

**Marsha F. Crader, PharmD, FASHP**  
*Curriculum Vitae*

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**PERSONAL INFORMATION**

Business Address (practice site)  
St. Bernards Medical Center – Pharmacy Department  
225 East Washington Avenue  
Jonesboro, AR 72401  
mfcrader@uams.edu  
mcrader@sbrmc.org

**EDUCATION**

Doctor of Pharmacy  
University of Louisiana at Monroe  
Monroe, Louisiana  
May 2003

**CERTIFICATIONS**

Making a Difference in Infectious Diseases (MAD-ID)  
Advanced Antimicrobial Stewardship Certificate  
July 2022

Society of Infectious Diseases Pharmacists (SIDP)  
Acute Care Antimicrobial Stewardship Certificate  
July 2018

**LICENSURE**

Arkansas State Board of Pharmacy, PD 10208  
September 2005 – Present

Louisiana State Board of Pharmacy, PST 17220  
July 2003 – Present

National Provider Identification # 1427269158

**ACADEMIC APPOINTMENTS AND PROFESSIONAL EXPERIENCE**

Associate Professor (non-tenure track)  
July 2013 – present  
Assistant Professor (non-tenure track)  
September 2005 – June 2013  
College of Pharmacy, Department of Pharmacy Practice  
University of Arkansas for Medical Sciences  
Little Rock, AR

- 50/50 position with UAMS and St. Bernards Medical Center to provide teaching, scholarship, and service
- Provide clinical pharmacy services for St. Bernards Medical Center while providing an advanced acute care experiential site for Doctor of Pharmacy candidates and learning experience for PGY1 pharmacy residents
  - Initial clinical practice emphasis was internal medicine which became more focused in infectious diseases and antimicrobial stewardship
- Didactic teaching responsibilities for Doctor of Pharmacy candidates in Therapeutics courses and infectious diseases elective

Assistant Professor (non-tenure track)

College of Pharmacy, Department of Clinical and Administrative Sciences

University of Louisiana at Monroe

Monroe, LA

December 2003 – August 2005

- Provided ambulatory care anticoagulation management for approximately 145 patients under a Collaborative Practice Demonstration Project under the auspices of the Louisiana State Board of Pharmacy and the Louisiana State Board of Medical Examiners at Glenwood Regional Medical Center
- Teaching responsibilities for Doctor of Pharmacy candidates (didactic/experiential) and College of Health Sciences students (didactic)

Staff Pharmacist/Pharmacy Intern

Wal-Mart Pharmacy

Jonesboro, Louisiana

Pharmacist, July 2003 – December 2005; Pharmacy Intern, December 2001 – July 2003

- Supervising pharmacy technicians
- Counseling about prescription and over-the-counter medications
- Filling and dispensing prescriptions
- Finalization of cash/credit sales
- Merchandise pricing and inventory control

Corporate Pharmacy Intern

Wal-Mart Home Office – Pharmacy Division

Bentonville, Arkansas

May 2001– August 2001

- Assisted with areas including Operations, Professional Services, Merchandising/Marketing, Computer Systems, and Human Resources
  - Writing – compiled original operations procedures, recruiting pamphlets, website
  - Communication – pharmacy schools, state pharmacy boards, district managers, corporate management
  - Leadership/Teamwork – group intern project leader, marketed Reli-On<sup>®</sup> products to American Association of Diabetes Educators, acquired funding for Wal-Mart Pharmacy's live continuing education program

Pharmacy Intern  
Mitchell's Pharmacy  
Jonesboro, Louisiana

May 2000 – January 2001

- Assisted in the correct filling and dispensing of prescriptions
- Finalization of cash/credit sales
- Assisted with merchandise pricing and inventory control

## **TEACHING**

### **I. Didactic**

UAMS Pharmacy Practice 73035 – Therapeutics II

Introduction to Bacterial Infections (*1 hour lecture*), Fall 2023 – present

Bacterial Meningitis (*1 hour lecture*), Fall 2023 – present

Ear, Nose, Throat/Sinus (*1 hour lecture*), Fall 2024 – present

Otitis Media (*1 hour lecture*), Fall 2023

Respiratory Tract Infections (*2 hour lecture*), Fall 2024 – present

Upper Respiratory Tract Infections (*1.5 hour lecture*), Fall 2022 – 2023

Lower Respiratory Tract Infections (*1 hour lecture*), Fall 2021 – 2023

Tuberculosis (*1 hour lecture*), Fall 2002 – present

Urinary Tract Infections and Asymptomatic Bacteriuria (*1 hour lecture*), Fall 2021 – present

Intra-abdominal and *C. difficile* Infections (*1.5 hour lecture*), Fall 2019 – present

Tick Borne Diseases (*0.5 hour lecture*), Fall 2021 – present

Skin and Soft Tissue and Diabetic Foot Infections (*1 hour lecture*), Fall 2021 – present

Osteomyelitis and Septic arthritis (*1 hour lecture*), Fall 2022 – present

Bloodstream and Line Infections (*1 hour lecture*), Fall 2019 – present

Infective Endocarditis (*1 hour lecture*), Fall 2019 – present

Fungal Infections (*1 hour lecture*), Fall 2022 – present

Viral Hepatitis (*2 hour lecture*), Fall 2019 – Fall 2021

University of Arkansas for Medical Sciences, 2019 – present

UAMS Pharmacy Practice 73372 – Infectious Diseases and Stewardship Elective

COURSE COORDINATOR, Lecturer, and Active Learning Facilitator

Infectious diseases resources and duration of therapy, Spring 2022 – 2024; 2026-present

Spectrum of activity (MRSA and VRE) and antibiotic allergies, Spring 2022 – 2024; 2026 – present

Spectrum of activity (*Pseudomonas*), antibiograms, and empiric antibiotic therapy, Spring 2022 – 2024; 2026 – present

Spectrum of activity (beta-lactamase producing organisms) and definitive therapy part 1, Spring 2022 – 2024; 2026 – present

Spectrum of activity (carbapenamase producing organisms) and definitive therapy part 2, Spring 2022 – 2024; 2026 – present

Spectrum of activity (anaerobic and atypical organisms) and infectious diseases and antibiotic monitoring, *Spring 2022 – 2024; 2026 – present*

Infectious diseases transitions of care, *Spring 2022 – 2024; 2026 – present*

CDC Antimicrobial Stewardship Core Elements, *Spring 2022 – 2024; 2026 – present*

Facilitator of written provider recommendations and order set development, *Spring 2022 – 2024; 2026 – present*

Facilitator of verbal provider recommendations and order set development, *Spring 2022 – 2024; 2026 – present*

Infection prevention and example antimicrobial stewardship projects and facilitator of antibiotic education development, *Spring 2022 – 2024; 2026 – present*

Clinical Laboratory Standards Institute susceptibility breakpoints and facilitator of antibiotic education development, *Spring 2022 – 2024; 2026 – present*

Microbiology equipment and diagnostic stewardship and facilitator of antibiotic education development, *Spring 2022 – 2024; 2026 – present*

UAMS Pharmacy Practice 7203 – Therapeutics I

Inflammatory Bowel Disease (2 hour lecture), *Spring 2007 – 2021*

Acute and Chronic Pancreatitis (1 hour lecture), *Spring 2007 – 2020*

Gastroesophageal Reflux Disease (1 hour lecture), *Spring 2013 - 2020*

Peptic Ulcer Disease (1 hour lecture), *Spring 2013 – 2020*

Non-variceal Gastrointestinal Bleeding (1 hour lecture), *Spring 2014 – 2020*

Introduction to Liver Disease (1 hour lecture), *Spring 2015 – 2021*

Alcoholic Liver Disease/Non-alcoholic steatohepatitis (1 hour lecture), *Spring 2015 – 2021*

Complications of Cirrhosis (2 hour lecture), *Spring 2015 – 2021*

Constipation (1 hour lecture), *Spring 2015*

Drug-Induced Liver Disease (1 hour lecture), *Spring 2018 – 2021*

University of Arkansas for Medical Sciences, *2007 – 2021*

ASU Nursing 4343 – Community Theory

Antibiotic Review (invited 1 ½ hour guest lecture)

Arkansas State University College of Nursing and Health Professions, *Fall 2008, Spring 2009, Fall 2009, Fall 2010, Spring 2012*

What’s New in Diabetes (invited 1 ½ hour guest lecture)

Arkansas State University College of Nursing and Health Professions, *Spring 2007*

ULM Pharmacy 446 – Nonprescription Medications and Self-Care – COURSE COORDINATOR and Lecturer

