# **CURRICULUM VITAE**

# WENDELL SCOTT AKERS, Pharm.D, Ph.D. January 2021

#### I. PERSONAL INFORMATION

Residence: 5214 Wildings Blvd, College Grove, TN 37046

Telephone: (615) 512-7793

University: Lipscomb University College of Pharmacy

One University Park Drive

Nashville, TN 37204

Telephone: (615) 966-7171

E-mail: scott.akers@lipscomb.edu

#### II. LICENSURE AND CERTIFICATION

Pharmacy License: State of Tennessee, #C008277 (1991 - present)

State of Kentucky, #011972 (2000 - 2008)

Professional Certification: Board Certified Pharmacotherapy Specialist (1993 - 2000)

Pharmacy Preceptor, State of Kentucky (2000 - 2008)

Research Certification: Protecting Study Volunteers in Research

#### III. EDUCATION

1981 – 85	Karns High School, Knoxville, Tennessee
1985 – 87	Roane State Community College, Harriman, Tennessee
1987 – 91	Doctor of Pharmacy, University of Tennessee, College of Pharmacy, Memphis, Tennessee
1991 – 92	Pharmacy Practice Resident, University of Tennessee Medical Center, Department of Pharmacy, Knoxville, Tennessee
1992 – 94	Cardiovascular Pharmacy Fellowship, University of Tennessee, Department of Clinical Pharmacy, Memphis, Tennessee; Mentor: Julie Johnson, Pharm.D.
1994 – 98	Doctor of Philosophy, Pharmaceutical Sciences, University of Kentucky, College of Pharmacy, Lexington, Kentucky; Mentor: Lisa Cassis, Ph.D.

#### IV. PROFESSIONAL EXPERIENCE

1986 – 87	Pharmacy Technician, Eckerd Drug, Oak Ridge, Tennessee
1988 – 90	Pharmacy Intern, Saint Francis Hospital, Memphis, Tennessee

1991 – 92 Pharmacist, University of Tennessee Medical Center, Department of Pharmacy, Knoxville, Tennessee
 1998 – 07 Clinical Pharmacy Specialist, Department of Pharmacy Services, University of Kentucky, Chandler Medical Center, Lexington, KY

#### V. ACADEMIC APPOINTMENTS

University of Kentucky		
1998 – 04	Assistant Professor (Tenure Track - Special Title Series), University of Kentucky, College of Pharmacy, Department of Pharmacy Practice and Science	
1998 – 04	Associate Member, Graduate Faculty for the Pharmaceutical Sciences, University of Kentucky, College of Pharmacy, Department of Pharmaceutical Sciences	
2004 – 07	Associate Professor with Tenure (Special Title Series), University of Kentucky, College of Pharmacy, Department of Pharmacy Practice and Science	
2004 – 09	Full Member, Graduate Faculty for the Pharmaceutical Sciences, University of Kentucky, College of Pharmacy, Department of Pharmaceutical Sciences	
Lipscomb Uni	versity	
2007 – 11	Associate Professor, Department of Pharmaceutical Sciences, Lipscomb University, College of Pharmacy	
2011 – 13	Associate Professor with Tenure, Department of Pharmaceutical Sciences, Lipscomb University, College of Pharmacy	
2013 –	Full Professor with Tenure, Department of Pharmaceutical Sciences, Lipscomb	

#### Vanderbilt University

2007 – 15 Associate Clinical Professor of Medicine, Division of Clinical Pharmacology, Vanderbilt University

University, College of Pharmacy

- 2011 19 Adjunct Associate Professor, Department of Pharmacology, School of Medicine, Vanderbilt University
- 2019 Adjunct Professor of Medicine, Department of Pharmacology, School of Medicine, Vanderbilt University

#### VI. ADMINISTRATIVE APPOINTMENTS

#### University of Kentucky

2006 – 07 Coordinator, Clinical & Experimental Therapeutics Graduate Track, University of Kentucky, Department of Pharmaceutical Sciences

# **Lipscomb University**

2007 –	Chair, Department of Pharmaceutical Sciences, Lipscomb University, College of Pharmacy
2009 –	Director, Pharmaceutical Sciences Summer Research Program, Lipscomb University, College of Pharmacy
2011 –	Co-Director, Pharm.D./Ph.D. Degree Partnership Program with Vanderbilt University, Lipscomb University, College of Pharmacy
2013 –	Director, Pharmaceutical Sciences Research Center, Lipscomb University, College of Pharmacy
2019 –	Laboratory Director, GCLP-Clinical Research Laboratory, Pharmaceutical Sciences Research Center, Lipscomb University, College of Pharmacy
HOSPITAL C	OR CLINICAL APPOINTMENTS
1998 – 07	Clinical Pharmacy Specialist, Department of Pharmacy Services, University of Kentucky, Chandler Medical Center, Lexington, KY
2002 – 06	Clinical Research Faculty (Without Compensation), Department of Veterans Affairs, Veteran Affairs Medical Center, Lexington, KY
TEACHING A	ACTIVITY
Pharmacy Cu	
<u>Pharmacy Cu</u> 1992 – 93	urriculum: CLPH 313: Cardiovascular Therapeutics Module
Pharmacy Cu 1992 – 93 1992 – 93 1992 – 93 University o	CLPH 313: Cardiovascular Therapeutics Module  CLPH 311: Applied Clinical Pharmacokinetics  CLPH 410: Cardiology Clerkship, Co-preceptor  f Kentucky
Pharmacy Cu 1992 – 93 1992 – 93 1992 – 93	CLPH 313: Cardiovascular Therapeutics Module  CLPH 311: Applied Clinical Pharmacokinetics  CLPH 410: Cardiology Clerkship, Co-preceptor  f Kentucky
Pharmacy Cu 1992 – 93 1992 – 93 1992 – 93 University o Pharmacy Cu	CLPH 313: Cardiovascular Therapeutics Module  CLPH 311: Applied Clinical Pharmacokinetics  CLPH 410: Cardiology Clerkship, Co-preceptor  f Kentucky  urriculum:
Pharmacy Cu 1992 – 93 1992 – 93 1992 – 93 University o Pharmacy Cu 1994	CLPH 313: Cardiovascular Therapeutics Module  CLPH 311: Applied Clinical Pharmacokinetics  CLPH 410: Cardiology Clerkship, Co-preceptor  f Kentucky  urriculum:  PHR 806: Biopharmaceutics/Pharmacokinetics; Teaching assistant
Pharmacy Cu 1992 – 93 1992 – 93 1992 – 93 University o Pharmacy Cu 1994	CLPH 313: Cardiovascular Therapeutics Module  CLPH 311: Applied Clinical Pharmacokinetics  CLPH 410: Cardiology Clerkship, Co-preceptor  f Kentucky  urriculum:  PHR 806: Biopharmaceutics/Pharmacokinetics; Teaching assistant  PHR 860: Cardiovascular/Pulmonary Physiology; Teaching assistant

VI.

VII.

1999 – 07	PHR 988 Pharmacy Practice Clerkship (20 Pharm.D. students since 1999) Coronary Intensive Care Unit, Chandler Medical Center	9)
1999 – 07	Pharmacy Academic Exchange Program (12 Pharmacy students since 19 Kitasato University, Tokyo, Japan	999)
Medicine Cur 1999 – 02	riculum: MD 842 Advanced Clinical Pharmacology/Anesthesiology (1 contact hou	r/year)
Pharmaceution 1999 – 07	cal Sciences Graduate Program: PHR 760 Introduction to Pharmaceutical Sciences Lab Infomercials – Pharmacology (0.5 contact hours per year)	
1999 – 07 2004 – 07	Clinical Pharmaceutical Sciences Ph.D. Program Clinical Research Rotation (2 students per year; 6-week rotation) PHR 760 Topics in Pharmaceutical Sciences: Introduction to Clinical and Translational Research (2 Contact Hours)	
2005 – 07	PHR 764 Special Topics in Pharmaceutical Sciences: Drug Development Regulation and Clinical Research (1 Contact Hour) Lecture: Use of Surrogate Markers in Phase 2/3 Cardiovascular Research	
University Ho	ospital Pharmacy Residency Program: Medical Intensive Care Unit Preceptor (3 Pharm.D. Residents since 1998	3):
1998 – 07	Coronary Intensive Care Unit Preceptor (30 Pharm.D. Residents since 19	998)
1999 – 03	Cardiothoracic Intensive Care Unit Preceptor (12 Pharm.D. Residents sir	nce 1999)
1998 – 07	Critical Care Resident Lecture Series (3 Critical Care Residents per year Cardiovascular Lectures (9 Contact Hours per year)	)
Lipscomb U Pharmacy Cu	▼ · · · · · · · · · · · · · · · · · · ·	
2008 – 09		1 CH
2008 – 10	PHIE 1512 Introductory Pharmacy Practice Experience Small Group Facilitator	3 CH
2008 –	PHAD 1111 Applied Christian Values in Pharmacy Small Group Facilitator	12 CH
2009 –	PHAD 2111 Applied Christian Values in Pharmacy Small Group Facilitator	12 CH
2008 –	PHSC 1512/1522 Integrated Biomedical Sciences Laboratory Drug Discovery Video/Biologics Pharmacokinetic Workshop Drug Dissolution Testing Pharmacogenomic Testing/CPIC Guidelines Drug Metabolism/CYP450 Inhibition Assays	54 CH

	Inhaled Pulmonary Drug Formulations		
2009 –	PHSC 1423 Biopharmaceutics Drug Development and Basic Pharmacokinetics Intravenous Formulations and Drug Delivery System Oral Drug Formulations and Drug Delivery System		33 CH
2009 – 10	PHSC 2623 Pharmacologic Basis of Therapeutics Cardiovascular Pharmacology		6 CH
2009 –	PHSC 2433 Applied Biopharmaceutics and Pharm Hepatic and Renal Clearance Concepts Phenytoin/Nonlinear Pharmacokinetics Pharmacogenomics/CPIC Case Studies Biotechnology Drug Products	acokinetics	30 CH
2012 –	APPE Rotation – Research in Pharmaceutical Science APPE Rotation – Academic Rotation in Pharmaco		
2013	PHSC 3002 Biotechnology and Drug Developmen	t (Elective)	
2016 –	PHSC 1113/1123 Physiologic Basis of Therapeuti Blood and Blood Components Renal Physiology	cs I and II	3 CH 5 CH
Vanderbilt U			
2007 – 09	ience Nursing Program: N307 Pharmacotherapeutics Adult Nurse Practitioner Specialty Program	4 CH per year	
2008 – 09	N307 Advanced Pharmacotherapeutics Family Nurse Practitioner Specialty Program	3 CH per year	
<u>Medicine Cu</u> 2009 – 15	rriculum: IDIS-5070 Disease, Diagnosis, and Therapeutics Pharmacokinetic Lectures	3 CH per year	
Pharmacolog 2009 –	gy <u>Graduate Program:</u> PHAR 320 Drug Metabolism and Pharmacokinetic Pharmacokinetics and Drug Development	s 14 CH per year	
ADVISING A	ACTIVITY		
University o 2000 – 07	of <b>Kentucky</b> Pharmacy Student Advisor (8)		
Pre-Pharmac	cy Student Research Advisor (2):		
2002	High School Research Apprentice Program (HS-R Justin Mullins, Whitesburg High School, Letcher C		
2006	Summer Undergraduate Research Program; Ment		

VIII.

# Brent Roach, Transylvania University, Lexington, KY

# Pharmacy Resident Advisor (5):

1998	Jennifer Justice, Pharm.D., Pharmacy Practice Resident
1998	Phillip Empey, Pharm.D., Pharmacy Practice Resident
2001	Sandy Cuellar, Pharm.D., Pharmacy Practice Resident
2004	Felix Yam, Pharm.D. , Pharmacy Practice Resident
2005	April Miller, PharmD., Pharmacy Practice Resident

#### Pharmacy Resident Research Advisor (7):

1998	Sara Douglas-Brouse, Pharm.D., Critical Care Resident (Co-Advisor)
1999	Phillip Empey, Pharm.D., Critical Care Resident (Co-Advisor)
2000	Jeremy Flynn, Pharm.D., Critical Care Resident
	Project: The Role of the Cardiac Renin-Angiotensin System in Ischemia-
	Reperfusion Injury.
2000	Shilpa Shah, Pharm.D., Critical Care Resident
	Project: The Effect of Clonidine on Cardiac Norepinephrine Spillover.
2001	Bonnie Rosbolt, Pharm.D., Critical Care Resident
	Project: The Effect of Ischemia-Reperfusion Injury on Angiotensin II Receptor
	Subtype Expression.
2002	Natasa Stevkovic, Pharm.D., Critical Care Resident
	Project: The Safety of Clopidogrel Administration in Combination with Aspirin After
	Off-Pump Coronary Artery Bypass Surgery.
2003	Diane H. Rhee, Pharm.D., Pharmacy Practice Resident
	Project: Evaluation of Chest Tube Output and Antiplatelet Therapy Following
	Coronary Artery Bypass Graft Surgery
2005	Kyle Weant, Pharm.D., Critical Care Resident
	Project: Clinical Utility of the RPFA following Off-Pump Coronary Artery Bypass
	Surgery.

