

CURRICULUM VITAE

Updated: **July, 2022**

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LICENSURE: FL # PS51118 (active), SC # 008171 (active)
 Inactive : TN # C007994 (original), 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, ASHP accredited residency in Psychiatric Pharmacy (B. Wells) July 1991

Board Certification

Board Certified Psychiatric Pharmacist (BCPP) # 496267, 1997, 2004 (re-exam) 2011 (re-exam)
 2018 (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 and Precision Medicine (Core Faculty) Center for Addiction Research and Education (Dept of Psychiatry, Member)
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 – Academic Institutions

“Assessment of the Drug Interaction Potential Between Oral Cannabidiol (Epidiolex[®]) and the CES1 Substrate Methylphenidate in Healthy Volunteers” The State of Florida Consortium for Medical Marijuana Clinical Outcomes Research. July 2020-21, Principal Investigator

FUNDED RESEARCH – Industry

“Relative Bioavailability of Two different Milk Thistle Formulations: A Single Dose Randomized Crossover Pharmacokinetic Study” Isagenix[®] International LLC. October, 2015, Principal Investigator.

“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

“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

FUNDED RESEARCH - National Institutes of Health (as PI)

R21 AT00511-01: “Assessing Herb-drug Interactions” NIH National Center for Complementary and Alternative Medicine (NCCAM), 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).

R21HD047810-01: “P-Glycoprotein and Disposition of Psychostimulants” NIH National Institute of Child Health and Human Development (NICHD), 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).

1R01 DA022475-01A1: “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 – 7/31/11)

FUNDED RESEARCH - National Institutes of Health (as PI) cont...

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)

1 R01 HD093612-01A1: "Carboxylesterase 1 genetic variation and methylphenidate in ADHD." NIH National Institute of Child Health and Human Development (NICHD), Principal Investigator, \$3,844,067.00 total (07/01/2018-6/30/2023)

FUNDED RESEARCH - National Institutes of Health (as Co-I)

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

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 DA048067-01A1: Medical Marijuana Use and Driving Performance: A Test of Psychomotor Function in Adults 50 and Older Co-I. Institute on Drug Abuse (NIDA). Co-investigator, (PI: Sherrilene Classen). 9/30/2020- 8/31/2022

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 Health-System Pharmacists (ASHP)
 American Society for Pharmacology and Experimental Therapeutics (ASPET)
 American Society for Clinical Pharmacology and Therapeutics (ASCPT)
 American College of Clinical Pharmacy (ACCP)
 College of Psychiatric and Neurologic Pharmacists (CPNP)

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
- * Outstanding Teaching Team- Year 3 Award, PHA5080C Patient Care VII, Team Leader, May 21, 2018
- * Outstanding Teaching Team- Year 3 Award, PHA5080C Patient Care VII, Team Leader, June 4, 2019
- * Teaching and Service Excellence Incentive Award, UF College of Pharmacy, November 12, 2019

PATENTS

- * # 6,245,360, 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- Academic Institutions

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

COURSES/LECTURES TAUGHT

University of Florida

Pharmacotherapy, Course lecturer, Pharmacotherapy II & III (PHA 5782)	2009-16
Drug Therapy Monitoring and Pharmacogenomics PHA 5113 (Co-coordinator)	2011-2013
Principles of Neuroscience III (GMS 7795, guest lecture)	2013
Interdisciplinary Family Health (IFH) BMS 6828	2014-2019
Medicinal Chemistry (PHA 5433), Team based learning facilitator	2015- present
Neurological and Psychiatric Disorders (PHA 5598)	2016-17
Drugs in Society (Elective, PHA 5737)	2017-2021
Pharmacogenetics of Drug Metabolism and Transport (PHA 6427)	2017-present