Self-Care and Nonprescription Pharmacotherapy

Patient Assessment and Consultation

Cultural, Legal, and Regulatory issues

Allergy, Cold, and Cough

University of Louisiana at Monroe, *Spring 2005*

ULM Pharmacy 585 – Disease/Pathology I

Dyslipidemia and Atherosclerosis

University of Louisiana at Monroe, *Fall 2004, Summer 2004*  
ULM Pharmacy 280 – Principles of Pharmacology (Nursing Pharmacology)  
Dyslipidemia and Atherosclerosis  
Coagulation Disorders  
Inflammation, Allergies, and Immune Disorders  
Pulmonary Disorders  
Muscle Spasms and Bone Disorders  
Skin Disorders  
University of Louisiana at Monroe, *Spring 2005, Fall 2004, Summer 2004*

Gastrointestinal Disorders  
Eye and Ear Disorders  
University of Louisiana at Monroe, *Fall 2004, Summer 2004*  
ULM Pharmacy Board Review  
NAPLEX Calculations Review  
University of Louisiana at Monroe, *May 2004*  
ULM Pharmacy 426 – Aging/Drug Use in the Elderly  
Care for the Dying Patient  
University of Louisiana at Monroe, *Spring 2003*  
ULM Pharmacy 557 – Pharmacotherapeutics Forum  
Non-Depolarizing Muscular Blockers  
University of Louisiana at Monroe, *Spring 2002*

## **II. Experiential**

Pharmacy Practice 74004 – Advanced Experiential – Acute Care (*average at least 20 hours per week in direct student interaction*)  
University of Arkansas for Medical Sciences, *Summer 2006 – present*

Pharmacy 604 – Advanced Experiential – Ambulatory Care  
University of Louisiana at Monroe, *Spring 2004 - Spring 2005*

## **III. Post-graduate Experiential**

UAMS Family Medicine and St. Bernards Medical Center Internal Medicine Residency Programs, *2017 – present*  
Conference lecturer, *2017 – present*

Pharmacy Post Graduate Year 1 (PGY1) Pharmacy Residency Program  
St. Bernards Medical Center, *2011 – 2014; 2020 – present*

Preceptor:

Infectious Diseases (required), *2020 – present*  
Antimicrobial Stewardship (required), *2011 – 2014; (elective), 2023*  
Academic/Preceptorship (required), *2013 – 2014*  
Internal Medicine (required), *2011 – 2012 and 2012 – 2013 co-preceptor and preceptor mentor for new preceptor of record*  
Cardiology (elective), *2011 – 2012*

Research Mentor:

- 2013-14: “Association of vancomycin loading dose administration with time to therapeutic level”  
2012-13: “Effect upon patient satisfaction with pharmacist intervention at time of admission and discharge”  
2011-12: “Impact of pharmacist-driven antimicrobial stewardship activities in a community hospital”  
“Implementation of an inpatient warfarin management service by pharmacists”

Teaching Mentor:

- 2025-26: Marlee Brothers, PharmD, Austin Dorman, PharmD, and Kylie Huckaba, PharmD  
2024-25: Amanda Russell, PharmD and Viviane Do, PharmD  
2023-24: Ellie Moore, PharmD, Lauren Thornburg, PharmD, and Ashlee Tinker, PharmD  
2022-23: Mary Anne Burlette, PharmD and Cherish Dunigan, PharmD  
2021-22: Linh Nguyen, PharmD and Sarah Steely, PharmD  
2013-14: Russ Pierce, PharmD, Justin Piker, PharmD, and Shervin Izadian, PharmD  
2012-13: Mandy Young, PharmD  
2011-12: Andrea Cavanaugh, PharmD and Sarah Cochran, PharmD

## **PRESENTATIONS**

### **I. Professional Continuing Education**

#### **Pharmacists**

**2024**

Antibiotic Stewardship Updates and Pearls  
58<sup>th</sup> Annual Fall Seminar, Arkansas Association of Health-System Pharmacists (*invited*)  
Little Rock, AR

**2023**

Structural Change to a Community Hospital’s Antimicrobial Stewardship Committee to Optimize Physician Engagement and Hospital Goal Achievement (Management Case Study; *accepted by peer review*)  
ASHP Midyear Clinical Meeting  
Anaheim, CA

**2022**

Pharmacy and Laboratory Collaboration to Update Minimum Inhibitory Concentration (MIC) Susceptibility Breakpoints and Interpretations (Management Case Study; *accepted by peer review*)  
ASHP Midyear Clinical Meeting  
Las Vegas, NV

- 2021** A Fantastic Point of View: Sharing New AMS Possibilities  
(coordinator, moderator, speaker; *invited*)  
55<sup>th</sup> Annual Fall Seminar, Arkansas Association of Health-System  
Pharmacists  
Virtual Conference due to COVID-19
- Surviving COVID-19: Navigating Treatment and Prevention  
(*invited*)  
2021 Annual Gerald J. Glass Memorial Lecture  
Virtual Lecture due to COVID-19
- 2018** Building on your AMS Foundation...Allergies, Micro, and  
Antibiograms (coordinator, speaker; *invited*)  
52<sup>nd</sup> Annual Fall Seminar, Arkansas Association of Health-System  
Pharmacists  
Little Rock, AR
- 2017** Antimicrobial Stewardship: Program Implementation Successes  
and Lessons Learned from the Joint Commission (coordinator,  
speaker; *invited*)  
51<sup>st</sup> Annual Fall Seminar, Arkansas Association of Health-System  
Pharmacists  
North Little Rock, AR
- Knowledge is Power: Antimicrobial Basics for Healthcare  
Professionals (*invited*)  
Arkansas Association of Health-System Pharmacists  
Live webinar  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2014** The “In’s” and “Out’s” of UTI Treatment  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- Clear the Air: Correct Treatment of Inpatient Pneumonias and  
COPD  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2013** Preceptor Development Part 1: Who, Why, and How?  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR

- 2012** Can Outpatient Herbal use Impact Hospital Care? (*invited*)  
46<sup>th</sup> Annual Fall Seminar, Arkansas Association of Health-System Pharmacists  
Hot Springs, AR
- 2010-11** ABCs for Pharmacists: Antibiotic Basic Competencies Part 1 and Part 2  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR – July and August 2010, repeated for new staff in August 2011
- 2009** Drug-Induced Diseases and Adverse Events (*invited*)  
UAMS College of Pharmacy sponsored continuing education  
Jonesboro, AR
- 2008** The Nitty-Gritty of Warfarin Therapy Management  
St. Bernards Medical Center, Pharmacy Department (updated)  
Jonesboro, AR
- 2007** The Nitty-Gritty of Warfarin Therapy Management (*invited*)  
UAMS College of Pharmacy sponsored continuing education  
Jonesboro, AR
- Management of Irritable Bowel Disease (IBS) (*invited*)  
Spring Meeting, Arkansas Association of Health-System Pharmacists Little Rock, AR
- 2006** Evaluating the Antibiogram: A Necessity for Curtailing Resistance in Your Institution-Pharmacist Must Get Involved - Part 2 (panel discussion participant) (*invited*)  
40<sup>th</sup> Annual Fall Seminar, Arkansas Association of Health-System Pharmacists  
Ridgedale, MO
- 2005** Optimal Health and Well-Being at Any-Age: Supplements to Keep Healthy (*invited*)  
National Association of Chain Drug Stores and the NACDS Foundation Wal-Mart Stores, Inc.  
Bentonville, AR (live-feed nationwide on Wal-Mart employee television)
- 2004** Preceptor Training Program (*invited*)  
ULM College of Pharmacy sponsored continuing education  
Louisiana Society of Health-System Pharmacists Mid-Year Meeting

Shreveport, LA – October 2004  
University of Louisiana at Monroe – September 2004

**Nurses**  
**2024**

Antimicrobial Stewardship: Don't "Squeeze the Balloon"  
Parts I (respiratory) and II (urinary tract infections)  
St. Bernards Medical Center Clinical Efficiency Program  
APRN Webinar (compiled presentation slides and assisted ID MD  
with commentary/answering questions as needed)

Effective Antibiotic Stewardship: Action and Integration in  
Nursing Homes (*invited*)  
Arkansas Foundation of Medical Care and Arkansas Department of  
Health  
Webinar

**2010** Antimicrobial Stewardship for Nurses (*invited*)  
3<sup>rd</sup> Annual Northeastern Arkansas Nursing Conference  
Jonesboro, AR

**2009** A Nurse's Guide to Warfarin in the Inpatient Setting (*invited*)  
2<sup>nd</sup> Annual Northeastern Arkansas Nursing Conference  
Jonesboro, AR

Anticoagulation in the Older Adult (*invited*)  
UAMS Center on Aging – Northeast  
Jonesboro, AR

**2007** Overview of Vancomycin and Aminoglycosides  
St. Bernards Medical Center  
Jonesboro, AR

**Medical Laboratory Scientists**

**2022** Microbiology in Antimicrobial Stewardship (*invited*)  
Spring Conference, American Society for Clinical Laboratory  
Science Arkansas Chapter  
Little Rock, AR