#### Fellow Research Advisor (2):

2001 - 03	Jeremy D. Flynn, Pharm.D., Cardiovascular Critical Care Fellow
	Project: Cardioprotective Effects of Losartan on the Functional Recovery of
	Isolated Rat Hearts.

2004 – 06 Jennifer Oh, Pharm.D., Cardiovascular Critical Care Fellow Project: Double-Blind Study of the Safety of Clopidogrel in Combination with Aspirin after OFF-Pump Coronary Artery Bypass Surgery.

# Graduate Student Research Advisory Committee (9): 1999 – 00 Member Steve Phipps Pharm D: Ph.D. Clinical Pharmaceutical Sciences

1999 – 00	Member, Steve Phipps, Pharm.D.; Ph.D. Clinical Pharmaceutical Sciences
2000 - 01	Member, Sherry Hsu; Ph.D. Pharmaceutical Sciences Program
2001 - 04	Member, Carine Boustany, Pharm.D.; Ph.D. Pharmaceutical Sciences
2004 - 04	Member, Gerome Burke; Ph.D. Toxicology
2004 - 07	Member, Leah Allen; Ph.D. Pharmaceutical Sciences Program
2005	Outside Examiner, Tracy Henriques; Ph.D. Nutritional Sciences
2005 - 09	Mentor, Julie Oestreich, Pharm.D.; Ph.D. Clinical Pharmaceutical Sciences
2005 – 06	Mentor, Jennifer Oh, Pharm.D.; Clinical Pharmaceutical Sciences (Masters)
2006 - 08	Member, Shaojing Ye; Ph.D Department of Molecular and Cellular Biochemistry

#### **Lipscomb University**

2008 – Pharmacy Student Advisor (Approx. 100)

2008 – Pharm.D.-to-Ph.D. Pathway Program Advisor (5)

Rachel Crouch (Class of 2012) Elizabeth Gibson (Class of 2015) Brittany Spitznagel (Class of 2016) Jessica Murray (Class of 2018) Matthew Murphy (Class of 2019) Vivian Truong (Class of 2021) Elliot McClure (Class of 2023)

#### 2012 – Summer Research Mentor (10)

2012 Alan Their (Student Pharmacist, P2)

2013 Benny Jemmott (Student Pharmacist, P2) Kelli Ingram (Student Pharmacist, P2)

2014 Luke Bolin (Student Pharmacist, P2)

2015 Brooke Baggett (Student Pharmacist, P2)

2016 Haley Scarbrough (Undergraduate Student)

2018 Breyanne Bannister (Student Pharmacist, P1) Vivian Truong (Student Pharmacist, P1)

Ellie Boster (Samford Undergraduate Student)

2019 Breyanne Bannister (Student Pharmacist, P2)

Vivian Truong (Student Pharmacist, P2) Amakia Gibson (Student Pharmacist, P2)

2020 Haley Lewis (Undergraduate Student)

Dallas Gibson (Student Pharmacist, P1)

2014 – 19 NIH/K01 Training Grant Mentor, Klarissa Jackson (Junior Faculty Member)

#### **Vanderbilt University**

#### Graduate Student Research Advisory Committee (4):

2012 – 14	Member, David Stevens, Department of Pharmacology (Harth Laboratory)
2012 – 16	Member, Rachel Crouch, Department of Pharmacology (Daniels Laboratory)
2016 – 19	Member, Elizabeth Gibson, Department of Pharmacology (Osheroff Laboratory)
2017 –	Member, Brittany Spitznagel, Department of Pharmacology (Weaver Laboratory)
2019 –	Member, Matthew Murphy, Department of Pharmacology (Murray Laboratory)

### **Meharry Medical College**

#### Graduate Student Research Advisory Committee (1):

2015 – 18 Member, Kristopher Abney, Department of Neuroscience (Weaver Laboratory)

#### IX. ADMINISTRATIVE ACTIVITY AND UNIVERSITY SERVICE

#### **University of Tennessee**

#### College of Pharmacy:

1993 – 94 Pharmacokinetic Course Subcommittee

1993 – 94 Drug Information Subcommittee

# **University of Kentucky**

Pharmacy Residency Program	:
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- 1998 07Critical Care Resident Preceptor, Cardiology
- Pharmacy Practice and Critical Care Resident Interviews 1999 - 07

# Hospital Pharmacy Patient Care Services:

1998	Medical Intensive Care Unit, Clinical Pharmacy Specialist
1998 - 07	Coronary Intensive Care Unit, Clinical Pharmacy Specialist
1999 - 03	Cardiothoracic Intensive Care Unit, Clinical Pharmacy Specialist

#### Hospital Pharmacy Service/Committees:

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1998 – 00	Pharmacy & Therapeutics Critical Care Subcommittee
1999	Great Lakes Pharmacy Resident Conference Planning Committee
1999	Enoxaparin Medication Use Evaluation Task Force
2000	Low Molecular Weight Heparin Task Force (Consultant)
2000	Thrombolytic Policy Revisions for Emergency Department
2000 - 01	Eptifibatide Medication Use Evaluation (Coordinator)
2000 - 01	Amiodarone Medication Use Evaluation Task Force (Coordinator)
2000 - 01	Coumadin Medication Use Evaluation Task Force
2001	Anthem PTCA Patient Education Multidisciplinary Team (Member)
2001	Anthem CABG Patient Education Multidisciplinary Team (Member)
2001	Tirofiban Formulary Evaluation (Consultant)
2001	Antiarrhythmic Formulary Evaluation (Consultant)
2001 – 02	Natrecor Drug Evaluation (Consultant)
2003	Dofetilide Administration/Dispensing Guideline Document (Consultant)
2003	Bivalirudin Dosing Administration Card (Consultant)
2004	Cardiothoracic Surgery Post-Operative Atrial Fibrillation Protocol (Consultant)
2004	GP IIb/IIIa Receptor Antagonist Formulary/Cost Analysis (Consultant)
2004	ACE Inhibitor & Angiotensin II Receptor Blocker Formulary (Consultant)
2004	University of Kentucky AHA Get with the Guidelines Planning Committee
2004	ASHP Residency Accreditation Visit, Faculty Participant
0005	

Cardiology Specialist Search Committee (Member)

#### Hospital Special Service Projects:

nospital Special Service Projects.		
tor)		
uate the frequency and		
patients to develop drug-		
ntucky Medical Center.		
ery (Co-Coordinator)		
ctively monitor patients at		
owing cardiac surgery.		

#### College of Pharmacy:

2005

1997 – 98	Graduate Task Force Committee
1998 – 99	Research Challenge Trust Fund Faculty Search Committee
1998 - 00	Seminar Advisory Committee
1999 - 00	Pharmacy Practice & Science Search Committee, Transplant position
1999 – 05	Clinical Pharmaceutical Sciences Focus Group
1999 – 07	Molecular and Cellular Pharmacology Area of Graduate Study (Member)

2000 – 01 2000 – 07	Pharmaceutical Sciences Faculty Search Committee, Drug Delivery position Safety Committee
2000 – 07	Clinical Pharmaceutical Sciences Graduate Student Recruitment, ASHP Midyear Clinical Meeting, New Orleans, LA
2003	ACPE Self-Study Subcommittee: Faculty Standards
2003	Pathology and Therapeutics Review Committee
2003 - 07	Pharmaceutical Sciences Faculty Search Committee, Faculty position
2003	Pharmaceutical Sciences Ph.D. Program Open House
2003	Clinical Pharmaceutical Sciences Fellow/Graduate Student Recruitment, American College of Clinical Pharmacy Recruitment Forum, Atlanta, GA
2003	Clinical Pharmaceutical Sciences Graduate Student Recruitment, ASHP Midyear Clinical Meeting, New Orleans, LA
2004 – 05	Ad Hoc Committee for Residency Planning and Clinical Fellowship Retreat
2004 – 05	PPS Faculty Search Committee, Clinical Pharmaceutical Scientist Position
2004 – 06	PPS Governance Document Committee
2004 – 06	Clinical Pharmaceutical Sciences Strategic Plan Workgroup
2004	Clinical Pharmaceutical Sciences Graduate Student Recruitment, ASHP Midyear
	Clinical Meeting, Orlando, FL
2005 - 06	Chair, Graduate Education and Research Committee, Department of
	Pharmaceutical Practice and Science
2005 – 06	Member, Executive Committee, Department of Pharmacy Practice and Science
2005 - 07	Member, Graduate Education and Research Committee, Department of
	Pharmaceutical Practice and Science
2006	Clinical & Experimental Therapeutics Graduate Student Recruitment, ASHP Midyear Clinical Meeting, Anaheim, CA
2006	College of Pharmacy Building/Research Committee, PPS Representative
2006	Summer Undergraduate Research Program Mentor, Pharmaceutical Sciences
2006 – 07	Coordinator, Clinical & Experimental Therapeutics Graduate Track, Department of
	Pharmaceutical Sciences
2006 - 07	Chair, Clinical and Experimental Therapeutics Track Steering Committee,
	Departments of Pharmacy Practice & Science and Pharmaceutical Sciences
2006 – 07	Member, Department Chair Search Committee, Pharmacy Practice and Science
University:	
2002	Research Challenge Trust Fund Reception, Kentucky General Assembly, Holiday
2002	Inn Capital Plaza, Frankfort, KY
2006 – 07	Member, Clinical and Translational Science Training Core Committee
Lipscomb University	
<u>University</u>	
2000	Mambay Now Science Facility Dragramming Committee

<u>University</u>	
2008	Member, New Science Facility Programming Committee
2008	Member, Environmental Protection Agency Audit Committee
2009	Member, Institutional Review Board
2009	Member, Scholarship Task Force
2013	Chair, Provost Faculty Summer Research Grant Selection Committee
2016	Section Chair, Lipscomb University Student Scholars Symposium
2016	Research Standard Contributor, SACS Accreditation Document
2017 –	Poster Judge, Lipscomb University Student Scholars Symposium

College of Pharmacy
2007 – Department Chair, Pharmaceutical Sciences

2007 –	Member, College of Pharmacy Leadership Team
2008 - 09	Chair, Environmental Health and Safety Committee
2008 – 11	Member, Environmental Health and Safety Committee
2008 – 11	Member, Educational Assessment Committee
2009	Coordinating Chair, Pharmacy Research Day Symposium
2010	Coordinating Chair, Pharmacy Research Day Symposium
2010 – 11	Chair, Meharry Collaborative Task Force
2011 – 17	Member, Academic Progression Committee
2011	Coordinating Chair, Pharmacy Research Day Symposium
2013	Coordinating Chair, Pharmacy Research Day Symposium
2016 –	Standard Manager, ACPE Accreditation Self Study Committee

# **Vanderbilt University**

# Department of Pharmacology

2014 –	Member, T32 NIH-NIGMS Training Grant in Pharmacological Sciences
2016 – 17	Exam Contributor, Pharmacology Qualifying Examination in Pharmacology
2017 –	Member, Pharmacology Mock Qualifying Examination in Pharmacology
2018 –	Member, Training Program Vanderbilt AHA Atrial Fibrillation SFRN
2019 –	Member, Training Program Vanderbilt AHA Sudden Cardiac Death SFRN

# X. PROFESSIONAL SERVICE

# **Grant Review Committees:**

1999 – 05	Internal Grant Reviewer, UK Chandler Medical Center
2004 - 07	Invited Grant Reviewer, UK General Clinical Research Center
2006 - 08	American Heart Association, Ohio Valley Peer Review Committee 2b
2013 –	Ad Hoc Research Design Studio Reviewer, Vanderbilt Institute for Clinical and
	Translational Research

# **Editorial Appointments:**

1999 Editor, "Acute Myocardial Infarction Module", UK CE Office

# Journal Referee:

1995	Clinical Pharmacy
1997 - 03	Journal of Pharmacology and Experimental Therapeutics
2001 - 03	Cardiovascular Research
2003 - 07	Pharmacotherapy
2003 - 07	The Annals of Pharmacotherapy
2006	Pharmaceutical Research
2007 – 15	Journal of Clinical Pharmacology
2020 –	European Heart Journal – Cardiovascular Pharmacotherapy

# Other Professional Service:

2002 – 07	Poster Judge, UK Gill Heart Institute Cardiovascular Research Day
2003	Invited Participant, <i>Pharmacotherapy</i> Focus Group
2004 - 05	Society of Critical Care Medicine, Multidisciplinary Model Research Committee
2004 - 05	Research/Scholarly Activity Mentor for UK Pharmacy ICU Team
2004 - 07	American College of Clinical Pharmacy, Abstract Reviewer
2005 - 07	Manuscript Reviewer, Residency Research Awards
2006 - 07	Poster Judge, Clinical and Translational Science Spring Conference

