine Learning Uncovers Novel Biomarkers of Antihypertensive Response in the Pharmacogenomic Evaluation of Antihypertensive Responses (PEAR) Study. ASCPT Annual Meeting, March 2019, Washington D.C.
108. Chekka LMS, Langaee TY, Wang D, Rolf R, Chapman AB, **Gums JG**, Turner ST, Cooper-DeHoff RM, Johnson JA. Plasma MicroRNA Profiling Reveals Potential Biomarkers of Thiazide Response. AHA Annual Meeting 2020. *Circulation* 2020 (November); 142 (supplement 3).
109. Dowling T, **Gums JG**. National Trends in Direct Patient Care and Payment Models Among U.S. Colleges of Pharmacy. *Amer. Coll. Clin. Pharmacy* (ACCP) Annual Meeting (2020).
110. Cook KS, Duong BQ, Singh D, Smith DM, Dietrich EA, Johnson JA, Wiisanen K, **Gums JG**, Arwood MJ. Patient Perceptions of Pharmacogenetic Testing in a Primary Care Setting. *Clin. Pharmacol. Ther.* 2021; 109:S50. ASCPT Annual Meeting. March 2021.
111. Mehanna M, Gong Y, McDonough CM, **Gums JG**, Chapman AB, Turner ST, Johnson JA, Cooper-DeHoff RM. Metabolomics Reveals Racial Differences in Blood Pressure Response to Metoprolol. ASCPT Annual Meeting. March 2021.

MANUSCRIPTS REVIEWED:

1. American Family Physician (December 2008)
2. American Family Physician (March 2009)
3. Pharmacotherapy (April 2009)
4. Infection Control and Hospital Epidemiology (September 2009)
5. The Lancet (November 2009)
6. Pharmacotherapy (January 2010)
7. Infection Control and Hospital Epidemiology (January 2010)
8. Pharmacotherapy (March 2010)
9. American Family Physician (May 2010)
10. Pharmacotherapy (June 2010)
11. Pharmacotherapy (July 2010)
12. Infection Control and Hospital Epidemiology (September 2010)
13. Pharmacotherapy (October 2010)
14. Annals of Pharmacotherapy (October 2010)

15. Drugs (July 2011)
16. Infection Control and Hospital Epidemiology (July 2011)
17. Pharmacotherapy (July 2011)
18. Drugs (September 2011)
19. Infection Control and Hospital Epidemiology (October 2011)
20. Journal of Clinical Hypertension (January 2012)
21. Journal of Clinical Hypertension (March 2012)
22. Journal of Clinical Hypertension (Jun 2012)
23. Journal of Clinical Hypertension (April 2013)
24. Journal of Clinical Hypertension (July 2013)
25. Infection Control and Hospital Epidemiology (July 2013)
26. Infection Control and Hospital Epidemiology (October 2013)
27. Infection Control and Hospital Epidemiology (February 2014)
28. Journal of Clinical Hypertension (August 2014)
29. Annals of Pharmacotherapy (October 2014)
30. Journal of Clinical Hypertension (November 2014)
31. Annals of Pharmacotherapy (December 2014)
32. Drugs (May 2015)
33. Infection Control and Hospital Epidemiology (October 2015)
34. Infection Control and Hospital Epidemiology (November 2015)
35. Annals of Pharmacotherapy (March 2016)
36. Infection Control and Hospital Epidemiology (January 2017)
37. Annals of Pharmacotherapy (November 2017)
38. Annals of Pharmacotherapy (January 2018)
39. American Journal of Preventive Medicine (November 2018)
40. Infection Control and Hospital Epidemiology (December 2018)
41. Infection Control and Hospital Epidemiology (April 2019)
42. Annals of Pharmacotherapy (May 2019)
43. Infection Control and Hospital Epidemiology (January 2020)
44. Infection Control and Hospital Epidemiology (April 2020)
45. Annals of Pharmacotherapy (April 2020)
46. Infection Control and Hospital Epidemiology (July 2020)
47. Annals of Pharmacotherapy (July 2020)
48. Infection Control and Hospital Epidemiology (August 2020)
49. PLOS ONE (November 2020)
50. Annals of Pharmacotherapy (December 2020)
51. Infection Control and Hospital Epidemiology (February 2021)
52. Infection Control and Hospital Epidemiology (April 2021)
53. Annals of Pharmacotherapy (May 2021)
54. Journal of the American College of Clinical Pharmacy (June 2021)

PRESENTATIONS (Selected Since 2000):

1. Allergic Rhinitis. Presented to:
 - a. Alachua County Physicians, Gainesville, Florida (May 2002)
2. Pharmacologic Treatment of Obesity. Presented to:
 - a. Gainesville Office Nurses Association, Gainesville, Florida (February 2001)
3. Antibiotic Resistance. Presented to:
 - a. Medical Therapeutics (BMS 5473), Gainesville, Florida (April 2001)
 - b. Grand Rounds (invited) Student Health Care Center, University of Florida

