
CURRICULUM VITAE

Updated: **February, 2012**

NAME: **John Seth Markowitz, Pharm.D.**

OFFICE ADDRESS: University of Florida College of Pharmacy
Department of Pharmacotherapy and Translational Research
PO Box 100486
1600 SW Archer Road, Room PG-23 (overnight)
Gainesville, FL 32610-0486
e-mail: jmarkowitz@cop.ufl.edu

Page | 1

PHARMACY LICENSURE: SC# 008171 (active), TN # C007994, MS # T-8180

EDUCATION AND TRAINING

Undergraduate

Memphis State University, Memphis, Tennessee
Bachelor of Science in Biology, December, 1984

Graduate

University of Tennessee College of Pharmacy, Memphis, Tennessee
Doctor of Pharmacy (Pharm.D) June, 1990

Residency

University of Tennessee College of Pharmacy, Memphis, Tennessee
Certificate, Residency in Psychiatric Pharmacy (ASHP accredited) July, 1991

Board Certification

Board Certified in Psychiatric Pharmacy (BCPP) # 496267, 1997, 2004 (re-exam) 2011 (re-exam); Credentialed by the Board of Pharmaceutical Specialties (BPS)

PROFESSIONAL EXPERIENCE

August 2009 - present

Professor, University of Florida College of Pharmacy
Gainesville, Florida
Dept of Pharmacotherapy and Translational Research
Center for Pharmacogenomics (Core Faculty)
Center for Drug Interaction Research & Education
(Member)
Center for Addiction Research & Education (Member)
(Department of Psychiatry)

July 2001 - August 2009

Associate Professor – Dual appointment
Dept of Pharmaceutical & Biomedical Sciences (primary)
and Psychiatry & Behavioral Sciences Co-Director:
Laboratory of Drug Disposition and Pharmacogenetics
Medical University of South Carolina
Charleston, South Carolina

PROFESSIONAL EXPERIENCE Continued

March 1998 - June 2001	Assistant Professor Department of Pharmaceutical Sciences
April 1999	Clinical Coordinator Institute of Psychiatry Pharmacy Services Charleston, South Carolina
September 1997 - September 1998	Director of Pharmacy Charter Hospital of Charleston Charleston, South Carolina
May 1995 - March 1998	Clin Pharm Specialist & Clin Assist Prof Department of Pharmacy Practice The Institute of Psychiatry, MUSC Charleston, South Carolina
May 1995 - January 1997	Community Pharmacist Island Pharmacy Isle of Palms, South Carolina
September 1994 - May 1995	Clinical Pharmacist in Psychiatry Diagnostek/HPI, Tewksberry, MA Westborough State Hosp, Worcester State Hosp, & Western MA Hosp
December 1992 - September 1994	Clinical Specialist and Assistant Professor Department of Pharmacy Practice The Institute of Psychiatry, MUSC Charleston, South Carolina
July 1991 - December 1992	Director of Pharmacy Services, Parkwood Hospital Olive Branch, Mississippi
May 1992 - December 1992	Staff Pharmacist (part-time) Veterans Administration Medical Center Memphis, Tennessee
August 1991 - December 1992	Clinical Consultant for Psychotropic Medications Northeast Mental Health Center Memphis, Tennessee
September 1987 - December 1990	Pharmacy Intern/Community Pharmacist Balmoral Pharmacy, Memphis, Tennessee

FUNDED RESEARCH Last 7 Years- Industry

“Pharmacokinetics of Olanzapine After Oral Administration of Standard Tablet Versus Normal and Sublingual Administration of Orally Disintegrating Tablets (Zyprexa Zydis®) in Healthy Adults” *Eli Lilly & Co. Investigator Initiated*, January, 2004. Principal Investigator.

“The Effects of Therapeutic Doses of Probenecid on the Disposition of Risperidone (Risperdal®) and Olanzapine (Zyprexa®) in Normal Volunteers” *Janssen Pharmaceutica, Investigator Initiated*, December, 1998-2001. Principal Investigator

Page | 3

“Sumatriptan (Imitrex®) for the Treatment of Post-ECT Headache” *GlaxoWellcome, Investigator Initiated*, October, 1998-2000. Principal Investigator.

“An Assessment of Discontinuation Symptoms with Citalopram (Celexa®)” *Forrest Laboratories, Investigator Initiated*, 1999-2000. Principal Investigator

National Institutes of Health (Funded)

R21 AT00511-01: “Assessing Herb-drug Interactions” NIH National Center for Complementary and Alternative Medicine, Principal Investigator, \$365,000 total (6/01 - 6/03).

R21 AT00939-02: “*Ginkgo biloba* for ECT-induced Memory Deficits” NIH National Center for Complementary and Alternative Medicine, Principal Investigator, \$365,000 total (7/02 - 4/04).

R01 DA15797-01: “Methylphenidate-Ethanol Interaction in ADHD and Co-abuse” National Institute of Mental Health (NIMH), Co-investigator, (KS Patrick, PI) \$511,000 total (10/02-8/04)

9R01 AA016707-03A1: “Methylphenidate-Ethanol Interactions in ADHD and Coabuse” National Institute of Drug and Alcohol Abuse (NIDA), Co-investigator, (KS Patrick, PI) \$1,540,000 total 09/01/06 – 08/31/11

R21 AT002073:”Drug Interactions and Bioavailability of Cranberry” NIH National Center for Complementary and Alternative Medicine, Co-investigator, (JL Donovan, PI) \$401,500 total 12/01/03-11/30/05

R21HD047810-01: “P-Glycoprotein and Disposition of Psychostimulants” NIH National Institute of Child Health and Human Development, Principal Investigator, \$401,500 total 7/1/04-6/30/06

R21 AT002817-01: “Pharmacokinetics and Drug Interactions with Milk Thistle” NIH National Center for Complementary and Alternative Medicine, Principal Investigator, \$584,000 total (4/05 – 3/31/08).

National Institutes of Health (Currently Funded)

1R01DA022475-01A1: “Drug transporters and the disposition of ADHD therapeutic agents” National Institute of Drug and Alcohol Abuse (NIDA), Principal Investigator, \$1,350,500 total (8/07 – 06/12)

Page | 4

1R21AI096345-01: “Genetic variants of human carboxylesterase 1 influence the activation and antiviral activity of oseltamivir.” National Institute of Allergy and Infectious Diseases (NIAID) Principal Investigator, \$440,000 total (06/20/2011 – 05/31/2012)

RESEARCH GRANT APPLICATIONS RE-SUBMISSION PENDING

1R01HD072062-01: “Methylphenidate metabolism and ADRs associated with CES1 variants” NIH National Institute of Child Health and Human Development, Principal Investigator, \$3,800,00 total budget requested.

UNRESTRICTED EDUCATIONAL GRANTS

Pfizer Inc. (1997)	Alza (2001)	Parke-Davis (1999)
GlaxoWellcome (1997)	Shire (2001)	Forrest Laboratories \$40,000 per year
Zeneca (1998)	Novartis (2002)	(2002, 2003, 2004)

PROFESSIONAL AFFILIATIONS

American Society of Hospital Pharmacists
American Society for Clinical Pharmacology and Therapeutics
American College of Clinical Pharmacy
College of Psychiatric and Neurologic Pharmacists

HONORS/AWARDS

- Rho Chi (Pharmaceutical Honor Society)
- Research Productivity Award: MUSC College of Pharmacy, 1997-8
- Research Productivity Award: MUSC Department of Pharmaceutical Sciences, 1997-8
- Medical University of South Carolina Developing Scholar Award, 2001
- Decade of Service Award, MUSC, Charleston, SC 2004
- MUSC College of Pharmacy Class of 2008 “Professor of the Year” 2005-2006
- Service to NIH Review Sections & Special Emphasis Panels (page 6)

PATENTS

- # 6,245,360, issued 6/12/01 “Supplement for Treating Deficiencies Associated w/Alcohol Use”.
- # 60/942,818, “Methods and Kits For Detecting Carboxylesterase-1 Polymorphisms”.
Provisional patent filed 6/08/07.
- # MESC:031USP1 “A Novel Homolog of Methylphenidate as a Novel and Potent Therapeutic Agent for the Treatment of ADHD *Provisional patent* filed 7/20/09.
- #61477475, “Compositions and Methods for Genotyping *CES1* Genetic Variants and Use Thereof “*Provisional patent* filed 4/20/11

TEACHING EXPERIENCE

University of Florida College of Pharmacy, Gainesville, FL	2009- present
Medical University of South Carolina, Charleston, SC	1992- 2009
University of Tennessee Center for Health Sciences, Memphis, TN	1990-1991
Precept Pharm.D. students on clinical rotations.	1992-2002

COURSES TAUGHT

University of Florida

Pharmacotherapy, Course lecturer, Pharmacotherapy II (PHA 5782)	2009-
Drug Therapy Monitoring and Pharmacogenomics PHA 5113 (Co-coordinator)	2011-

Medical University of South Carolina

Precept Clinical Pharmacy residents (Psychiatric and Pharmacy Practice)	1992-2002
Provide didactic graduate student lectures in psychiatric pharmacy	1999-2004
Provide didactic lectures in Medicinal Chemistry II	2002-2007
Provide didactic lectures as part of graduate student elective <i>Rational Drug Design, Pharmacogenomics and Toxicology</i> (PHMSC 712)	2002-2009
<i>Introduction to Pharmacology and Medicinal Chemistry</i> (SCCP 620)	2006-2009
Pharmacology III: <i>CNS Agents</i> (SCCP 721)	2008-2009

DOCTORAL (Ph.D) COMMITTEES

Gloriane Schnabolk (2007 -2009)
Robin Williard (2006 - 2007)

POST DOCTORAL FELLOWS

Heidi Liston, Pharm.D. (2002-4 w/C.L. DeVane)
Haojie Zhu, Ph.D. (2005-2008)

NATIONAL COMMITTEES:

NIH: Special Emphasis Panel ZRG1 EMNR-R(56), 09/14/ 2011
NIH (NICHD) SRG Biological Testing Facility (ZHD1 DSR-K 09), 02/09/09
NIH (NCCAM) R21 Clinical Research Panel II (ZAT1-JH-14), 10/28/05. NIH (NCCAM)
Special Emphasis Panel/Scientific Review Group (ZAT1-JH-11), 6/23/05

NIH (NCCAM) Special Emphasis Panel PIRC (ZAT1-G-14), 4/13/05.
NIH (NCCAM) Special Emphasis Panel RFA AIDS (ZAT1-JH-09), 3/28/05.
Special Emphasis Panel (ZAT1-JH-07), 2/23/05.