Patient Care 7: Brain & Behavior (PHA 5080C) Core Faculty 2017- present

Module #	PHA5080C Patient Care VII: Brain and Behavior: <u>Unit Topic</u>	Contact hrs	Role
2.2	General principles of neuropsychiatric disorder management	0.5	Lecturer
2.5	Unit 2.5: Management of Parkinson's Disease	1.5	Lecturer
2	Active Learning Session 2: Parkinson's and Alzheimer's Disease Patient Case Studies	2.0	Session co-Leader
3.1	Unit 3.1: Background/Etiology of Psychotic Spectrum Disorders	0.5	Lecturer
3.5	Unit 3.5: Management of Psychotic Spectrum Disorders: Focus on Schizophrenia	2.0	Lecturer
3	Active Learning Session 3: Case Studies in Psychotic Spectrum Disorders	2.0	Session Leader
4.1	Unit 4.1: Background/Etiology of Mood Disorders	0.5	Lecturer
4.4	Unit 4.4: Management of Depressive Disorders	2.0	Lecturer
4.5	Unit 4.5: Management of Bipolar Disorder	1.5	Lecturer
4	Active Learning Session 4: Case Studies in Mood Disorders	2.0	Session Leader
5.1	Unit 5.1: Background/Etiology of Anxiety and Sleep-Wake Disorders	0.5	Lecturer
5.4	Unit 5.4: Management of Sleep-Wake Disorders	1.0	Lecturer
5.5	Unit 5.5: Management of Anxiety Disorders I (generalized anxiety, panic, social anxiety disorders)	0.75	Lecturer
5.6	Unit 5.6: Management of Anxiety Disorders II (PTSD, Obsessive compulsive disorder)	0.75	Lecturer
5	Active Learning Session 5: Anxiety and Sleep-Wake Patient Case Studies	2.0	Session Leader
7.7	Unit 7.7: Management of Attention Deficit/Hyperactivity Disorder	1.5	Lecturer
7	Active Learning Session 7: Case Studies in Neuropsychiatric Disorders	2.0	Session Leader

Teaching at the Medical University of South Carolina (MUSC)

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	2002-7
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

Jieqiang Zhou, University of Florida (2022-present)
 Mohammad H. Alshaer, PharmD, University of Florida (2019-2020)
 Jiexin Deng, University of Florida (2015-17)
 Jessica Lynn King University of Florida (2014-16)
 Snehal Samant University of Florida (2014-16)
 Abdullah Sultan University of Florida (2012-15)
 Ahmed Albassam University of Florida (2012-15)
 Gloriane Schnabolk, PhD, MUSC (2007 -2009)
 Robin Williard, PhD, MUSC (2006 - 2007)

Graduate Students

Yuli Qian, PhD (2017-2021): Abbvie Pharmaceuticals
 Brandon Klee, PharmD (2020-2022) US FDA
 Philip Melchert, PharmD 2020- present
 Qingchen Zhang, MS 2021- present

Post-doctoral Fellows: MUSC

Heidi Liston, PharmD (2002-4)
 Haojie Zhu, PhD (2005-8)

Summer Research Interns: University of Florida

Jenna A. Rhoades, PharmD	2010	Bryan J. Brinda, PharmD	2011
Nancy K. Gillis, PharmD	2010	Brian Gawronski, PharmD	2012
Megha A. Patel, Pharm.D	2011	Juliana Munoz, PharmD	2013

Exchange Students: Xinewen Wang, MS. (China) 2012-13

Visiting Scholars: Guo, Yu, Ph.D. (China), 2016-17

Pharmacy Intern: Anna Waizenegger (Germany) 2022

NATIONAL INSTITUTES OF HEALTH REVIEWER/COMMITTEE SERVICE

NIH/NICHD Special Emphasis Panel ZRG1 EMNR-S (55) PAR20-300: Maternal and Pediatric Pharmacology and Therapeutics 11/21/21

NIH/NCCIH Special Emphasis Panel ZAT1 AJT (16) R, Preclinical Screening for Natural Product Drug Interactions, and AJT 15 U54 Review Panel for Center of Excellence for Natural Product Drug Interaction Research, April 2-3, 2020

NIH/NCCIH Special Emphasis Panel ZAT AJT (12) Review Panel, September 25th-26th, 2019

NIH/NCCIH 2018 NCCIH Loan Repayment Program (LRP), Ad hoc reviewer, April, 2018

NIH/NCCIH Special Emphasis Panel ZAT1 VS (08); NCCIH Training and Research Grants reviewer, 3/22/18

NIH/NCCIH 2017 NCCIH Loan Repayment Program (LRP), Ad hoc reviewer, 4/12/17

NIH Special Emphasis Panel ZRG1 DKUS-C (82) A: Toxicology and Digestive, Kidney and Urological Systems, 11/17/2015

NIH Special Emphasis Panel (ZRG1 GGG Q 51) 4/15/15

NIH (NCCAM) and the Office of Dietary Supplements (ODS/NIH), Stage 2 Editor/Reviewer, Botanical Dietary Supplement Research Centers and Centers for Advancing Natural Products Innovation and Technology Centers (CANPIT) (U41). 12/ 17–19th, 2014.