4. Pharmacology Case Conference: Noon Conference, University of Florida, Family Practice Residency Program, Gainesville, Florida (February 1996-present).
5. Pharmacist - Assisted Infectious Disease Consult Service: Outcome Analysis
 - a. Mountain Area Health Education Center, Asheville, North Carolina (March 2000)
6. Antimicrobial Resistance in the New Millennium: Bugs vs. Drugs
 - a. York Hospital, York, Pennsylvania (January 2000)
 - b. St. Joseph's Hospital, Marshfield, Wisconsin (February 2000)
 - c. St. Francis Medical Center, Peoria, Illinois (February 2000)
 - d. Our Lady of Lourdes Medical Center, Camden, New Jersey (May 2000)
 - e. Community Hospital, Munster, Indiana (July, 2000)
 - f. Pinnacle Health Systems-Harrisburg Hospital, Lancaster, Pennsylvania (July 2000)
 - g. Pinnacle Health Systems-Polyclinic Hospital, Lancaster, Pennsylvania (July 2000)
 - h. Northeast Medical Center, Humble, Texas (August 2000)
 - i. Jackson-Madison County, Jackson, Tennessee (September 2000)
 - j. Broward General Medical Center, Ft. Lauderdale, Florida (November 2000)
 - k. Baptist Hospital, Miami, Florida (March 2001)
 - l. South Miami Hospital, South Miami, Florida (March 2001)
 - m. Huntsville Hospital, Huntsville, Alabama (May 2001)
 - n. Sacred Heart, Pensacola, Florida (May 2001)
 - o. University of Alabama, Huntsville, Alabama (June 2001)
 - p. Integris Health System, Oklahoma City, Oklahoma (October 2001)
 - q. American Society of Health System Pharmacists, New Orleans, LA (December 2001)
 - r. Orlando Regional Health Care, Grand Rounds, Orlando, Florida (January 2002)
 - s. Bayfront Family Practice Residency, Tampa, Florida (May 2002)
 - t. Good Samaritan/St. Mary's, West Palm Beach, Florida (June 2002)
 - u. Georgia Society of Hospital Pharmacists, Amelia Island, Florida (July 2002)
 - v. Florida Society of Health-Care Pharmacists, Orlando, Florida (August 2002)
 - w. University of Alabama Birmingham, Birmingham, Alabama (September 2002)
 - x. Northeast Florida Society of Hospital Pharmacists, Jacksonville, Florida (October 2002)
 - y. 14th Annual Deaconess Hospital Fall Symposium, Oklahoma City, Oklahoma (October 2002)
 - z. University of Florida, Shands at Jacksonville Hospital, Noon Conference, Jacksonville, Florida (October 2002)
 - aa. Tallahassee Memorial Hospital, Medicine Staff Noon Conference, Tallahassee, Florida (December 2002)
 - bb. Hospital Auxilio Muto, Hato Rey, Puerto Rico (April 2003)
 - cc. Hospital Dr. Perea, Mayaguet, Puerto Rico (April 2003)
 - dd. Florida Academy of Family Physicians, Orlando, Florida (July 2003)
7. Low-Molecular Heparins:
 - a. NE Society of Health-System Pharmacists, Jacksonville, Florida (April 2001)
 - b. Eastern Shores Pharmaceutical Association, Ormond Beach, Florida (February 2002)
 - c. Palm Beach County Pharmacy Association, West Palm Beach, Florida (May 2003)
 - d. Florida Society of Health-System Pharmacist, Orlando, Florida (August 2003)
 - e. Primary Care Update, University of Florida (May 2004)

8. Strategies for Controlling and Preventing Antimicrobial Resistance:
 - a. American Society of Health-System Pharmacists Annual Meeting, Philadelphia, PA (June 6, 2000)

9. Antimicrobial Resistance: Focus on Gram-negative organisms.
 - a. CME Symposium Tampa General Hospital, Tampa Florida (April 2001);
 - b. Marion County Pharmacy Association, Ocala, Florida (April 2001);
 - c. Georgia Osteopathic Medical Association, Amelia Island, Florida (June 2001)
 - d. Georgia Society of Health-System Pharmacists, Amelia Island, Florida (July 2002)

10. Hypertension Management:
 - a. Shands OB/GYN Grand Rounds, Gainesville, Florida (April 2002)

11. Antimicrobial Resistance Management (A.R.M.)
 - a. North Central Florida Society of Health-System Pharmacists, Gainesville, Florida (April 2002)
 - b. Virginia Beach General Hospital, Medicine Grand Rounds, Virginia Beach, Virginia (October 2002)
 - c. 4th International Symposium Perspectives in Clinical Microbiology and Infections, ESCMID, Venice, Italy (January 2003)
 - d. San Juan Local Hospitals, San Juan, Puerto Rico (March 2003)
 - e. Tift Regional Hospital, Tifton, Georgia (March 2003)
 - f. University of Florida, College of Medicine, Grand Rounds, Gainesville, Florida (March 2003).
 - g. University of Florida, College of Medicine, Pediatric Grand Rounds, Gainesville, Florida (May 2003)
 - h. Hospital Auxilio Muto, Hato Rey, PR (August 2003)
 - i. Hospital Interamericano do Medicina Avanzada, Caguas, PR (August 2003)
 - j. Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) 43rd Annual Meeting, Chicago, Illinois (September 2003)
 - k. Providence Portland Medical Center, Portland, OR (September 2003)
 - l. Providence St. Vincent Medical Center, Portland OR (September 2003)
 - m. Valley Hospital (ValleyHealth System), Las Vegas, NV (September 2003)
 - n. South Carolina Society of Health-System Pharmacists (SCHSP) Annual Meeting, Greenville, SC (October 2003)
 - o. Jackson Memorial Hospital, Miami, FL (February 2004)
 - p. Hospital Corporation of America Regional Pharmacy Meeting, Dallas, TX (May 2004)
 - q. Hospital Corporation of America Regional Pharmacy Meeting, Phoenix, AZ, (May 2004)
 - r. Eastern Virginia Medical School, Norfolk, VA (May 2004)
 - s. Lexington Medical Society, Lexington, SC (June 2004)
 - t. Florida Public Health Association, Orlando, FL (July 2004)
 - u. Federal Pharmacy Association, Jacksonville, FL (July 2004)
 - v. Strong Memorial Hospital at University of Rochester, Rochester, NY (September 2004)
 - w. University Medical Center Grand Rounds, Las Vegas, NV (October 2004)
 - x. American College of Emergency Physicians (ACEP) National Meeting, San Francisco, CA (October 2004)
 - y. Presbyterian Hospital, Charlotte, NC (November 2004)
 - z. Montgomery Regional Hospital, Blacksburg, VA (June 2005)
 - aa. VHA Hospital System (East Region) Philadelphia, PA (September 2005)