Page | 6

NIH (NIDDK, NCCAM, NIAA) Presenter: Liver Disease subcommittee of the DDICC entitled
"Silymarin as Therapy of Liver Disease" (development of RFA) March 22, 2004
NIH (NCCAM) Special Emphasis Panel (ZAT1-JH-03), 6/21/04
NIH (NCCAM) Special Emphasis Panel (ZAT1 G 11), 2/26/04.
NIH (NCCAM) Special Emphasis Panel: Training/Education Panel (ZAT1 CP 12 1), 11/7/03
NIH (NCCAM) Special Emphasis Panel, HIV/Drug Interactions (ZAT1 DB 04 1), 6/5/02
NIH (NCCAM) Special Emphasis Panel, Basic Sciences (ZAT1 DB 03 1), 6/4/02

INTERNATIONAL COMMITTEES:

Canadian Institutes of Health Research (CIHR), External Scientific Reviewer (Ad Hoc), 12/04

NATIONAL COMMITTEES: Professional

College of Psychiatric and Neurologic Pharmacists (CPNP) Research Committee, 2005-6
College of Psychiatric and Neurologic Pharmacists (CPNP) Program Committee Chair, 2001
College of Psychiatric and Neurologic Pharmacists (CPNP) Program Committee, 2000

University of Florida Centers and Committee Affiliations and Memberships

College of Pharmacy's Center for Drug Interaction Research and Education 2011-
The Mission, Planning and Evaluation Self-Study Committee 2011 –
Admissions Committee 2011 –

Medical University of South Carolina Hospital/College Committee Service

Student Policy/Activities Committee, member, 2007-9
Honors/Awards/Scholarships Committee, member, 2007-9
General Clinical Research Center Scientific Advisory Committee- 2005
MUSC Honorary Degree Committee, member, 2005-6.
MUSC College of Pharmacy_Curriculum Committee- member, 2004
Research and Graduate Studies Committee - member, 2001-02
Assessment Committee, member, 2001-02
Scholastic Standing Committee, member, 2001-02

Medical University of South Carolina Hospital/College Committee Service (Cont..)

Appointments, Promotion & Tenure Committee - member, 2002
MUSC Pharmacy and Therapeutics (P&T) Committee-member, 1996 -2002
Pharmacy Organizational Performance Task Force -member, 1996
Clinitrend® Documentation Task Force -member, 1996
Four Year Pharm.D. Curriculum Committee # 5 -member, 1996
Committee for Development of Pharmacy Practice Plan -member, 1998
MUSC College of Pharmacy Ad Hoc Strategic Plan Committee, 1998

Data Safety Monitoring Committee Memberships

Data Safety Monitoring Board Member (MAPS Pilot Study #63,384), year 2004-5: Phase II clinical trial testing the safety and efficacy of 3,4-methylenedioxymethamphetamine (MDMA)-assisted psychotherapy in subjects with chronic post-traumatic stress disorder. (PI: M. Mithoefer)

Data Safety Monitoring Board Member (year 2006-07) A Placebo-Controlled Trial of Buspirone for Treatment of Marijuana Dependence. NIDA - sponsored. (PI: A. McRae)

Data Safety Monitoring Board Member, (year 2007-08), A Placebo-Controlled Trial of Atomoxetine for Treatment of ADHD in Marijuana Dependent Patients. NIDA - sponsored. (PI: A. McRae)

PEER-REVIEWED PUBLICATIONS

1. Patrick KS, **Markowitz JS**, Jarvi EJ, Straughn AB, Meyer MC. Gas-chromatographic mass spectrometric analysis of plasma oxybutynin using a deuterated internal standard. *J Chromatogr: Biomed Appl* 1989;487:91-98.
2. Jackson C, Carson WH, Mintzer J, **Markowitz JS**. SIADH associated with sertraline therapy. *Am J Psychiatry* 1995;152:809.
3. **Markowitz JS**, Wells BG, Carson WH. Drug-drug interactions between antipsychotics and antihypertensives. *Ann Pharmacother* 1995;29:603-9.
4. **Markowitz JS**, Patrick KS. Thermal degradation of clozapine-N-oxide to clozapine during gas chromatography. *J Chromatogr: Biomed Appl* 1995;668:171-4.
5. **Markowitz JS**, Gaulin BD, Good, MI. The significance of plasma thiothixene concentrations. *Ann Pharmacother* 1995;29:789-90.
6. Jackson C, **Markowitz JS**, Brewerton TD. Delirium associated with clozapine and benzodiazepine combinations. *Ann Clin Psychiatry* 1995;7:139-41.
7. **Markowitz JS**, Patrick KS. Neuroleptic plasma levels: practical clinical considerations. *J Pharm Practice* 1996;9:132-7.
8. Brewerton TD, **Markowitz JS**, Keller SG, Cochrane CE. Stuttering with sertraline. *J Clin Psychiatry* 1996;57:90-91.
9. Carson WH, **Markowitz JS**. Smart drugs? *Ann Clin Psychiatry* 1996;8:41-2.
10. **Markowitz JS**, Brewerton TD. Zolpidem-induced psychosis. *Ann Clin Psychiatry* 1996;8:89-91.
11. **Markowitz JS**, Jackson C. Savings on nutritional supplements administered to patients with chronic alcoholism. *Am J Health Syst Pharm* 1996;53:1336.
12. **Markowitz JS**, Patrick KS. Polypharmacy interactions. *J Am Acad Child Adolesc Psychiatry* 1996;35:842.
13. **Markowitz JS**, White R. Pharmacists as laboratory-based researchers. *J Pharm Practice* 1996;9:467-70.
14. **Markowitz JS**, Gill HS, Lavia M, DeVane CL, Brewerton TD. Fluvoxamine-clozapine dose-dependent interaction. *Can J Psychiatry* 1996;41:670-1.

15. **Markowitz JS**, Jackson CW: Use of clozapine with nonresponsive patients. *Psychiatric Services* 1996;47:1392.
16. **Markowitz JS**, Gill HS. Pharmacotherapy of dissociative identity disorder. *Ann Pharmacother* 1996, 30:1498-99.
17. Edge S, **Markowitz, JS**, DeVane CL. Drug-drug interactions with clozapine: a review of the literature. *Hum Psychopharmacol* 1997, 12:5-20.
18. Patrick KS, **Markowitz, JS**. Potential for over-estimation of clozapine concentrations. *J Anal Toxicol* 1997, 21:73-5.
19. **Markowitz JS**, Jackson C, Grinberg R. Marked liver enzyme elevations with clozapine. *J Clin Psychopharmacol* 1997;17:70-1.
20. **Markowitz JS**, Rames LJ, Thomas S, Reeves N. Zolpidem and hallucinations. *Ann Emerg Med* 1997, 29:300-1.
21. **Markowitz JS**, Morton WA, Gaulin BD. Antipsychotic blood concentrations: Nonstandardization of reference ranges. *J Clin Psychopharmacol* 1997, 17:121-4.
22. **Markowitz JS**, Myrick H, Hiott W. Clonidine dependence. *J Clin Psychopharmacol* 1997, 17:137-8.
23. **Markowitz JS**. Clozapine-fluvoxamine interaction. *Clin Neuropharmacol* 1997, 20: 281-2
24. **Markowitz JS**, Gill HS, DeVane CL, Mintzer J. Fluoroquinolone inhibition of clozapine metabolism. *Am J Psychiatry* 1997, 153:881.
25. DeVane CL, Gill HS, **Markowitz JS**, Carson WH. Awareness of potential drug interactions may aid avoidance. *Ther Drug Monit* 1997, 19:366-7.
26. **Markowitz JS**, DeVane CL. The drug interaction potential of fluoxetine, sertraline, and paroxetine in four state psychiatric hospital populations. *Ther Drug Monit* 1997,19: 244-5.
27. DeVane CL, **Markowitz JS**, Hardesty S, Mundy S, Gill HS. Fluvoxamine-induced theophylline toxicity. *Am J Psychiatry* 1997, 154: 1317-18.
28. Thierren F, **Markowitz JS**. Selective serotonin reuptake inhibitors and withdrawal symptoms: a review of the literature. *Hum Psychopharmacol* 1997, 12: 309-23.

29. Patrick KS, **Markowitz JS**. Pharmacology of methylphenidate, amphetamine enantiomers and pemoline in attention-deficit hyperactivity disorder. *Hum Psychopharmacol* 1997, 12: 527-46.
30. Gaulin BD, **Markowitz JS**, Caley C, Nesbitt LA, Dufresne RL. Clozapine-associated elevation in serum triglycerides. *Am J Psychiatry* 1999, 156:1270-2.
31. **Markowitz JS**, Patrick KS. Tramadol-venlafaxine similarities. *Medical Hypotheses* 1998, 51:167-8.
32. **Markowitz JS**, DeVane CL, Gill HS, Hunt N, Monroe R. Lack of antidepressant-cyclosporine pharmacokinetic interactions. *J Clin Psychopharmacol* 1998, 18: 91-3.
33. **Markowitz JS**, Finkenbine R, Myrick H, King L, Carson WH. Abuse of gabapentin in a cocaine abuser: Implications for treatment? *J Clin Psychopharmacol* 1997, 17: 423-4.
34. **Markowitz JS**. Selective serotonin reuptake inhibitor discontinuation with ECT and withdrawal symptoms. *J ECT* 1998, 14:55.
35. **Markowitz JS**, Carson WH, Jackson CW. Possible dihydroepiandrosterone-induced mania. *Biol Psychiatry* 1999, 45:241-2.
36. Myrick H, **Markowitz JS**, Henderson S. Priapism following trazodone overdose with cocaine use. *Ann Clin Psychiatry* 1998, 10:81-3.
37. **Markowitz JS**. Herbal drugs assuming a larger role in psychiatric care. *Drug Topics* 1998, September 7:50.
38. **Markowitz JS**, Brown CS, Moore TR. Atypical antipsychotics: Part I: Pharmacology, pharmacokinetics, and efficacy. *Ann Pharmacother* 1999;33:73-85.
39. Brown CS, **Markowitz JS**, Moore TR, Parker NG. Atypical antipsychotics Part II: Adverse effects, drug interactions, and costs. *Ann Pharmacother* 1999;33:210-17.
40. Fantz R, **Markowitz JS**, Kellner C. Sumatriptan in post-ECT headache. *J ECT* 1998;14:272.
41. Liston HL, **Markowitz JS**. Opioid drug-drug interactions. *J Pharm Practice* 1998;11:325-41.
42. **Markowitz JS**, DeVane CL. Suspected ciprofloxacin inhibition of olanzapine resulting in increased plasma concentration. *J Clin Psychopharmacol* 1999;19:289-91.