2006	Representative, NIH PharmD Pathways to Biomedical Research Conference	
2016 – 17	Advisory Panel, AACP Academic Research Fellows Program - Catalyst	
2017 – 18	Member, AACP Research Program Development Committee	
2019 –	Member, NIH Data and Safety Monitoring Board, NHLBI	
PUBLIC SEF		
1997 – 00	Member, Florence Church of Christ, Florence, KY	
2000 – 07	Member, Southside Church of Christ, Lexington, KY	
2004	Pharmacy Team Leader, Gill Heart Institute, American Heart Association Walk,	
0000	Ohio Valley Affiliate, Lexington, KY	
2008 –	Member, Harpeth Hills Church of Christ, Nashville, TN	
2008 – 10	Participant, Lipscomb College of Pharmacy Team, Arthritis Walk, Tennessee	
2008 – 09	Chapter, Nashville, TN Participant, Lipscomb College of Pharmacy Explorers Program, Nashville, TN	
2006 – 09	Failicipant, Lipscomb College of Fnarmacy Explorers Program, Nashville, TN	
CONSULTIN	IG ACTIVITY	
1999 – 00	Poulenc Rorer Pharmaceuticals, Inc., Delaware, PA	
2000 - 01	Quest Medical, Inc., Allen, Tx	
2000 - 07	Sanofi-Aventis Pharmaceuticals, Inc., New Jersey	
2004 - 05	Pfizer Pharmaceuticals, Inc., New York, NY	
2004 - 05	Guilford Pharmaceuticals, Inc.	
2012 – 13	Palm Beach Atlantic College of Pharmacy, Pharmaceutical Sciences Mentor	
2016 – 19	Sano Informed Prescribing, Inc., Franklin, TN	
2019 – 20	Seventh Wave Laboratories LLC, Maryland Heights, MO	
2020 –	Inotiv, West Lafayette, IN	
DDOEESSIONAL ACTIVITY AND DEVELOPMENT		
PROFESSIO	NAL ACTIVITY AND DEVELOPMENT	
	NAL ACTIVITY AND DEVELOPMENT Affiliations:	
<u>Professional</u>	Affiliations:	
<u>Professional</u> 1987 – 88	Affiliations:  Member, The Academy of Students of Pharmacy	
<u>Professional</u>	Affiliations:	
<u>Professional</u> 1987 – 88 1987 –	Affiliations:  Member, The Academy of Students of Pharmacy  Member, Kappa Psi Pharmaceutical Fraternity	
<u>Professional</u> 1987 – 88 1987 – 1991 – 92	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94 1992 – 94 1992 – 07 1998 –	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94 1992 – 94 1992 – 07 1998 – 1998 –	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94 1992 – 07 1998 – 1998 – 2001 – 07	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94 1992 – 07 1998 – 1998 – 2001 – 07 2002 – 07	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association	
Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 07 1998 - 1998 - 2001 - 07 2002 - 07 2003 - 07	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association	
Professional 1987 – 88 1987 – 1991 – 92 1991 – 08 1992 – 94 1992 – 07 1998 – 1998 – 2001 – 07 2002 – 07 2003 – 07 2006 –	Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology	
Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 07 1998 - 1998 - 2001 - 07 2002 - 07 2006 - 2007 -	Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology Member, Tennessee Pharmacist Association	
Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 97 1998 - 1998 - 2001 - 07 2002 - 07 2003 - 07 2006 - 2007 - 2008 -	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology Member, Tennessee Pharmacist Association Member, American Association of Pharmaceutical Scientists	
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Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 07 1998 - 1998 - 2001 - 07 2002 - 07 2003 - 07 2006 - 2007 - 2008 - 2015 -	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology Member, Tennessee Pharmacist Association Member, American Association of Pharmaceutical Scientists Member, American Society of Pharmacology and Experimental Therapeutics	
Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 07 1998 - 1998 - 2001 - 07 2002 - 07 2003 - 07 2006 - 2007 - 2008 - 2015 -  Professional	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology Member, Tennessee Pharmacist Association Member, American Association of Pharmaceutical Scientists Member, American Society of Pharmacology and Experimental Therapeutics  Development:	
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Professional 1987 - 88 1987 - 1991 - 92 1991 - 08 1992 - 94 1992 - 97 1998 - 1998 - 2001 - 07 2002 - 07 2003 - 07 2006 - 2007 - 2008 - 2015 -  Professional 1992	Affiliations:  Member, The Academy of Students of Pharmacy Member, Kappa Psi Pharmaceutical Fraternity Member, Knoxville Society of Hospital Pharmacists Member, American Society of Hospital Pharmacists Member, Memphis Area Resident/Fellow Society Member, Mid-South College of Clinical Pharmacy Member, Mid-South College of Clinical Pharmacy Member, American College of Clinical Pharmacy Member, Rho Chi Honor Society Member, American Association of Colleges of Pharmacy Member, Society of Critical Care Medicine Member, American Heart Association Member, Bluegrass Pharmacists Association Member, American College of Clinical Pharmacology Member, Tennessee Pharmacist Association Member, American Association of Pharmaceutical Scientists Member, American Society of Pharmacology and Experimental Therapeutics  Development:  Advanced Cardiac Life Support University of Tennessee Medical Center at Knoxville	

XI.

XII.

XIII.

	University of Tennessee, College of Pharmacy
1992	Biostatistics for the Sciences I
	University of Tennessee, Memphis
1993	Pharmacotherapy Review Course
	University of Tennessee, Department of Clinical Pharmacy
1993	Advanced Pharmacokinetic/Pharmacodynamics Course
	University of Tennessee, Department of Clinical Pharmacy
1998	Pharmacotherapy Self-Assessment Program, Third Edition
	American College of Clinical Pharmacy
1999	Development of Laboratory Techniques in the Isolated Perfused Rat Heart
	Preparation, Drs. Joseph Janicki and Greg Brower, Department of Anatomy,
	Physiology, and Pharmacology, Auburn University
1999	Development of Laboratory Techniques in the Isolated Perfused Rat Heart
	Preparation with Attached Cardiac Sympathetic Nerves. Dr. Subramanium
	Apparsundaram, Department of Pharmacology and Center for Molecular
	Neuroscience, Vanderbilt University Medical School
2001	Orientation to Blackboard 5. WT Young Library, University of Kentucky.
2001	K30 Fall Retreat Mini-Workshops: Authorship Ethics, Conflict of Interest.
	University of Kentucky.
2001	K30 December Journal Club. Coaching: The Opportunity to Realize Dreams.
	University of Kentucky.
2002	Development of Laboratory Techniques using Gel Shift Assays and Western Blots.
	Drs. Hollie Swanson and Ginell Post, University of Kentucky
2002	Certification of Human Subject Protection Education
2003	NIH Peer Review Policies and Procedures: Grant Writing for Success, Anthony M.
	Coelho, Ph.D., NIH Review Policy Officer. Presented at the University of
	Kentucky, Lexington, KY.
2003	NIH R03 and R21 Workshop. University of Kentucky, Lexington, KY.
2003	Clinical Research Skills Workshop, Pfizer Pharmaceuticals, Lexington, KY
2004	Uniform IRB, IBC, GCRC Unanticipated Problems/Adverse Event Reporting in
	Human Research Projects. University of Kentucky IRB, Lexington, KY.
2004	NIH Grant Workshop: R03 and R21. OSPA, University of Kentucky, Lexington, KY.
2013	Fellow, Academic Research Fellows Program, American Association of
	Colleges of Pharmacy
•	AWARDS AND ACHIEVEMENTS
1985 – 86	Dean's List, Roane State Community College
1988 – 91	Scholarship Honors, Kappa Psi Pharmaceutical Fraternity
1993	Upjohn Research Award, University of Tennessee
1993	American College of Clinical Pharmacy Cardiovascular Fellowship
2000	American Foundation of Pharmaceutical Education Fellowship
2001	Rho Chi Honor Society
2001	American College of Clinical Pharmacy Critical Care Fellowship (Mentor)
2001	AACP New Investigator Award
2001	UK Pharmacy Practice & Science Research Enhancement Award
2001	UK K30 Career Training Award in Translation Research (Mentor)
2002	UK Gill Heart Institute Cardiovascular Research Conference Fellow Poster Award
2002	1st Place Winner: Jeremy Flynn, Pharm.D. (Mentor: Akers)

Society of Critical Care Outcomes Pharmacy Fellowship Program Award

American College of Clinical Pharmacy Best Fellow Award

Fellow: Jeremy Flynn, Pharm.D. (Mentor: Akers)

XIV.

2003

2003

2006	K30 Mentor Recognition Award, Clinical and Translational Science Spring Conference, University of Kentucky, Lexington, KY
2006	Student Abstract Award (Julie Oestreich, PharmD; Mentor: Akers) American College of Clinical Pharmacology, Cambridge, MA
2006	Wayne A. Colburn Memorial Award (Julie Oestreich, PharmD; Mentor: Akers) American College of Clinical Pharmacology, Cambridge, MA
2006	Finalist, Best Student Poster (Julie Oestreich, PharmD; Mentor: Akers) American College of Clinical Pharmacy, St. Louis, MO
2006 – 07	American Heart Association Pre-Doctoral Fellowship (Julie Oestreich, PharmD; Mentor: Akers)
2006	American Foundation for Pharmaceutical Education Pre-Doctoral Fellowship (Julie Oestreich, PharmD; Mentor: Akers)
2006	Rho Chi Research Day First Place Graduate Student Poster, University of Kentucky (Julie Oestreich, PharmD; Mentor: Akers)
2008	Rho Chi Research Day Second Place Graduate Student Poster, University of Kentucky (Julie Oestreich, PharmD; Mentor: Akers)
2008	PhRMA Foundation Pre-Doctoral Fellowship (Julie Oestreich, PharmD; Mentor: Akers)
2008	APhA Annual Meeting First Place Postgraduate Poster Award-Clinical Sciences (Julie Oestreich, PharmD; Mentor: Akers)
2013	American Association of Colleges of Pharmacy, Academic Research Fellows Program
2014	Faculty of the Year Award, Kappa Psi Pharmaceutical Fraternity, Lipscomb College of Pharmacy
2015	Faculty of the Year Teaching Award, First Year Class, Lipscomb College of Pharmacy
2017	Lipscomb University Student Scholars Symposium, First Place Presentation (Haley Scarbrough, Undergraduate Research Student; Mentor: Akers)
2018	Faculty of the Year Teaching Award, First Year Class, Lipscomb College of Pharmacy

#### XV. SCHOLARLY PRESENTATIONS

#### **Local Presentations:**

Racial differences in antihypertensive response to beta-blockade. <u>Podium:</u> University of Tennessee, College of Pharmacy, Department of Clinical Pharmacy Research Seminar, Memphis, TN, July 1993.

Racial differences in antihypertensive response to beta-blockade. <u>Podium:</u> University of Tennessee, College of Pharmacy, Department of Clinical Pharmacy Research Seminar, Memphis, TN, June 1994.

Angiotensin II in congestive heart failure. <u>Podium:</u> University of Kentucky, College of Pharmacy, Division of Pharmacology and Experimental Therapeutics Research Seminar, Lexington, KY, March 1995.

Characterization of the renin-angiotensin system in a pressure-overload rat model. <u>Podium:</u> University of Kentucky, College of Pharmacy, Division of Pharmacology and Experimental Therapeutics Research Seminar, Lexington, KY, February 1996.

Angiotensin II regulates cardiac beta-adrenergic receptors in a rat model of pressure-overload. <a href="Podium: University">Podium: University</a> of Kentucky, College of Pharmacy, Division of Pharmacology and Experimental Therapeutics Research Seminar, Lexington, KY, March 1997.

Enhanced cardiac sympathetic neurotransmission in a rat model of pressure-overload. <u>Podium:</u> University of Kentucky, College of Pharmacy, Department of Pharmacy Practice and Science, Lexington, KY, September 1997.

Enhanced Cardiac Neurotransmission in Rat Left Ventricle Following Pressure-Overload. Podium: Gill Heart Research Seminar, University of Kentucky, October 1998.

Suppressing Cardiac Sympathetic Neurotransmission. <u>Podium:</u> Pharmacy Practice and Science Research Seminar Series, University of Kentucky, March 1999. Low Molecular Weight Heparins. <u>Podium:</u> Department of Emergency Medicine Grand Rounds, College of Medicine, University of Kentucky, Lexington, KY (CE Provided), November 1999.

Suppressing Cardiac Neurotransmission. <u>Podium:</u> American Association of Pharmaceutical Scientists: University of Kentucky Chapter. Session III: Clinical Pharmacology. Lexington, KY, April 2000.