**Physicians**  
**2025**

Stewardship: A Key to Sustainable Antibiotic Use  
St. Bernards Medical Center Clinical Efficiency Program  
Jonesboro, AR/Webinar

**2024** Antimicrobial Stewardship: Don't "Squeeze the Balloon"  
St. Bernards Medical Center Clinical Efficiency Program  
Jonesboro, AR/Webinar

**2023** Antimicrobial Stewardship 101: How to Treat Common Infections  
St. Bernards Medical Center Clinical Efficiency Program  
Jonesboro, AR/Webinar

**2022** The More We Use Antibiotics, the More We Lose Antibiotics  
St. Bernards Medical Center Clinical Efficiency Program  
Jonesboro, AR/Webinar

**2020** S.E.A: Selecting Evidenced-based Antibiotics  
St. Bernards Medical Center Clinical Efficiency Program  
Jonesboro, AR

**Interdisciplinary**

**2023** Antimicrobial Stewardship Education for Hospitalists (speaker;  
*invited*)  
3<sup>rd</sup> Annual Arkansas Summit for Antimicrobial Stewardship  
Little Rock, AR

**2022** Joint Commission Stewardship Updates (speaker; *invited*)  
2<sup>nd</sup> Annual Arkansas Summit for Antimicrobial Stewardship  
Little Rock, AR

Does “S” Always Mean Susceptible (speaker; *invited*)  
Rural Hospital Rural Collaborative (sponsored by Arkansas  
Foundation of Medical Care and Arkansas Department of Health)  
Virtual Webinar

**2019** Making the Most of ASP Interventions (speaker; *invited*)  
1<sup>st</sup> Annual Arkansas Summit for Antimicrobial Stewardship  
Baptist Health  
Little Rock, AR

Dilemma Solving (coach and consultant; *invited*)  
Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes  
Arkansas Foundation of Medical Care and Arkansas Department of  
Health  
Little Rock, AR

Outpatient Stewardship and Education (speaker, coach, and  
consultant; *invited*)  
Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes  
Arkansas Foundation of Medical Care and Arkansas Department of

Health  
Webinar

Specimen Collection & Respiratory and Skin Infections (speaker,  
coach, and consultant; *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of  
Health

Webinar

Bugs and Drugs & *C. difficile* (speaker, coach, and consultant;  
*invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of  
Health

Webinar

Pharmacy-led Interventions and Allergies (speaker, coach, and  
consultant; *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of  
Health

Webinar

UTI and Asymptomatic Bacteriuria (speaker, coach, and  
consultant; *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of  
Health

Webinar

Antimicrobial Stewardship Tracking and Reporting (speaker,  
coach, and consultant; *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of  
Health

Webinar series

**2018**

Antibiograms (speaker, coach, and consultant, *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals  
and Nursing Homes

Arkansas Foundation of Medical Care and Arkansas Department of Health  
Webinar

Physician Engagement: Team-based Approach and Best Practices for Antibiotic Stewardship (speaker, moderator, and consultant; *invited*)

Arkansas Antimicrobial Stewardship Collaborative for Hospitals and Nursing Homes Kick-off Event

Arkansas Foundation of Medical Care and Arkansas Department of Health

North Little Rock, AR

Antimicrobial Stewardship for Critical Access Hospitals (*invited*)

Arkansas Foundation of Medical Care's Annual Critical Access Hospital Workshop

Little Rock, AR

Outpatient Antimicrobial Stewardship Program (*invited*)

Texas Medical Foundation Quality Innovation Network Annual Conference

Webinar

**2016**

The Role of the Pharmacist in ABS (speaker and moderator; *invited*)

Arkansas Hospital Association and Arkansas Association of Health-System Pharmacists Antimicrobial Stewardship Collaborative Meeting

Little Rock, AR

**2015**

Hospital Story: Pharmacy-Led Collaborative For Antimicrobial Stewardship – Part 3 (*invited*)

Arkansas Hospital Association and Arkansas Association Health-System Pharmacists Antimicrobial Stewardship Collaborative Meeting

Little Rock, AR

Update on Current Statewide Antimicrobial Stewardship Collaborative Efforts (*invited*)

Marsha Crader, PharmD and Buddy Newton, MD

Antimicrobial Stewardship and One Health sponsored by One Health Arkansas

Little Rock, AR

Health-system Pharmacy Panel Expert (*invited*)

Arkansas Pharmacists Association, District 2 Meeting

Jonesboro, AR

Knowledge is Power: Antimicrobial Basics for Healthcare Providers (*invited*)  
Arkansas Hospital Association and Arkansas Association Health-System Pharmacists Antimicrobial Stewardship Collaborative Members  
Live webinar

Insulin and Medication Therapy for Type 1 and Type 2 Diabetes Mellitus (*invited*)  
Diabetes Update for Health Care Providers sponsored by the Arkansas State University – College of Nursing and Health Professions  
Jonesboro, AR

**2014** Health-system Pharmacy Panel Expert (*invited*)  
Arkansas Pharmacists Association, District 2 Meeting  
Jonesboro, AR

**2013** Autism Spectrum Disorder (ASD): one family's ongoing journey...hoping to provide awareness of ASD, treatment, and resources (*invited*)  
St. Bernards Medical Center Grand Rounds  
Jonesboro, AR

Antimicrobial Stewardship in Practice in Arkansas: Success, Failures, and Challenges (*invited*)  
Arkansas Antimicrobial Stewardship Conference: Developing a Collaborative Approach sponsored by the Arkansas College of Clinical Pharmacy and the Arkansas Department of Health (*invited*)  
Little Rock, AR

Health-system Pharmacy Panel Expert (*invited*)  
Arkansas Pharmacists Association, District 2 Meeting  
Jonesboro, AR

**2012** Diabetes Pharmacological Management (*invited*)  
Diabetes Update for the Health Care Provider  
Arkansas State University  
Jonesboro, AR

**2011** Drug-Induced Diseases and Adverse Effects (*invited*; updated lecture)

St. Bernards Medical Center Grand Rounds  
Jonesboro, AR

**2010** How We Cured Parkinson's disease (*invited*)  
Dr. Crader, Dr. McNerney, and Dr. Mulligan  
St. Bernards Medical Center Grand Rounds  
Jonesboro, AR

**2009** Clinical Pearls of Warfarin Therapy (*invited*)  
St. Bernards Medical Center Grand Rounds  
Jonesboro, AR

**2007** Asthma Management: Medications (*invited*)  
Asthma Educator Certificate Preparatory Course  
American Lung Association  
Jonesboro, AR

**2006** What's New in Diabetes (*invited*)  
Diabetes Educator Continuing Education  
Arkansas State University  
Jonesboro, AR

## **II. Panel Expert/Moderator (no continuing education provided)**

### **Pharmacists**

**2017** Antimicrobial Stewardship Roundtable Moderator (*invited*)  
51<sup>st</sup> Annual Fall Seminar, Arkansas Association of Health-  
System Pharmacists  
North Little Rock, AR

**2015** Clinical Coordinators Roundtable Moderator (*invited*)  
49<sup>th</sup> Annual Fall Seminar, Arkansas Association of Health-System  
Pharmacists  
Little Rock, AR

**2013** Effective Leadership (speaker and moderator)  
Resident Roundtable Session, 47<sup>th</sup> Annual Fall Seminar, Arkansas  
Association of Health-System Pharmacists  
Little Rock, AR

## **III. Staff In-services**

### **Pharmacists (annual antibiotic education includes competency development)**

**2025** Antimicrobial Stewardship Competency Updates & Antibiotic  
Allergies and De-escalation/IV to PO Considerations  
St. Bernards Medical Center, Pharmacy Department

Jonesboro, AR

- 2024** Antimicrobial Stewardship Competency Updates & IDSA Antimicrobial Resistant Guideline Updates  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2023** Antimicrobial Stewardship Updates & UTIs and Asymptomatic Bacteriuria  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2022** Antimicrobial Stewardship Pharmacist Overview  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2021** Antimicrobial Stewardship and Microbiology Education and Updates  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2020** Antibiotic Allergy Education  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- Antimicrobial Stewardship and Microbiology Education and Updates (2 part series)  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2019** Antimicrobial Stewardship and Microbiology Education and Updates  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2018** The “In’s” and “Out’s” of UTI Treatment (updated)  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2010-11** Antibiotic Mini-Reviews  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2009** Vancomycin Dosing: 2009 Update  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR

- 2008** Overview of Vancomycin and Aminoglycosides  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2007** Antibiograms: What a St. Bernards' Pharmacist Needs to Know  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2006-07** Review of Pharmacokinetics (on-going education series with staff pharmacists)  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- Antibiotic Management (one-on-one education with staff pharmacists)  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- 2006** The Nitty-Gritty of Warfarin Drug-Drug Interactions  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- Safety Measures for High Risk Drugs and Handling of Cytotoxic Agents  
St. Bernards Medical Center, Pharmacy Department  
Jonesboro, AR
- Nurses**
- 2024** Overview of Outpatient UTI Treatment – developed educational flyer and presented to some APRNs in coordination with pharmacy resident  
St. Bernards Healthcare/Webinar/Telephone  
Jonesboro, AR
- 2019** Antimicrobial Stewardship Resources, Annual Goals, and Antibiotic Pearls (for nurse practitioners and physician assistants)  
St. Bernards Medical Center  
Jonesboro, AR
- 2010** Overview of Vancomycin and Aminoglycosides – developed PowerPoint and accompanying pocket card reference for roving education by nursing

St. Bernards Medical Center  
Jonesboro, AR

- 2009** Overview of Vancomycin and Aminoglycosides – also developed PowerPoint and trained nursing educator to use during orientation medication classes  
St. Bernards Medical Center  
Jonesboro, AR

### **Physicians**

- 2021** Microbiology Updates and Antibiotic and Antifungal Reminders  
St. Bernards Medical Center Medical Staff Meeting  
Jonesboro, AR
- 2020** Antimicrobial Stewardship Program and Community Acquired Pneumonia Guideline Updates (*invited*)  
St. Bernards Medical Center Medical Staff Meeting  
Jonesboro, AR
- 2019** Outpatient Antimicrobial Stewardship Joint Commission Requirements, Goals, and Ways to Improve Antibiotics Usage  
St. Bernards Medical Center Outpatient Clinic Medical Staff  
Jonesboro, AR
- Antimicrobial Stewardship Program Updates (*invited*)  
St. Bernards Medical Center Medical Staff Meeting  
Jonesboro, AR
- 2018** Antimicrobial Stewardship Program Updates (*invited*)  
St. Bernards Medical Center Medical Staff Meeting  
Jonesboro, AR
- 2017** Antimicrobial Stewardship Program Updates (*invited*)  
St. Bernards Medical Center Medical Staff Meeting  
Jonesboro, AR
- 2008** Rationale for Anticoagulation Bridging – CHEST updates (*invited*)  
St. Bernards Medical Center Medical Staff Meetings  
Jonesboro, AR

### **Interdisciplinary**

- 2004-05** Establishing a New Anticoagulation Clinic  
Glenwood Anticoagulation Clinic  
West Monroe, LA (April 2004, April 2005)

- 2003** Review of Abilify

St. Vincent DePaul Pharmacy  
Monroe, LA

- 2003** Article Review: “Effectiveness of Pharmacist’s Care for Patients with Reactive Airways Disease”  
St. Vincent DePaul Pharmacy  
Monroe, LA
- 2003** Review of Metaglip  
St. Vincent DePaul Pharmacy  
Monroe, LA
- 2002** Review of Lantus, Kineret, Bextra, Actonel, Zometa, and Zemplar  
St. Francis Medical Center  
Monroe, LA

## **PUBLICATIONS**

### **I. Journal and OnLine Learning Management System Publications**

**Crader MF.** Antimicrobial Stewardship Takes All of Us. *Journal of the Arkansas Medical Society.* 2025;123(3):88-90. (Invited article by AFMC)

Kell M, Lee ZC, Hernandez M, **Crader M**, and Norwood J. A Case Report of Bacteremia Due to a Symptomatic and Rare Lactobacillus Rhamnosus Infected Splenic Hematoma and the Ultimate Treatment Model. *Cureus.* 2023;15(3):e36128. (peer reviewed)

**Crader MF.** Nursing Roles in Antimicrobial Stewardship. *Arkansas State Board of Nursing Update.*2023;28(1):14-15. (Invited article by AFMC)

**Crader MF.** Antimicrobial Stewardship Joint Commission Updates: Is Your Hospital Ready for 2023 Requirements? *Arkansas Hospitals.* 2022 winter ed:53-55. (Invited article by AFMC)

**Crader MF.** Getting Back to the Basics of Microbiology Antimicrobial Stewardship Efforts. *AJHP.* 2022;79(16):1307-1308. (peer reviewed)

**Crader M** and Liddell K. Expansion of Antimicrobial Stewardship in the Outpatient Setting. *The Arkansas Family Physician.* 2021;24(4):18-19. (peer reviewed)

**Crader MF.** Update on Antimicrobial Stewardship Efforts in Arkansas. *Journal of the Arkansas Medical Society.* 2020;116(9):204-205. (peer reviewed)

**Crader MF**, Leslie SW. Bacteriuria. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Oct 27. (*peer reviewed; also published in multiple eBooks, Apps, and an Online Learning Management System; ongoing updates required*)

**Crader M**, Bhimji S. Preoperative Antibiotic Prophylaxis. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2017 Jun-2017 Jul 9. (*peer reviewed; also published in multiple eBooks, Apps, and an Online Learning Management System; ongoing updates required*)

**Crader M**, Bhimji S. Warfarin, Drug Interactions. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2017 Jun-2017 Jul 9. (*peer reviewed; also published in multiple eBooks, Apps, and an Online Learning Management System; ongoing updates required*)

**Crader MF**. Continuing to Move Forward. *The Arkansas Pharmacist* 2015; spring. Ed:38-39.

**Crader MF**. AAHP Offers N.O.W. (Networking Opportunities that Work). *The Arkansas Pharmacist* 2015; winter ed:28.

**Crader MF**. AAHP Membership...What can it mean to you? *The Arkansas Pharmacist* 2014; fall ed:32-33.

**Crader MF**. The Time is Now. ARR<sub>x</sub>: *The Arkansas Pharmacist* 2014; summer ed: 34.

**Crader MF**. Development of Antimicrobial Competencies and Training for Staff Hospital Pharmacists. *Hosp Pharm*. 2014;49(1)32-41. (*peer reviewed*)

Anderson BC, **Crader MF**, Nix ES, McDaniel M. Nursing Behaviors Related to Vancomycin and Aminoglycoside Administration. *MEDSURG Nursing* 2012; 21(6):378-382. (*peer reviewed*)

**Crader, MF** and Chelette CT. A Beneficial Partnership between Hospitals and Colleges of Pharmacy: Development and Discussion of a Joint Cooperative Endeavor Agreement. *Hosp Pharm* 2010;45(9):697-704. (*peer reviewed*)

**Crader MF**, Chelette CT, and Steffenson MB. Creating a Pharmacist-Managed Anticoagulation Clinic: An Example of a Joint Endeavor Between a Community Hospital and a College of Pharmacy. *Hosp Pharm* 2010;45(8):618-23, 633. (*peer reviewed*)

**Crader M** and Borkowski J. Nebulized Albuterol Versus Levalbuterol in Pediatric and Adult Patients: A Review. *Formulary*. 44(4): p 108-110,112-118. 2009. (*peer reviewed*)

Myers E, Humble L, **Crader MF**, et al. Myocardial Infarction Post-Discharge Medication Therapy: Baton Rouge, LA. *Louisiana Medicaid Pharmacy Benefits Management Program*; 2006. Lipid Series, P4. (not peer reviewed)

## II. **Professional Posters**

**Crader MF**. Impact of Multi-year Education on Fluoroquinolone Utilization and Gram-Negative Organism Susceptibilities. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas – December 2025

**Crader MF** and Owen H. Evaluation of Cephalexin Dosed Twice Daily Versus Four Times Daily for the Treatment of Uncomplicated Urinary Tract Infections in Adult Females. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas – December 2025

**Crader, MF**. Impact of Provider Education and Pharmacist Antibiotic Time-outs with Prospective Audit and Feedback on Linezolid Usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, New Orleans, LA – December 2024

**Crader MF**. Impact of diagnostic stewardship, rapid diagnostics, and order set interventions on anti-Pseudomonal antibiotic usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2023

**Crader MF**. Impact of Electronic Health Record Prescribing Guidance on Carbapenem Usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2022

**Crader MF**. Impact of Education and Local Guidelines on Fluoroquinolone and Clindamycin Usage in an Emergency Department. **Poster Presentation**

ASHP Midyear Clinical Meeting, virtual due to COVID-19 – December 2021

**Crader MF**. Impact of Education, Order Sets, and Antibiotic Time-outs on Carbapenem Usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, virtual due to COVID-19 – December 2021

**Crader MF**. Impact of education and antibiotic time-outs on broad-spectrum gram-negative antibiotic usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, virtual due to COVID-19 – December 2020

**Crader MF**. Compilation of local anaerobic antibiogram and subsequent education impacts clindamycin usage. **Poster Presentation**

ASHP Midyear Clinical Meeting, virtual due to COVID-19 – December 2020

**Crader MF**, Kasey Holder, Debbi Ledbetter, and Sarah Lowtharp. Impact of Modifying Prescriber *Clostridioides difficile* (*C. difficile*) Ordering Practices on *C. difficile* Infection Rates. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2019

