



THE UNIVERSITY OF
MISSISSIPPI

Center for Pharmaceutical
Marketing and Management

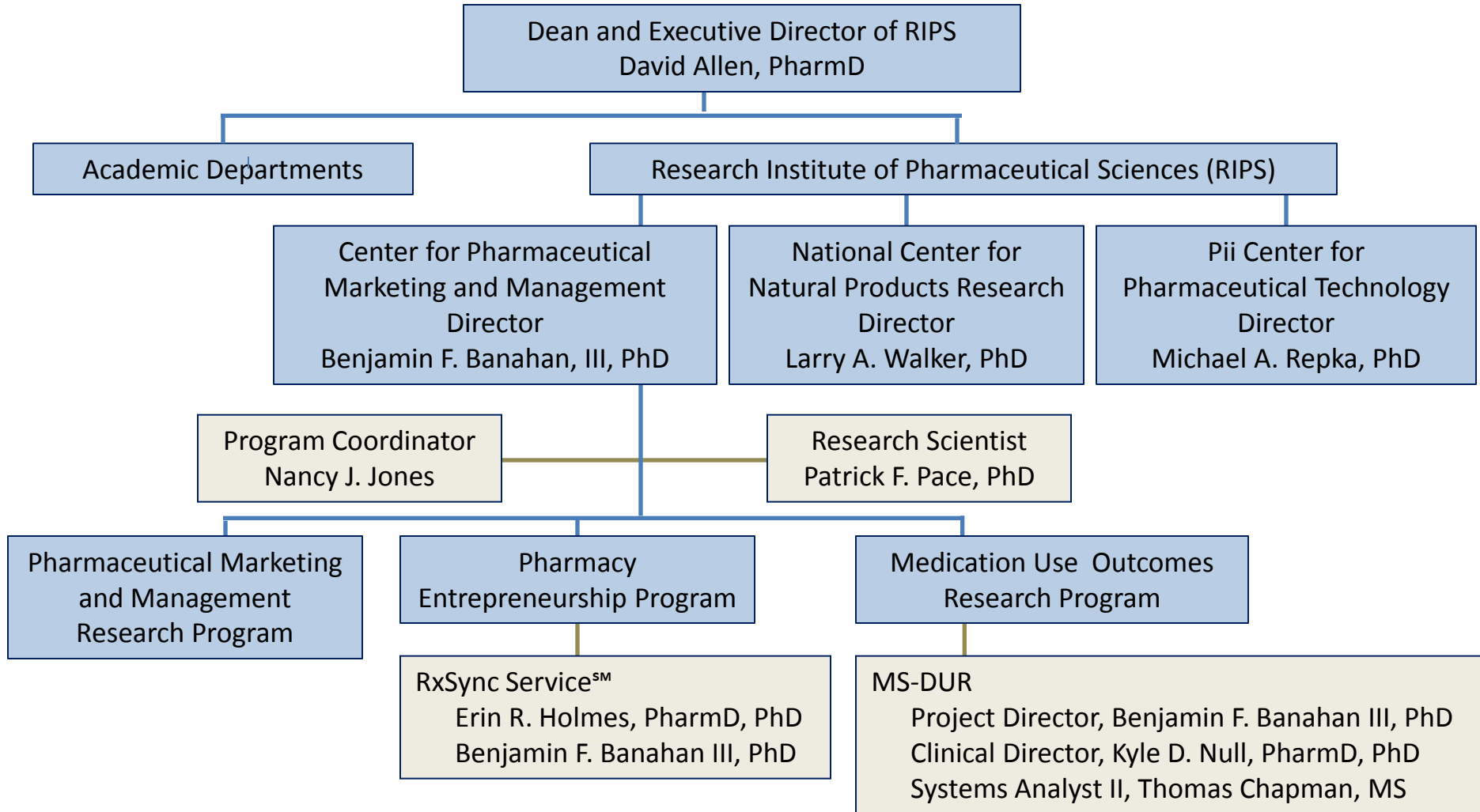
Overview of Research Programs
January 2013

University of Mississippi School of Pharmacy

- 6 academic departments
Medicinal Chemistry, Pharmaceutics, Pharmacognosy,
Pharmacology, **Pharmacy Administration**,
Pharmacy Practice
- 3 research centers in the Research Institute of
Pharmaceutical Sciences (RIPS)
National Center for Natural Products Research (NCNPR)
**Center for Pharmaceutical Marketing and
Management Research (CPMM)**
Pii Center for Pharmaceutical Technology