*Clinical Pharmacology of Nitrovasodilators.* <u>Podium:</u> Cardiology Catheterization Report, College of Medicine, University of Kentucky, April 2000.

Building Community Partnership for Heart Failure Care: A Multi-Disciplinarian Approach. Podium Discussion Panel: Heart Failure - From Cell to Bedside. Hyatt Regency Lexington, Lexington, KY (CE Provided), September 2000.

Clinical Pearls: Drug-Induced QT Interval Prolongation. <u>Podium:</u> Pharmacy Grand Rounds, University of Kentucky Chandler Medical Center, September 2002.

Losartan and Ischemic Preconditioning Inhibits p38 Kinase Activation During Ischemia and Enhances Akt Activation During Reperfusion in Isolated Rat Hearts. Flynn J, Post G, Kilpatrick E, Cassis L, Pauly J, Akers WS. Poster: University of Kentucky Gill Heart Research Institute Conference, November 2002.

Optimizing the Diabetic Formulary to Improve Cardiovascular Outcomes. <u>Podium:</u> Bluegrass Pharmacists Association Meeting, Lexington, KY (CE Provided), May 2003.

Initiation of a Prospective QT Interval Monitoring Program in the Intensive Care Units. Presented to the Pharmacy & Therapeutics Committee, University of Kentucky Medical Center, Lexington, KY, September 2003.

Improving Drug Therapy and Outcomes in the Cardiothoracic Surgical Population. <u>Podium:</u> University of Tennessee, College of Pharmacy, Department of Clinical Pharmacy Research Seminar, Memphis, TN, January 2004.

Inhibition of platelet function by clopidogrel is attenuated when initiated during Cangrelor therapy. Oestreich JH, Ferraris S, Wagner R, Locklar A, Kaibas A, Akers WS, and Steinhubl SR. Poster: Rho Chi Research Day, Lexington, KY, April 2006. The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. Oestreich JH, Locklar A, Oh J, and Akers WS. Poster: Clinical and Translational Science Spring Conference, Lexington, KY, June 2006.

Integrating and Applying Pharmacokinetic, Pharmacodynamic, and Pharmacogenomic Tools to Discover and Define Relationships Between Drug Concentration and Response: Focus on Antiplatelet Agents. Podium: Center for Clinical and Translation Science Fall Conference, Lexington, KY, October 2006.

Integrating and Applying Pharmacokinetic, Pharmacodynamic, and Pharmacogenomic Tools to Discover and Define Relationships Between Drug Concentration and Response: Focus on Antiplatelet Agents. Podium: Freed-Hardeman University Research Day, Henderson, TN, April 2008.

*Drug Dissolution Testing.* <u>Laboratory Exercise:</u> Lipscomb University Race To The Top Hands-On Chemistry Program, Nashville, TN, March 2012.

*Drug Dissolution Testing.* <u>Laboratory Exercise:</u> Lipscomb-HCA/TriStar Health Care Academy Lipscomb University, Nashville, TN, June 2012.

Enhancing Research and Scholarship: A Lipscomb Perspective. Palm Beach Atlantic School of Pharmacy, West Palm Beach, FL, April 2013.

*Inside the Numbers: Examine Analysis and Student Feedback.* Palm Beach Atlantic School of Pharmacy, West Palm Beach, FL, April 2013.

*Pharmacokinetics 101: Back to the Basics.* Continuing Education. Lipscomb University College of Pharmacy, Nashville, TN, March 2016.

High-dose Montelukast Pharmacokinetics in Children with Asthma Attacks. Akers WS, King JC, Truong V, Arnold DH. Poster: Vanderbilt University Translational Research Forum, October 2019.

#### **State/Regional Presentations:**

Chronic imipramine treatment as a rodent model for nutritionally related congestive heart failure. Burke GV, Cross A, Akers WS, Cassis LA. Poster: University of Kentucky Gill Heart Research Institute Conference, October 1998.

Alterations in cardiac sympathetic neurotransmission following pressure-overload. Akers W, English V, Cross A, Cassis L. Poster: University of Kentucky Gill Heart Research Institute Conference, October 1998.

Management of Acute Coronary Syndromes: Low Molecular Weight Heparins. <u>Podium:</u> Nursing Health Education. Baptist East Hospital, Louisville, Kentucky (CE Provided), April 1999.

Presynaptic Modulation of Norepinephrine Release Contributes to Cardiac Sympathetic Activation. Akers WS, English VL, Cassis LA. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, October 2000.

Chronic Imipramine Administration as a Rodent Model for Cardiac Failure with Associated Cardiac Cachexia. Burke G, Akers S, Cassis L. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, October 2000.

Effects of Losartan on Ischemia/Reperfusion Injury in Isolated Rat Hearts. Akers WS, Flynn J, Narayan P. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, October 2001.

The Effect of Clonidine on Norepinephrine Spillover in the isolated rat heart. Akers WS, Shah SK, Oak K, Apparsundaram S. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, October 2001.

Chronic Imipramine Administration Reduces Cardiac Contractility. <u>Burke G</u>, Akers W, Narayan P, Cassis L. <u>Poster:</u> University of Kentucky Gill Heart Institute Cardiovascular Research Conference, October 2001.

Management of Acute Coronary Syndromes: Case-based Workshop. <u>Podium:</u> Aventis Pharmacueticals Consultant Meeting. Ritz Carlton, Amelia Island, Florida, March 2002.

The Effects of the Cardiac Renin-Angiotensin System on Myocardial Ischemia-Reperfusion Injury. <u>Podium: Flynn JD</u>, Akers WS. 32nd Annual Southeastern Residency Conference, Athens, GA, April, 2001.

Reduction in Cardiac Norepinephrine Spillover Using Clonidine. <u>Podium: Shah SK</u>, Akers WS. 32nd Annual Southeastern Residency Conference, Athens, GA, April, 2001.

Effect of Ischemia-Reperfusion Injury on Angiotensin II Receptor Subtype Expression. <u>Podium: Rosbolt MB</u>, Flynn JD, Akers WS. 33rd Annual Southeastern Residency Conference, Athens, GA, April, 2002.

Enhancing Cardiac Protection Through Sodium-Hydrogen Exchange Inhibition. <u>Podium:</u> Grand Rounds Meriter Hospital, Madison, WI (CE Provided), October 2002.

Safety of Clopidogrel in Combination with Aspirin After Off-Pump Coronary Artery Bypass Surgery. Podium: Stevkovic N, Flynn JD, Ramaiah C, Akers WS. 34th Annual Southeastern Residency Conference. Athens, GA, April 2003.

Vitamin K1 for the Reversal of Warfarin Anticoagulation: An Outcomes Evaluation. <u>Podium: Martin CA</u>, Akers WS, Armitstead JA, Davis GA. 34th Annual Southeastern Residency Conference. Athens, GA, April 2003.

Vitamin K1 for the reversal of warfarin anticoagulation: evaluation of an educational program at a university hospital. <u>Davis GA</u>, Martin CA, Armitstead JA, Akers WS. <u>Poster:</u> University of Kentucky Gill Heart Research Institute Conference, October 2003.

Differential Regulation of Serine/Threonine Protein Kinases by Angiotensin II Receptor Subtypes During Myocardial Ischemia-Reperfusion Injury. <u>Akers WS</u>, Flynn JD, Post G. <u>Poster:</u> University of Kentucky Gill Heart Research Institute Conference, October 2003.

Clonidine Suppression of Cardiac Norepinephrine Spillover in the Isolated Rat Heart. Akers WS, Flynn JD, Apparsundaram S. Poster: University of Kentucky Gill Heart Research Institute Conference. October 2003.

Frequency of P2Y12 haplotype and GPIIb/IIIa genotype in African American and Caucasian populations. Akers WS, Flynn JD, Carmichael EM, Davis GA. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference. A(76), 2004.

Optimization of Agonist-stimulated [35S]GTPγS Binding in Rat Heart Tissue Sections. Oestreich J, Locklar A, Pauly J, Akers WS. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference. A(50), 2004.

Inhibition of platelet function by clopidogrel is attenuated when initiated during Cangrelor therapy. Oestreich JH, Ferraris S, Wagner R, Locklar A, Kaibas A, Akers WS, and Steinhubl SR. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, Lexington, KY, October 2005.

Effect of intravenous cangrelor, a reversible platelet P2Y12 receptor antagonist, on ADP-induced platelet aggregation. Oh J, Ferraris S, Wethington M, Dulin B, Steinhubl SR, and Akers WS. <a href="Poster: University">Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, Lexington, KY, October 2005.</a>

Recent and Ongoing Clinical Trials with Other Antithrombins: Implications in the Management of Acute Coronary Syndromes. <u>Podium:</u> Sanofi-Aventis Pharmaceuticals, Pharmacy Working Group Meeting, Dallas, TX, November 2005.

Interventions to improve compliance with guidelines in patients following coronary artery bypass grafting. Yam FK, Akers WS, Ferraris VA, Smith K, Ramaiah C, Camp PC, Flynn JD. Poster: Central Surgical Association Annual Meeting, Louisville, KY, March 2006.

The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. Oestreich JH, Locklar A, Oh J, and Akers WS. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, Lexington, KY, October 2006.

Effect of increased maintenance dose of clopidogrel on platelet aggregation. Holt J, Akers WS, Oestreich JH, and Steinhubl SR. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, Lexington, KY, October 2006.

Variability in ADP-induced platelet activation and aggregation by light transmittance aggregometry. Roach B, Oestreich JH, and Akers WS. Poster: University of Kentucky Gill Heart Institute Cardiovascular Research Conference, Lexington, KY, October 2006.

Overview of Platelet Assays: Applications for Interpreting Clinical Trial Data. <u>Podium:</u> Sanofi-Aventis Pharmaceuticals, Regional Cardiovascular Medical Training Meeting, Jackson Hole, WY, February 2007.

*University of Tennessee College of Pharmacy Expansion – Vision for the Nashville Campus.* Invited Speaker: University of Tennessee College of Pharmacy, Nashville, TN, July 2014.

Pharmacokinetics for the Pharmaceutical Scientist – Short Course. <u>Invited Speaker:</u> Drug Metabolism and Pharmacokinetics Division, Seventh Wave Laboratories LLC, Maryland Heights, MO, July 2019.

Pharmacokinetics for the Pharmaceutical Scientist – Short Course. <u>Invited Speaker:</u> Pharmacology and Toxicology Division, Seventh Wave Laboratories LLC, Maryland Heights, MO, October - November 2019.

#### **National Presentations:**

Racial differences in response to beta-blockade. <u>Podium:</u> ACCP Genentech Research Fellowship Award presented at the 15<sup>th</sup> Annual Meeting of the American College of Clinical Pharmacy, St. Louis, MO, July 1994.

*R- and S-verapamil protein binding: characterization and effect of metabolites.* Akers WS, Johnson JA. Poster: 15<sup>th</sup> Annual Meeting of the American College of Clinical Pharmacy, St. Louis, MO, July 1994.

Effect of pressure-overload on angiotensin receptors in rat heart. Akers W, Dowell T, Cassis L. Poster: FASEB, Washington D.C., April 1996.

Differential effects of propranolol and labetalol on nighttime blood pressure. Akers WS, Johnson JA. Poster: American Society of Hypertension, New York City, New York, April 1998.

Alterations in cardiac sympathetic neurotransmission following pressure-overload. <u>English V;</u> Akers W; Cassis L. <u>Poster:</u> FASEB April 1999.

The Renin-Angiotensin System in Heart Failure: Angiotensin II Receptor Blockers. <u>Podium:</u> AstraZeneca Pharmaceuticals, Dallas, TX, August 2000.

The Renin-Angiotensin System in Heart Failure. <u>Podium:</u> Aventis Pharmaceuticals, Cincinnati, OH, October 2000.

Increased Cardiac Sympathetic Neurotransmission in Cardiac Hypertrophy. <u>Podium:</u> American College of Clinical Pharmacy Annual Meeting. Los Angeles, CA, November 2000.

Severe isolated thrombocytopenia following antiplatelet administration during acute myocardial infarction. Brouse S, Akers WS. Poster: ASHP Midyear Clinical Meeting, Los Vegas, NV, December 2000.

The renin-angiotensin system in myocardial ischemia-reperfusion injury. Flynn JD, Narayan P, Akers WS. Poster: The American College of Clinical Pharmacy Spring Practice and Research Forum, Salt Lake City, UT, April 2001.

The Effect of Clonidine on Norepinephrine Spillover in the isolated rat heart. Akers WS, Shah SK, Oak K, Apparsundaram S. Poster: The American College of Clinical Pharmacy Annual Meeting, Tampa, FL, October 2001.

Effect of Nesiritide Versus Milrinone on Patient Outcomes in the Treatment of Acutely Decompensated Heart Failure. <u>Lewis DA</u>, Gurram NR, Abraham WT, Akers WS. <u>Poster:</u> The American College of Clinical Pharmacy Spring Meeting, Palm Springs, CA, April 2003.