- bb. Alliance Prudent Use Antibiotics (APUA), Boston, MA (October 2005)
 - cc. Medical University of South Carolina Family Practice Residency Program, Noon Conference, Charleston, SC (February 2006)
 - dd. VHA Empire State Clinical Improvement Symposium Syracuse, NY (June 2007).
 - ee. FSHP 41st Annual Meeting, Orlando, FL (August 2007)
 - ff. VHA Northeast Region, Pharmacy Directors Council; Boston, MA (August 2007)
 - gg. UF Student Health Care Center, Grand Rounds, Gainesville, FL (August 2007)
 - hh. VHA Gulfstates and SE Regions Joint Pharmacy Directors Council, Destin, FL (October 2007)
 - ii. University of Central Florida – Department of Student Health Sciences, Noon Conference, Orlando, FL (November 2007)
 - jj. Montgomery Regional Hospital, Blacksburg, VA (November 2007)
 - kk. Dartmouth University Medical Center, Grand Rounds, Lebanon, NH (November 2007)
 - ll. University of Florida, Grand Rounds, Division of Dermatology & Cutaneous Surgery, Gainesville, FL (April 2008)
12. Primary Care: From Education to Legislation
- a. 2002 Francis S. Balassone Memorial Lecture, University of Maryland, Baltimore, Maryland (November 2002)
13. VTE Prophylaxis in the Medically Ill Patient
- a. Noon Conference, Family Practice Residency Program at the University of Florida, Gainesville, FL (August 2005)
 - b. VHA Hospital Corporation. SE Region Pharmacy Director's Meeting (February 2007)
 - c. Cleveland Clinic Hospital, Cleveland, OH (January 2008)
 - d. Florida Hospital Pharmacy Association, SW Florida Seminar Series, Tampa, FL (March 2008)
 - e. Primary Care Symposium, University of Florida, Gainesville, FL (April 2008)
 - f. Orlando Regional Hospital, Orlando, FL (January 2010)
 - g. St. Joseph's Hospital, Savannah, GA (February 2010)
 - h. LSU Health Science Center, Shreveport, LA (February 2010)
 - i. Columbia Hospital, New York, NY (February 2010)
 - j. Banner Health System, Phoenix, AZ (February 2010)
 - k. University of Arkansas, Little Rock, AK (April 2010)
 - l. Primary Care Symposium, Gainesville, FL (April 2010)
 - m. University of Arizona, Tucson, AZ (May 2010)
 - n. St. Joseph's Hospital, Detroit, MI (May 2010)
 - o. Atlanta Academy of Institutional Pharmacists, Atlanta, GA (October 2010)
14. Hormone Contraception Update 2006
- a. Florida Hospital Celebration Health (October 2006)
15. State of Infectious Disease in Florida
- a. Florida Department of Health (FDOH) Annual Statewide Epidemiology Seminar. Tampa, FL (November 2006)
16. Implementing Clinical Pharmacy Services in Austria
- a. Series of lectures to Austrian Pharmacy Association (invited). Rust, Austria (October 2007)

- b. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (October 2008)
 - c. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (August 2010)
 - d. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (August 2011)
 - e. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (August 2012)
 - f. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (August 2013)
 - g. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (August 2014)
 - h. Series of lectures to Austrian Pharmacy Association (invited), Vienna, Austria (September 2015)
17. Update on Family Medicine Research-Keynote Lecture
- a. 9th Annual Research Achievement Symposium, University of Iowa, Division of Clinical and Administrative Pharmacy, Iowa City, IA (invited) (April 2008)
18. Understanding Bugs and Drugs: The Journey to Antibiotic Stewardship
- a. CME National Teleconference, VHA Hospital Corporation (July 2008)
 - b. University of Florida Family Medicine Residency Program, Didactics, (May 2014).
19. Overview of Treatment Options in Atrial Fibrillation
- a. Tallahassee Memorial Hospital, Tallahassee, FL (October 2010)
 - b. Ocala Regional Hospital, Ocala, FL (November 2010)
 - c. Auburn University, Auburn, AL (November 2010)
 - d. St. Joseph's Hospital, Savannah, GA (December 2010)
20. Infectious Disease 101
- a. Noon Conference – Family Medicine Residency Program, UF (November 2010)
 - b. Noon Conference – Family Medicine Residency Program, UF (December 2010)
21. Anticoagulant Treatment Options for the Prevention of Stroke in Patients with Atrial Fibrillation
- a. Delray Medical Center; CME Lecture to Medical Staff, Delray Beach, FL (invited) (December 2011)
22. Update on the New Oral Anticoagulants
- a. Department of Community Health and Family Medicine, University of Florida (July 2013).
23. Atrial Fibrillation: Update on Disease State and Therapeutic Options for the prophylaxis of Stroke.
- a. Department of Translational Research, University of Florida (October 2013)
24. Diabetes
- a. Orientation, Family Medicine Residency Program, UF (July 2013)
25. Hypertension I
- a. Orientation, Family Medicine Residency Program, UF (July 2013)

