



# *The University of Mississippi*

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## *Interoffice Memorandum*

### **SCHOOL OF PHARMACY OFFICE OF THE DEAN**

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**TO: All School of Pharmacy Personnel**

**FROM: Charles D. Hufford, Associate Dean for Research and Graduate Programs**

**DATE: May 17, 2001**

**SUBJECT: Research News (#2)**

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The following **GRANTS/CONTRACTS** have recently been awarded:

1. **Dr. Alice Clark** (P.I. – RIPS/NCNPR) and **Dr. Larry Walker** (Co-P.I. - RIPS/NCNPR) – Development of Natural Products from Plants and Microbes for Replacement of Synthetic Pesticides (Amendment 7) (USDA), \$1,673,161 – 2001.
2. **Dr. Mahmoud ElSohly** (P.I. – RIPS/NCNPR) and **Dr. Samir Ross** (Co-P.I. – RIPS/NCNPR) – Production, Analysis and Distribution of Cannabis and Marijuana Cigarettes (Amendment 3) (NIDA), \$809,361 – 12/1/00-11/30/01.
3. **Dr. Mahmoud ElSohly** (P.I. – RIPS/NCNPR) and **Dr. Samir Ross** (Co-P.I. – RIPS/NCNPR) – Production, Analysis and Distribution of Cannabis and Marijuana Cigarettes (Modification 4) (NIDA), \$162,212 – 12/1/00-11/30/01.
4. **Dr. Mahmoud ElSohly** (P.I. – RIPS/NCNPR), **Dr. Larry Walker** (Co-P.I. – RIPS/NCNPR) and **Dr. Ikhlas Khan** (Co-P.I. – RIPS/NCNPR) – Appropriate Quality Control Procedures of Herbal Drugs in Egypt (USAID Funds via Foreign Relations Coordination Unit, Egypt), \$40,000.
5. **Dr. Christy Foran** (P.I. - RIPS/ECHR) – Use of a Transgenerational Model to Evaluate Threshold Effects of Endocrine Disrupting Chemicals (U.S. Environmental Protection Agency), \$127,773.
6. **Dr. Mark Hamann** (P.I. - Pharmacognosy) – A Sponge Taxonomy Workshop and Novel Approaches to the Classification of Species in the Phylum Porifera (Mississippi/Alabama Sea Grant College Program), \$2500.
7. **Dr. Charles Hufford** (P.I. – RIPS/NCNPR) – NMR Spectral Data for King Saud University (King Saud University), \$10,000.
8. **Dr. Eugene Kolassa** (P.I. – Pharmacy Administration) – Studies in Pharmaceutical Public Policy (Astra-Zeneca Pharmaceuticals, Inc.), \$40,000 – 2/01-12/01.