NIH (NCCAM) Dietary Supplement Drug Interaction Advisory Committee, 4/1/13

NIH (NCCAM) Herb/Drug Interaction Steering Committee, member, 2012

NIH (NICHD) Special Emphasis Panel (ZRG1 EMNR-R(55), 05/22/12

NIH (NCCAM) Dietary Supplement-Drug Interactions Workshop: Faculty Presenter, 3/27/12

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

NIH Special Emphasis Panel (ZAT1-JH-07), 2/23/05

NIH (NIDDK, NCCAM, NIAA) Presenter: Liver Disease subcommittee of the DDICC

"Silymarin as Therapy of Liver Disease" (development of RFA) 3/22/04

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

The Fund for Scientific Research, Belgium, External Scientific Reviewer (Ad Hoc), 9/21

Research Grants Council (RGC) of Hong Kong, External Scientific Reviewer (Ad Hoc), 5/17

The Fund for Scientific Research, Belgium, External Scientific Reviewer (Ad Hoc), 9/13

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

NATIONAL COMMITTEES: Professional

College of Psychiatric and Neurologic Pharmacists (CPNP) Editorial Board 2017-2018

AACP Biological Section member, 2014

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

Tenure and Promotion Committee (PTR): 2016-17
 COP Admissions Scholarship Subcommittee- 2016-18
 UF Institutional Review Board (IRB-01), Board Member (alternate), 2014-present
 Appointments, Promotion & Tenure Committee - Member, 2010-12
 College of Pharmacy's Center for Drug Interaction Research and Education, Member 2011-13
 The Mission, Planning and Evaluation Self-Study Committee, Member, 2011 –
 COP Admissions Committee Member, 2011 – present
 UF & Shands Personalized Medicine Program (PMP) Subcommittee Member, 2011 - 2014

Medical University of South Carolina (MUSC) 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
 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 (DSMB) Committee Memberships

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)

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

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 Published Work per MyNCBI:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/john.markowitz.2/bibliography/41149674/public/?sort=date&direction=descending>

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. (PMID: 2715278)
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. (PMID: 7663034)
4. **Markowitz JS**, Patrick KS. Thermal degradation of clozapine-N-oxide to clozapine during gas chromatography. *J Chromatogr: Biomed Appl* 1995;668:171-4. (PMID: 7550974)
5. **Markowitz JS**, Gaulin BD, Good, MI. The significance of plasma thiothixene concentrations. *Ann Pharmacother* 1995;29:789-90. (PMID:8520104)
6. Jackson C, **Markowitz JS**, Brewerton TD. Delirium associated with clozapine and benzodiazepine combinations. *Ann Clin Psychiatry* 1995;7:139-41. (PMID: 8646274)
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. (PMID: 8591976)
9. Carson WH, **Markowitz JS**. Smart drugs? *Ann Clin Psychiatry* 1996;8:41-2. (PMID: 8743649)
10. **Markowitz JS**, Brewerton TD. Zolpidem-induced psychosis. *Ann Clin Psychiatry* 1996;8:89-91. (PMID: 8807033)
11. **Markowitz JS**, Jackson C. Savings on nutritional supplements administered to patients with chronic alcoholism. *Am J Health Syst Pharm* 1996;53:1336. (PMID: 8725210)
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. (PMID: 8978949)
15. **Markowitz JS**, Jackson CW: Use of clozapine with nonresponsive patients. *Psychiatric Services* 1996;47:1392. (PMID: 9117483)
16. **Markowitz JS**, Gill HS. Pharmacotherapy of dissociative identity disorder. *Ann Pharmacother* 1996, 30:1498-99. (PMID: 8968469)
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. (PMID: 9013297)
19. **Markowitz JS**, Jackson C, Grinberg R. Marked liver enzyme elevations with clozapine. *J Clin Psychopharmacol* 1997;17:70-1. (PMID: 9004073)
20. **Markowitz JS**, Rames LJ, Thomas S, Reeves N. Zolpidem and hallucinations. *Ann Emerg Med* 1997, 29:300-1. (PMID: 9018205)
21. **Markowitz JS**, Morton WA, Gaulin BD. Antipsychotic blood concentrations: Nonstandardization of reference ranges. *J Clin Psychopharmacol* 1997, 17:121-4. (PMID: 10950479)
22. **Markowitz JS**, Myrick H, Hiott W. Clonidine dependence. *J Clin Psychopharmacol* 1997, 17:137-8. (PMID: 10950490)
23. **Markowitz JS**. Clozapine-fluvoxamine interaction. *Clin Neuropharmacol* 1997, 20: 281-2. (PMID: 9197954)
24. **Markowitz JS**, Gill HS, DeVane CL, Mintzer J. Fluoroquinolone inhibition of clozapine metabolism. *Am J Psychiatry* 1997, 153:881. (PMID: 9167522)
25. DeVane CL, Gill HS, **Markowitz JS**, Carson WH. Awareness of potential drug interactions may aid avoidance. *Ther Drug Monit* 1997, 19:366-7. (PMID: 9200782)
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. (PMID: 9108660)
27. DeVane CL, **Markowitz JS**, Hardesty S, Mundy S, Gill HS. Fluvoxamine-induced theophylline toxicity. *Am J Psychiatry* 1997, 154: 1317-18. (PMID:9286199)