26. Hypertension II & Lipids
 - a. Orientation, Family Medicine Residency Program, UF (July2013)
27. Birth Control Pills
 - a. Orientation, Family Medicine Residency Program, UF (July2013)
 - b. Noon Conference (invited) Family Medicine Residency Program, UF (March2016)
28. Antibiotics
 - a. Orientation, Family Medicine Residency Program, UF (July 2013)
 - b. Orientation, Family Medicine Residency Program, UF (July 2014)
29. Drugs and the Elderly
 - a. Didactic Wednesday – Family Medicine Residency Program, UF (March2014)
30. 3rd International Cardiovascular Conference, April 2015, Riyadh, SaudiaArabia
 - a. Stroke Presentation in Non-Valvular Atrial Fibrillation
 - b. Customizing the Treatment of Hypertension
 - c. Rate vs. Rhythm Treatment Options: A Review
31. Antimicrobial Resistance: Implications for the Primary Care Provider.
 - a. Student Health Care Center Grand Rounds, University of Florida (June2016)
32. Interviewing Preparing and Skill Development Mid-Year Prep Workshop
 - a. Univeristy of Florida, College of Pharmacy (November 2020)

RESEARCH:

1. The Relationship of Serum Amino Acids to Mood States in Malnourished Patients.
Conducted in cooperation with Dr. Julian McGill of the Medicinal Chemistry Department at the Medical University of South Carolina. (Co-Investigator) Conducted from January 1983 through May 1984. Internal Funding Provided.
2. The Effect of Magnesium and Potassium Serum Concentrations on Cardiac Function: The Role of Spironolactone. December 1982 through May 1985. (Principal Investigator) Internal Funding Provided. Conducted at Department of Family Medicine, Medical University of South Carolina.
3. The Effect of Maxzide (triamterene-hydrochlorothiazide) on Blood Lipids.
(Co-Investigator) Conducted from April 1985 through May 1986.
4. The Determination of Magnesium Concentrations in Platelets, Granulocytes, and Lymphocytes. (Co-Investigator) Conducted from December 1982 through May 1985.
5. Comparison of Generic and Brand-Name 1-Thyroxine Tablets. (Co-Investigator)
Conducted at the Department of Family Practice Medical Group, Inc., Gainesville, Florida. Funding provided by Daniels Pharmaceutical (\$45,000). Conducted from January 1986 through October 1986.
6. Evaluation of the Safety of Betacor in Mild-to-Moderate Hypertension. (Co-Investigator)
(Completed March 1986) Conducted at the Department of Family Practice Medical Group, Inc., Gainesville, Florida. Funding provided by Ayerst Laboratories (\$53,000).

7. The Treatment of Type I Diabetics with a Combination of Diabeta and Insulin. (Principal Investigator) Conducted at the Department of Family Practice, University of Florida. Funding provided by Hoechst-Roussel Pharmaceuticals (\$45,000) (June 1987 - May 1988).
8. Comparison of Safety and Efficacy of Lomefloxacin and Norfloxacin in the Treatment of Uncomplicated Urinary Tract Infections. (Principal Investigator) Conducted at the Department of Family Practice, University of Florida. Funding provided by Searle Pharmaceuticals (\$33,000) (October 1988 - December 1989).
9. A Two-Month, Double-Blind Study of the Safety and Efficacy of Intranasal DDAVP (Vasopressin in the Treatment of Elderly Patients with Nocturnal Urinary Frequency. (Co-Investigator) Funding provided by Rorer Pharmaceuticals (up to \$70,000) (May 1989 - March 1990).
10. Cefuroxime Axetil in Various Bacterial Infections. Funding provided by Eli Lilly Pharmaceuticals (\$25,780) (April 1989 - December 1989).
11. Randomized, Comparative Evaluation of Low-Dose Glyburide Versus Low-Dose Glipizide in the Treatment of Elderly Patients with Non-Insulin Dependent Diabetes Mellitus. (Principal Investigator) Funding provided by Hoechst-Roussel Pharmaceuticals (\$19,800) (May 1990 - June 1992).
12. A Randomized, Clinical Trial Comparing Monopril versus Procardia XL in Older, Overweight Patients with Mild Hypertension. (Co-Principal Investigator) Funding provided by Bristol-Myers Squibb (July 1992 - April 1993).
13. A Double- Blind, Placebo-Controlled Dose Titration Study of the Safety and Efficacy of Dilacor XR in Elderly Patients with Mild to Moderate Hypertension. (Co-Principal Investigator) Funding provided by Rhone-Poulenc Rorer (July 1992 - April 1993).
14. Pharmacy Intervention in a Antibiotic Prescribing Service: Outcome Analysis. (Principal Investigator) Funding provided by Roche (\$75,000) (July 1994 - February 1996).
15. Losartan Intervention for Endpoint Reduction in Hypertension (LIFE Study). (Co-Principal Investigator) Funding provided by Merck (\$40,968) (December 1995 - 2001).
16. A Multi-Center, Prospective, Randomized, Single-Blind, Parallel Group Comparison of the Clotrimazole 1-day and Clotrimazole 3-day regimens. (Co-Principal Investigator) Funding provided by Bayer (\$17,000) (January 1996 - November 1996).
17. The Hypertension Optimal Treatment (HOT) Study. (Principal Investigator) Funding provided by Astra-Merck (\$60,000) (October 1993 – October 1997).
18. Accupril Titration Interval Management Evaluation. (A-TIME) Protocol #253-96. (Co-Principal Investigator) Funding provided by Parke-Davis (October 1996 - January 1998)
19. A Randomized, Double-blind, Placebo-controlled, Multi-center Study Measuring the effects of CI-991 Non-insulin Dependent Diabetes Mellitus (NIDDM) patients requiring insulin: Protocol 991- 084. (Co-Principal Investigator) Funding provided by Parke-Davis (\$11,400.00) (October 1996 – March 1998).