School and CPMM Organizational Structure



CPMM: Talented and diverse research team

- RIPS/ CPMM personnel
 - 2 Research Faculty (PhDs)
 - 1 Research Scientist (PhD)
 - 1 Systems Analyst (MS)
 - 1 Program Coordinator
- Pharmacy Administration personnel
 - 6 Faculty (PhDs) – all have joint appointment in CPMM – 2 have primary focus in outcomes research, 1 has primary focus in marketing, 1 has primary focus in management, 1 is PhD biostatistician
 - 14 MS and PhD graduate students (~half receive stipend support from RIPS and CPMM)
- Close collaborative relationship with Medical Marketing and Economics (MME) a local pharmaceutical marketing consulting company
(4 of 5 starting partners are PhD graduates of Pharmacy Administration department)

CPMM: 3 major research program areas

- **Medication Use Outcomes Research Program (MUORP)**
 - Pharmacoepidemiology and pharmacovigilance research using Medicare, Medicaid, and private pay administrative claims data.
 - Major emphases in evaluating safety and efficacy outcomes associated with medication adherence and other medication use behaviors/patterns.
- **Pharmacy Entrepreneurship Program (PEP)**
 - Evaluation of expanded pharmacy services and the impact of community pharmacy on health outcomes.
 - Development of an RxSync Pharmacy™ network providing assistance in implementing and evaluating the RxSync ServiceSM - a unique medication adherence, practice management model.
- **Pharmaceutical Marketing and Management Research Program (PMMRP)**
 - Pharmaceutical marketing projects examining consumer and prescriber product selection.

MUORP projects: Recently completed or underway (1 of 5)

- Mississippi Division of Medicaid retrospective drug utilization review vendor January 2010 to present (MS Medicaid DUR data 2008 – ongoing weekly updates -- Banahan, Project Director; Null, Clinical Director) .
 - Typically have 5-10 on-going adhoc analysis underway in addition to DUR exception monitoring and intervention activities.
- National Association of Chain Drug Stores grant to examine primary medication non-adherence (Prescription transaction data from 3 chains – 2012-2013 - Donna West-Strum and David McCaffrey, Co-PIs)
- Endo Pharmaceuticals grant to examine treatment patterns for central precocious puberty and to conduct cost of treatment comparison for GN-Rh agonists (National Medicaid data 2006 – 2008, anticipated completion spring 2012 – Banahan, PI).

MUORP projects: Recently completed or underway (2of 5)

- Dissertation project to develop normative data for states on pharmacy measures initially proposed for CMS Medicaid Adult Quality Measures (National Medicaid data 2007 - anticipated completion summer 2012 – Thumula, Student; Banahan, Director).
- CMS grant (Banahan, Project Director) to examine:
 - Evaluate Pharmacy Quality Alliance (PQA) quality measures at the pharmacy level (MS Medicaid data 2004, 2007, MS Medicare data 2007 – being completed spring 2012 – Banahan, Co-PI).
 - Evaluate post-MI treatment and outcomes (Medicare 5% sample 2002-2007 – being completed spring 2012 – Yang, Co-PI).
 - Evaluate effect of state prescription drug cap change from 7 to 5 prescriptions (2005 Mississippi Medicaid data – completed fall 2011 – Khanna, Co-PI).
 - Examine impact of Medicaid prescription cap when dual eligibles transitioned to Medicare Part D (MS Medicaid and MS Medicare data 2005-2006 – completed fall 2011 – Khanna, Co-PI).

MUORP projects: Recently completed or underway (3 of 5)

- Dissertation project to examine impact of REMS on appropriate and inappropriate medication use (MS Medicaid DUR data 2008-2011 - anticipated completion date spring 2012 – Mendonca, Student; Banahan, Director).
- EMD Serono grant to examine treatment patterns of multiple sclerosis and the impact of out-of-pocket burden on use of disease modifying drugs (Medicare 5% sample 2006-2008 – completed fall 2011 – Banahan, PI).
- Thesis project to examine impact of FDA safety signals on use of rosiglitazone in indicated and contraindicated patients before and after the safety signals (Medicare 5% sample 2006-2008 – completed fall 2011 – Oko-Osi, Student; Banahan, Director).