Arkansas Association of Health-System Pharmacists Fall Seminar, North Little Rock, AR – October 2019 (2<sup>nd</sup> place award for professional posters)

**Crader MF, Painter J.** Impact of vancomycin loading doses on methicillin resistant *Staphylococcus aureus* minimum inhibitory concentrations. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Anaheim, CA – December 2018  
Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2018 (2<sup>nd</sup> place award for professional posters)

Lance C, Garner K, **Crader M.** Antimicrobial stewardship in Arkansas: a statewide antimicrobial initiative approach. **Poster Presentation**  
SHEA Spring Conference, Portland, OR – April 2018

**Crader MF.** Impact of antimicrobial stewardship initiatives on vancomycin usage. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Orlando, FL – December 2017  
Arkansas Association of Health-System Pharmacists Fall Seminar, North Little Rock, AR – October 2017 (3<sup>rd</sup> place award for professional posters)

**Crader MF.** Impact of antimicrobial stewardship interventions on the treatment of extended-spectrum beta-lactamase positive organisms. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Orlando, FL – December 2017

**Crader MF** and Smith R. Human prothrombin complex concentrate utilization evaluation at a community hospital. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Orlando, FL – December 2017

**Crader MF** and Capers W. Impact of liposomal bupivacaine in total hip and knee arthroplasties. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2016

**Crader MF.** Sodium-glucose cotransporter2 (SGLT2) inhibitor utilization evaluation at a community hospital. **Poster Presentation**  
ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2016

Carver N, **Crader MF**, Brown P. Power of Collaboration: State-affiliate Pharmacy Organization Connects with State Hospital Association to Reduce Adverse Drug Events. **Poster Presentation**  
ASHP Midyear Clinical Meeting, New Orleans, LA – December 2015

**Crader MF, Yancey L.** Impact of Inpatient Pharmacist Interventions on Chronic Obstructive Pulmonary Disease Hospital Readmissions. **Poster Presentation**  
ASHP Midyear Clinical Meeting, New Orleans, LA – December 2015

**Crader MF.** Implementation of a Postgraduate Year One Residency Preceptor Rotation. **Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2014

Garris C, **Crader MF**. Influence on Blood Use in Orthopedic Surgery with a Blood Management Program Including Tranexamic Acid. **Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2014

**Crader MF**, Izadian SD, Garris C. Effect of Vancomycin Loading Doses on Time to Therapeutic Level. **Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2014

**Crader MF**, Capers W, Garris C, Jordan W. Impact of a decentralized integrated pharmacist staffing model on pharmacist initiated interventions. **Poster Presentation**

ASHP Midyear Clinical Meeting, Orlando, FL – December 2013

Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2013

Garris C and **Crader MF**. Impact on blood use in a community hospital after physician education and addition of tranexamic acid to formulary

Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2013

**Crader MF**, Cavanaugh A, Cochran S, Garris C. Impact of a residency antimicrobial stewardship rotation on pharmacist initiated interventions. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2012

**Crader MF**, Capers W. Effect of education on hospital pharmacists' antibiotic knowledge. ASHP Midyear Clinical Meeting. 2011: p P-399(D). 2012. **Poster Presentation**

ASHP Midyear Clinical Meeting, New Orleans, LA – December 2011

Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2011

**Crader MF**, Anderson BC, Nix ES, McDaniel M. Effect of education on nursing knowledge and behaviors related to the use of vancomycin and aminoglycosides. ASHP Midyear Clinical Meeting. 2011: p P-202(E). 2012. **Poster Presentation**

Drexel University Education Institute, Philadelphia, PA – June 2012

*(3<sup>rd</sup> author for national nursing poster presentation)*

ASHP Midyear Clinical Meeting, New Orleans, LA – December 2011

Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2011

Garris CE, **Crader MF**. Pharmacist impact on albumin use. **Poster Presentation**

Arkansas Association of Health-System Pharmacists Fall Seminar, Little

Rock, AR – October 2011

**Crader MF**, Capers W, Garris C. Impact of restructuring and cost containment on pharmacy performance. ASHP Midyear Clinical Meeting. 2010: p P-252(E). 2011.

**Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2010  
Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2010

**Crader MF**. Vancomycin drug utilization evaluation as part of implementing an antimicrobial stewardship program at a regional acute care institution. ASHP Midyear Clinical Meeting. 2009: p 091. 2010. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2009

**Crader MF**, Garris C. Effect on sepsis mortality after implementation of the Institute of Healthcare Improvement (IHI) sepsis bundles at a regional acute care institution. ASHP Midyear Clinical Meeting. p P74D. 2009. **Poster Presentation**

ASHP Midyear Clinical Meeting, Orlando, FL – December 2008  
Arkansas Association of Health-System Pharmacists Fall Seminar, Tunica, MS – October 2008

**Crader MF**, Garris C. Implementation of a pro re nata (PRN) order set at a transitional care facility (TCF) in a regional acute care institution to comply with the Centers for Medicare and Medicaid Services (CMS) guidelines. ASHP Midyear Clinical Meeting. 42(DEC). 2007. **Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2007  
Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2007

**Crader MF**, Garris C. Incidence of Adverse Drug Reaction (ADR) reporting in a regional acute care institution and its outpatient facilities with college of pharmacy affiliation. ASHP Midyear Clinical Meeting. 41(Dec). 2006. **Poster Presentation**

ASHP Midyear Clinical Meeting, Anaheim, CA – December 2006  
Arkansas Association of Health-System Pharmacists Fall Seminar, Ridgedale, MO – October 2006

**Resident-Mentored**

Huckaba K, **Crader M**, and Taylor P. Identifying Risk Factors for Treatment Failure with Oral Vancomycin in Initial *Clostridioides difficile* Infection to Support First-Line Fidaxomicin Use. **Resident Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas – December 2025

Burlette M, Davis A, Taylor P, and **Crader MF**. *Evaluation of Vancomycin Loading Dose Criteria on Incidence of Acute Kidney Injury*. **Resident Poster Presentation**

ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2022

Nguyen, L, Davis A, Taylor P, and **Crader MF**. Impact of Pharmacist-driven Methicillin-resistant *Staphylococcus aureus* Nasal Screens on Duration of Antibiotic Therapy in Patients with Respiratory Infections. **Resident Poster Presentation**  
ASHP Midyear Clinical Meeting, virtual due to COVID-19 – December 2021

Izadian SD and **Crader MF**. Association of Vancomycin Loading Dose Administration with Time to Therapeutic Level. **Resident Poster Presentation**  
ASHP Midyear Clinical Meeting, Orlando, FL – December 2013

Young M, **Crader MF**, Garris C. Effect upon patient satisfaction with pharmacist intervention at time of admission and discharge, **Resident Platform and Poster Presentation**  
Midsouth Pharmacy Resident Conference, Memphis, TN – April 2013  
ASHP Midyear Clinical Meeting, Las Vegas, NV – December 2013

Cochran SJ. **Crader MF**, Garris C, Capers W. Impact of pharmacist driven antimicrobial stewardship program in a community hospital. **Resident Platform and Poster Presentation**

Midwest Pharmacy Resident Conference, Omaha, NE – May 2012  
ASHP Midyear Clinical Meeting, New Orleans, LA – December 2011

Cavanaugh A, **Crader MF**, Garris C, Capers W. Impact of an inpatient warfarin management service by pharmacists in a community hospital. **Resident Platform and Poster Presentation**

Midwest Pharmacy Resident Conference, Omaha, NE – May 2012  
ASHP Midyear Clinical Meeting, New Orleans, LA – December 2011

### **Student-Mentored**

Hedrick H and **Crader MF**. Evaluation of Cephalexin Dosed Twice Daily Versus Four Times Daily for the Treatment of Uncomplicated Urinary Tract Infections in Adult Females. **Poster Presentation**  
Arkansas Association of Health-System Pharmacists Fall Seminar, Little Rock, AR – October 2024 (1<sup>st</sup> place award for student posters)

Turner M and **Crader MF**. Evaluation of Carbapenem Utilization at a Community Hospital. **Poster Presentation**  
Arkansas Association of Health-System Pharmacists Fall Seminar, North Little Rock, AR – October 2019 (1<sup>st</sup> place award for student posters)

### **III. Professional Newsletter**

Steffenson MB, **Fannin ML**. Collaborative Practice Demonstration Project.

*Newsletter of the Louisiana Society of Health-System Pharmacists. 2006; 15: 6.*

#### **IV. Patient Education**

**Crader, M.** “Do’s and Don’ts of Warfarin Therapy” *Seniority*, Center on Aging – Northeast Community Newsletter. Fall 2010

Zagar M, **Crader M**, and Massey M. Tips for Healthy Living after a Heart Attack. Baton Rouge, LA: *Louisiana Medicaid Pharmacy Benefits Management Program*; 2006. Lipid Series, R4.