20. A Multi-center, Open-Label 12 Week Prospective Study to Evaluate the Effectiveness and Tolerability of LEXXEL in Hypertensive Patients Participating in the General Registry Program who have not Adequately Responded to Angiotensin-Converting Enzyme Inhibitor Monotherapy. (Co-Principal Investigator), Astra Merck, Inc. (\$22,500.00) (July 1997 - August 1999).
21. A Multi-center, Double-Blind, 12 Week Randomized, Parallel Group, Comparative Study to Evaluate the Efficacy and Tolerability of LEXXEL versus Lisinopril 20 mg in Hypertensive Patients who have not Adequately Responded to Lisinopril 10 mg Monotherapy. (Co-Principal Investigator), Astra Merck Inc. (\$6,000.00) (July 1997 – August 1999).
22. A Randomized Double-Blind Placebo-Controlled Multicenter Study Measuring the Effects of Glyburide with the Addition of Troglitazone on Achieving Glycemic Control in Type II (Noninsulin Dependent) Diabetes Mellitus (NIDDM) Patients (Protocol 991-085). (Co-Principal Investigator), Parke-Davis (\$15,200.00) (July 1997 - October 1999).
23. A Double-Blind, Placebo-Controlled, Randomized Study of the Safety and Efficacy of a Combination of Metformin and 30 mg Pioglitazone in the Treatment of Patients with Non-Insulin Dependent Diabetes Mellitus (NIDDM). (Co-Principal Investigator), Takeda America, Inc., (\$47,520.00) (August 1997 - July 1999)
24. A Double-Blind, Placebo-Controlled, Randomized Study of the Safety and Efficacy of a Combination of Sulfonylurea and Two Doses of Pioglitazone (15 or 30 mg) in the Treatment of Patients with Non-Insulin Dependent Diabetes Mellitus (NIDDM), (Co-Principal Investigator), Takeda America, Inc., (\$ 47,520.00) (August 1997 - July 1999).
25. A Multi-center, 24-week, Double-Blind, Randomized, Placebo-Controlled, Parallel Group Study to Reduce Insulin Injection Frequency to Once Daily (QD) With The Addition of Troglitazone (CI-991) in Type 2 Diabetes Mellitus Patients. (Co-Principal Investigator). Parke-Davis. (\$38,625.00). (March 1998 - September 1999).
26. A randomized, Double-Blind, Multi-Center Trial Comparing the Safety and Efficacy of Troglitazone vs. Metformin as Monotherapy in Subjects with Type 2 Diabetes Mellitus. (Co-Principal Investigator). Parke-Davis. (\$32,400) (2001)
27. A Randomized, Double-Blind Placebo Controlled, Multi-center, Long-Term Trial of Preventing Hypertension Using Candesartan Cilexetil 16 mg in Patients with High Normal Blood Pressure (TROPHY: Trial of Preventing Hypertension) (Protocol#197). (Co-investigator). Astra Pharmaceuticals. (\$33,000) (December 1999 – June 2005)
28. Clinical Protocol for Successive Celecoxib Efficacy and Safety Studies in Osteoarthritis (SUCCESS-1) (Protocol #149-98-02-096). (Co-Investigator). Searle. (\$7,776). February 1999 - January 2000)
29. Double-Blind, Active-Controlled Study of the Efficacy and Safety of Oral HMR 3647 (800 mg once daily) 5 Days versus 7 Days versus 10 Days Oral Clarithromycin (300 mg twice daily) in the Treatment of Community-Acquired Pneumonia (Protocol# HMR3647A/4003). (Sub-Investigator). (Hoechst-Marion Roussel). (\$43,500) (January 2000-June 2001)