Safety of Clopidogrel in Combination with Aspirin After Off-Pump Coronary Artery Bypass Surgery (OPCAB): The CLOPCAB Trial. Flynn JD, Ramaiah C, Ferraris S, Ferraris V, Akers WS.

<u>Poster</u>: Cardiology PRN, The American College of Clinical Pharmacy Annual Meeting, Atlanta, GA, November 2003.

A Comparison of Rate Control and Rhythm Control in Patients with Atrial Fibrillation: The AFFIRM Trial. Significant Papers in Pharmacotherapy (Cardiology). <u>Podium:</u> The American College of Clinical Pharmacy Annual Meeting, Atlanta, GA, November 2003.

Differential Regulation of Mitogen Activated Protein Kinases by Angiotensin II Receptor Subtypes During Myocardial Ischemia-Reperfusion Injury. Flynn JD, Post G, Akers W.S. Poster: American College of Clinical Pharmacy, November 2003.

Cardioprotective Effects of Losartan during Myocardial Ischemia-Reperfusion Injury. Flynn JD, Post GR, Akers WS. Podium: ACCP Research Institute, Scientific Paper Platform Presentation, American College of Clinical Pharmacy, November 2003.

Vitamin K1 for the reversal of warfarin anticoagulation: an outcomes evaluation. Poster: Martin CA, Akers WS, Armitstead JA, Davis GA. American Society of Health-System Pharmacists Midyear Clinical Meeting. New Orleans, LA. December 2003.

Impact of P2Y12 Haplotype on the Antiplatelet Effects of Clopidogrel in Off-Pump Bypass Surgery Patients. Oh J, Flynn JD, Davis GA, Ferraris S, Akers WS. Podium: Cardiology PRN, American College of Clinical Pharmacy Annual Meeting, Dallas, TX. October 2004.

Development of a multidisciplinary hemostasis monitoring program for post-cardiac surgery patient. Flynn JD, Akers WS. Poster: The American College of Clinical Pharmacy Annual Meeting, Dallas, TX. October 2004.

Frequency of P2Y12 haplotype and GPIIb/IIIa genotype in African American and Caucasian populations. <u>Davis GA</u>, Flynn JD, Carmichael EM, Akers WS. <u>Podium:</u> The American College of Clinical Pharmacy Annual Meeting, Dallas, TX. October 2004.

Implementation of a pharmacy directed, multidisciplinary practice to improve compliance with published guidelines and quality indicators in post coronary artery bypass graft patients. Yam FK, Smith K, Akers WS, Camp PC, Flynn JD. Poster: The American College of Clinical Pharmacy Spring Practice and Research Forum, Myrtle Beach, SC, April 2005.

The effect of the P2Y12 receptor haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. Oestreich JH, Akers WS. Poster/Podium: The American College of Clinical Pharmacology Annual Meeting, Boston, MA, September 2006.

Pharmacodynamics of Cangrelor when Administered Alone or in Combination with Clopidogrel. Oestreich JH, Steinhubl SR, Ferraris S, Oh J, Wethington M, Akers WS. Poster: The American College of Clinical Pharmacy Annual Meeting, St. Louis, MO, October 2006.

Risk-adjusted outcomes of patients receiving either e-aminocaproic acid or Aprotinin for antifibrinolytic prophylaxis during on-pump cardiac surgery. Flynn JD, Ramsey EZ, Akers WS, Stienke D, Smith K, Camp PC, Ramaiah C, Ferraris VA. Poster: The American College of Clinical Pharmacy Annual Meeting, St. Louis, MO, October 2006.

Effect of increased maintenance dose of clopidogrel on platelet aggregation. Holt J, Akers WS, Oestreich JH, Steinhubl SR. <u>Poster:</u> American College of Cardiology Annual Scientific Sessions, New Orleans, LA, March 2007.

Career Growth Areas in Pharmacology: Colleges of Pharmacy. <u>Podium:</u> National Directors of Graduate Studies in Pharmacology Annual Meeting, East Lansing, MI, July 2011.

An integrated approach to drug dissolution: focus on drug formulation and release. Akers WS and Mercer SL. Poster: American Association of Colleges of Pharmacy Annual Meeting, San Antonio, TX, July 2011.

Use of a high-throughput assay to emphasize key concepts in drug metabolism and drug interactions. Akers WS and Mercer SL. Poster: American Association of Colleges of Pharmacy Annual Meeting, San Antonio, TX, July 2011.

An Integrated Biomedical and Pharmaceutical Sciences Teaching Laboratory for First Year PharmD Students. Fowler MW, Deweese JE, Dilks HH, Mercer SL, Phipps SD, McCormack J, Akers WS. Poster: American Association of Colleges of Pharmacy Annual Meeting, San Antonio, TX, July 2011.

Drug Metabolism Laboratory. Special Session: Back to the Basics: Integrating Curricular Content in the Pharmaceutical Sciences through Laboratory Based Exercises. American Association of Colleges of Pharmacy Annual Meeting, Kissimmee, Florida, July 2012.

Drug Dissolution Laboratory. <u>Special Session:</u> Back to the Basics: Integrating Curricular Content in the Pharmaceutical Sciences through Laboratory Based Exercises. American Association of Colleges of Pharmacy Annual Meeting, Kissimmee, Florida, July 2012.

*IBS Laboratory Student Survey and Course Evaluations.* Special Session: Back to the Basics: Integrating Curricular Content in the Pharmaceutical Sciences through Laboratory Based Exercises. American Association of Colleges of Pharmacy Annual Meeting, Kissimmee, Florida, July 2012.

An In-Vitro Model of Intralipid Emulsion Treatment for Verapamil Toxicity. Akers WS, Ingram K, Fowler MW, Vergne M, Knollman BC, Segar DL, Dawling SP. Academic Research Fellow Program Poster: American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX, July 2014.

Establishing a Research Scholars Program and Cross Institutional Partnerships. Akers WS. Special Poster Session: American Association of Colleges of Pharmacy Annual Meeting, Grapevine, TX, July 2014.

Establishing Cross-Institutional Partnerships: PharmD-to-PhD Pathway Program. Akers WS and Barnett J. Leading from the Lab: the 2018 Research Symposium (AACP Catalyst and INSPIRE 2018). American Association of Colleges of Pharmacy Interim Meeting. Long Beach, CA, February 2018.

AHA-Strategically Focused Research Network for Atrial Fibrillation. Reverse Site Presentation: A Novel Molecular Target in Atrial fibrillation – Pharmacokinetics and Pharmacodynamics of 2HOBA. American Heart Association. Chicago, IL, May 2018.

AHA-Strategically Focused Research Network for Sudden Cardiac Death. Reverse Site Presentation: Clinical Research Study in Ventricular Tachycardia Ablation – Pharmacokinetics and Pharmacodynamics of Ryanodex. American Heart Association. Dallas, TX, May 2019.

#### **International Presentations:**

Therapy for Secondary Prevention following Coronary Artery Bypass Graft Surgery. <u>Poster:</u> Rhee DH, Flynn JD, Ramaiah C, Davis GA, Akers WS. ACCP-ESCP International Conference on Clinical Pharmacy. Paris, France. April 2004.

Use of Recombinant Factor VIIa for the Treatment of Refractory Bleeding in Heart Transplantation. Poster: Jahania SA, Camp PC, Flynn JD, Akers WS, and Saha SP. 46th Annual World Congress of the International College of Angiology. Lexington, Kentucky. July 2004

#### XVI. GRANTS AND CONTRACTS

#### **Research Grants and Contracts**

Title: The role of angiotensin II in cardiac hypertrophy of the senescent heart.

Award: 1999 Pilot Grant in the Biology of Aging

Sponsor: UK Department of Physiology

Amount: \$ 20,000

Date: 1/1/00 - 12/31/00

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 10%)

Lisa A. Cassis, Ph.D. (Co-PI)

Title: Alterations in the Cardiac Renin-Angiotensin System during Myocardial

Ischemia-Reperfusion Injury.

Award: 2001 Research Enhancement Award

Sponsor: UK Division of Pharmacy Practice & Science

Amount: \$ 30.000

Date: 7/01/01 - 6/30/02

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 15%)

Title: The Role of Endogenous Angiotensin II on Myocardial Ischemia-

Reperfusion Injury.

Award: 2001 Medical Center Research Grant

Sponsor: UK Medical Center

Amount: \$ 15,000

Date: 7/01/01 - 6/30/02

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 5%)

Title: Role of Angiotensin II in Myocardial Ischemia-Reperfusion Injury.

Award: 2001 New Investigator Program

Sponsor: American Association of Colleges of Pharmacy

Amount: \$ 10,000

Date: 5/1/02 – 12/31/03

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 2%)

Title: Monitoring Hemostasis in the Cardiac/Cardiothoracic ICU

Award: Unrestricted Educational Grant Sponsor: Aventis Pharmaceuticals

Amount: \$ 5,000

Date: 5/1/02 – 12/31/03

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 5%)

Title: Establishment of an Ex-Vivo Model of Myocardial Ischemia-Reperfusion

Injury Using Human Atrial Trabeculae to Evaluate Cardioprotective

Strategies.

Award: 2001 K30 Career Training Award

Sponsor: University of Kentucky K30 Clinical Research Training Program

Amount: \$ 5,000

Date: 7/01/02 – 12/31/02

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 5%)

Jeremy Flynn, Pharm.D. (K30 Fellow/Co-PI; 5%)

Title: Pilot Study on the Effects of Clopidogrel on Platelet Function and

Postoperative Bleeding following Off-Pump Coronary Artery Bypass

Surgery

Award: 2001 K30 Career Training Award

Sponsor: University of Kentucky K30 Clinical Research Training Program

Amount: \$ 5,000

Date: 7/01/02 - 6/30/04

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 5%)

Jeremy D. Flynn, Pharm.D. (K30 Fellow/Co-PI; 10%)

Title: Angiotensin II Coupling to G-proteins in Rat Heart Tissue Sections.

Award: 2003 Medical Center Research Grant

Sponsor: UK Medical Center

Amount: \$15,000

Date: 7/1/03 - 6/30/04

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 10%)

Title: Effects of Clopidogrel on Platelet Function Determined by the Rapid

Platelet Function Analyzer in Patients Undergoing Off-Pump Coronary

Artery Bypass Surgery.

Sponsor: Accumetrics, Inc.

Amount: \$ 5,000

Date: 8/1/03 – 6/30/05

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 5%)

Title: Regulation of Ras Signaling by Rlf in Hypertrophy.

Award: R01-HL075241

Sponsor: National Institutes of Health

Amount: \$1,589,616

Date: 12/1/03 – 11/30/08

Role (% Effort): Steve Post, M.D., Ph.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Co-I; 5%)

Title: The Effects of Aprotinin on Thrombin-Induced Proteolytic Cleavage of the

Proteinase-Activated Receptor-1 (PAR-1) on Human Platelets.

Sponsor: Bayer Pharmaceuticals

Amount: \$14,300

Date: 1/1/04 – 12/31/04

Role (% Effort): Victor Ferraris, M.D., (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 5%)

Title: Double-Blind Study of the Safety of Clopidogrel in Combination with Aspirin

after Off-Pump Coronary Artery Bypass Surgery.

Award: USPHS #M01RR02602

Sponsor: UK General Clinical Research Center

Amount: \$ 20,290

Date: 2/1/04 - 6/30/05

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 10%)

Title: Effects of Clopidogrel on Graft Patency by Magnetic Resonance Imaging

following Off-Pump Coronary Artery Bypass Surgery.

Sponsor: UK MRISC Grant

Amount: \$6.000

Date: 3/1/04 - 6/30/05

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 5%)

Chand Ramaiah, M.D. (Co-PI)

Title: Differential Regulation of MAP Kinases and Protein Kinase B by

Angiotensin II Subtype Receptors during Myocardial Ischemia-Reperfusion.

Award: Grant-in-Aid

Sponsor: American Heart Association, Ohio Valley Affiliate Grant-in-Aid

Amount: \$121,000

Date: 7/1/04 - 6/30/06

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 15%)

Title: Clinical Utility of the Rapid Platelet Function Analyzer

Sponsor: American College of Clinical Pharmacy

Amount: \$15,000

Date: 7/1/04 - 6/30/05

Role (% Effort): Jeremy D. Flynn, Pharm.D. (PI; 10%)

Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 5%)

Title: An open-label study assessing the pharmacokinetics and

pharmacodynamics of a cangrelor bolus plus infusion in healthy volunteers.