9. **Dr. Dale Nagle** (P.I. – Pharmacognosy) - Control of Blue-green Algae in Aquaculture Ponds (Year 3) (Mississippi State University/Southern Regional Aquaculture Center), \$20,000.
10. **Dr. Dale Nagle** (P.I. – Pharmacognosy) - Discovery of New Drugs that Target Hypoxic Breast Tumor Cells (U.S. Army Medical Research Acquisition Activity Award), \$72,000.
11. **Dr. John Rimoldi** (P.I. – Medicinal Chemistry) – Computer Software Predictor of Physicochemical Parameters: An Alternative to Laboratory Experiments (UM Educational Technology Grant Program), \$2350.
12. **Dr. David Rogers** (P.I. – Pharmacy Practice) – Molecular Mechanisms of Echinocandin Antifungal Resistance in a *Saccharomyces Cerevisiae* Model (Merck & Co., Inc.), \$23,250 – 10/00-10/01.
13. **Dr. Samir Ross** (P.I. – RIPS/NCNPR) – Development of an Economic Supply of Delta 9 THC (NIH subcontract with ElSohly Laboratories, Inc.), \$201,243.
14. **Dr. Marc Slattery** (P.I. – Pharmacognosy) – Hybridization of Soft Corals – Combinational Genetics & Drug Discovery (Mississippi/Alabama Sea Grant College Program), \$15,233 – 12/00-12/01.
15. **Dr. Mickey Smith** (P.I. – Pharmacy Administration) – Diversity Recruitment Initiative (Pfizer, Inc.), \$9,224 – 2/01-12/01.
16. **Dr. Larry Walker** (P.I. – NCNPR) and **Dr. Alice Clark** (Co-P.I. – NCNPR) – Natural Products Acting via New Anti-Fungal Targets (Modification 1) (Georgetown University/National Cancer Institute), \$168,744.
17. **Dr. Kristine Willett** (P.I. – Pharmacology) – Screening of Environmental Contaminates Detected in Mississippi Sediments as Inducers and/or Inhibitors of CYP1B1 Expression in Channel Catfish (Mississippi State University/U.S. Dept. of the Interior, U.S. Geological Survey), \$20,047 – 3/01-2/02.
18. **Dr. John Williamson** (P.I. – Medicinal Chemistry) – UM’s Biomedical Research Internship Program (National Institute of General Medical Sciences), \$175,636 – 2/01-1/02.
19. **Dr. John Williamson** (P.I. – Medicinal Chemistry) – Multimedia Tool Box for Science-Related Courses (UM Educational Technology Grant Program), \$5500.
20. **Dr. Yu-Dong Zhou** (P.I. – RIPS/NCNPR) – Natural Products as Modulators of Therapeutic Angiogenesis in Ischemic Diseases (American Society of Pharmacognosy Research Starter Grant), \$7500.
21. **Dr. Jordan Zjawiony** (P.I. – Pharmacognosy) and **Dr. Mark Hamann** (Co-P.I. – Pharmacognosy) – Design and Synthesis of New Anticancer and Antitubercular Agents Based on Marine Natural Product, puupehenone (Mississippi/Alabama Sea Grant Consortium), \$49,968 – 2/01-1/04.

The following **PUBLICATIONS** have appeared:

1. **E. Bedir** and **I.A. Khan** – “A New Cyclolanostanol Arabinoside from the Rhizome of *Cimicifuga racemosa*”, *Pharmazie*, **56**, pp. 268-269, 2001.
2. R. Bekker, **X.C. Li**, **H.N. ElSohly**, **A.M. Clark**, E.V. Brandt and **D. Ferreira** – “Resolution and Absolute Configuration of Naturally Occurring Auronols”, *Journal of Natural Products*, **64**, pp. 345-347, 2001.
3. L. Bennie, J. Coetzee, E. Malan, J.R. Woolfrey and **D. Ferreira** – “Oligomeric flavanoids. Part 34: Doubly-linked proteracacinidin analogues from *Acacia caffra* and *Acacia galpinii*”, *Tetrahedron*, **57**, pp. 661-667, 2001.