43. **Markowitz JS**, Morrison SD, DeVane CL. Psychostimulant drug interactions. *Int Clin Psychopharmacol* 1998; 14:1-18.
44. Letterman L, **Markowitz, JS**. Gabapentin : A review of published experience in the treatment of bipolar affective disorder and other psychiatric indications. *Pharmacotherapy* 1999; 19:565-72.
45. Jefferson A, **Markowitz JS**, Brewerton TD. Atypical antipsychotics. *J Am Acad Child Adolesc Psychiatry* 1998; 3:1243-4.
46. **Markowitz JS**, DeVane CL. Rifampin-induced selective serotonin reuptake withdrawal syndrome in a patient treated with sertraline. *J Clin Psychopharmacol* 2000;20:109-110.
47. **Markowitz JS**. Nefazodone withdrawal symptoms. *Can J Psychiatry* 1999;44:286-7.
48. **Markowitz JS**, Logan BK, Diamond F, Patrick KS. Detection of the novel metabolite ethylphenidate following methylphenidate overdose with alcohol co-ingestion. *J Clin Psychopharmacol* 1999;19:362-6.
49. Spollen JJ, Spollen SM, **Markowitz JS**. Psychiatric side effects of herbal medicinals. *J Pharm Practice* 1999;12:196-207.
50. **Markowitz JS**. Are alternative medicines either? *J Pharm Practice* 1999;12:170.
51. **Markowitz JS**, DeVane CL, Boulton DW, Carson SW, Nahas Z, Risch SC. Effect of St. John's wort (*Hypericum perforatum*) on cytochrome P-450 2D6 and 3A4 activity in healthy volunteers" *Life Sci* 2000;66, 133-7.
52. Chappell K, **Markowitz, JS**, Jackson C. Is valproate pharmacotherapy associated with polycystic ovaries? *Ann Pharmacother* 1999;33:1211-6.
53. DeVane CL, **Markowitz JS**, Carson SW, Boulton DW, Gill HS, Nahas Z, Risch SC. Single dose methylphenidate pharmacokinetics in CYP 2D6 extensive and poor metabolizers. *J Clin Psychopharmacol* 2000;20:347-49
54. DeVane CL, **Markowitz JS**. Avoiding psychotropic drug interactions in the cardiovascular patient. *Bull Menn Clin* 2000;64:49-59.
55. Liston H, **Markowitz JS**, DeVane CL. Glucuronidation: Implications in psychopharmacology. *J Clin Psychopharmacol* 2001;21:500-15.

56. **Markowitz JS**, DeVane CL, Boulton DW, Nahas Z, Risch SC, Diamond F, Patrick KS. Ethylphenidate formation in human subjects after the administration of a single dose of methylphenidate and alcohol. *Drug Metab Dispos* 2000;28:620-24.
57. **Markowitz JS**, McRae A, Sonne SC. Oral nutritional supplementation for the alcoholic patient: A brief review. *Ann Clin Psychiatry* 2000;12:153-8.
58. **Markowitz JS**, DeVane CL, Liston H, Montgomery S. An assessment of the potential for SSRI discontinuation syndrome with citalopram. *Int Clin Psychopharmacol* 2000;15:329-333.
59. Risch SC, McGurk S, Horner MD, Nahas Z, Owens SD, Molloy M, Gilliard C, Christie S, **Markowitz JS**, DeVane CL, Mintzer J, George MS. A double-blind placebo-controlled case study of the use of donepezil to improve cognition in schizoaffective disorder patient: Functional MRI correlates. *Neurocase* 2001;7:105-110.
60. Liebrecht K, **Markowitz JS**, Caley CF. New onset diabetes and atypical antipsychotics. *Eur Neuropsychopharmacol* 2001; 11:25-32.
61. Sannicandro TJ, Farrar MC, **Markowitz JS**. Selective serotonin reuptake inhibitor-induced rash: Case report and review of the literature. *Pharmacotherapy* 2002;22:516-8.
62. **Markowitz JS**, McLeod-Bryant S, Jackson CW. Cost savings with intramuscular anticholinergics. *J Clin Psychiatry* 2001;62:295.
63. **Markowitz JS**, DeVane CL. Attention-deficit hyperactivity disorder (ADHD) and the rise in methylphenidate use. *US Pharmacist Suppl.* November, 2000;3-11.
64. **Markowitz JS**, DeVane CL. The emerging recognition of herb-drug interactions with a focus on St. John's wort (*Hypericum Perforatum*). *Psychopharm Bull* 2001;35:53-64.
65. **Markowitz JS**, Patrick KS. Pharmacokinetic and pharmacodynamic drug interactions in children with attention-deficit/hyperactivity disorder. *Clin Pharmacokinet* 2001;40:753-72.
66. Liston, HL, DeVane CL, **Markowitz JS**. Lack of citalopram effect on the pharmacokinetics of cyclosporine. *Psychosomatics* 2001;42:370-2.
67. Liston HL, DeVane CL, Boulton DW, Risch SC, **Markowitz JS**, Goldman J. Time course inhibition of fluoxetine vs sertraline vs paroxetine in healthy volunteers. *J Clin Psychopharmacol* 2002;22:169-73.

68. DeVane CL, **Markowitz JS**, Risch SC, Liston HL. Charleston antidepressant drug interactions surveillance program (CADISP) *Psychopharm Bull* 2001;35:50-61.
69. Wagner MW, **Markowitz JS**, Patrick KS. Methylphenidate ER tablet lodging in the esophagus. *J Am Acad Child Adolesc Psychiatry* 2001;40:1244-5.
70. Boulton DW, **Markowitz JS**, DeVane CL. A high performance liquid chromatography assay with ultraviolet detection for olanzapine in human plasma and urine. *J Chromatogr B: Biomed Appl* 2001; 759: 319-323.
71. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW, Risch SC. The effects of probenecid on the disposition of risperidone and olanzapine in healthy volunteers. *Clin Pharmacol Ther* 2002;1:30-8.
72. DeVane CL, **Markowitz JS**. Avoiding psychotropic drug interactions in the cardiovascular patient. *The Economics of Neuroscience* 2001;3:68-71.
73. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW. Hypotension and bradycardia in a healthy volunteer following a single 5 mg dose of olanzapine. *J Clin Pharmacol* 2002;42:104-106.
74. DeVane CL, Liston HL, **Markowitz JS**. Clinical pharmacokinetics of sertraline. *Clin Pharmacokinet* 2002;41:1247-66.
75. **Markowitz JS**, Kellner CH, DeVane CL, Beale MD, Folk J, Burns C. Intranasal sumatriptan in post-ECT headache: Results from an open-label trial. *J ECT* 2001;17:280-3.
76. Boulton DW, DeVane CL, Liston HL, **Markowitz JS**, P-glycoprotein specificity for atypical and conventional antipsychotics as determined by their adenosine triphosphatase (ATPase) activity. *Life Sci* 2002;163-9.
77. DeVane CL, **Markowitz JS**. Psychoactive drug interactions with pharmacotherapy for diabetes. *Psychopharm Bull* 2002;36:40-52.
78. **Markowitz JS**, Patrick KS. Drug interactions with psychostimulants. *Mental Health Fitness* 2002;1:60-8.
79. Donovan JL, Malcolm RJ, **Markowitz JS**, DeVane CL. Chiral analysis of *d*- and *l*-modafinil in human serum: Application to human pharmacokinetic studies. *Ther Drug Monit* 2003;25:197-202.

80. Nahas Z, George MS, Horner MD, **Markowitz JS**, Li, X, Lorberbaum JP, Owens SD, McGurk S, DeVane CL, Risch SC. Augmenting atypical antipsychotics with a cognitive enhancer (donepezil) improves regional brain activity in schizophrenia patients: A pilot double-blind placebo controlled BOLD fMRI study. *Neurocase* 2003;9:274-82.
81. Donovan JL, DeVane CL, Chavin KD, Taylor RM, **Markowitz JS**. Siberian ginseng (*Eleutherococcus senticosus*) effects on CYP2D6 and CYP3A4 activity in normal volunteers. *Drug Metab Dispos* 2003;31:519-22.
82. **Markowitz JS**, Donovan JL, DeVane CL, Sipkes L, Chavin KD. Multiple-dose administration of *Ginkgo biloba* did not affect cytochrome P-450 2D6 or 3A4 activity in normal volunteers *J Clin Psychopharmacol* 2003;23:676-8.
83. **Markowitz JS**, Straughn AB, Patrick KS, DeVane CL, Pestreich L, Lee J, Wang Y, Muniz R. Pharmacokinetics of methylphenidate after oral administration of two modified-release formulations in healthy adults. *Clin Pharmacokinet* 2003;42:393-401.
84. Donovan JL, DeVane CL, Boulton S, Dodd S, **Markowitz JS**. Brief Communication: Dietary levels of quinine in tonic water do not inhibit *CYP2D6* in vivo. *Food Chem Toxicol* 2003;41:1199-1201.
85. **Markowitz JS**, DeVane CL, Chavin KD, Taylor RM, Ruan Y, Donovan JL. Effects of garlic (*Allium sativum L*) supplementation on cytochrome P450 2D6 and 3A4 activity in normal volunteers. *Clin Pharmacol Ther* 2003;74:170-7.
86. **Markowitz JS**, Straughn AB, Patrick, KS. Advances in the pharmacotherapy of attention-deficit hyperactivity disorder: Focus on methylphenidate formulations. *Pharmacotherapy* 2003;23(10):1281–99.
87. DeVane CL, Donovan JL, Liston HL, **Markowitz JS**, Cheng KT, Risch SC, Willard L. Comparative CYP3A4 inhibitory effects of venlafaxine, fluoxetine, sertraline, and nefazodone in healthy volunteers. *J Clin Psychopharmacol* 2004;24:4-10.
88. **Markowitz JS**, Donovan JL, DeVane CL, Taylor RM, Ruan Y, Wang J-S, Chavin KD. Effect of St. John's wort on drug metabolism by induction of cytochrome P450 3A4 enzyme. *JAMA* 2003;290:1500-4.
89. **Markowitz JS**, Donovan JL, DeVane CL, Taylor RM, Ruan Y, Wang J-S, Chavin KD. Multiple-doses of Saw Palmetto (*Serenoa repens*) did not alter CYP2D6 and CYP3A4 activity in normal volunteers. *Clin Pharmacol Ther* 2003;74:536-42.