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. **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. (PMID: 9315994)
31. **Markowitz JS**, Patrick KS. Tramadol-venlafaxine similarities. *Medical Hypotheses* 1998; 51:167-8. (PMID: 9881825)
32. **Markowitz JS**, DeVane CL, Gill HS, Hunt N, Monroe R. Lack of antidepressant-cyclosporine pharmacokinetic interactions. *J Clin Psychopharmacol* 1998;18:91-3. (PMID: 9472853)
33. **Markowitz JS**. Selective serotonin reuptake inhibitor discontinuation with ECT and withdrawal symptoms. *J ECT* 1998;14:55. (PMID: 9661096)
34. Myrick H, **Markowitz JS**, Henderson S. Priapism following trazodone overdose with cocaine use. *Ann Clin Psychiatry* 1998;10:81-3. (PMID: 9669540)
35. **Markowitz JS**. Herbal drugs assuming a larger role in psychiatric care. *Drug Topics* 1998, September 7:50.
36. Fantz R, **Markowitz JS**, Kellner C. Sumatriptan in post-ECT headache. *J ECT* 1998;14:272. (PMID: 9871850)
37. Liston HL, **Markowitz JS**. Opioid drug-drug interactions. *J Pharm Practice* 1998;11:325-41.
38. **Markowitz JS**, Morrison SD, DeVane CL. Psychostimulant drug interactions. *Int Clin Psychopharmacol* 1998;14:1-18. (PMID:10221637)
39. Jefferson A, **Markowitz JS**, Brewerton TD. Atypical antipsychotics. *J Am Acad Child Adolesc Psychiatry* 1998;3:1243-4. (PMID: 9847493)
40. Gaulin BD, **Markowitz JS**, Caley C, Nesbitt LA, Dufresne RL. Clozapine-associated elevation in serum triglycerides. *Am J Psychiatry* 1999;156:1270-2. (PMID: 10450273)
41. **Markowitz JS**, Carson WH, Jackson CW. Possible dihydroepiandrosterone-induced mania. *Biol Psychiatry* 1999;45:241-2. (PMID: 9951574)