4. A. Brown, M. Andrew, T. Clemons, **D. King**, H. Taylor, M. Wofford, W. Wyatt and D. Jones – “Classification of JNC VI Blood Pressure Stages and Risk Groups in the ARIC Study”, *Am J Hypertension*, **13**, 2000.
5. **W.M. Davis** – “Dietary Supplements: Are They Safe and Reliable?”, *Drug Topics*, pp. 61-72, April 16, 2001.
6. **H.N. ElSohly, A.S. Joshi, A.C. Nimrod, L.A. Walker and A.M. Clark** – “Antifungal Chalcones from *Maclura tinctoria*”, *Planta Med*, **67**, pp. 87-89, 2001.
7. **M. Ganzera, E. Bedir, I. Calis and I.A. Khan** – “Separation of *Astragalus Saponins* by Reversed Phase High Performance Liquid Chromatography and Evaporative Light Scattering Detection”, *Chromatographia*, **53**, pp. 131-134, 2001.
8. K.G. Harkins, **D.S. King**, M.R. Wofford, C.A. Brown, S.B. Wyatt, M.E. Miller-Davis, **L.A. Ramsey** and D.W. Jones – “Screening for Dyslipidemia in Resident Training Clinics: Is Cardiovascular Risk Management Adequate?”, *Am J Hypertension*, **13**, 2000.
9. **T.K. Harrell and D.S. King** – “Morton Selected for Community Health Project”, *Spirit of Morton*, **4**, p. 1, 2001.
10. **T.K. Harrell, N.N. Horton, D.S. King, M.R. Wofford, A.K. Low and S.L. Noble** – “Women’s Health Initiative of Mississippi: An Innovative Approach to Promoting Wellness”, *Obesity Research*, **8**, p. 104S, 2000.
11. **T.K. Harrell, W.W. Newcomb, W.H. Replogle, D.S. King and S.L. Noble** – “Onychomycosis: Improved Cure Rates with Itraconazole and Terbinafine”, *Journal of the American Board of Family Practice*, **13**, pp. 268-273, 2000.
12. **D.B. Huggett, J.A. Steevens, J.C. Allgood, C.B. Lutkin, C.A. Grace, and W.H. Benson** – “Mercury in Sediment and Fish from North Mississippi Lakes”, *Chemosphere*, **42**, pp. 923-929, 2001.
13. **M. Ilias, D.C. Dunbar, S. Takamatsu, L.A. Walker and A.M. Clark** – “Antimalarial, Cytotoxic and Antifungal Alkaloids from *Duguetia hadrantha*”, *Journal of Natural Products*, 2001.
14. **M. Ilias, K.A. ElSayed, J.S. Mossa, M.S. AlSaid, F.S. El-Ferally, A.M. Clark, C.D. Hufford, S. Oh and A.M.S. Mayer** – “Bioactive 12-Oleanene Triterpene and Secotriterpene Acids from *Maytenus undata*”, *J. Nat. Prod.*, **63**, pp. 605-610, 2000.
15. **M. Ilias, I.A. Khan, N.H. Fischer** and F.R. Fronczek – “Two Stereoisomeric Pentacyclic Oxindole Alkaloids from *Uncaria Tomentosa*: Uncarine C and Uncarine E”, *Acta Cryst*, **57**, pp. 480-482, 2001.
16. I. Katsuyama, A.A. Khalil, J. Ren and **J.K. Zjawiony** – “New and Unique Heterocyclic System with a Fused Imidazole Ring”, *Heterocycles*, **54**, pp. 721-726, 2001.
17. **D.S. King, D.W. Jones, M.R. Wofford, K.G. Harkins, T.K. Harrell** and K.W. Kelley – “Cognitive Impairment Associated with Atorvastatin”, *Pharmacotherapy*, **21**, p. 36, 2001.
18. **D.S. King, S.L. Noble, T.K. Harrell** and M.R. Wofford – “Education, Service and Pharmaceutical Care Opportunities for Pharmacy Students Through Medical Missions”, *Pharmacotherapy*, **21**, p. 107, 2001.
19. **D.S. King, S.L. Noble, K.G. Harkins, M.R. Wofford, K. Harrell, L.A. Ramsey, W.H. Replogle and B.H. Tidwell** – “Evaluation of Compliance with National Cholesterol Education Program Recommendations for Screening and Treatment of Hyperlipidemia in Medical Resident Primary Care Clinics”, *Pharmacotherapy*, **20**, p. 1235, 2000.
20. **D.S. King, S.B. Wyatt, M.R. Wofford, K. Harrell** and D.W. Jones – “Improvement in Blood Pressure Control Through Interdisciplinary Medication Assistance Efforts in Hypertensive Patients with Multiple Metabolic Syndrome”, *Pharmacotherapy*, **20**, p. 1235, 2000.
21. **D.S. King** and M.R. Wofford – “Identification/Management of Obstructive Sleep Apnea”, *Drug Topics*, **144**, pp. 41-50, 2000.
22. **D.S. King, S.B. Wyatt, N.S. King, M.R. Wofford, L.H. Statham, M.M. Pearson, T.K. Harrell** and D.W. Jones – “Improvement in Blood Pressure Control Through Interdisciplinary Medication