90. Wang J-S, Taylor R, Ruan Y, Donovan JL, **Markowitz JS**, DeVane CL. Olanzapine penetration into brain is greater in transgenic Mdr1a P-glycoprotein deficient mice than FVB1 (wild type) animals. *Neuropsychopharmacology* 2004;29:551-7.
91. Wang J-S, Taylor R, Ruan Y, Donovan JL, **Markowitz JS**, DeVane CL. Brain penetration of methadone R- and S-enantiomers is greatly increased by P-glycoprotein deficiency in the blood brain barrier of Abcb1a gene knockout mice. *Psychopharmacology* 2004;173:132-8.
92. Wang J-S, Taylor R, Ruan Y, Donovan JL, **Markowitz JS**, DeVane CL. The brain entry of risperidone and 9-hydroxyrisperidone are greatly limited by P-glycoprotein. *Int J Neuropsychopharmacology* 2004;7:1-5.
93. **Markowitz JS**, Donovan JL, DeVane, CL, Chavin KD. Common herbal supplements did not produce false positive results on urine drug screens analyzed by enzyme immunoassay. *J Anal Toxicol* 2004;28:1-2.
93. Donovan JL, Chavin KD, DeVane CL, Taylor RM, Wang J-S, Ruan Y, **Markowitz JS**. Green tea (*Camellia sinensis*) supplementation does not alter cytochrome P-450 3A4 or 2D6 activity in healthy volunteers. *Drug Metab Dispos* 2004;32:906-8.
94. Christman AK, Fermo JD, **Markowitz JS**. Atomoxetine: A novel treatment for attention-deficit/hyperactivity disorder. *Pharmacotherapy* 2004;24:1020-36.
95. Donovan JL, DeVane CL, Chavin KD, Wang J-S, Gibson BB, Gefroh HA, **Markowitz JS**. Multiple nighttime doses of valerian (*Valeriana officinalis*) had minimal effects on CYP 3A4 activity and no effect on CYP 2D6 activity in healthy volunteers. *Drug Metab Dispos* 2004;32:1333-6.
96. Patrick, KS, Gonzalez MA, Straughn AB, **Markowitz JS**. New methylphenidate formulations for the treatment of Attention-Deficit/Hyperactivity Disorder. *Expert Opin Drug Delivery* 2005;2:121-43.
97. Donovan JL, DeVane, CL, Lewis, JG, Chavin KD, Wang J-S, Ruan Y, Chavin KD, **Markowitz JS**. Effects of an extract of St. John's wort (*Hypericum perforatum* L.) on plasma androgen concentrations in healthy men and women: A pilot study. *Phytotherapy Res* 2005;19:901-906.
98. Fiorini RN, Donovan J, Rodwell D, Evans Z, Cheng G, May H, Milliken CE, **Markowitz JS**, Campbell C, Haines JK, Schmidt MG, Chavin KD. Short-term administration of (-)-epigallocatechin gallate reduces hepatic steatosis and protects against warm hepatic ischemia/reperfusion injury in steatotic mice. *Liver Transplantation* 2005;11:298-308.

-
99. Wang JS, **Markowitz JS**, Donovan JL, DeVane CL. P-glycoprotein does not actively transport nicotine and cotinine. *Addiction Biology* 2005;10:127-9.
 100. **Markowitz JS**, DeVane CL, Lewis JG, Chavin KD, Wang JS, Donovan JL. The effect of a *Ginkgo biloba* extract on plasma steroid concentrations in normal volunteers: A pilot study. *Pharmacotherapy* 2005;25:1337-40.
 101. Donovan JL, DeVane CL, Chavin KD, Oates JC, Njoku C, Patrick KS, Fiorini RN, **Markowitz JS**. Oral administration of a decaffeinated green tea (*Camellia sinensis*) extract did not alter urinary 8-epi-prostaglandin F_{2α}, a biomarker for in vivo lipid peroxidation. *J Pharm Pharmacol* 2005;57:1-5.
 102. Wang J-S, DeVane CL, Gibson B, Donovan JL, **Markowitz JS**, Zhu H-J. Population pharmacokinetic analysis of drug-drug interactions among risperidone, bupropion, and sertraline in CF1 mice. *Psychopharmacology* 2006;183:490-99.
 103. **Markowitz JS**, DeVane CL, Malcolm RJ, Gefroh HA, Wang J-S, Zhu, H, Donovan JL. Pharmacokinetics of olanzapine after single dose oral administration of standard tablet versus normal and sublingual administration of an orally disintegrating tablet in normal volunteers. *J Clin Pharmacol* 2006;46:164-171.
 104. Risch SC, Horner MD, McGurk SR, Palecko S, **Markowitz JS**, Nahas Z, DeVane CL. Donepezil effects on mood in patients with schizophrenia and schizoaffective disorder. *Int J Neuropsychopharmacol* 2005;9:1-3.
 105. Zhu H-J, Wang J-S, **Markowitz JS**, Donovan JL, Gibson BB, Gefroh HA, DeVane CL. Characterization of p-glycoprotein inhibition by major cannabinoids from marijuana. *J Pharmacol Exp Ther* 2006;317:850-857.
 106. **Markowitz JS**, DeVane CL, Pestreich, LK, Patrick KS, Muniz, R.A. Comprehensive in vitro screening of *d*-, *l*- and *dl*-threo-Methylphenidate: An exploratory study. *J Child Adolesc Psychopharmacol* 2006;16:687-698.
 107. Zhu H-J, Wang J-S, DeVane CL, Williard RL, Donovan JL, Middaugh LD, Gibson BB, Patrick KS, **Markowitz JS**. The role of the polymorphic efflux transporter p-glycoprotein on the brain accumulation of *d*-methylphenidate and *d*-amphetamine. *Drug Metab Dispos* 2006;34:1116-1121.
 108. Hackman DA, Giese N, **Markowitz JS**, McLean A, Ottariano SG, Tonelli C, Weissner W, Welch S, Ulbricht, C. Agave (*Agave americana*): An evidence-based systematic review by the Natural Standard Research Collaboration. *J Herb Pharmacol* 2006;6:101-22.

109. Wang J-S, Zhu H-J, **Markowitz JS**, Donovan JL, DeVane CL. Evaluation of antipsychotic drugs as inhibitors of multidrug resistance transporter p-glycoprotein. *Psychopharmacology* 2006;187:415-23.
110. Zhu H-J, Wang J-S, **Markowitz JS**, Donovan JL, Gibson BB, DeVane CL. Risperidone and paliperidone inhibit p-glycoprotein activity *in vitro*. *Neuropsychopharmacol* 2007;32:757-64.
111. Zhu H-J, Wang J-S, Donovan JL, DeVane CL, Gibson BB, **Markowitz JS**. Sensitive quantification of atomoxetine in human plasma by HPLC with fluorescence detection using 4-(4,5-diphenyl-1H-imidazole-2-yl) benzoyl chloride derivatization. *J Chromatogr B* 2007;846:351-4.
112. Patrick KS, Straughn AB, Yeatts S, Herrin AE, DeVane CL, Malcolm R, Minhinnett RR, Janis GC, **Markowitz JS**. Influence of ethanol and gender on methylphenidate pharmacokinetics and pharmacodynamics. *Clin Pharmacol Ther* 2007;81:346-53.
113. Risch SC, Horner MD, McGurk SR, Palecko S, **Markowitz JS**, Nahas Z, DeVane CL. Double-blind donepezil-placebo crossover augmentation study of atypical antipsychotics in chronic, stable schizophrenia. *Schizophrenia Res* 2007;93:131-5.
114. **Markowitz JS**, von Moltke LL, Donovan JL. Predicting interactions between conventional medications and botanical products on the basis of *in vitro* investigations. *Molecular Nutrition & Food Research* 2008;52:747-54.
115. Sonuga-Barke EJS, Coghill D, **Markowitz JS**, Swanson JM, Vandenberghe M, Hatch SJ. Sex differences in the response of children with ADHD to once daily formulations of methylphenidate. *J Am Acad Child Adolesc Psychiatry* 2007;46:701-10.
116. Zhu H-J, Wang J-S, Patrick KS, Donovan JL, DeVane CL, **Markowitz JS**. A novel HPLC fluorescence method for the quantification of methylphenidate in human plasma. *J Chromatogr B* 2007;858:91-5.
117. **Markowitz JS**, Patrick, KS. Differential pharmacokinetics and pharmacodynamics of methylphenidate enantiomers: Does chirality matter? *J Clin Psychopharmacol* 2008;28:S54-S61.
118. **Markowitz JS**, Patrick, KS. Introduction: Methylphenidate in the treatment of attention-deficit/hyperactivity disorder. *J Clin Psychopharmacol* 2008;28:S37-8.
119. Wang J-S, Zhu H-J, Gibson BB, **Markowitz JS**, Donovan JL, DeVane CL. Sertraline and its metabolite desmethylsertraline, but not bupropion or its three major metabolites, have high affinity for P-glycoprotein. *Biol Pharm Bull* 2008;31:231-4.