30. Repaglinide vs. Pioglitazone vs. the Combination in Type 2 Diabetes Patients: A 24-Week, Randomized, Controlled Multicenter Trial. (Protocol #AGREE-2064), Sub-Investigator), (Novo-Nordisk), (\$36,000) (2001)
31. A Double-Blind, Randomized Study of the Safety and Efficacy of a Combination of Insulin and 45 mg of ACTOS (Pioglitazone) Compared to a Combination of Insulin and 30 mg ACTOS (Pioglitazone) in the Treatment of Patients with Type 2 (Non-Insulin Dependent) Diabetes Mellitus. (Protocol #AD-4833/PNFP 343). (Sub-Investigator), (Takeda).(\$42,000) (February 2000-June 2001)
32. A Multi-Center, Randomized, Double-Blind, Placebo-Controlled and Open-Label Evaluation of the Safety and Efficacy of Dual Therapy with Atorvastatin Plus Amlodipine When Compared To Either Therapy Alone in the Treatment of Patients with Simultaneous Hyperlipidemia and Hypertension (The Avalon Study) (Sub-Investigator) (Pfizer) (\$42,000). April 2001-November 2004.
33. Omipatrilat Cardiovascular Treatment Assessment Versus Enalapril (OCTAVE), Protocol #: CV137-120 (Sub-Investigator) (Bristol-Myers Squibb) (\$9,000.00) November 2000-September 2001
34. A Double-Blind, Randomized, Placebo-Controlled Surveillance Study of Asthma Event Outcomes in Subjects Receiving Either Usual Pharmacotherapy of Asthma or Usual Pharmacotherapy plus Salmeterol 42 MCG (2 Puffs) Twice Daily. (Sub-Investigator) (Glaxo-Wellcome). (\$2400.00) April 2000-2003.
35. Double-Blind, Placebo-Controlled, Randomized Six Week Comparison Study of the Efficacy of Valdecoxib 20 MG QD and Rofecosib 25 MG QD in Relieving the Signs and Symptoms of Osteoarthritis of the Knee (Protocol 872-IFL-0513-004). (Sub-Investigator). (Lilly Icos) (\$48,518.00) (December 2001).
36. A Multi-National, Prospective, Randomized, Double-Blind, Multi-Center, Placebo-Controlled Study to Evaluate Efficacy and Safety of a Fixed Combination Therapy of Amlodipine and Atrovastatin in the Treatment of Concurrent Hypertension and Hyperlipidemia. The Respond Trial. (Protocol A3841003). (Sub-Investigator) (Pfizer). (\$40,310.00). (March 2002).
37. Clinical Protocol for a Multi-Center, Double-Blind, Placebo-Controlled, Randomized, Parallel Group Study in the U.S. to Compare the Efficacy and Tolerability of Valecoxib Vs. Tramadol in Treatment of Acute Ankle Sprains. (Protocol 872-IFL-0513-008). (Sub-Investigator). (Pharmacia) (\$12,000.00). (February 2002 – June 2003).
38. Clinical Protocol For A Double-Blind, Placebo Controlled, Randomized Two Week Comparison Study Of The Efficacy And Tolerability Of Valdecoxib 10MG QD And Rofecoxib 25MG QD In Relieving The Signs And Symptoms Of Osteoarthritis Of The Knee. (Protocol VALA-0513-142). (Sub-Investigator). (Pharmacia). (\$27,000). (May2002).
39. Chronic Pain Management: The Effects of Including a Pain Self-Assessment in the Patient's Medical Chart. 2002 Summer NIH Research Program for Pharmacy Students (Mentor)
40. American Federation for Aging Research: Merck/AFAR Research Scholarship in Geriatric Pharmacology (Mentor) (\$3,500) (April 2002).

41. A Multi-Center, Randomized, Investigator-Blind, Parallel group study designed to evaluate the safety and clinical equivalence of Clay-Park Labs Inc.'s Terconazole Vaginal Suppositories, 80 mg and Terazol[®] 3 (Terconazole) Vaginal Suppositories 80 mg (Ortho-McNeil Pharmaceutical, Inc.) in the treatment of Vulvovaginal Candidiasis (Moniliasis) Caused by Candida Species. (Protocol CPL-202). (Clay-Park Labs, Inc.) (\$49,600). (November 2002 – December 2003).
42. A Multi-Center, Double-Blind, Randomized, Parallel Groups, Placebo-Controlled Study to Assess the Efficacy and Safety of Fexafenadine 120 mg BID in Subjects With Mild to Moderate Persistent Asthma. (Protocol M016455P/3002) (Sub-Investigator) (Aventis) (\$10,000) (September 2002-2003.)
43. An Open-Label Study to Evaluate the Efficacy and Safety of Tadalafil administered "On Demand" to Men of Various Populations with Erectile Dysfunction. (Protocol H6D-MC-LVFN) (Sub-Investigator) (Lilly Icos) (\$52,013) (July 2003-June 2004)
44. A 24 Week, Placebo-Controlled, Randomized, Parallel Group Study Comparing Roflumilast 500 mcg Daily vs. Placebo on Pulmonary Function and Respiratory Symptoms in Patients with Chronic Obstructive Pulmonary Disease (COPD). (Protocol PDEACO-9287-001) (Sub-Investigator) (Pfizer) (\$24,651) (March 2004 – June 2004)
45. A Multi-Center, Randomized, Double-Blind, Active Controlled Study to Compare the Effect of 52 Weeks Treatment with LAF237 50 mg BID to Metformin Up to 1000 mg BID in Drug Naïve patients with Type 2 Diabetes. (Protocol CLAF237A2309) (Sub-Investigator) (Novartis) (\$24,651) (March 2004 – June 2005)
46. A Randomized, Double-Blind, Parallel-Group, Multi-center Study to Compare Clinical Health Outcomes of Telithromycin versus Azithromycin in Outpatients with Community-Acquired Lower Respiratory Tract Infections (KEYS). (Protocol HMR3647A/4019) (Sub-Investigator) (Aventis) (\$22,000) (February 2005 – December 2006)
47. A Double-Blind, Randomized, Placebo and Active Controlled, Forced Titration Study Evaluating the Effects of Nebivolol on Blood Pressure and Heart Rate in African American Patients with Hypertension, (Protocol NEB-310) (Sub-Investigator) (Mylan Bertek Pharmaceuticals) (\$28,500) (2007)
48. A 52 week extension to a multicenter, randomized, double-blind, active controlled study to compare the effect of 52 weeks treatment with LAF237 50 mg bid to metformin up to 1000 mg bid in drug naïve patients with type 2 diabetes. (Protocol CLAF237A2309E1) (Sub-Investigator) (Novartis) (\$3,662.00) (June 2005 – December 2006)
49. A randomized, double-blind, placebo-controlled, parallel-group, multicenter study comparing an eight-week treatment of aliskiren 75 mg, 150 mg and 300 mg to placebo in patients with essential hypertension. (Protocol CSPP100A2328) (Sub-Investigator) (Novartis) (\$25,284.00) (September 2005 – December 2006)
50. A Multicenter, Randomized, Double-Blind, Active Controlled Study to Compare the Effect of 24 Weeks Treatment with Vildagliptin 100 mg QD or Metformin 1500 mg QD in Elderly Drug Naïve Patients with Type 2 Diabetes (Protocol CLAF 237A2398) (Sub-Investigator) (Novartis) (\$6,327.00) (December 2006 – December 2008)
51. Pharmacogenomic Evaluation of Antihypertensive Responses, PEAR, National Institute of