Sponsor: The Medicines Company

Amount: \$353,400

Date: 1/01/05 – 12/31/06

Role (% Effort): Steven Steinhubl, M.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 10%)

Title: A Double Blind, Randomized Comparison Between Two Different

Clopidogrel Maintenance Doses

Sponsor: UK General Clinical Research Center

Amount: \$2.520

Date: 9/01/05 – 1/01/07 Role (% Effort): John Holt, M.D. (PI) Wendell S. Akers, Pharm.D., Ph.D. (Co-I; 2%); Platelet Function

Laboratory support

Title: EMERALD-ACS

Sponsor: UK General Clinical Research Center

Amount: \$7,650

Date: 9/01/05 – 7/31/07

Role (% Effort): Debabrata Mukherjee, M.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Co-I; 2%); Platelet Function support

Title: A Pharmacodynamic Comparison of Prasugrel vs Clopidogrel in Subjects

with ACS who have recently Undergone Percutaneous Coronary

Intervention and are Receiving Clopidogrel

Sponsor: Eli Lilly and Company

Amount: \$177,786

Date: 9/01/05 – 1/01/08

Role (% Effort): Steven Steinhubl, M.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Co-I; 5%)

Title: The Effect of RB006 and RB007 on In Vitro Platelet Activation in Human

Blood

Sponsor: Regado Biosciences

Amount: \$68,872

Date: 1/01/07 – 7/30/08

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI; 5%)

Title: The Cellular, Inflammatory, Oxidative, and Genomic Effects of

Aluminum Oxide Nanoparticles on Blood and Endothelial Cells

Sponsor: UK Got Grants Program

Amount: \$22,020

Date: 7/01/06 - 6/30/07

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (Co-PI; 2%)

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation

Sponsor: UK General Clinical Research Center (USPHS #M01RR02602)

Amount: \$47,503.20

Date: 6/01/06 – 12/31/08

Role (% Effort): Julie Oestreich, Pharm.D. (Mentee)

Wendell S. Akers, Pharm.D., Ph.D. (Mentor)

Title: Champion PCI Study/Platelet Pharmacodynamic Substudy

Sponsor: The Medicines Company

Amount: \$163.632

Date: 7/01/07 – 4/01/09

Role (% Effort): Steven Steinhubl, M.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (PI for Substudy; 5%)

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation.

Award: K30 Training Grant, Career Training in Therapeutics and Translational

Research

Sponsor: General Clinical Research Center, University of Kentucky

Amount: \$5,000

Date: 1/01/06 – 12/31/06

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation.

Award: Clinical Research Feasibility Funds Award

Sponsor: UK General Clinical Research Center (USPHS #M01RR02602)

Amount: \$16,000

Date: 7/10/07 – 3/31/08

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: An in-vitro model of lipophilic drug sequestration in serum for drug

toxicity

Award: 2013 Faculty Summer Grant

Sponsor: Provost's Office, Lipscomb University

Amount: \$12,920

Date: 6/1/2013 – 5/31/2014

Role: Wendell S. Akers, Pharm.D., Ph.D. (Co-PI)

Mike Fowler, Ph.D. (Co-PI)

Title: Enhancing Automation for Rapid Equilibrium Dialysis Experiments in

**Drug Sequestration Studies** 

Award: Gilson Program to Accelerate the Sciences – Equipment Grant

Sponsor: Gilson, Inc. Amount: \$8,000

Date: 1/1/2014 – 12/31/2014

Role: Wendell S. Akers, Pharm.D., Ph.D. (PI)

Title: Potency Determination of an Ophthalmic Drug Product

Award: Research Contract Sponsor: Designer Drugs, Inc.

Amount: \$2.005

Date: 1/1/15 – 12/31/2015 Role: Wendell Akers (PI)

Title: Toward a Mechanism-Based Approach to Treating Atrial Fibrillation

Award: R01 Renewal Sponsor: NIH-NHLBI

Amount: \$300,000 Subcontract Scope: LC-MS/MS Analysis

Date: 5/15/2015 – 3/31/2020

Role: Bjorn Knollmann (PI); Wendell Akers (Co-I; Subaward PI)

Title: Long-term Potency and Stability of an Ophthalmic Drug Product

Award: Research Contract Sponsor: Designer Drugs, Inc. Amount: \$10,000

Date: 11/1/15 – 7/31/2017 Role: Wendell Akers (PI)

Title: Single and Multiple Ascending Dose Studies of 2-HOBA in Healthy

Subjects following Oral Administration.

Award: Research Contract

Sponsor: Metabolic Technologies, Inc.

Amount: \$38,000

Date: 6/1/2017 – 12/31/2019 Role: Wendell Akers (Consultant)

Title: Novel Molecular Target in Atrial Fibrillation – 2-HOBA

Award: Strategically Focused Research Network in Atrial Fibrillation

Sponsor: American Heart Association

Amount: \$ 128,689

Date: 7/1/2018 – 6/30/2022

Role: Wendell Akers (Co-I; Subaward PI)

Title: High Dose Montelukast for Treatment of Asthmatic Exacerbations in

Children

Award: VICTR Grant

Sponsor: Vanderbilt University

Amount: \$7,700

Date: 1/1/2019 – 5/31/2020 Role: Wendell Akers (Co-I)

Title: A Clinical Trial of RyR2 Inhibition to Prevent Ventricular Arrhythmias in

Patients with Structural Heart Disease

Award: Strategically Focused Research Network in Sudden Cardiac Death

Sponsor: American Heart Association

Amount: \$ 170,415.40

Date: 7/1/2019 - 6/30/2023

Role: Wendell Akers (Co-I; Subaward PI)

Title: Safety, Pharmacokinetics and Efficacy of Oral Ifetroban in Subjects with

**Duchenne Muscular Dystrophy** 

Award: Research Contract

Sponsor: Cumberland Pharmaceuticals

Amount: \$28,360

Date: 9/1/2019– 8/31/2021

Role: Wendell Akers (Subaward PI)

Title: Novel Reactive Lipid Mediators Underlie the Emergence of AF Triggers

in the posterior left atrium

Award: Strategically Focused Research Network

Sponsor: American Heart Association

Amount: \$22.814

Date: 7/1/2020 – 6/30/2022

Role: Wendell Akers (Co-I; Subaward PI)

Title: Pharmacokinetics and Cardiac RyR2 Inhibition of Verticilide in a

**Preclinical Mouse Model** 

Award: VUMC - Academic Sponsored Research Contract

Sponsor: NIH-NHLBI Amount: \$5.834

Date: 8/1/2020 – 7/31/2021

Role: Jeffrey Johnston (PI); Wendell Akers (Co-I; Subaward PI)

Title: OAT Transporter Trafficking in Human Renal Proximal Tubule Cells

Award: Industry Sponsored Research Contract

Sponsor: Inotiv Inc. Amount: \$13,636.16

Date: 10/1/2020 – 9/30/2021

Role: Wendell Akers (Co-I; Institutional PI)

Title: Dose escalation study of high-dose oral montelukast to inform future

RCT in children with acute asthma exacerbations

Award: R34 PAR-19-155

Sponsor: NIH-NHLBI

Amount: Pending (\$85,828)

Date: February 2021 Submission

Role: Wendell Akers (Co-I; Subaward PI)

Title: Trial for repurposing montelukast for cardiac surgery-associated acute

kidney injury (MONARCH)

Award: U01 PAR-18-332 Sponsor: NIH-NCATS

Amount: *Pending (\$266,187)* 

Date: February 2021 Submission

Role: Wendell Akers (Co-I; Subaward PI)

#### **Training Program Grants and Contracts**

Title: Racial differences in antihypertensive response to beta-blockade.

Award: 1993 Genentech Cardiovascular Research Fellowship Sponsor: American College of Clinical Pharmacy Research Institute

Amount: \$ 19,000 (7/1/93 – 6/30/94)

Date: 7/1/93 – 6/30/94

Role (% Effort): Wendell Akers, Pharm.D. (Co-I/Fellow; 75%)

Mentor: Julie A. Johnson, Pharm.D. (PI)

Title: Angiotensin II Regulates Cardiac Beta-Adrenergic Receptors in a Rat

Model of Pressure-Overload.

Award: 1997 AFPE Fellowship

Sponsor: American Foundation of Pharmaceutical Education

Amount: \$ 6,000

Date: 5/1/97 – 4/30/98

Role (% Effort): Wendell Akers, Pharm.D. (Co-l/Graduate Student; 75%)

Mentor: Lisa A. Cassis, Ph.D. (PI)

Title: Role of the Cardiac Renin-Angiotensin System in Myocardial Ischemia-

Reperfusion Injury.

Award: 2001 Bayer Critical Care Fellowship

Sponsor: American College of Clinical Pharmacy Research Institute

Amount: \$ 22,500

Date: 7/1/01 - 6/30/03

Role (% Effort): Wendell S. Akers, Pharm.D., Ph.D. (PI/Mentor)

Jeremy D. Flynn, Pharm.D. (Co-I/Fellow; 75%)

Title: Double-Blind Study of the Safety of Clopidogrel in Combination with Aspirin

after OFF-Pump Coronary Artery Bypass Surgery.

Award: 2002 Ortho Biotech/Critical Care Outcomes Pharmacy Fellowship Program

Sponsor: Society of Critical Care Medicine

Amount: \$ 30,000

Date: 7/1/03 - 6/30/05

Role (% Effort): Post-doctoral Fellow (Co-I/Fellow; 75%)

Mentor: Wendell S. Akers, Pharm.D., Ph.D. (PI)

Title: Optimizing drug therapy in the cardiothoracic population.

Award: First-year graduate school scholarship

Sponsor: Phi Lambda Sigma-GlaxoSmithKline-American Foundation for

Pharmaceutical Education

Amount: \$7,500

Date: 8/01/04 – 6/30/05

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation

Sponsor: Sigma Xi Scientific Research Society (Grant-in-Aid Program)

Amount: \$400

Date: 7/01/06 - 6/30/07

Role (% Effort): Julie Oestreich, Pharm.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Mentor)

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation

Sponsor: American Heart Association Predoctoral Fellowship

Amount: \$42,000

Date: 7/01/06 - 6/30/08

Role (% Effort): Julie Oestreich, Pharm.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Mentor)

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation

Sponsor: Sigma Xi Scientific Research Society (Grant-in-Aid Program)

Amount: \$1000

Date: 7/01/07 - 6/30/08

Role (% Effort): Julie Oestreich, Pharm.D. (PI)

Wendell S. Akers, Pharm.D., Ph.D. (Mentor)

Title: The Effect of RB006 and RB007 on In Vitro Platelet Activation in Human

Blood

Award: AFPE Gateway Research Scholarship/PharmD Student Sponsor: American Foundation for Pharmaceutical Education

Amount: \$5,000

Date: 7/01/07 - 6/30/08

Role (% Effort): Tyler Whisman, Pharm.D. (Student)

Wendell S. Akers, Pharm.D., Ph.D. (Mentor 3%)

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation.

Award: Graduate Student Incentive Program Fellowship

Sponsor: University of Kentucky

Amount: \$3,150

Date: 7/01/06 - 6/30/09

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: The effects of P2Y12 polymorphisms on platelet receptor density and

activation.

Award: Pre-doctoral Fellowship

Sponsor: American Foundation for Pharmaceutical Education

Amount: \$6,000 (declined fellowship – accepted AHA Predoctoral fellowship)

Date: 7/01/06 - 6/30/07

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: Evaluating the genetic influence of P2Y12 and GP IIb/IIIa receptor

polymorphisms on platelet response in healthy volunteers.

Award: Pre-doctoral Fellowship Sponsor: PhRMA Foundation

Amount: \$21,000

Date: 7/01/08 – 6/30/09

Role: Julie Oestreich, Pharm.D., Ph.D.-Candidate (PI)

Mentor: Wendell S. Akers, Pharm.D., Ph.D.

Title: Hands-On Chemistry Program – Pharmaceutical Sciences

Award: Race To The Top Grant

Sponsor: Tennessee Higher Education Commission

Amount: \$10,000 (Subcontract of Primary Grant \$113,027)

Date: 9/01/11 – 8/31/12

Role: Ben Hutchinson and Deborah Boyd (Co-Directors)

Wendell Akers and Mike Fowler (Co-Coordinators)

Title: Training in Pharmacological Sciences
Award: T32 GM007628 Vanderbilt University
Sponsor: National Institutes of Health - NIGMS

Amount: (Renewal Submitted June 2012 - \$6,091,811)

Date: 7/01/14 - 6/30/19

Role: Joey Barnett (PI) (Training Slot for Pharm.D./Ph.D Student)

Wendell Akers (Affiliated Program Faculty- Partnership Program)

Title: Role of CYP3A5 in the Metabolism and Hepatotoxicity of Lapatinib and

Sunitinib.

Award: K01 Mentored Research Scientist Award - 5K01CA190711

Amount: \$679,062

Sponsor: National Institutes of Health - NCI

Date: 9/01/14 – 8/31/19
Role: Klarissa Jackson (PI)

Wendell Akers (Project Mentor Team)

#### XVII. PUBLICATIONS

Johnson JA; **Akers WS**; Miller ST; Applegate WB. Lymphocyte beta 2-receptor activity, metoprolol kinetics, and response to metoprolol in hypertensive black men. Pharmacotherapy 15(2):150-157, 1995.