120. Zhu H-J, Wang J-S, Donovan J-L, Jiang Y, Gibson B, DeVane CL, **Markowitz JS**. Interactions of attention-deficit/hyperactivity disorder therapeutic agents with the efflux transporter P-glycoprotein. *Eur J Pharmacol* 2008;578:148-58.
121. LeVasseur NL, Zhu H-J, **Markowitz JS**, DeVane CL, Patrick KS. Enantiospecific GC-MS analysis of urinary methylphenidate: Implications for phenotyping. *J Chromatogr B* 2008;862:140-9.
122. Wang J-S, Zhu H-J, **Markowitz JS**, Donovan JD, Yuan H-J, DeVane CL. Antipsychotic drugs inhibit the function of breast cancer resistance protein. *Basic & Clin Pharmacol & Toxicol* 2008;103:336-41.
123. Zhu H-J, Patrick KS, Yuan H-J, Wang J-S, Donovan JL, DeVane, CL, Malcolm R, Johnson JA, Youngblood GL, Sweet DH, Langae TY, **Markowitz JS**. Two *CES1* gene mutations lead to dysfunctional carboxylesterase 1 activity in man: Clinical significance and molecular basis. *Am J Hum Genetics* 2008;82: 1241-48.
124. **Markowitz, JS**, DeVane CLD, Ramamoorthy S, Zhu H-J. The psychostimulant *d-threo*-(*R,R*)-methylphenidate binds as an agonist to the 5HT_{1A} receptor. *Pharmazie* 2009;64:123-5.
125. Zhu H-J, **Markowitz JS**. Activation of the antiviral prodrug oseltamivir is impaired by two newly identified carboxylesterase 1 variants. *Drug Metab Dispos* 2009;37:264-7.
126. Wang JS, Zhu HJ, Donovan JL, Yuan HJ, **Markowitz JS**, Geesey ME, DeVane CL. Aripiprazole brain concentration is altered in p-glycoprotein deficient mice. *Schizophrenia Res* 2009;110:90-94.
127. Zhu H-J, Appel DI, Johnson JA, Chavin KD, **Markowitz JS**. Role of carboxylesterase 1 and impact of natural genetic variants on the hydrolysis oftrandolapril. *Biochem Pharmacol* 2009;77:1266-72.
128. Zhu H-J, Appel DI, Jiang Y, **Markowitz JS**. Age and sex-related expression and activity of carboxylesterase 1 and 2 in mouse and human liver. *Drug Metab Dispos* 2009;37:1819-1825.
129. Zhu H-J, Appel DI, Peterson YK, Wang Z, **Markowitz JS**. Identification of selected therapeutic agents as inhibitors of carboxylesterase 1: Potential sources of metabolic drug interactions. *Toxicology* 2010;270:59-65.
130. Zhu HJ, Appel DI, Gründemann D, **Markowitz JS**. Interaction of organic cation transporter 3 (*SLC22A3*) and amphetamine. *J Neurochemistry* 2010;114:142–9.

131. Zhu HJ, Patrick KS, **Markowitz JS**. Enantiospecific determination of *dl*-methylphenidate and *dl*-ethylphenidate in plasma by liquid chromatography-tandem mass spectrometry: Application to human ethanol interactions. *J Chromatogr B* 2011;879:783-88.
132. Gillis NK, Zhu H-J, **Markowitz JS**. An in vitro evaluation of guanfacine as a substrate for P-glycoprotein. *Neuropsychiatric Disease and Treatment* 2011;7:501-5.
133. Rhoades JA, Peterson YK, Zhu H-J, Appel DI, Peloquin CA, **Markowitz JS**. Prediction and *in vitro* evaluation of selected protease inhibitor antiviral drugs as inhibitors of carboxylesterase 1: A potential source of drug-drug interactions. *Pharm Res* 2011 (online ahead of press, (DOI: 10.1007/s11095-011-0637-9))
134. Appel DI, Zhu H-J, Newcorn JH, **Markowitz JS**. A liquid chromatography/tandem mass spectrometry assay for the analysis of atomoxetine in human plasma and *in vitro* cellular samples. *Biomed Chromatogr* 2012 (online ahead of press DOI 10.1002/bmc.2706).
135. Zhu H-J, Brinda B, Froehlich TE, **Markowitz JS**. A discriminative genotypic method for detecting *CES1A1* and *CES1A2/CES1A3* genetic variants. *Pharmacogenetics & Genomics* 2012; (online ahead of press, DOI: 10.1097/FPC.0b013e32834f03eb)
136. Zhu HJ, Appel DI, Gründemann D, Richelson E, **Markowitz, JS**. Evaluation of organic cation transporter 3 (*SLC22A3*) inhibition as a contributing mechanism of antidepressant action. *Pharm Res* (in press, 2012)

MANUSCRIPTS UNDER CONSIDERATION

Zhu HJ, Wang JS, DeVane CL, **Markowitz JS**. Evaluation of organic cation transporters function by flow cytometry with fluorescence probe rhodamine 123. (submitted 2012).

BOOKS/BOOK CHAPTERS

Markowitz JS. Case histories of panic disorder and generalized anxiety disorder in: *Workbook for Clinical Pharmacy and Therapeutics* 2nd editions) Williams and Wilkins, Baltimore 1991.

DeVane CL, **Markowitz JS.** Drugs as Substrates of Metabolic Enzymes: Antipsychotics. In: Metabolic Drug Interactions, (Eds Levy et al) Lippincott Williams & Wilkins, 2002

Page | 20

Markowitz JS, DeVane CL. The Ritalin Handbook: What Every Parent and Patient Should Know. Morris Publishing, Kearney, NE 2000.

Markowitz JS, DeVane CL. The Ritalin Handbook: What Every Parent and Patient Should Know: Revised, (Japanese Translation) Kafusha Publishing, Tokyo, Japan, 2003

Markowitz JS and Patrick, KS. Pharmacokinetic and Pharmacodynamic Drug Interactions in ADHD. In: Attention Deficit Hyperactivity Disorder: From Genes to Patients. (Eds. D. Gozal and D. Molfese), Humana Press, Inc., Totowa, NJ, 2005.

Maria BL and **Markowitz JS.** Current Pharmacotherapy for Attention-Deficit Hyperactivity Disorder In: Current Management in Child Neurology. 4th edition, (Editor B.L. Maria), BC Decker, 2007.

MONOGRAPHS/MISC PUBLICATIONS

Markowitz JS. Psychostimulants In: Professional's Handbook of Psychotropic Drugs, Springhouse Corporation 2001.

Markowitz JS. Echinacea monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Ephedra monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Elecampane monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Elderberry monograph. Nursing Herbal Medicine Handbook Springhouse Corporation 2001.

Markowitz JS. Dong Quai monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Skullcap monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Skunk Cabbage monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Slippery Elm monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Sorrel monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

Markowitz JS. Soapwort monograph. Nursing Herbal Medicine Handbook, Springhouse Corporation 2001.

*Contributing Editor for CNS Drugs, Nursing 2003 Drug Handbook, Lippincott Williams & Wilkins

*Contributing Editor for CNS Drugs, Nursing 2004 Drug Handbook, Lippincott * Nurse's Essential Drug Guide 2005, Lippincott

RESEARCH ABSTRACTS

1. **Markowitz JS**, Patrick KS. Evidence of clozapine glucuronide in patient urine using GC-MS. American College of Clinical Pharmacology, Boston, MA, 1993. *Journal of Clinical Pharmacology* 1993;33:1000.
2. DeVane CL, **Markowitz JS**, Gill HS, Risch SC. Charleston South Carolina Drug Interaction Surveillance Program. American Psychiatric Association. San Diego, CA, May, 1997
3. DeVane CL, Gill HS, Sallee FR, **Markowitz JS**, Hand LD. The pharmacogenetics of methylphenidate, American College of Clinical Pharmacy Annual Meeting, Phoenix, Arizona, November 9, 1997.
4. DeVane CL, **Markowitz JS**, Gill HS, Nahas Z, Risch SC. Charleston Drug Interactions Surveillance Program, American College of Neuropharmacology Annual Meeting, Kamuela, Hawaii, December 9, 1997.
5. DeVane CL, **Markowitz JS**, Gill HS, Carson SW, Sallee FR, Boulton DW, Patrick KS. The effect of methylphenidate on cytochromes 2D6 and 3A4. International College of Neuropsychopharmacology (CINP), Glasgow, Scotland, July 13, 1998, *Int J Neuropsychopharmacol* 1999;2(Suppl 1), p63.
6. DeVane CL, **Markowitz JS**, Gill HS, Carson SW, Sallee FR, Boulton DW, Nahas Z, & Risch SC. Methylphenidate effects on cytochrome (CYP) 2D6/3A4 in children and disposition in CYP2D6 poor and extensive metabolizers. American College of Neuropsychopharmacology Annual Meeting, Las Croabas, PR, Dec. 1998.
7. **Markowitz JS**, DeVane CL, Gill HS, Carson SW, Sallee FR, Boulton DW, Nahas Z, & Risch SC. Methylphenidate effects on cytochrome (CYP)2D6/3A4 in

children and disposition in CYP2D6 poor and extensive metabolizers. College of Psychiatric and Neurologic Pharmacists, 2nd Annual Meeting, Lake Tahoe, March 25, 1999.

8. **Markowitz JS** and DeVane CL. Effects of abrupt discontinuation of citalopram. American Psychiatric Association Annual Meeting, Washington, D.C. May 20, 1999.
9. **Markowitz JS** and DeVane CL. Effects of abrupt discontinuation of citalopram. European College of Neuropsychopharmacology Annual Meeting, London, England, September 22, 1999. *European Neuropsychopharmacology*, 1999; 9, (Suppl 5), 230.
10. **Markowitz JS**, DeVane CL, Carson SW, Nahas Z, Boulton DW, Chike-Harris K, Leung JWW, Risch SC. Effect of St. John's wort on cytochrome (CYP) P-450 activity in healthy volunteers. European College of Neuropsychopharmacology Annual Meeting, London, England, September 24, 1999. *European Neuropsychopharmacology*, 1999;9, (Suppl 5) 367-368.
11. **Markowitz JS**, Logan BK, Diamond F, Patrick KS. Detection of the novel metabolite ethylphenidate after methylphenidate overdose with ethanol co-ingestion. American College of Clinical Pharmacy, Kansas City, Missouri, October 24th, 1999.
12. **Markowitz JS**, DeVane C.L, Boulton DW, Nahas Z, Risch SC, Patrick KS, Goldman J. Ethylphenidate formation after administration of methylphenidate and ethanol. American College of Neuropsychopharmacology, Acapulco, Mexico, December 13, 1999.
13. Risch SC, Nahas Z, Horner MD, McGurk SR, Molloy M, Goldman J, Gilliard C, Owens SD, Christie S, **Markowitz JS**, DeVane CL, Mintzer JE, George MS. Donepezil augmentation of antipsychotics in schizophrenia: Cognitive and fMRI effects. Society of Biological Psychiatry, Chicago, Illinois, May 11, 2000.
14. Liston HL, **Markowitz JS**, DeVane CL, Boulton DW, Ashcraft E. Lack of citalopram-cyclosporine interaction. College of Psychiatric and Neurologic Pharmacists, 3rd Annual Meeting, Washington, DC, April 7, 2000.
15. Liston HL, DeVane CL, Boulton DW, **Markowitz JS**, Goldman J, Risch SC, Time course of enzyme inhibition of fluoxetine vs sertraline vs paroxetine. College of Psychiatric and Neurologic Pharmacists, 3rd Annual Meeting, Washington, DC, April 7, 2000.
16. **Markowitz JS**, DeVane CL, Boulton DW, Nahas Z, Risch SC, Goldman J, Patrick KS, Ethylphenidate formation after administration of methylphenidate and ethanol. College

of Psychiatric and Neurologic Pharmacists, 3rd Annual Meeting, Washington, DC, April 7, 2000.