42. **Markowitz JS**, Brown CS, Moore TR. Atypical antipsychotics: Part I: Pharmacology, pharmacokinetics, and efficacy. *Ann Pharmacother* 1999;33:73-85. (PMID: 9972387)
43. Brown CS, **Markowitz JS**, Moore TR, Parker NG. Atypical antipsychotics: Part II: Adverse effects, drug interactions, and costs. *Ann Pharmacother* 1999;33:210-17. (PMID: 10084417)
44. **Markowitz JS**, DeVane CL. Suspected ciprofloxacin inhibition of olanzapine resulting in increased plasma concentration. *J Clin Psychopharmacol* 1999;19:289-91. (PMID: 10350045)
45. Chappell K, **Markowitz JS**, Jackson C. Is valproate pharmacotherapy associated with polycystic ovaries? *Ann Pharmacother* 1999;33:1211-6. (PMID: 10573322)
46. 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. (PMID: 10331819)
47. **Markowitz JS**. Nefazodone withdrawal symptoms. *Can J Psychiatry* 1999;44:286-7. (PMID: 10225136)
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. (PMID: 10440465)
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. (PMID:10698361)
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81. Zhu H-J, Appel DI, Brinda BJ, **Markowitz JS**. Disposition of *d,l*-methylphenidate in organic cation transporter 3 (*Oct3*) knockout mice. NCDEU, May 28th- 31st, 2013, FL
81. Wang X, Zhu H-J, Munoz J, Gurley BJ, **Markowitz JS**. An ex vivo approach to botanical-drug interactions: A proof of concept study. 18th Annual Meeting of the College of Psychiatric and Neurologic Pharmacists (CPNP) April 19th- 22nd 2015, Tampa, FL
83. **Markowitz JS**. Limitations of in vitro assessments of the drug interaction potential of botanical supplements. *Planta Med* 2015; 81 - PL_07. DOI: 10.1055/s-0035-1565282
84. Albassam AA, **Markowitz JS**, Frye RF. The effect of milk thistle (*Silybum marianum*) and its main flavonolignans on CYP2C8 enzyme activity in human liver microsomes. Annual Meeting of the American College of Clinical Pharmacology (ACCP), September 25th - 27th, 2016, Bethesda, MD.

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85. Patrick KS, Straughn AB, Zhu H-J, Reeves III OT, Bernstein H, Shi J, Johnson HJ, Knight JM, Smith AT, Malcolm RJ, **Markowitz JS**. Ethanol PK/PD interactions with dexmethylphenidate and *dl*-methylphenidate spheroidal oral drug absorption systems in healthy volunteers. Annual meeting of American College of Clinical Pharmacology, San Diego, CA, Sept 17-19, 2017. *Clin Pharmacol Drug Development* 6: S1 48-49, 2017
 86. Qian Y, Wang X, **Markowitz JS**. Inhibition of carboxylesterase 1 by major cannabinoids and selected metabolites. *Experimental Biology 2019 (ASPET)*, Orlando, FL, April 6—9, 2019
 87. Gilliland TK, Qian Y, **Markowitz, JS**. In vitro assessment of known CES1 inhibitors on CES1 activity and heroin metabolism. American Society of Health-System Pharmacists (ASHP): 2019 ASHP Midyear Clinical Meeting, Las Vegas, NV, December 8-12, 2019
 88. Zhang Q, Melchert PW, De Faria L, Qian Y, Klee BO. **Markowitz JS**. An assessment of the influence of cannabidiol on the pharmacokinetics of methylphenidate. Cannabis Clinical Outcomes Research Conference (CCORC), Orlando, FL, May 19th-20th, 2022

MANUSCRIPT REFEREE/REVIEWER

American Journal of Cardiovascular Drugs
Annals of Pharmacotherapy
Basic & Clinical Pharmacology & Toxicology
Bipolar Disorders
British Journal of Clinical Pharmacology
Canadian Journal of Physiology & Pharmacology
Canadian Medical Association Journal
Clinica Chimica Acta
Clinical Drug Investigation
Clinical Pharmacokinetics
Clinical Pharmacology & Therapeutics
Clinical Therapeutics
Current Drug Metabolism
CNS Drugs
Drug Design, Development and Therapy
Drug Metabolism and Disposition
Drug Topics
Drug Safety Pharmacotherapy
European Journal of Pharmaceutical Sciences
Expert Opinion on Therapeutic Patents
Expert Review of Neurotherapeutics Pharmacotherapy
Expert Opinion on Drug Metabolism and Toxicology
Expert Opinion on Emerging Drugs
Hospital Pharmacy
JAMA
Journal of Child Adolesc Psychopharmacol
J International Medical Research
Toxicolog
Case Reports in Psychiatry
International Journal of Biological Macromolecules