#### **RESEARCH**

**Co-Investigator** with principal investigator Huckaba K. *Identifying Risk Factors for Treatment Failure with Oral Vancomycin in Initial Clostridioides difficile Infection to Support First-Line Fidaxomicin Use.* St. Bernards Medical Center, October 2025 – April 2026

**Co-Investigator** with principal investigator Burlette MA. *Evaluation of Vancomycin Loading Dose Criteria on Incidence of Acute Kidney Injury.* St. Bernards Medical Center, October 2022 – April 2023.

**Co-Investigator** with principal investigator Nguyen L. *Impact of Pharmacist-driven Methicillin-resistant Staphylococcus aureus Nasal Screens on Duration of Antibiotic Therapy in Patients with Respiratory Infections* St. Bernards Medical Center, November 2021 – April 2022.

**Co-Investigator** with principal investigator Izadian SD. *Association of Vancomycin Loading Dose Administration with Time to Therapeutic Level,* St. Bernards Medical Center, August 2013 – April 2014

**Co-Investigator** with principal investigator Cochran SJ and co-investigator Garris CE. *Impact of Pharmacist-Driven Antimicrobial Stewardship Activities in a Community Hospital,* St. Bernards Medical Center, August 2011 – May 2012

**Co-Investigator** with principal investigator Cavanaugh A. *Implementation of an Inpatient Warfarin Management Service by Pharmacists,* St. Bernards Medical Center, August 2011 – May 2012

**Principal investigator.** *Effect of Education on Pharmacists’ Antimicrobial Knowledge,* St. Bernards Medical Center, July 2010 – May 2011

**Co-investigator and research coordinator** with principal investigator Nix ES and co-investigator Anderson BC. *Nursing Behaviors Related to Peak and Trough Dosing of Vancomycin and Aminoglycosides,* St. Bernards Medical Center, April 2009- March 2010

#### **GRANTS**

##### **I. Funded Proposals**

**Fannin ML, Steffenson MB.** *Key Clinical Information Resources for Training*

*Pharmacy Students in the Ambulatory Care Setting: Diabetes, Hypertension, Hyperlipidemia, and related Cardiovascular Disease.* Submitted May 2005 to the Faculty Development Awards Program, ULM Department of Clinical and Administrative Sciences - Accepted August 2005.

## **II. Unfunded Proposals**

Mulligan T, **Crader M**, Garris C, Parker B, Wing G. *Decreasing Inappropriate and Unnecessarily Expensive Medication Use among Older Adults in Northeast Arkansas.* Submitted May 2007 to the Arkansas Tobacco Settlement Commission Community Grants

## **CONSULTING**

- I. Arkansas Antimicrobial Stewardship Statewide Collaborative for Hospitals and Nursing Homes  
Centers for Disease Control and Prevention grant awarded to the Arkansas Department of Health with the Arkansas Foundation of Medical Care executing the logistics of the grant  
Pharmacist consultant with helping to recruit facilities to join the collaborative and utilize the antimicrobial stewardship certificate scholarship, compile antimicrobial stewardship assessment questions, develop an on-line toolkit, create live monthly educational programs that include education/recruitment of facilities to share stewardship stories/participant coaching, and targeted consultation for specific facilities, etc.

## **AWARDS AND HONORS**

UAMS College of Pharmacy Jonathan J. Wolfe and Donna M. Wolfe Award for Faculty Excellence – 2024

American Society of Health-System Pharmacists Fellow – 2020

VigiLanz “Wow Winner” Award as part of the St. Bernards Medical Center Clinical Pharmacy Team – 2020

Who’s Who in Pharmacy Academia – 2011

Arkansas Association of Health-System Pharmacists Clinician of the Year – 2010

*“This is an annual award established by AAHP to recognize the accomplishments of a pharmacist in a clinical pharmacy position who provides an innovative approach to pharmaceutical care, has made outstanding contributions to clinical pharmacy, and serves as role model for fellow clinicians. It recognizes the exceptional work of the recipient during the last 12-18 months.”*

Montclair’s Who’s Who Among Collegiate Faculty – 2010

Distinguished Professionals On-line – 2010

Cambridge Who’s Who Registry among Executive and Professional Women in the Pharmaceutical Industry – 2009

The ASHP Midyear Clinical Meeting poster *“Effect on sepsis mortality rate at a regional acute care institution after implementation of the Institute of Healthcare Improvement (IHI) sepsis bundles”* was selected to be featured on ASHP’s Quality Improvement Initiative Resource Center as a virtual poster session – live as of February 2009

Arkansas Association of Health-System Pharmacists New Practitioner of the Year – 2008

*“This is an annual award established by AAHP to recognize a pharmacist who has been active in the practice of pharmacy for 7 years or less and displays leadership, professionalism, and dedication to the future of health-system pharmacy. It recognizes the exceptional work of the recipient during the last 12 to 18 months.”*

Cum Laude Latin Honors, ULM – 2003

APhA Mortar and Pestle Professionalism Award – ULM 2003

University of Louisiana at Monroe Woman of the Year – ULM 2002; Top 3 Finalist, ULM 2001

Who’s Who Among Students in American Universities and Colleges – ULM 2000

Phi Kappa Phi Honor Society, Member and Outstanding Senior Initiate – ULM 2000

Alpha Lambda Delta Freshman Honor Society – LSU 1998

Phi Eta Sigma Freshman Honor Society – LSU 1998

All-American Collegiate Award – LSU 1998

## **PROFESSIONAL MEMBERSHIPS AND LEADERSHIP ROLES**

### **Current**

American Society of Health-System Pharmacists (ASHP)

Member 2004 – present

Commission on Affiliate Relations (COAR) Member, June 2016 – June 2019

-ASHP Policy Week – 2016, 2017, and 2018

Arkansas Antimicrobial Stewardship Foundation

Vice President, 2025 – present

Arkansas Summit for Antimicrobial Stewardship Contributor, 2019; 2022 – present

Steering Committee Member, 2024 – present

Speaker Committee Member, 2022 – present

-Co-chair, 2024-25, 2025-26

Arkansas Association of Health-System Pharmacists (AAHP)

Member 2006 – present

Antimicrobial Stewardship Task Force Chair, June 2017 – 2024

-Organize and lead task force, obtain/provide educational opportunities, provide e-mail networking platform, provide tools and resources for U.S. Antibiotics

Awareness Week, liaison for the Arkansas Department of Health (ADH)

Antimicrobial Stewardship Sub-committee of Healthcare-Associated Infection

Advisory Committee

Treasurer, June 2016 – June 2017

-Worked with board to revise accounting codes, annual budget, travel expense form, and other ongoing accounting processes suggested by the 2015 Approved Upon Procedure (AUP) findings

-Worked with board to change long-term investments to another management company

Immediate Past President, June 2015 – June 2016

-AAHP Fall Seminar Committee, June 2015 – October 2015

-Junior Board Member Mentor, July 2015 – June 2016

-Membership and Communication Council Chair Mentor

-Completion of commitments during presidential term

Arkansas Hospital Association and AAHP Antimicrobial Stewardship Collaborative,  
Stake holder and assisted chair as needed with ideas, communication, materials, and  
education to be disseminated to the collaborative January 2015 – present  
President, June 2014 – June 2015

- Platform: Increase membership services and improve viability of organization  
through updated policies/procedures and increase membership involvement
- Additional services implemented by organization during term:
  - 1) Surveys to identify membership needs;
  - 2) Live, ACPE-accredited continuing education via webinars;
  - 3) Monthly e-mail communication with membership;
  - 4) AAHP new member mentor program;
  - 5) Professional interest group contact information via member-only website;
  - 6) Continuation of AAHP/Arkansas Hospital Association Collaborative for  
pharmacist-driven initiatives (adverse drug events and antimicrobial stewardship);
  - 7) Addition of junior board members from Arkansas' colleges of pharmacy;
  - 8) Silent auction for additional revenue stream
- Membership and Communications Chair (completed appointment for volunteer  
unable to complete term), January 2015 – June 2015
- ASHP Pharmacy Practice Model Initiative Address to state student societies:  
The Future of Pharmacy Practice, and How Can I be Involved? – October 2014
- AAHP Presidential Address: 3 Ways of Improving the Pharmacy Profession  
through Improving You – October 2014
- Fall Seminar Committee: exhibitor co-chair, May 2014 – June 2015

President-elect, October 2012 – June 2014

Bylaws *ad hoc* Committee, 2011-2014

Secretary, October 2009 – October 2012

- ASHP state affiliation renewal – July 2010

Fall Seminar Speaker Chair, 2009

Arkansas Department of Health (ADH)

Member of Antimicrobial Stewardship Sub-committee of Healthcare-Associated  
Infection Advisory Committee, April 2017 – present  
Pharmacist co-chair, January 2020 – present