17. **Markowitz JS**, Kellner CH, DeVane CL, Beale MD, Folk JW, Burns C, Myers M. Intranasal sumatriptan for post-ECT headache. College of Psychiatric and Neurologic Pharmacists, 3rd Annual Meeting, Washington, DC, April 7, 2000.
18. **Markowitz JS**, DeVane CL, Boulton DW, Nahas Z, Risch SC, Goldman J, Patrick KS. Ethylphenidate formation after administration of methylphenidate and ethanol. American Psychiatric Association Annual Meeting, Chicago, Illinois, May 18, 2000.
19. **Markowitz JS**, Kellner CH, DeVane CL, Beale MD, Folk JW, Burns C, Myers M, Liston H. Intranasal sumatriptan for post-ECT headache. American Psychiatric Association Annual Meeting, Chicago, Illinois, May 18, 2000.
20. **Markowitz JS** and DeVane CL. Effects of abrupt discontinuation of citalopram. American Academy of Family Physicians Annual Meeting, Dallas, TX, September 21, 2000.
21. DeVane CL, Boulton DW, Liston HL, **Markowitz JS**. Human recombinant P-glycoprotein specificity for antipsychotics. American College of Neuropsychopharmacology (ACNP). The 39th ACNP Annual Meeting, December 9-12th, 2000. San Juan, Puerto Rico.
22. Nahas Z, Risch SC, Horner MD, **Markowitz JS**, Li X, Lorberbaum JP, McGurk S, DeVane CL, George MS. Augmenting an atypical antipsychotic with a cognitive enhancer (donepezil) improves regional brain activity in schizophrenia patients: A double-masked placebo controlled BOLD phMRI study. ACNP, San Juan, Puerto Rico, December 9-13th, 2000.
23. Nahas Z, Risch SC, Horner MD, **Markowitz JS**, Xingbao L, Lorberbaum JP, McGurk S, DeVane CL, George MS. Augmenting an atypical antipsychotic with a cognitive enhancer (donepezil) improves regional brain activity in schizophrenia patients: A double-blind placebo controlled BOLD phMRI study. Society of Biological Psychiatry, Annual Meeting, New Orleans, May 1-4, 2001. *Biol Psychiatry* 2001;49:29S
24. Liston HL, **Markowitz JS**, DeVane CL, Boulton DW, Ashcraft E, Hunt N. Lack of citalopram-cyclosporine interaction. Society of Biological Psychiatry, Annual Meeting, New Orleans, May 1-4, 2001. *Biol Psychiatry* 2001;49:29.
25. DeVane CL, Boulton DW, Liston HL, **Markowitz JS**. Human recombinant P-glycoprotein specificity for atypical antipsychotics. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting San Antonio, Texas, March 28, 2001.

26. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW. Probenecid effects on the disposition of olanzapine and risperidone. American Psychiatric Association (APA) Annual Meeting, New Orleans, LA, May 9, 2001.
27. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW. Probenecid effects on the disposition of olanzapine and risperidone. The National Institute of Mental Health 41st Annual NCDEU, Phoenix, AZ, May 28-31, 2001.
28. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW. Probenecid effects on the disposition of olanzapine and risperidone. 2001 Institute on Psychiatric Services, Orlando, FL, October 12, 2001.
29. **Markowitz JS**, DeVane CL, Liston HL, Boulton DW. Probenecid effects on the disposition of olanzapine and risperidone. American College of Clinical Pharmacy (ACCP) Annual Meeting, Tampa, FL, September 23, 2001.
30. DeVane CL, Liston HL, Donovan JL, **Markowitz JS**, Cheng KT, Risch SC, and Willard L. Comparative CYP3A4 inhibitory effects of venlafaxine, fluoxetine, sertraline and nefazodone. XXIII CINP Congress, Montreal, July 23-27, 2002.
31. **Markowitz JS**, DeVane CL, Donovan JL, Risch SC, Emmanuel N. An assessment of the potential for common herbal supplements to cause false positive results on the enzyme immunoassay (EIA) urine drug screen. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Seattle WA, April 18-21, 2002.
32. **Markowitz JS**, DeVane CL, Donovan JL, Risch SC. An assessment of CYP2D6 inhibitory effects of *Ginkgo biloba* in normal volunteers. XXIII CINP Congress, Montreal, July 27, 2002; *Int J Neuropharm* 2002;5: (Suppl 1):192.
33. DeVane CL, Liston HL, Donovan JL, **Markowitz JS**, Cheng KT, Risch SC, and Willard L. Comparative CYP3A4 inhibitory effects of venlafaxine, fluoxetine, sertraline, and nefazodone. XXIII CINP Congress, Montreal, July 27, 2002; *Int J Neuropharm* 2002;5: (Suppl 1):105.
34. DeVane CL, Donovan J, Liston H, **Markowitz JS**, Risch SC, Willard L. Lack of venlafaxine CYP3A4 inhibitory effects on oral and iv model substrates. *Eur Neuropsychopharmacol* 2002;12(Suppl 3):229.
35. Thomson MR, Dowd JJ, **Markowitz JS**, DeVane CL, Patrick KS. Enantioselective transesterification of methylphenidate to ethylphenidate after coadministration with ethanol. American College of Clinical Pharmacology, 31st Annual Meeting, San Francisco, CA, September 21-27th, 2002. *J Clin Pharmacol* 2002;42:1069.

36. Sclar DA, Skaer TL, Robison LM, Dickson MW, DeVane CL, **Markowitz JS**. Factors influencing the prescribing of atypical antipsychotic pharmacotherapy: Does age matter? The International Psychogeriatric Association European Regional Meeting, April 1-4th, 2003. 37.
37. Rupnow M, **Markowitz JS** and Grogg A. Psychotropic polypharmacy among medicaid subjects. *European Neuropsychopharmacology*, 2003;13, (Suppl 4), October 2003, Pages S311-S312. Page | 25
38. Risch SC, Horner MD, McGurk SR, Palecko S, **Markowitz JS**, Nahas Z, Christie SD, DeVane CL. Donepezil supplementation to improve cognition in schizophrenia. American College of Neuropsychopharmacology (ACNP) 41st Annual Meeting, San Juan, Puerto Rico, December 8-12th, 2002.
39. Sclar DA, Robison LM, Skaer TL, **Markowitz JS**, DeVane CL, Dickson WM, Evans MA. Cost of use patterns for atypical antipsychotics among medicaid beneficiaries in the US. Annual Meeting of the British Royal College of Psychiatrists. Edinburgh, Scotland. July 1, 2003.
40. Sclar DA, Robison LM, Skaer TL, **Markowitz JS**, DeVane CL, Dickson WM, Evans MA. Use patterns for antipsychotics among medicaid beneficiaries. American Psychiatric Association Annual Meeting, San Francisco, CA, May 17-22, 2003
41. Sclar DA, Skaer TL, Robison LM, Dickson WM, **JS Markowitz JS** and DeVane CL. Use and cost patterns of risperidone versus olanzapine for the treatment of schizophrenia: An assessment of medicaid children and adolescents age 5–18 years. *European Neuropsychopharmacology*, 2003;13, (Suppl 4), S281-S282.
42. **Markowitz JS**, Straughn AB, Patrick KS, DeVane CL, Pestreich L, Lee J, Wang Y, Muniz R. Pharmacokinetics of methylphenidate after oral administration of two modified-release formulations in healthy adult volunteers. American Psychiatric Association Annual Meeting, San Francisco, CA, May 17-22, 2003.
43. Donovan JL, DeVane CL, Chavin KD, Taylor RM, **Markowitz JS**. Siberian ginseng (*Eleutherococcus senticosus*) effects on CYP2D6 and CYP3A4 activity in normal volunteers. American Psychiatric Association Annual Meeting, San Francisco, CA, May 17-22, 2003.
44. **Markowitz JS**. Donovan JL, DeVane CL, Sipkes L, Chavin KD, Taylor RM. Ginkgo biloba has no effect on cytochrome P-450 2D6 and marginal effects on 3A4 activity in normal volunteers. American Psychiatric Association Annual Meeting, San Francisco, CA, May 17-22, 2003.

45. **Markowitz JS**, Straughn AB, Patrick KS, DeVane CL, Pestreich L, Lee J, Wang Y, Muniz R. Comparative pharmacokinetics of two long-acting methylphenidate formulations: analysis of sex differences and treatment implications. 43rd NCDEU Meeting, Boca Raton, FL. May 27-30, 2003.
46. Sclar DA, Skaer TL, Robison LM, **Markowitz JS**, DeVane CL. Use and cost patterns of risperidone versus olanzapine for the treatment of schizophrenia among US children and adolescents 5-18 years old. European Society of Child and Adolescent Psychiatry Meeting, Paris, France, September 29th - October 2, 2003. Page | 26
47. Sclar DA, Skaer TL, Robison LM, Dickson WM, **Markowitz JS**, DeVane CL. Cost of use patterns for atypical antipsychotics by race. 55th Annual American Psychiatric Association Institute on Psychiatric Services Meeting, Boston, MA, October 29th - November 11th, 2003.
48. **Markowitz JS**, Straughn AB, Patrick KS, DeVane CL, Pestreich L, Muniz R. Rate and extent of absorption of two methylphenidate formulations. 50th Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Miami, FL October 14th - 19th 2003.
49. Donovan JL, DeVane CL, Taylor RM, Ruan Y, Wang JS, Chavin KD, **Markowitz JS** Effects of cranberry on cytochrome P-450 3A4 and 2D6 activity. 3rd International Symposium on Natural Drugs, October 2-4th, 2003, Naples, Italy.
50. Donovan JL, **Markowitz JS**, DeVane CL, Taylor RM, Ruan Y, Wang JS, Chavin KD. Saw Palmetto (*Serenoa repens*) does not significantly alter the activity of cytochrome P-450 3A4 or 2D6. 3rd International Symposium on Natural Drugs, October 2-4th, 2003 Naples, Italy
51. Donovan JL, **Markowitz JS**, DeVane CL, Taylor RM, Ruan Y, Wang JS, Chavin KD. Screening herbal preparations for drug interactions by alterations in cytochrome P-450 activity. 1st International Conference on Polyphenols and Health. November 18-21, 2003 Vichy, France
52. Fiorini RN, Donovan J, Evans Z, Reyna R, Schmidt M, Campbell C, May H, Milliken C, **Markowitz J**, Chavin KD. A spot of tea for steatosis? American Transplant Congress, May 14-19th, 2004, Boston, MA. *Am J Transplantation* 2004; 4(8):211.
53. Patrick, KS, Williard, RL, **Markowitz, JS**, DeVane, CL, Minhinnett, RR, Malcolm, RJ, Middaugh, LD, Janis, GC. Synthesis, pharmacology and human formation of ethylphenidate: The transesterification product of methylphenidate and ethanol, Southeastern Regional Meeting of American Chemical Society Nov 10-13, 2004, Research Triangle Park, NC.