Journal of Clinical Pharmacology
Journal of Clinical Psychiatry
J Clinical Psychology in Medical Settings
Journal of Clinical Psychopharmacology
Journal of Pharmaceutical Sciences
J Pharmacology and Experimental Therapeutics
Journal of Pharmacy Practice
Journal of Pharmacy and Pharmacology
Journal of Postgraduate Medicine
J Human Psychopharmacology
Journal of Psychopharmacology
Life Sciences
Molecular Pharmaceutics
Neuropsychiatric Disease and Treatment
Nutritional Neuroscience
Pediatrics
Pharmacogenomics
Pharmacogenetics
Pharmacogenetics and Genomics
Planta Medica
Phytotherapy Research
PLOS ONE
Prog Neuropsychopharmacol Biol Psychiatry
Psychiatry Research
The APS Journal
The Lancet
Xenobiotica
CNS Spectrums

EDITORIAL BOARDS

Journal of Child and Adolescent Psychopharmacology (Editorial Board member) 2014-2016
 (Deputy Editor 2016-)
Clinical Therapeutics (Topic Editor) 2012-present
 (Section: Pharmacology, Pharmacokinetics, Pharmacodynamics, Biosimilars, Bioequivalence)

Clinical Pharmacology in Drug Development (Editorial Board member) 2016-

Neuropsychiatric Disease and Treatment, 2006-
Journal of Drug Metabolism and Toxicology 2010 –2013
Natural Standard, (Senior Editorial Board) 2006-2013

*Contributing Editor for *CNS Drugs*, *Nursing Drug Handbook*, Lippincott Williams & Wilkins, 2003-2005

INVITED PRESENTATIONS

“Dosing and Doses” Cannabis Clinical Outcomes Research Conference (CCORC), Orlando, FL, May 19th-20th, 2022

“Ritalin: What You Don’t Know About Its Metabolism and Inter-Individual Variability” presented to The Child Mind Institute Visiting Professor Lecture Series, New York, NY, May 28, 2021

“Burnout Syndrome and Wellness Among Healthcare Professionals” Presented to APhA-ASP (UF Student Chapter) on April 2, 2018, Gainesville, FL.

“Medical Cannabis in Florida: Some considerations of use risks and patient safety.” Presented to ACCP Psychiatry and Neurology (UF Student Chapter) March 15, 2017, Gainesville, FL.

“Drug-Dietary Supplement Interactions-What Have We Learned?” Symposium Speaker, presented October 26th, 2015 at the 2015 AAPS Annual Meeting and Exposition, October 25th-29th, 2015, Orlando, FL.

“Limitations of in vitro Assessments of the Drug Interaction Potential of Botanical Supplements” 63rd International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA). August 25th 2015, Budapest, Hungary

“Carboxylesterase 1: Recent Developments in Pharmacogenetics” ASPET, Annual Meeting of Experimental Biology, Division for Toxicology Symposium: Pharmacogenetics and Drug Toxicity. March 31st 2015, Boston, MA

“Drug Metabolism: Beyond CYP450” 18th Annual Meeting of the College of Psychiatric and Neurologic Pharmacists (CPNP), Tampa, FL April 20th 2015

“Psychotropic Medications”, Gainesville FL Chapter of the National Alliance of the Mentally Ill (NAMI), Gainesville. FL, March 9th, 2015

“Carboxylesterase 1: Recent Developments in Pharmacogenomics”, November 6th, 2014. Faculty Seminar, University of Florida, Gainesville. FL

“Criteria for inclusion of in vitro assays in testing matrix” presented at NIH to the NCCAM personnel as the Dietary Supplement Drug Interaction Advisory Committee, Bethesda, Maryland, April 1st, 2013

“Evaluation of Dietary Supplement-Drug Interactions: Limitations of in vitro methods” presented at NIH to the NCCAM personnel as the Dietary Supplement Drug Interaction Advisory Committee, Bethesda, Maryland, March 27th, 2012

“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, NV, December 8th, 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

Seminar: “Psychotropic Medications”, Gainesville FL Chapter of the National Alliance of the Mentally Ill (NAMI), March 9th, 2015

Volunteer Science Judge for Ft. Clarke Middle School, Gainesville, FL 2011, 2012, 2013, 2015, 2016, 2017, 2018

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’s 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