Johnson JA; **Akers WS**; Miller ST; Applegate WB. Metoprolol minimizes nighttime blood pressure dip in hypertensive black males. Am J Hypertens 8(3):254-259, 1995.

Johnson JA; **Akers WS**. Influence of metabolites on protein binding or verapamil enantiomers. Br J Clin Pharmacol 39:536-538, 1995.

Cassis L; Laughter A; Fettinger M; **Akers S**; Speth R; Burke G; King V; Dwoskin L. Cold exposure regulates the renin-angiotensin system. J Pharmacol Exp Ther 286(2):718-726, 1998.

**Akers WS**, Cassis LA. Presynaptic Modulation of Cardiac Sympathetic Neurotransmission in Rat Left Ventricle Slices: Effect of Pressure Overload. J Neural Transm 107:885-902, 2000.

Johnson JA, **Akers WS**, Herring VL, Wolfe MS, Sullivan JM. Gender differences in labetalol kinetics: Importance of determining stereoisomer kinetics for racemic drugs. Pharmacotherapy 20:622-628, 2000.

**Akers WS**, Cross A, Speth B, Dwoskin LP, Cassis LA. Renin-angiotensin system and the sympathetic nervous system in cardiac pressure-overload hypertrophy. Am J Physiol Heart Circ Physiol 279:H2797-H2806, 2000.

Lewis DA, Gurram NR, Abraham WT, **Akers WS**. Effect of nesiritide versus milrinone in the treatment of acute decompensated heart failure. AJHP 60(4):S16-S20, 2003.

Flynn JD, **Akers WS**. Effects of the angiotensin AT1 receptor antagonist, losartan, on the functional recovery of isolated rat hearts undergoing global myocardial ischemia-reperfusion. Pharmacotherapy 23(11):1401-1410, 2003.

**Akers WS**, Flynn JD, Davis GA, Green AE, Winstead PS, Strobel G. Prolonged cardiac repolarization following tacrolimus and haloperidol administration in the critically ill patient. Pharmacotherapy 24(3):404-408, 2004.

**Akers WS**, Shah SK, Flynn JD, Apparsundaram S. Effect of clonidine on cardiac norepinephrine spillover in isolated rat heart. J Cardiovasc Pharmacol 43(6):830-838, 2004.

**Akers WS**, Cassis LA. Presynaptic modulation of evoked norepinephrine release contributes to sympathetic activation following pressure overload. Am J Physiol Heart Circ Physiol 286:H2151-H2158, 2004.

Flynn JD, **Akers WS**, Jones M, Stevkovic N, Waid T, Mullett T, Jahania S. Treatment of Respiratory Syncytial Virus Pneumonia in a Lung Transplant Recipient: Case Report and Review of the Literature. Pharmacotherapy 24(7):932-938, 2004.

Flynn JD, Camp PC, Jahania MS, Ramaiah C, **Akers WS**. Successful Treatment of Refractory Bleeding after Bridging from Acute to Chronic Left Ventricular Assist Device Support with Recombinant Activated Factor VII. ASAIO Journal 50(5):519-521, 2004.

Flynn JD, Pajoumand M, Camp PC, Jahania MS, Ramaiah C, **Akers WS**. Recombinant Activated Factor VIIa for refractory bleeding following orthotopic heart transplantation. Ann Pharmacother 38(10):1639-1642, 2004.

Oh JJ, Robon MJ, **Akers WS**. Optimizing antiplatelet and anticoagulant agents in the perioperative orthopedic surgery patient. Orthopedics. May;28(5):453-8, 2005.

Koziara JM, Oh JJ, **Akers WS**, Ferraris SP, Mumper RJ. Blood Compatibility of Cetyl Alcohol/Polysorbate-Based Nanoparticles. Pharm Res 22(11):1821-8, 2005.

Blancett JR, Smith KM, **Akers WS**, Flynn JD. Staying in Rhythm: Identifying Risk Factors for Torsade de pointes. Orthopedics 28(12):1417-20, 2006.

Blancett JR, Smith KM, **Akers WS**, Flynn JD. Staying in Rhythm: Management of Patients at Risk for Torsade de pointes. Orthopedics 29(1):31-3, 2006.

Oh JJ, **Akers WS**, Lewis D, Ramaiah C, Flynn JD. Recombinant Factor VIIa for Refractory Bleeding Following Cardiac Surgery Secondary to Anticoagulation with the Direct Thrombin Inhibitor Lepirudin. Pharmacotherapy 26(4):569-577, 2006.

Steinhubl SR and **Akers WS**. Clopidogrel-statin interaction: a mountain or a mole hill? Am. Heart J. Aug;152(2):200-2003, 2006.

Yam FK, **Akers WS**, Ferraris VA, Smith K, Ramaiah C, Camp P, Flynn JD. Interventions to improve guideline compliance following coronary artery bypass grafting. Surgery Oct;140(4):541-547, 2006.

Weant KA, Flynn JD, **Akers WS**. Management of antiplatelet therapy for minimization of bleeding risk before cardiac surgery. Pharmacotherapy Nov;26(11):1616-25, 2006.

Boustany-Kari CM, Gong M, **Akers WS**, Guo Z, Cassis LA. Enhanced Vascular Contractility and Diminished Coronary Artery Flow in Rats made Hypertensive from Diet-Induced Obesity. Int J Obes Nov;26(11):1652-1659, 2007.

Steinhubl SR, Oh JJ, Oestreich JH, Ferraris S, Charnigo R, **Akers WS**. Transitioning patients from cangrelor to clopidogrel: pharmacodynamic evidence of a competitive effect. Thromb Res. 121(4):527-534, 2008.

Oestreich JH, Holt J, Dunn SP, Smyth SS, Campbell CL, Charnigo R, **Akers WS**, Steinhubl SR. Considerable variability in platelet activity among patients with coronary artery disease in response to an increased maintenance dose of clopidogrel. Coron Artery Dis. May 20(3):207-213, 2009.

**Akers WS**, Oh JJ, Oestreich JH, Ferraris S, Wethington M, Steinhubl SR. Pharmacokinetics and Pharmacodynamics of a Bolus and Infusion of Cangrelor: A Direct, Parenteral P2Y12 Receptor Antagonist. J Clin Pharmacol 50(1):27-35, 2010.

Oestreich JH, Steinhubl SR, Ferraris SP, **Akers WS**. High residual platelet reactivity on standard clopidogrel maintenance dose predicts increased responsiveness to the double-standard dose in an assay-dependent manner. Thromb Haemost. May;105(5):927-30, 2011.

Oestreich JH, Ferraris SP, Steinhubl SR, **Akers WS**. Pharmacodynamic interplay of the P2Y(1), P2Y(12), and TxA(2) pathways in platelets: the potential of triple antiplatelet therapy with P2Y(1) receptor antagonism. Thromb Res. Feb;131(2):e64-70, 2013.

Cox ZL, Calcutt MW, Morrison TB, **Akers WS**, Davis MB, Lenihan DJ. Elevation of Plasma Milrinone Concentrations in Stage D Heart Failure Associated With Renal Dysfunction. J Cardiovasc Pharmacol Ther. 2013;18(5):433-438.

Oestreich JH, Steinhubl SR, Ferraris SP, Loftin CD, **Akers WS**. Effect of Genetic Variation in P2Y12 on TRAP-Stimulated Platelet Response in Healthy Subjects. J Thromb Thrombolysis. 2014 Oct;38(3):372-379.

Pitchford LM, Rathmacher JA, Fuller JC, Daniels JS, Morrison RD, **Akers WS**, Abumrad NN, Amarnath V, Currey PM, Roberts LJ, Oates JA, Boutaud O. First-in-Human Study Assessing Safety, Tolerability, and Pharmacokinetics of 2-Hydroxybenzylamine Acetate, A Selective Dicarbonyl Electrophile Scavenger, in Healthy Volunteers. BMC Pharmacol Toxicol. 2019 Jan 5;20(1). PubMed PMID: 30611293

Arnold DH, Bowman N, Reiss TF, Hartert TV, **Akers WS**, Seger DL. Adverse Events Associated with Weight-based, High-dose Montelukast Exposures in Children. Clin Toxicol. 2020 Feb;58(2):145-146. PMID: 31056949

Pitchford LM, Driver PM, Fuller JC, **Akers WS**, Abumrad NN, Amarnath V, Milne GL, Chen S, Ye F, Roberts LJ, Oates JA, Boutaud O. Safety, Tolerability, and Pharmacokinetics of Repeated Oral Doses of 2-Hydroxybenzylamine Acetate in Healthy Volunteers: A Double-blind, Randomized, Placebo-controlled Clinical Trial. BMC Pharmacol Toxicol 2020 Jan;21(3):1-10. PMID: 31907026

Arnold DH, Van Driest SL, Reiss TF, King JC, **Akers WS**. Pilot study of peak plasma concentration after high-dose oral montelukast in children with acute asthma exacerbations. In press, J Clin Pharmacol (2020).

O'Neill MJ, Yoneda ZT, Crawford DM, Ye F, Ao M, Pitchford LM, Rathmacher JA, Murray KT, **Akers WS**, Roden DM, Michaud GF, Shoemaker MB. 2-Hydroxybenzylamine (2-HOBA) to Prevent Early Recurrence of Atrial Fibrillation after Catheter Ablation: Protocol for a Randomized Controlled Trial Including Detection of AF Using a Wearable Device. Trials (Submitted November 2020).

# XVIII. ABSTRACTS

#### **Local Abstracts**

**Akers W**; English V; Cross A; Cassis L. Enhanced cardiac neurotransmission in rat left ventricle following pressure-overload. University of Kentucky Gill Heart Research Institute Conference. A(51):26, 1998.

Burke GV, Cross A, **Akers WS**, Cassis LA. Chronic imipramine treatment as a rodent model for nutritionally related congestive heart failure. University of Kentucky Gill Heart Research Institute Conference. A(62):32, 1998.

**Akers WS**, English VL, Cassis LA. Presynaptic Modulation of Norepinephrine Release Contributes to Cardiac Sympathetic Activation. University of Kentucky Gill Heart Research Institute Conference. A(34):36, October 2000.

Burke G, **Akers S**, Cassis L. Chronic Imipramine Administration as a Rodent Model for Cardiac Failure with Associated Cardiac Cachexia. University of Kentucky Gill Heart Research Institute Conference. A(17):19, 2000.

**Akers WS**, Shah SK, Oak K, Apparsundaram S. The Effect of Clonidine on Norepinephrine Spillover in the isolated rat heart. University of Kentucky Gill Heart Research Institute Conference. A(36), 2001.

**Akers WS**, Flynn J, Narayan P. Effects of Losartan on Ischemia-Reperfusion Injury in Isolated Rat Hearts. University of Kentucky Gill Heart Research Institute Conference. A(35), 2001.

Burke G, **Akers WS**, Narayan P, Cassis LA. Chronic Imipramine Administration Reduces Cardiac Contractility. University of Kentucky Gill Heart Research Institute Conference. A(40), 2001.

Davis GA, Martin CA, Armitstead JA, **Akers WS**. Vitamin K1 for the reversal of warfarin anticoagulation: evaluation of an educational program at a university hospital. University of Kentucky Gill Heart Research Institute Conference. A(31), 2003.

**Akers WS**, Flynn JD, Post G. Differential Regulation of Serine-Threonine Protein Kinases by Angiotensin II Receptor Subtypes During Myocardial Ischemia-Reperfusion Injury. University of Kentucky Gill Heart Research Institute Conference. A(42), 2003.

**Akers WS**, Flynn JD, Apparsundaram S. Clonidine Suppression of Cardiac Norepinephrine Spillover in the Isolated Rat Heart. University of Kentucky Gill Heart Research Institute Conference. A(46), 2003.

**Akers WS**, Flynn JD, Carmichael EM, Davis GA. Frequency of P2Y12 haplotype and GPIIb/IIIa genotype in African American and Caucasian populations. University of Kentucky Gill Heart Institute Cardiovascular Research Conference. A(76), 2004.

Oestreich J, Locklar A, Pauly J, **Akers WS**. Optimization of Agonist-stimulated [35S]GTP $\gamma$ S Binding in Rat Heart Tissue Sections. University of Kentucky Gill Heart Institute Cardiovascular Research Conference. A(50), 2004.

Oestreich JH, Ferraris S, Wagner R, Locklar A, Kaibas A, **Akers WS**, Steinhubl SR. Inhibition of platelet function by clopidogrel is attenuated when initiated during cangrelor therapy. Rho Chi Poster Session, Lexington, Kentucky, April 2005.