MUORP projects: Recently completed or underway (4 of 5)

- Internally funded project to examine adherence with treatments for diabetes, depression, epilepsy, hypercholesterolemia, hypertension and rheumatoid arthritis and the relationships among adherence rates and health resource utilization (MS Medicaid data 2006-2007 – completed fall 2011 – Khanna, PI).
- HRSA grant (Banahan, Project Director) to examine:
 - Impact of benefit gap and out-of-pocket burden on medication adherence (Medicare 5% sample 2006-2007 – completed summer 2011 – Banahan, Co-PI).
 - Medication safety in the elderly (Medicare 5% sample 2006-2007 – completed summer 2011 – Yang, Co-PI).

MUORP projects: Recently completed or underway (5 of 5)

- Thesis to examine whether statins improve outcomes for asthma patients on inhaled corticosteroid therapy (MS Medicaid data 2002-2004 – completed fall 2010 – Lokhandwala, Student; West, Director).
- Thesis project to examine quality of care and costs among children with Type 2 diabetes (MS Medicaid data 2002-2004 – completed fall 2010 – Thumula, Student; Yang, Director).
- CMS grant to study application of BearingPoint medication use measures in the Medicaid population (MS Medicaid data 2002-2004 – completed spring 2009 -- Banahan, PI).

PEP projects: Recently completed or underway

- Building RxSync Pharmacy® Network.
- Major revisions to RxSync for Pharmacies® workbook.
- Research to document outcomes related to RxSync ServiceSM on adherence, outcomes and overall health care costs.
 - PharmNet analysis in Medicaid (internally funded project: Banahan and Datar). Examined changes in adherence and costs using a retrospective analysis of Medicaid claims with matched cohort and a pre-/post- subject designs.
 - Tyson Drugs / Thrift analysis in Medicaid and other payers. (internally funded project: Banahan, Holmes, Dikun). Will exam changes in adherence using store claims data and exam changes in adherence and costs using Medicaid claims data and data from other payers, if possible.

PMMRP projects: Recently completed or underway

- Internally funded project to examine pharmacy faculty attitudes toward and perceptions of the pharmaceutical industry (primary research survey anticipated completion January 2013 – Wamble and Dikun, Co-PIs; Kolassa and Banahan, Faculty Advisors).
- Thesis project to examine physician and patient factors affected use of antipsychotics in children using patient simulation (primary research survey of PSYCH and PCPs – anticipated completion Spring 2013 – Ramachandra, Student; Banahan, Director).
- Thesis project to examine patients' perceptions of community pharmacy quality measures (primary research survey – completed November 2011 – Shahpurwala, Student; Bolden, Director).
- Thesis project to examine patients' value drivers for new inhaled insulin product (primary research survey – completed April 2011 – Verma, Student; Banahan, Director).
- Thesis project to examine physician adoption of E-prescribing (primary research survey of PCPs – completed December 2010 – Jariwala, Student; Holmes, Director).

Major conferences presentations last 3 years

International Society for Pharmacoeconomic and Outcomes Research (ISPOR)

- 2010 -- 13 posters, 2 podium presentations
- 2011 -- 12 posters, 1 podium presentation
- 2012 – 14 posters, 2 podium presentations

AcademyHealth

- 2011 – 5 posters
- 2012 – 2 posters

Academy of Managed Care Pharmacy

- 2012 – 1 poster

American Pharmacists' Association (APhA)

- 2010 – 10 posters, 1 podium presentation
- 2011 – 10 posters, 1 podium presentation
- 2012 – 5 posters, 1 podium presentation

Additional presentations at:

- Consortium of Multiple Sclerosis Centers – 2011
- Drug Information Association – 2010, 2011

Contact information

<http://www.pharmacy.olemiss.edu/cpmm>

Benjamin F. Banahan, III Ph.D., *Director, Research Professor and
Professor of Pharmacy Administration*

Off: 662-915-5352 Cell: 662-801-8299 E-mail: benb3@olemiss.edu

Kyle D. Null, Pharm.D., Ph.D.

Research Assistant Professor

Off: 662-915-5948 E-mail: kdnull@olemiss.edu

Nancy J. Jones

Project Coordinator

Off: 662-915-7650 E-mail: njjones@olemiss.edu