- Development of antimicrobial stewardship pharmacist surveys with ADH

American Association of Colleges of Pharmacy

Member, 2009 – 2013; 2025 – present

Annual Meeting Faculty Voting Delegate, 2004

Rho Chi

Life Member

Vice President of ULM student chapter, 2001 – 2002

Phi Lambda Sigma

Life Member

### **Previous**

Arkansas Pharmacists Association (APA)

Member, 2006 – 2023



- |   |  |
|---|--|
| 2011-2014;<br>2021-present<br>2006-07<br>2005-2013  | UAMS Teaching Certificate, mentor and portfolio reviewer (additional portfolio reviewer in 2020-2021)<br>Self-Study 2007, Student Workgroup<br>UAMS College of Pharmacy Alumni Committee, <i>ad hoc</i> member   |
| • Student Service                                   |  |
| 2024-present  | UAMS NE MASH high school shadowing program, pharmacist participant   |
| 2007-11   | UAMS College of Pharmacy/St. Bernards annual health screening co-coordinator and pharmacist participant <ul style="list-style-type: none"> <li>○ Allows for P3 longitudinal experience hours, student organization involvement outside of central Arkansas, and exposure of the College of Pharmacy for recruitment and patient health assistance</li> </ul> |
| 2007-present  | UAMS College of Pharmacy P3 longitudinal shadowing, pharmacist participant   |
| 2006-present  | Pre-pharmacy student shadowing, pharmacist participant   |
| • Community Service                                 |  |
| <u>Community Presentations/Expert Panel Q&amp;A</u> |  |
| 2018<br>(April)                                     | Antibiotics, Allergies, and Vaccines<br>St. Bernards Healthcare Health and Wellness Expo   |
| 2017<br>(April)                                     | Antibiotics...Why They Aren't Always Best for You<br>St. Bernards Healthcare Health and Wellness Expo  |
| 2010<br>(July, October)                             | UAMS Center on Aging - Northeast<br>"What Every Informed Warfarin (Coumadin) Patient Needs to Know"  |
| <u>Community Wellness Events</u>                    |  |
| 2013<br>(September)                                 | UAMS Center on Aging – Northeast<br>Fall Awareness and Prevention, pharmacist brown bag participant  |
| <u>Newsletters</u><br>2010                          | <b>Crader, M.</b> "Do's and Don'ts of Warfarin Therapy" <i>Seniority</i> , UAMS Center on Aging – Northeast Community Newsletter. Fall 2010.   |
| <u>Media</u>  |  |
| Television<br>2020<br>(December)                    | KAIT 8 expert panel to discuss COVID-19 related issues and questions via social media and posted to website  |
| Television<br>2010<br>(July, October)               | KAIT 8 interview on mid-day news to speak about warfarin and publicize educational event   |



## St. Bernards Medical Center Clinical Service

### Clinical Service

2016-present

Pharmacist leader (co-leader) of SBMC Antimicrobial Stewardship Program

- Work with physician leaders of the SBMC Inpatient and Outpatient Antimicrobial Stewardship Programs to ensure requirements for regulatory agencies are met
- Work with physician leaders and Clinical Efficiency Program Antimicrobial Stewardship (CEP-AS) Subcommittee to implement education and improvement initiatives to ensure appropriate and cost effective use of antimicrobial agents to improve patient outcomes, including initiatives identified through data collection and analysis
  - Ensure compliance with Joint Commission Medication Management Standard MM.09.01.01, CMS section 485.640(b), and CMS interoperability reporting of AUR to NHSN
  - Create and update antimicrobial-related physician inpatient order sets outpatient protocols based on national guidelines and local susceptibility data
  - Compile and review inpatient, outpatient, intensive care, and pediatric antibiograms for trends and changes needed in empiric therapy (e.g., MRSA, ESBLs, *Pseudomonas*, anaerobes)
  - Calculate and trend days of antibiotic therapy per 1000 patient days and other measures as appropriate
  - Build IT alerts and create reports in clinical surveillance software
  - Work with microbiology lab and infection prevention for potential opportunities for improvement (e.g., ESBL and Amp C susceptibility results, blood culture specimen collection, MDRO definitions and testing, *C. difficile* test and urine culture ordering)
  - Collect, track, analyze, and report antimicrobial usage, antimicrobial documentation policy adherence, facility-specific order set utilization, and pharmacist prospective audit and feedback recommendations and acceptance rate
  - Work with physicians, pharmacists, nursing, microbiology, etc. to improve education and processes for antibiotic de-escalation (e.g., obtaining MALDI-TOF and PCR lab equipment,

- de-escalation, penicillin/cephalosporin allergy education and assessments)
  - Develop and provide education and competency training to appropriate health-care providers
  - Provide assistance to critical access hospitals that are owned/managed by SBMC
  - Participate as needed in appropriate committees, collaboratives at the local, state, and national level
  - Participate in community education (e.g., HMG Health and Wellness Expo, U.S. Antibiotic Awareness Week, as needed education during COVID-19)
  
- 2010-present Pharmacist antimicrobial stewardship/ID rounds, clinical pharmacist
  - Review for appropriate antibiotic usage including empiric therapy, “bug-drug” mismatch, de-escalation, drug-drug interactions, monitoring, dosing, length of therapy, transitions of care, etc.
  - Follow-up with prescribers regarding therapy and make automatic changes per the Pharmacy and Therapeutics Committee (e.g., renal dosing and intravenous to oral conversions)
  - Rounding includes presentation of complicated patients to infectious diseases physician for his expert opinion on difficult cases, 2010-2013; ID rounds with interdisciplinary team, 2019-present
  
- 2014-15 St. Bernards Clopton Clinic, part-time clinical pharmacist
  - Helped begin medication therapeutic management services at Clopton Clinic as part of the CMS Comprehensive Primary Care Initiative
  - Provide chart reviews, patient counseling, transitions of care services, and any other duties related to medication management for high risk patients
  - Developed and implemented collaborative practice agreement for pharmacist-managed warfarin dosing service, 2015
  
- 2006-14 Hospice, clinical pharmacist
  - As needed pharmacist for both outpatient and inpatient hospice services
  - Attend interdisciplinary meetings and provide chart reviews to ensure appropriate medication therapy and to comply with regulatory requirements
  
- 2006-14 Pharmacokinetics dosing, clinical pharmacist
  - Established pharmacokinetics dosing service
  - Provided house-wide services, 2006-08

- 2006-13 Senior Health Clinic, clinical pharmacist
  - Provide services, education, and expert opinion as needed
  - Review for appropriate medication therapy and monitoring in addition to anticoagulation/other medication consults
- 2006-10 Internal medicine rounds, clinical pharmacist
  - Provide patient education as needed
  - First pharmacist to round with physician in hospital which led to rounding with other specialties
  - Review for appropriate medication therapy/monitoring and ensure CMS core measures and Joint Commission National Patient Safety Goals are met
- 2005-07 Transitional Care Facility, clinical pharmacist
  - Chart reviews for appropriate medication therapy, monitoring, and documentation
  - Weekly interdisciplinary meetings for skilled nursing facility patients

#### Committee/Workgroup Service

- 2005-present Pharmacy and Therapeutics Committee
  - Pharmacist co-chair: 2014-2021
  - Secretary: 2005-2014; 2022-present
  - Medication utilization evaluations (MUEs), new drug monographs, comparison of medication classes for therapeutic auto-substitution, literature reviews, policy/procedure development/revisions, interdisciplinary education, etc.
    - MUEs
      - 2025: ceftazidime
      - 2022: ceftazidime/avibactam (Avycaz)
      - 2021: ceftolozane/tazobactam (Zerbaxa), ceftaroline (Teflaro), fidaxomicin (Dificid)
      - 2019: carbapenems
      - 2018: Liraglutide (Victoza), Canagliflozin (Invokana)
      - 2017: prothrombin complex concentrate (Kcentra)
      - 2016: liposomal bupivacaine (Exparel), canagliflozin (Invokana), idarucizumab (Praxbind)
      - 2014: linezolid
      - 2010: albumin
      - 2009: vancomycin, intravenous to oral