54. Wang J-S, DeVane CL, Donovan JL, Gibson BB, Gefroh HA, **Markowitz JS** Cannabinoids stimulate ATPase activity of P-glycoprotein. American College of Neuropsychopharmacology Annual Meeting (ACNP), San Juan, Puerto Rico, Dec 13, 2004; *Neuropsychopharmacol* 2004;29(Suppl 1):S73.
55. **Markowitz, JS**, DeVane CL, Muniz R, Pestreich, LK. Differentiation of *d*-, *l*- and *dl* methylphenidate through *in vitro* pharmacological screening. NCDEU June 6-9th, 2005, Boca Raton, FL
56. Sanchez DY, Hatch SJ, **Markowitz JS**. Sex differences in the clinical efficacy of methylphenidate: Evidence from the COMACS study. 25th Annual Meeting of the Canadian Academy of Child & Adolescent Psychiatrists (CACAP), October 18-23rd, 2005, Toronto, Canada
57. Pentikis HS, Connolly M, **Markowitz JS**, Hatch SJ. Sex based differences in the pharmacokinetics of methylphenidate. 25th Annual Meeting of the Canadian Academy of Child & Adolescent Psychiatrists (CACAP), October 18-23rd, 2005, Toronto, Canada
58. Patrick, KS, DeVane, CL, Malcolm, RJ, Minhinnett, RR, **Markowitz, JS**. Influence of ethanol and gender on methylphenidate bioavailability, metabolism and response. 34th Annual Meeting American College of Clinical Pharmacology, September 11th-12th, 2005. *J Clin Pharmacol* 2005;45:1083.
59. **Markowitz JS**, DeVane CL, Pestreich LK, Patrick KS, Muniz R. Enantioselective receptor and transporter binding characteristics of methylphenidate. Poster presented at the Joint Annual Meeting of the AACAP and CACAP, Toronto, Ontario, Canada, October 18-22, 2005.
60. Zhu H-J, Williard RL, Wang J-S, Donovan JL, Gibson B, DeVane CL, Middaugh, LD, Patrick KS, **Markowitz JS**. Brain penetration of *d*-*threo*-methylphenidate is influenced by the polymorphic efflux transporter P-glycoprotein. Poster presented at the Joint Annual Meeting of the AACAP and CACAP, Toronto, Canada, October 22, 2005.
61. Fiorini RN, Donovan JL, Evans Z, Cheng G, Haines JK, Schmidt MG, **Markowitz JS**, Chavin KD. The green tea flavonoid epigallocatechin gallate reduces hepatic steatosis and protects against hepatic ischemia/reperfusion injury in steatotic mice. Presented at the 3d South Carolina Nutrition Research Summit, Columbia, SC, November 4, 2005.
62. Zhu H-J, Wang J-S, **Markowitz JS**, Donovan JL, Gibson BB, Gefroh HA, DeVane CL. The cannabinoid cannabidiol inhibits P-glycoprotein activity. Presented at the 107th Annual

Meeting of the American Society for Clinical Pharmacology and Therapeutics (ASCPT), Baltimore, MD, March 8-11th, 2006. *Clin Pharmacol Ther* 2006;79:P16.

63. Wang JS, Zhu HJ, Gibson BB, Donovan JL, **Markowitz JS**, DeVane CL. Sertraline and its metabolite desmethylsertraline, but not bupropion or its major metabolites, have high affinity for P-glycoprotein. Presented at the 107th Annual Meeting of the American Society for Clinical Pharmacology and Therapeutics (ASCPT), Baltimore, MD, March 8-11th, 2006. *Clin Pharmacol Ther* 2006;79:P16.
64. **Markowitz JS**, DeVane CL, Patrick KS, Pestreich KS, Muniz R. Enantioselective receptor and transporter binding characteristics of methylphenidate. Society of Biological Psychiatry, Toronto, Canada, May 20, 2006, *Biol Psychiatry* 2006;59:122S.
65. Williard RL, Zhu H-J, Wang J-S, Donovan JL, DeVane CL, Middaugh LD, Patrick KS, Gibson BB, **Markowitz JS**. Brain penetration of *d*-amphetamine is not influenced by the polymorphic efflux transporter p-glycoprotein. Society of Biological Psychiatry, Toronto, Canada, May 19, 2006, *Biol Psychiatry* 2006;59:37S.
66. **Markowitz, JS**, DeVane, CL, Patrick, KS, Ramamoorthy, S. In vitro binding affinities of racemic methylphenidate and its respective isomers: Dopamine, norepinephrine, and beyond. Collegium Internationale Neuro-Psychopharmacologicum (CINP) 25th Biennial Congress, July 11th, 2006 Chicago. *Intl J Neuropsychopharm* 2006;9:S177.
67. Zhu H-J, Wang J-S, **Markowitz JS**, Donovan JL, Gibson BB, DeVane CL. Risperidone and paliperidone inhibit p-glycoprotein activity *in vitro*. Collegium Internationale Neuro-Psychopharmacologicum (CINP) 25th Biennial Congress, July 11th, 2006 Chicago. *Intl J Neuropsychopharm* 2006;9:S263.
68. Patrick KS, LeVasseur NL, DeVane CL, **Markowitz JS**. Identifying a poor metabolizer of methylphenidate by urinary enantiomer concentrations. 35th Ann Meeting ACCP, September 17-19, 2006 Cambridge, Massachusetts. *J Clin Pharmacol* 2006;46:1070.
69. **Markowitz, JS**, Wang, J-S, DeVane, CL, Yuan, H-J, Zhu, H-J, Malcolm, R, Donovan, JL, Johnson, JA, Youngblood GL, Sweet DH, Patrick, KS. Identification of two novel single nucleotide polymorphisms of the *CES1* gene encoding carboxylesterase-1 (hCE-1) in a slow metabolizer of methylphenidate. 47th Annual Meeting, NCDEU, June 13th, 2007, Boca Raton, FL.
70. Zhu H-J, DeVane CL, **Markowitz JS**. Evaluation of P-glycoprotein mediated interaction of the atypical antipsychotic agents risperidone and paliperidone *in vitro*. *The FASEB Journal*. 2008;22:1132. Exp Biology Meeting, April 5-9 2008, San Diego, CA
71. Zhu, H-J, Appel DI, DeVane, CL, Donovan, JL, **Markowitz, JS**. Developmental expression and activity of carboxylesterase 1 and carboxylesterase 2 in mouse and

human. in press, 2009 (Suppl) *European Neuropsychopharmacology*. 22nd ECNP Congress, September 12 - 16 2009, Istanbul, Turkey

72. Silva RR, **Markowitz JS**, Muniz R Wang C, Yoon M, Wargin W, Cavanaugh PF. Pharmacokinetic profile of clonidine hydrochloride extended-release in children and adolescents with attention-deficit/hyperactivity disorder. NCDEU Annual Meeting, June 13th– 16th , 2011, Boca Raton, FL.
73. Zhu H-J, Brinda B, Froehlich TE, **Markowitz JS**. A discriminative analytical method for detection of *CES1A1* and *CES1A2/CES1A3* genetic variants. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL, April 29th-May 2nd , 2012.
74. Appel DI, Brinda B, **Markowitz JS**, Newcorn JS, Zhu H-J. A novel liquid chromatography /tandem mass spectrometry assay for the analysis of atomoxetine in human plasma and *in vitro* cellular samples. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL April 29th-May 2nd , 2012.
75. Patrick KS, Zhu H-J, **Markowitz JS**. An assessment of isopropylphenidate pharmacology: An ester homolog of methylphenidate. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL April 29th-May 2nd , 2012.
76. Gillis NK, Zhu H-J, **Markowitz JS**. An *in vitro* evaluation of guanfacine as a substrate for P-glycoprotein. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL April 29th-May 2nd , 2012.
77. Rhoades JA, Peterson YK, Zhu H-J, Appel DI, Peloquin CA, **Markowitz JS**. Prediction and *in vitro* evaluation of selected protease inhibitor antiviral drugs as inhibitors of carboxylesterase 1: A potential source of drug-drug interactions. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL April 29th-May 2nd , 2012.
78. Zhu HJ, Appel DI, Gründemann D, Richelson E, **Markowitz, JS**. Evaluation of organic cation transporter 3 (SLC22A3) inhibition as a potential mechanism of antidepressant action. College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Tampa, FL April 29th-May 2nd , 2012.

Bipolar Disorders
British Journal of Clinical Pharmacology
JAMA
Journal of Pharmacy Practice
Canadian Journal of Physiology & Pharmacology
Canadian Medical Association Journal
Clinica Chimica Acta
Clinical Pharmacokinetics
Clinical Pharmacology & Therapeutics
CNS Drugs
Drug Metabolism and Disposition
Drug Safety
Drug Topics
European Journal of Pharmaceutical Sciences
Expert Review of Neurotherapeutics
Hospital Pharmacy
Human Psychopharmacology
Journal of Child Adolesc Psychopharmacol
Journal of Clinical Psychology in Medical Settings

Journal of Pharmaceutical Sciences
Journal of Pharmacology and Experimental Therapeutics
Journal of Pharmacy and Pharmacology
Journal of Clinical Psychopharmacology
Journal of Postgraduate Medicine
Life Sciences
Neuropsychiatric Disease and Treatment
Nutritional Neuroscience
Pediatrics
Pharmacogenetics
Pharmacotherapy
Planta Medica
Psychiatric Research
The Lancet

EDITORIAL BOARDS

Natural Standard, 2006-
Neuropsychiatric Disease and Treatment, 2006-
Journal of Drug Metabolism and Toxicology 2010 –

INVITED PRESENTATIONS

“Altered Amphetamine Pharmacodynamics in Oct3 Knockout Mice” Presented at The American Association of Pharmaceutical Scientists (AAPS) as part of a *Workshop on Drug Transporters in ADME: From Bench to Bedside*, March 30th, 2009, Baltimore, MD.