- Health (Protocol U01 GM074492) (\$1,037,710.00) (Investigator) (August 2005 – July 2010).
52. Carter BL, Ardery G, James PA, **Gums JG**, et.al. “Collaboration Among Pharmacists and Physicians To Improve Outcomes NOW (CAPTION) Study”, Funded by the NIH RO1 HL091841 (November 2008-Present).
CCC: Direct Costs: \$4,186,114 Total Costs: \$5,475,591
DCC: Direct Costs: \$2,552,342 Total Costs: \$3,820,932
Total: Direct Costs: \$6,738,456 Grand Total Costs: \$9,296,523
53. Smith SM, **Gums JG**, Kuo G, Carter B, Fagnan LJ, (Interdisciplinary Primary Care Research Network Study Group). Medical Office Survey on Patient Safety (SDPS) Project. Funding provided by the Agency for Healthcare Research and Quality (AHRQ). (April 2009).
54. **Gums JG**. VTE-Project.com Principal Investigator. January 2010-June 2011 (\$509,418.00) (\$404,300.00-Direct)
55. **Gums JG**. Infectious Disease Outcomes Project (iDOP). Principal Investigator, May 2009-March 2012 (\$371,700.00) (\$295,000.00-Direct)
56. Pharmacogenomic Evaluation of Antihypertensive Responses, PEAR 2, National Institute of Health (Protocol U01 GM074492-06) (Co-Investigator) (\$185,313) (August 2010-July 2011)
57. Inpatient Orthopedic Surgery Outcomes Project (TAP-OUT-034), Principal Investigator. September 2011-Present. (\$355,950.00) (\$282,500.00-Direct).
58. Pharmacogenomic Evaluation of Antihypertensive Response (PEAR 2), National Institute of Health (Protocol U01 GM074492-06). Co-Investigator (\$185,313.00) August 2011-May 2012.
59. Pharmacogenomic Evaluation of Antihypertensive Response (PEAR 2), National Institute of Health (Protocol U01 GM074492-06). Co-Investigator (\$139,541) August 2012-May 2013.
60. Carter BL, Ardery G, James PA, **Gums JG**, et.al. “Collaboration Among Pharmacists and Physicians To Improve Outcomes NOW (CAPTION) Study”, Funded by the NIH RO1 HL091841 (\$6,407.00) March 2013-February 2014.
61. Systolic Blood Pressure Intervention Trial (SPRINT). (Protocol 704,R01HL107257-01A1) (\$17,000.00). Investigator. August 2012-Present.
62. Study of Diabetic Nephropathy with Atrasentan (SONAR). AbbVie, Co-Investigator (\$338,673) November 2013-2019.
63. A Randomized, Multicenter, Double-Blind, Placebo-Controlled, Parallel-Group, 24-Week Pilot Study to Assess the Efficacy, Safety, and Tolerability of LCQ908 in Patients with Non-Alcoholic Fatty Liver Disease. Sub-Investigator. Novartis.
64. Pharmacogenomic Evaluation of Antihypertensive Response (PEAR 2), National Institute of Health (Protocol U01 GM074492-06). Co-Investigator (\$139,541) July 2013-June 2014. \$87,900 (\$60,000-Direct; \$27,900-Indirect)
65. Study of Diabetic Nephropathy with Atrasentan (SONAR). AbbVie, Investigator (\$234,450) November 2013-2016.

66. MEDication Focused Outpatient Care for Underutilization of Secondary Prevention (MED-FOCUS). NIH/NHLBI 1 R18 HL 116259-01 (Carter & Coffey)04/01/2014-03/31/2019. \$1,454,013 (Direct); \$733,387 (Indirect) Site Investigator.
67. MEDication Focused Outpatient Care for Underutilization of Secondary Prevention. Subaward Agreement. Gums JG. (UF Principal Investigator) April 2014-March 2015. \$16,660 (\$11,140 direct). Prime Award #: 1 R18 HL116259-01A1 NIH Carter, Barry (University of Iowa).
68. Dose-finding of semaglutide administered subcutaneously once daily versus placebo and liraglutide in subjects with type 2 diabetes. Trial ID: NN9535-4191. Novo Nordisk. (\$35,769.60) (Sub-Investigator) July 2015-April 2016.
69. MEDication Focused Outpatient Care for Underutilization of Secondary Prevention. Subaward Agreement. Gums JG (UF Principal Investigator) March 2015-June 2016. \$6,000 (\$4,000 direct). Prime Award #1R18HL116259-01A1. Carter, Barry (University of Iowa).