- medication conversions
    - 2008: tigecycline (Tygacil), meperidine (Demerol), ertapenem (Invanz)
    - 2007: levalbuterol (Xopenex), vitamin K
    - 2006: vancomycin, morphine sulfate liposome (DepoDur), stress ulcer prophylaxis
- 2005-present Infection Prevention Committee, pharmacist representative
  - Development of antibiogram, 2011 – present
  - Mandatory influenza vaccine sub-committee, 2013 – 2016
  - Review charts as needed for physician antibiotic prescribing intervention needs based on nosocomial infection marker trends – 2010 – present
- 2015-present Antimicrobial Stewardship Subcommittee of the Clinical Excellence Program, pharmacist member
  - Continuation of work started on the Pharmacy and Therapeutics Antibiotic Sub-committee
  - See Clinical Service: Pharmacist leader of SBMC Antimicrobial Stewardship Program
  - 2016 and 2017 fiscal year goals: decrease Vancomycin usage
  - 2018 fiscal year goal: increase antibiotic order set utilization
  - 2019 fiscal year goal: decrease broad spectrum gram-negative antibiotic usage
  - 2020 annual goal: decrease meropenem and ertapenem usage
  - 2021 annual goal: decrease meropenem usage
  - 2022 annual goal: decrease piperacillin-tazobactam, cefepime, and meropenem
  - 2023 annual goal: decrease linezolid usage
  - 2024 annual goal: decrease metronidazole usage and unnecessary *Candiduria* treatment
  - 2025 annual goal: decrease ceftriaxone usage
  - 2026 annual goal: increase IV to PO utilization for antibiotics with high oral bioavailability
- 2005-15 Pharmacy and Therapeutics Antibiotic Sub-committee, co-chair
  - Development of antimicrobial stewardship rounds, 2010-present
  - Development of antibiotic education and required competencies for all staff pharmacists, 2010 - present
  - Development of policy for intravenous to oral conversions for antibiotics and anti-secretory medications, 2010

- Development of continuous renal replacement therapy dosing of antibiotics by pharmacists, 2010
  - Development of policy and procedure for renal dosing of antibiotics and other high volume medications, 2009
  - Development of pharmacist-managed pharmacokinetics dosing program
    - Developed policy and procedures 2006-2007
    - Full time pharmacokinetics pharmacist, 2006-2008
    - Updated normal laboratory reference range for vancomycin trough values, 2009
    - Education of pharmacy, nursing, and physician staff, 2006-2007; follow-up with updated information and as needed, 2006 - 2012
    - As needed pharmacokinetics pharmacist, 2009 - 2012
  - Development of education for St. Bernards' nursing orientation
- 2020-present Pharmacy Residency Advisory Council
- Member
- 2011-14 Pharmacy Residency Council
- Residency coordinator
  - Establishment of accredited PGY1 pharmacy residency program
  - Resident interviews
- 2016-present Evidence-Based Medicine (EBM) Committee, pharmacist representative as needed
- 2009-13 EBM Physician order sets developed/reviewed/updated
- 2013: 57
  - 2012: 87
  - 2011: 91
  - 2010: 81
  - 2009: 31
- 2009-13 Continuing Medical Education Steering Committee, charter member
- Development of Grand Rounds and Journal Club interdisciplinary education
- 2010 Education Research Council, pharmacist representative
- 2007-09 Pharmacy and Therapeutics *ad hoc* Anticoagulation Team, lead co-chair
- Contributor to the development of anticoagulation education and competencies for all staff pharmacists, 2011 - 2012
  - Development of pharmacist-driven anticoagulation monitoring program, including initial and ongoing education of staff pharmacists, 2008-2009

- Development and revision of physician order sets, policies, procedures, and education (house wide and all disciplines) to meet the Joint Commission Anticoagulation National Patient Safety Goals, 2008
- 2009 Diabetes Focus PDCA, pharmacist representative
  - Led to diabetes *ad hoc* committee that developed basal/bolus and insulin pump physician order sets
- 2009 Core Measures Stroke Team, pharmacist representative
  - Developed stroke physician order set/protocol
- 2009 Core Measures Pneumonia Team, pharmacist representative
  - Developed pneumonia blue print
- 2008 Care of the Hospitalized Older Adult Team, pharmacist representative
  - Literature review led to development of delirium order set with incorporation of potential drug-induced delirium reminders and EBM medication treatment
- 2008 Pharmacy Challenge Team: Training and Development, team captain
  - Led to continuous education for pharmacy staff

Educational Service (not aforementioned)

- 2005-present Completed in coordination with other initiatives and on as needed/requested basis, including involvement in the annual safety education
- Representative examples (*not already aforementioned*)
    - Updated nursing guidelines for drawing drug levels for Nursing Professional Practice Committee, 2009
    - An Overview of Diabetes Care (*invited by Arkansas State University nursing faculty and certified diabetes educator*) – developed medication section Nursing continuing education self-learning packet - May 2007; update May 2010 and May 2011

Other Service

- 2011 Pharmacy week co-coordinator
- 2005-10 Pharmacy week coordinator
  - Coordinate community promotion and activities related to profession of pharmacy and health education/screenings
- 2008 Clinical Pharmacy Business Plan, clinical pharmacist contributor
  - Compiled portion of literature review

**Other Professional Service**

- 2023 AAHP Fall Seminar COP Student Jeopardy question writer
- 2022-2023; 2016 Faculty Promotion Dossier Peer Reviewer
- 2022 and 2023 Joint Commission antimicrobial stewardship interview participant

2012-2018 Peer reviewer for *Hospital Pharmacy* journal  
 2011 Provided antibiotic educational materials to Arkansas Medical Board per request of pharmacist member  
 2022-25; 2015-17; ASHP student poster mentor, ASHP Midyear Clinical Meeting  
 2012; 2008-09

**Community Service**

- Professional  
 2017-present U.S. Antibiotics Awareness Week, pharmacist volunteer for professional and/or community education, Jonesboro, AR  
 2012 St. Bernards Health and Wellness Institute Education, “CDC Get Smart about Antibiotics Week,” pharmacist volunteer, Jonesboro, AR  
 2011 St. Bernards employee and patient/family “pharmacist meet and greet” about cough and cold options and flu vaccine information, pharmacist volunteer, Jonesboro, AR  
 2011 St. Bernards Senior Life Center “brown bag” and flu vaccine presentation, pharmacist volunteer, Jonesboro, AR  
 2010 St. Bernards Community Education, “Proper Use and Safety of OTC and Rx Meds,” presenter, Teleflora, Inc., Paragould, AR  
 2007 Cathedral Baptist Church AWANAS Program, “Correct Handwashing demonstration,” presenter, Jonesboro, AR  
 2006 Healthy Aging Fair “brown bag”, pharmacist volunteer, Jonesboro, AR  
 2006 St. Bernards Community Education, Valley View Kindergarten medication and poison control presentation with McGruff the crime dog, coordinator and co-presenter, Jonesboro, AR  
 2006 St. Bernards employee GERD screening, coordinator, Jonesboro, AR  
 2005 St. Bernards Village presentation on Medicare Part D and medication-related questions, coordinator and co-presenter, Jonesboro, AR  
 2004 Louisiana Bioterrorism Preparedness and Emergency Response/Louisiana Strategic National Stockpile Deployment Exercise, pharmacist participant, Bossier City, LA  
 2003 St. Vincent DePaul (indigent) Pharmacy patient education in-services, Monroe, LA
  - Oral Health for Patients With Diabetes Mellitus, Proper Foot Care, Glycemic Index, Healthy Portions for a Healthy You
- Unrelated to Profession  
 2022-present Valley View Junior and Senior High School Quiz Bowl competition judge and/or scorekeeper

2022-present	Cathedral Baptist Church, food bank/clothes closet volunteer
2022-present	Cathedral Baptist Church, church Sunday School secretary
2006-2007;	Cathedral Baptist Church, AWANAS participant
2010-present	<ul style="list-style-type: none"> <li>• Puggles leader: 2010-2012</li> <li>• SPARKS leader: 2006-2007; 2013-2016</li> <li>• SPARKS director: 2016-present</li> </ul>
2007-present	Cathedral Baptist Church substitute Sunday school teacher
2006-present	Samaritan's Purse Operation Christmas Child, participant
2019-present	Boy Scout Troup #134 parent helper to fulfill community service/ Eagle Scout projects and fundraising
2014-2024	Cub Scout Den #1225 parent helper to fulfill community service hours
2019, 2021-2024	Cathedral Baptist Church, children's Christmas program director
2011-2020	Cathedral Baptist Church Wee Worship <ul style="list-style-type: none"> <li>• Worker: 2011-2020</li> <li>• Coordinator: 2016-2017</li> </ul>
2008-2018	Cathedral Baptist Church nursery worker
2006-2019	Cathedral Baptist Church choir, soloist
2009-11	Jingle Bell Walk/Run for the Arthritis Foundation, participant
2007-11	Susan G. Komen Breast Cancer Foundation, participant
2008	HMG Health and Fitness EXPO, set-up volunteer
2005-07	United Way Day of Caring, volunteer <ul style="list-style-type: none"> <li>• Abilities Unlimited, 2007</li> <li>• Salvation Army, 2006</li> <li>• Northeast Arkansas Food Bank, 2005</li> </ul>
2005	Red Cross, certified volunteer
2005-06	Valley View Missionary Baptist Church, junior and senior high teacher/co-leader
2004	Boy Scouts: Learning for Life Field Day for underprivileged and at risk youth, volunteer
2002-03	Ebenezer Baptist Church College and Career Sunday School Department, secretary

## **REFERENCES**

Available on request