“Pharmacogenetic and Pharmacokinetic Considerations in Dosing Psychostimulants” Presented to Pediatricians, Developmental Pediatricians, and Pediatric Psychiatrists as part of the *Promoting Happy and Healthy Youth* seminar program, 3rd Floor Rutledge Tower, MUSC, November 18th, 2008, Charleston, SC.

“Ritalin[®], Alcohol, and Serendipity: The Identification of a Novel SNP Influencing Drug Metabolism” Invited seminar presented to the Faculty at the University of Florida Departments of Pharmacy Practice and Pharmaceutical Sciences, October 12th, 2008, Gainesville, Florida.

“Ritalin, Alcohol, and Serendipity: On the Tracks of a Novel Carboxylesterase-1 Mutation”. Darby Children’s Research Institute, DCRI Forum Series, September 15th 2008, MUSC, Charleston, SC.

“Botanical Medications and Psychotropics” Annual Conference entitled *Managing Recovery: The role of medical treatment and medications*. Sponsored by Community Care Behavioral Health & University of Pittsburgh School of Medicine. June 5th, 2008, York, PA

“Identification of two novel single nucleotide polymorphisms of the *CES1* gene encoding carboxylesterase-1 (hCE-1) in a slow metabolizer of methylphenidate” Psychiatric Pharmacist’s Meeting, June 11th, 2007, 47th Annual Meeting, NCDEU, Boca Raton, FL.

"Recent Developments in Psychostimulants for ADHD: Innovations or Renovations?" MUSC Annual Update in Psychiatry, June 1st, 2007, Charleston, SC.

"Botanical-drug Interactions: Assessing Clinical Significance." 6th Oxford International Conference on the Science of Botanicals (ICSB), "Critical Approaches to Pre-clinical Evaluation of Botanicals." National Center for Natural Products Research, May 3rd, 2007, Oxford, MS.

“Depression and Anxiety: Current Topics in Clinical Management” CE Program Moderator, March 19, 2005, Institute of Psychiatry, Medical University of South Carolina, Charleston, SC.

“Mechanisms of Drug-Drug Interactions: Cytochrome P450 and Beyond” American Psychiatric Nurses Association Psychopharmacology Institute, Cambridge, MA, June 11, 2004.

“Botanical-Drug Interactions: What is Clinically Significant?” American Psychiatric Nurses Association Psychopharmacology Institute, Cambridge, MA, June 11, 2004.

“Differentiating the New Long-Acting ADHD Medications” Third Joint Meeting of the West Virginia Society of Health-System Pharmacists and West Virginia Pharmacists Association, Morgantown, WV, May 1, 2004.

“Examining the Metabolic Effects of Atypical Antipsychotics” American College of Osteopathic Neurologists and Psychiatrists Mid-Year Meeting and Scientific Seminar, Charleston, SC April 30th, 2004.

“Botanical Drug Interactions: What’s the Evidence?” Nineteenth Annual Spring Symposium of the South Carolina Society of Health System Pharmacists, Hilton Head, SC March 15-17th, 2004.

“Psychopharmacology Update” The Tenth Annual Advanced Practice Nurse’s Conference, Charleston, South Carolina, February 18th-20th, 2004

“Update on Psychotropic Medication Use” presented at the 20th Annual Meeting of the South Carolina Primary Health Care Association, Myrtle Beach, SC October 28th, 2003.

“Differentiating Long-acting Methylphenidate Formulations” Symposia: Navigating Complex Treatment Issues in ADHD, presented at the 50th Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Miami, FL October 16th, 2003.

“The Metabolism and Disposition of Medications Used in ADHD” Institute: Advanced Psychopharmacology for Clinical Practice, presented at the 50th Annual Meeting of the American Academy of Child & Adolescent Psychiatry, Miami, FL October 14th, 2003.

“Unmet Needs in the Treatment of Mood Disorders: Role of Atypical Antipsychotics” Symposia Chair and discussant, ” College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Charleston, SC, May 1-4th, 2003

“Psychotropic Drug-drug Interactions: Update on Newer Therapeutic Agents” South Carolina Medical Association Annual Meeting, Charleston, SC, April 25, 2003.

Workshop on ADHD Pharmacotherapy. Twenty-third Annual National Symposium for Mental Health/Developmental Disabilities/Substance Abuse Practitioners. University of Georgia, Athens, GA. February 5, 2003.

“Assessing Drug interactions Between Botanical and Prescription Medications” Metabolism and Transport of Xenobiotic and Endogenous Molecules Symposia, Medical University of SC, May 10, 2002.

“Update on Psychostimulants” College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting, Seattle WA, April 18-21, 2002.

“Psychopharmacology Update” The Eighth Annual Advanced practice Nurse’s Conference, Charleston, South Carolina, February 20-22, 2002

“Drug-drug Interactions and Herb-drug Interactions: Problems and Prospects” Grand Rounds: Institute of Psychiatry, Charleston, South Carolina, September 25, 2001.

“Dealing with ADHD, 2nd Annual Therapeutic Issues in Pediatrics” Charleston, South Carolina, April 27, 2001.

Moderator, Forum on Psychotropic Drug Metabolism, College of Psychiatric and Neurologic Pharmacists (CPNP) Annual Meeting San Antonio, Texas, March 28, 2001.

“Herbal medications in Psychiatry”, 23rd Annual Arthur E. Schwarting Pharmacy Practice Symposium, Storrs, Connecticut, May 24, 2000.

“Differentiating and Choosing Between Newer Antidepressant Pharmacotherapies” American Society of Hospital Pharmacists Midyear Clinical Meeting, Orlando, Florida, December 6-9th, 1999.

“Herbal Drug Interactions in Psychiatry” 9th Annual Psychiatric Nursing Learning Institute Psychopharmacology Update. Charleston, South Carolina, September 16th, 1999.

“Treatment of Aggression in Children” 9th Annual Psychiatric Nursing Learning Institute Psychopharmacology Update. Charleston, South Carolina, September 16th, 1999.

“The Treatment of Depression in Patients with Cardiovascular Disorders” 2nd Annual Meeting of College of Psychiatric and Neurologic Pharmacists. Lake Tahoe, Nevada, March, 1999.

“Psychostimulants in the Treatment of Attention-Deficit Hyperactivity Disorder” Nineteenth National Symposium for Mental Health/Developmental Disabilities/Substance Abuse Practitioners. Athens, GA. February, 1999.

“Atypical Antipsychotic Workshop” Nineteenth National Symposium for Mental Health/Developmental Disabilities/Substance Abuse Practitioners. Athens, GA. February, 1999.

“New Drug Update: Antidepressants” Nineteenth National Symposium for Mental Health/Developmental Disabilities/Substance Abuse Practitioners. Athens, GA. February, 1999.

“Overview of Agents for the Treatment of Depression: New and in Development” American Society of Hospital Pharmacists Midyear Clinical Meeting, Las Vegas, Nevada, December 8, 1998.

“Pharmacotherapy of Behavioral Dyscontrol in the Elderly: Focus on Anticonvulsants” Sixth Annual South Carolina Post-Graduate Geriatrics Workshop. Charleston, SC, October 24, 1998.

“Herbal Drugs in Psychiatry” The University of Texas College of Pharmacy’s 10th Annual Psychiatric Pharmacy Update. Austin, TX September, 1998.

“The Use of Herbal Drug Products and Supplements in Psychiatry” 8th Annual Psychiatric Nursing Learning Institute. Charleston, SC, September 19, 1998

“Update on Sleep Disorders” 1st Annual Meeting of College of Psychiatric and Neurologic Pharmacists. Orlando, FLA. May, 1998.

“SSRI Withdrawal Syndromes” Eighteenth National Symposium for Mental Health/Developmental Disabilities/Substance Abuse Practitioners. Athens, GA. February, 1998.

"Natural/Herbal Drugs in Psychiatry" Second Annual Northeast Psychiatric Pharmacotherapy Symposium. Hancock, MA. October, 1997.

"Clinical Utility of Neuroleptic Blood Levels in Psychiatric Practice " Sixteenth Annual National Conference for Mental Health/Developmental Disabilities/Substance Abuse Pharmacists. Athens, GA. February, 1996.

"Patient Medication Education: Focus on Noncompliance" Sixteenth Annual National Conference for Mental Health/Developmental Disabilities/Substance Abuse Pharmacists. Athens, GA. February, 1996.

"The Use of Sedative/Hypnotics" Veterans Administration Medical Center, Charleston, SC. August 1995. "Pharmacological Treatment of Depression " Veterans Administration Medical Center, Charleston, SC. August, 1995.

"Pharmacological Approaches to Mood Stabilization" Veterans Administration Medical Center, Charleston, SC. August, 1995.

"Pharmacological Treatment of Psychosis" Veterans Administration Medical Center, Charleston, SC. August, 1995

"Principles of Drug Interactions" Veterans Administration Medical Center, Charleston, SC. August, 1995.

"Principles of Drug Interactions" Western Massachusetts Hospital, Westfield, MA. March, 1995.

"Pharmacological Approaches to Mood Stabilization" Parkwood Psychiatric Hospital, Olive Branch, MS. September, 1992.

"Antidepressant Pharmacotherapy" Parkwood Psychiatric Hospital, Olive Branch, MS. August, 1992.

NATIONAL MEDIA/PUBLIC SERVICE

Volunteer Science Judge for Ft. Clarke Middle School, December 7th, 2011

Guest Expert interviewed about the increasing diagnosis of ADHD in adults appearing in *Drug Topics*, October 25, 2005

National Public Radio (NPR) Interview, September 16th, 2003 "All Things Considered" regarding St. John's wort study published in JAMA, 2003.

Volunteer Pharmacist: South Carolina DHEC and South Carolina Pharmacy Association Pharmacist Emergency Response Group. 2002-2009

Guest Expert on medications for Attention-Deficit Hyperactivity Disorder "What On Your Mind" with Linda Austin, M.D., a live broadcast on National Public Radio (NPR) May 26, 2000.

Guest Expert interviewed about psychostimulants and my recently published Ritalin Handbook in *Drug Topics*, July 3, 2000

Guest Expert interviewed about the newly approved psychostimulant Concerta[®] appearing in *Drug Topics*, September, 2000