GRANTS:

1. Ayerst Pharmaceuticals (\$53,000.00) (July 1985).
2. Division Sponsored Research - University of Florida. New Faculty Award (\$4,550.00) (October 1986).
3. Daniels Pharmaceuticals (\$45,000.00) (October 1986).
4. Hoechst-Roussel Pharmaceuticals (\$52,000.00) (January 1987).
5. Searle Pharmaceuticals (\$33,000) (October 1988).
6. Eli Lilly Pharmaceuticals (\$25,780) (April 1989).
7. Hoechst-Roussel Pharmaceuticals (\$19,800) (May 1990).
8. Miscellaneous Donors (\$14,700) (November 1992).
9. Astra-Merck (\$27,113) (January 1994).
10. Astra-Merck (\$6,000) (March 1994).
11. DuPont Pharmaceuticals (\$1,700) (May 1994).
12. Bristol-Myers (\$1,056) (November 1994).
13. Alachua General Hospital (\$12,000) (March 1995).
14. Sandoz Pharmaceuticals (\$1,000) (August 1995)
15. Roche Pharmaceuticals (\$25,000) (September 1995).
16. Roche Pharmaceuticals (\$55,000) (January 1996).

17. Alachua General Hospital (\$30,000) (June 1996).
18. Merck (\$4,000) (October 1996).
19. Merck (\$5,000) (April 1997).
20. Alachua General Hospital (\$30,000) (July 1997).
21. Merck (\$3,500) (May 1998).
22. Roche (\$10,000) (January 2000)
23. Roche (\$50,000) (May 2001)
24. Roche (\$50,000) (June 2001)
25. Bristol-Myers Squibb (\$8,000) (June 2001)
26. Aventis Pharmaceuticals (\$62,500) (December 2001)
27. Aventis Pharmaceuticals (\$15,000) (July 2002)
28. Aventis Pharmaceuticals (\$3,000) (August 2002)
29. Roche (\$50,000) (December 2002)
30. Aventis Pharmaceuticals (\$10,000) (May 2003)
31. Roche Pharmaceuticals (\$40,000) (July 2003)
32. Roche Pharmaceuticals (\$37,000) (July 2003)
33. Roche Pharmaceuticals (\$11,000) (December 2004)
34. Roche Pharmaceuticals (\$523,000) (April 2004)
35. Wyeth Pharmaceuticals (\$5,000) (December 2004)
36. AstraZeneca Pharmaceuticals (\$102,891) (December 2005)
37. Roche Pharmaceuticals (\$50,000) (July 2007)
38. AstraZeneca Pharmaceuticals (\$114,141) (July 2007)
39. Wyeth Pharmaceuticals (\$12,500) (August 2007)
40. Schering-Plough Pharmaceuticals (\$1,500) (July 2007)
41. VHA Hospital Corporation (\$2,250) (September 2008)
42. Ortho-McNeil Janssen Pharmaceuticals (\$371,700) (July 2009)

43. Sanofi-Aventis Pharmaceuticals (\$509,418) (January 2010)
44. Janssen Pharmaceuticals (\$355,950) (September 2011)
45. Pfizer Pharmaceuticals (Vaccines) (\$19,127.00) (October 2021)

POST-DOCTORAL FELLOWS:

1. Preceptor - Post-Doctoral Fellow, Department of Family Medicine/PharmacyPractice.
 - a. Gelcys Montes de Oca, Pharm.D. (July 1987 - June 1988).
 - b. Hilary A. Skluth, Pharm.D. (July 1988 - June 1989).
 - c. Aixa M. Rey, Pharm.D. (July 1989 - June 1991).
 - d. Anne C. Wells, Pharm.D. (July 1991 - June 1992).
 - e. Michelle A. Goode, Pharm.D. (July 1992 - June 1993).
 - f. Vickie M. Wilt, Pharm.D. (July 1993 - June 1995).
 - g. Carol A. McKenna, Pharm.D. (July 1994 - June 1995).
 - h. Jacintha S. Cauffield, Pharm.D. (July 1995 - June 1997).
 - i. Jerry D. Smith, Pharm.D. (July 1996 – June 1998).
 - j. Jim Lewis, Pharm.D. (July 1996 – June 1998).
 - k. Billie Nyugen, Pharm.D. (July 1997 - June 1999).
 - l. Chris Terpening, Pharm D., Ph.D. (July 1999-June 2001).
 - m. John Tovar, Pharm.D. (July 2002 – June 2004)
 - n. Benjamin J. Epstein, Pharm.D. (July 2004 – June 2006)
 - o. Shawn Anderson, Pharm.D. (July 2006 – June 2008)
 - p. Steve M. Smith, Pharm.D. (July 2008 – 2011)
 - q. Patricia Sealy, Pharm.D., Ph.D. (July 2011-September 2011)
University of the West Indies
 - r. Eric Dietrich, Pharm.D. (July 2011-June 2013)
 - s. Nicholas Carris, Pharm.D. (July 2013-June 2015)
 - t. Andrew Hwang, Pharm.D. (July 2015-June 2017)
 - u. Scott Garland, Pharm.D. (July 2017-June 2019)
 - v. Christopher Piszczatoski, Pharm.D. (July 2019-June 2021)
 - w. Christie Monahan, PharmD (July 2021-present)

(Revised July 2021)