Oestreich JH, Ferraris S, Wagner R, Locklar A, Kaibas A, **Akers WS**, and Steinhubl SR. Inhibition of platelet function by clopidogrel is attenuated when initiated during Cangrelor therapy. University of Kentucky Gill Heart Institute Cardiovascular Research Conference, A(38), 2005.

Oh J, Ferraris S, Wethington M, Dulin B, Steinhubl SR, and **Akers WS**. Effect of Intravenous Cangrelor, a Reversible Platelet P2Y12 Receptor Antagonist, on ADP-induced Platelet Aggregation. University of Kentucky Gill Heart Institute Cardiovascular Research Conference, A(39), 2005.

Oestreich JH, Locklar A, Oh J, **Akers WS**. The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. Clinical and Translational Science Spring Conference, Lexington, Kentucky, June 2006.

Oestreich JH, Locklar A, Oh J, and **Akers WS**. The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. University of Kentucky Gill Heart Institute Cardiovascular Research Conference, (A46), 2006.

Holt J, **Akers WS**, Oestreich JH, and Steinhubl SR. Effect of increased maintenance dose of clopidogrel on platelet aggregation. University of Kentucky Gill Heart Institute Cardiovascular Research Conference, (A60), 2006.

Roach B, Oestreich JH, and **Akers WS**. Variability in ADP-induced platelet activation and aggregation by light transmittance aggregometry. University of Kentucky Gill Heart Institute Cardiovascular Research Conference, (A76), 2006.

Oestreich JH and **Akers WS**. The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. Rho Chi Poster Session, Lexington, Kentucky, April 2007.

Oestreich JH, Ferraris S, **Akers WS**. The effect of platelet receptor polymorphisms on platelet activation and aggregation in healthy volunteers. Gill Heart Institute Cardiovascular Research Day, Lexington, Kentucky, October 2007.

Oestreich JH, Ferraris S, **Akers WS**. Evaluating the genetic influence of P2Y12 and GP IIb/IIIa receptor polymorphisms on platelet response in healthy volunteers. Rho Chi Poster Session, Lexington, Kentucky, April 2008.

Oestreich JH, Ferraris S, **Akers WS**. Evaluating the genetic influence of P2Y12 and GP IIb/IIIa receptor polymorphisms on platelet response in healthy volunteers. Clinical and Translational Science Spring Conference, Lexington, Kentucky, June 2008.

Oestreich JH, Ferraris S, **Akers WS**. Pharmacodynamic variability of P2Y12 receptor mediated platelet response in healthy volunteers. Gill Heart Institute Cardiovascular Research Day, Lexington, Kentucky, October 2008.

R Heath, R Hogan, J Fiorella, J Bouldin, SL Mercer, **WS Akers**. Drug Metabolism Laboratory: CYP2C9 Inhibition Assay. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2010.

**Akers WS** and Mercer SL. An integrated approach to drug dissolution: focus on drug formulation and release. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2011.

Crouch R, Kulkarni K, **Akers WS**, Daniels JS. Use of a high-throughput assay to emphasize key concepts in drug metabolism and drug interactions. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2011.

Fowler MW, Deweese JE, Dilks HH, Mercer SL, Phipps SD, McCormack J, **Akers WS**. An Integrated Biomedical and Pharmaceutical Sciences Teaching Laboratory for First Year PharmD Students. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2011.

Cox ZL, Morrison TB, **Akers WS**, Leniham DJ. Milrinone Plasma Concentrations in Heart Failure Patients Across a Spectrum of Kidney Function. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2012.

Nielsen NM and **Akers WS**. Oral Rehydration Therapy for Children in Zambia. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2012.

Their A, **Akers WS**, Fowler MW, Dawling S. An In-vitro Model of Lipophilic Drug Sequestration in Serum. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2012.

Torr JW, Fowler MW, Jacob DA, **Akers WS**. High School Students Gain Knowledge of the Pharmacy Profession. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2012.

Torr JW, Fowler MW, Jacob DA, **Akers WS**. High School Students Gain Knowledge of the Pharmacy Profession. Lipscomb University College of Pharmacy Research Day. Nashville, Tennessee, October 2012.

Bolin L, Fowler MW, Vergne M, **Akers WS**. Impact of Intralipid Emulsion Therapy on Reversing Drug Toxicity. Student Scholars Symposium, Lipscomb University, Nashville, Tennessee, March 2016.

Flatt K, Vergne MJ, Fowler MW, Knollman B, **Akers WS**. Quantitation of Propafenone Enantiomers in Serum by Liquid Chromatography-Tandem Mass Spectrometry. Student Scholars Symposium, Lipscomb University, Nashville, Tennessee, March 2016.

Baggett B, Bradley A, Vergne MJ, Fowler MW, **Akers WS**. Optimizing Experimental Conditions to Assess Drug Efflux by P-glycoprotein in a Cell-Based Assay. Student Scholars Symposium, Lipscomb University, Nashville, Tennessee, March 2016.

**Akers WS**, King JC, Truong V, Arnold DH. High-dose Montelukast Pharmacokinetics in Children with Asthma Attacks. Vanderbilt University Translational Research Forum, October 2019.

#### State/Regional Abstracts

Flynn JD, **Akers WS**. The Effects of the Cardiac Renin-Angiotensin System on Myocardial Ischemia-Reperfusion Injury. 32nd Annual Southeastern Residency Conference, Athens, GA, April, 2001.

Shah SK, **Akers WS**. Reduction in Cardiac Norepinephrine Spillover Using Clonidine. 32nd Annual Southeastern Residency Conference, Athens, GA, April, 2001.

Rosbolt MB, Flynn JD, **Akers WS**. Effect of Ischemia-Reperfusion Injury on Angiotensin II Receptor Subtype Expression. 33rd Annual Southeastern Residency Conference, Athens, GA, April, 2002.

Stevkovic N, Flynn JD, Ramaiah C, **Akers WS**. Safety of Clopidogrel in Combination with Aspirin After Off-Pump Coronary Artery Bypass Surgery. 34th Annual Southeastern Residency Conference. Athens, GA, April 2003.

Martin CA, **Akers WS**, Armitstead JA, Davis GA. Vitamin K1 for the Reversal of Warfarin Anticoagulation: An Outcomes Evaluation. 34th Annual Southeastern Residency Conference. Athens, GA, April 2003.

Yam FK, **Akers WS**, Ferraris VA, Smith K, Ramaiah C, Camp PC, Flynn JD. Interventions to improve compliance with guidelines in patients following coronary artery bypass grafting. Central Surgical Association Annual Meeting, 2006.

Oestreich JH, Ferraris S, **Akers WS**. Pharmacodynamic variability of P2Y12 receptor mediated platelet response in healthy volunteers. Midwest Platelet Conference, Lexington, Kentucky, October 2008.

#### **National Abstracts**

Johnson JA; **Akers WS**; Miller ST; Applegate WB. Blood pressure response to metoprolol is related to lymphocyte beta-receptor cAMP production. *Pharmacotherapy* 13:297, 1993.

**Akers WS**; Johnson JA. R- and S-verapamil protein binding: characterization and effect of metabolites. *Pharmacotherapy* 14(3):375, 1994.

**Akers WS**; Sullivan JM; Johnson JA. Racial differences in antihypertensive response to beta-blockade. *Pharmacotherapy* 14(3):380, 1994.

**Akers W**; Dowell T; Cassis L. Effect of pressure-overload on angiotensin receptors in rat heart. *FASEB* 10(3):A308, 1996.

**Akers WS**; Johnson JA. Differential effects of propranolol and labetalol on nighttime blood pressure. American Society of Hypertension #E038, 1998.

English V; **Akers W**; Cassis L. Alterations in cardiac sympathetic neurotransmission following pressure-overload. *FASEB* April 1999.

**Akers WS**; English VL; Cassis LA. Increased cardiac sympathetic neurotransmission in cardiac hypertrophy. *Pharmacotherapy* 20:1232, 2000.

- Flynn JD, Narayan P, **Akers WS**. The renin-angiotensin system in myocardial ischemia/reperfusion injury. *Pharmacotherapy* 21(3):390, 2001.
- Shah SK, Oak K, Apparsundaram S, **Akers WS**. The Effect of Clonidine on Norepinephrine Spillover in the isolated rat heart. *Pharmacotherapy* 21(10):1263, 2001.
- <u>Lewis DA</u>, Gurram NR, **Akers WS**, Abraham WT. Effect of Nesiritide Versus Milrinone on Patient Outcomes in the Treatment of Acutely Decompensated Heart Failure. *Pharmacotherapy* 23(3):392, 2003.
- Flynn JD, Post G, **Akers WS**. Differential Regulation of Mitogen Activated Protein Kinases by Angiotensin II Receptor Subtypes During Myocardial Ischemia-Reperfusion Injury. *Pharmacotherapy* 20(10):1330, 2003.
- Flynn JD, Post GR, **Akers WS**. Cardioprotective Effects of Losartan during Myocardial Ischemia-Reperfusion Injury. *Pharmacotherapy* 20(10):1374, 2003.
- Davis GA, Flynn JD, Carmichael EM, **Akers WS**. Frequency of P2Y12 haplotype and GPIIb/IIIa genotype in African American and Caucasian populations. *Pharmacotherapy* 24(10):1458, 2003.
- Flynn JD, **Akers WS**. Development of a multidisciplinary hemostasis monitoring program for post-cardiac surgery patients. *Pharmacotherapy* 24(10):1470, 2003.
- Flynn JD, **Akers WS**. Development of a multidisciplinary hemostasis monitoring program for post-cardiac surgery patient. *Pharmacotherapy* 24(10): 1470, 2004.
- Davis GA, Flynn JD, Carmichael EM, **Akers WS**. Frequency of P2Y12 haplotype and GPIIb/IIIa genotype in African American and Caucasian populations. *Pharmacotherapy* 24(10): 1458, 2004.
- Yam FK, Smith K, **Akers WS**, Camp PC, Flynn JD. Implementation of a pharmacy directed, multidisciplinary practice to improve compliance with published guidelines and quality indicators in post coronary artery bypass graft patients. *Pharmacotherapy* 25(3):485, 2005.
- Oestreich JH and **Akers WS**. The effect of the H2 haplotype and receptor antagonism on platelet activation and aggregation in healthy volunteers. J Clin Pharmacol 46:1078 (A73), 2006.
- Oestreich JH, Steinhubl SR, Ferraris S, Oh J, Wethington M, **Akers WS**. Pharmacodynamics of Cangrelor when Administered Alone or in Combination with Clopidogrel. *Pharmacotherapy* 26:e113 (A380), 2006.
- Flynn JD, Ramsey EZ, **Akers WS**, Stienke D, Smith K, Camp PC, Ramaiah C, Ferraris VA. Risk-adjusted outcomes of patients receiving either e-aminocaproic acid or Aprotinin for antifibrinolytic prophylaxis during on-pump cardiac surgery. *Pharmacotherapy* 26:e56 (A43), 2006.
- Holt J, **Akers WS**, Oestreich JH, Steinhubl SR. Effect of increased maintenance dose of clopidogrel on platelet aggregation. *JACC* 49;815-7(A376), 2007.
- Oestreich JH, Ferraris S, **Akers WS**. Evaluating the genetic influence of P2Y12 and GP IIb/IIIa receptor polymorphisms on platelet response in healthy volunteers. *J Am Pharm Assoc* 48;270(A164), 2008.

Oestreich JH, Ferraris S, **Akers WS**. Significant pharmacodynamic variability of P2Y12 receptor mediated platelet response in healthy volunteers as assessed by comprehensive platelet function analysis. Arterioscler Thromb Vasc Biol Vol 29(7):e121, 2009.

**Akers WS** and Mercer SL. An integrated approach to drug dissolution: focus on drug formulation and release. *AJPE* 75(5):105, 2011.

**Akers WS** and Mercer SL. Use of a high-throughput assay to emphasize key concepts in drug metabolism and drug interactions. *AJPE* 75(5):105, 2011.

Fowler MW, Deweese JE, Dilks HH, Mercer SL, Phipps SD, McCormack J, **Akers WS**. An Integrated Biomedical and Pharmaceutical Sciences Teaching Laboratory for First Year PharmD Students. *AJPE* 75(5):105, 2011.

**Akers WS**, Ingram K, Fowler MW, Vergne M, Knollman BC, Segar DL, Dawling SP. An In-Vitro Model of Intralipid Emulsion Treatment for Verapamil Toxicity. *AJPE* 78(5):111, 2014.

#### **International Abstracts**

Brouse S, **Akers WS**. Severe isolated thrombocytopenia following antiplatelet administration during acute myocardial infarction. *Internat Pharmaceut Abst.* 37(21):224, 2000.

Rhee DH, Flynn JD, Ramaiah C, Davis GA, **Akers WS**. Drug Therapy for Secondary Prevention following Coronary Artery Bypass Graft Surgery. ACCP-ESCP International Conference on Clinical Pharmacy in Paris, France. *Pharmacy World and Science* 2004; 26(6):A129.