- Assistance Efforts in Hypertensive Patients with Multiple Metabolic Syndrome”, *Am J Hypertension*, **13**, 2000.
23. **D.S. King** and M.R. Wofford – “Obesity and New-Onset Diabetes Mellitus”, *Drug Topics*, **144**, pp. 69-78, 2000.
  24. **D.S. King** and M.R. Wofford – “Obesity and Hypertension”, *Drug Topics*, **144**, pp. 59-68, 2000.
  25. M. Murawski and **J.P. Bentley** – “Pharmaceutical Therapy-Related Quality of Life: Conceptual Development”, *Journal of Social and Administrative Pharmacy*, **8**, pp. 2-14, 2001.
  26. **S.L. Noble**, **D.S. King**, D. Price, D.M. Phillips, **T.K. Harrell** and W.H. Replogle – “Assessing and Advising Women for Breast Cancer Risks and Treatment Option”, *Pharmacotherapy*, **21**, p. 136, 2001.
  27. **S.L. Noble**, **D.S. King** and J.L. Olutade – “Cyclooxygenase-2 Enzyme Inhibitors: Place in Therapy”, *Am Family Physician*, **61**, pp. 3669-3676, 2000.
  28. K.Y. Orabi, J.S. Mossa, **M. Ilias**, M.H. Alloush, **A.M. Galal**, F.S. El-Feraly and A.T. McPhail – “New Eudesmane Sesquiterpens from *Plectranthus cylindraceus*”, *Journal of Natural Products*, **63**, pp. 1665-1668, 2000.
  29. C.C. Pace and **K.C. Rogers** – “Bustin’ Open: A Single-session Case of Hypertensive Crisis”, *The Journal of Clinical Problem-based Learning*, **4**, pp. 4-10, 2000.
  30. **N. Pugh**, **S.A. Ross**, **M.A. ElSohly** and **D.S. Pasco** – “Characterization of Aloeride, a New High-Molecular-Weight Polysaccharide for *Aloe vera* with Potent Immunostimulatory Activity”, *Journal of Agricultural and Food Chemistry*, **49**, pp. 1030-1034, 2001.
  31. **N. Pugh**, **I.A. Khan**, **R.M. Moraes** and **D.S. Pasco** – “Podophyllotoxin Lignans Enhance IL-1 But Suppress TNF- mRNA Expression in LPS-Treated Monocytes”, *Immunopharmacology and Immunotoxicology*, **23**, pp. 83-95, 2001.
  32. **M.A. Repka** and J.W. McGinity – “Bioadhesive Properties of Hydroxypropylcellulose Topical Films Produced by Hot-Melt Extrusion”, *Journal of Controlled Release*, **70**, pp. 341-351, 2001.
  33. **K.C. Rogers** and D.A. Wolfe – “Ibutilide: A Class III Rapidly Acting Antidysrhythmic for Atrial Fibrillation or Atrial Flutter”, *The Journal of Emergency Medicine*, **20**, pp. 67-71, 2001.
  34. **K.C. Rogers** and **P.D. Rogers** – “Recent Treatment Strategies for Acute Coronary Syndromes”, *Hospital Pharmacist Report*, **14**, pp. 29-38, 2000.
  35. **K.C. Rogers** and D.A. Wolfe – “Amiodarone-induced blue-gray Syndrome”, *The Annals of Pharmacotherapy*, **34**, p. 1075, 2000.
  36. M.Y. Salem, **S.A. Ross**, T.P. Murphy and **M.A. ElSohly** – “GC-MS Determination of Heroin Metabolite in Meconium: Evaluation of Four Solid-Phase Extraction Cartridges”, *Journal of Analytical Toxicology*, **25**, pp. 93-98, 2001.
  37. S.R. Snodgrass and **B. Parks** – “Anticonvulsant Blood Levels: Historical Review with a Pediatric Focus”, *Journal of Child Neurology*, **15**, pp. 734-746, 2000.
  38. E.M. Ulrich, **K.L. Willett**, A. Caperell-Grant, R.M. Bigsby and R.A. Hites – “Understanding Enantioselective Processes: A Laboratory Rat Model for  $\gamma$ -Hexachlorocyclohexane Accumulation”, *Environ. Sci. Technol.*, **35**, pp. 1604-1609, 2001.
  39. **K.L. Willett**, L.A. Lienesch and R.T. DiGiulio – “No Detectable DNA Excision Repair in UV-exposed Hepatocytes from Two Catfish Species”, *Comparative Biochemistry and Physiology Part C*, **128**, pp. 349-358, 2001.
  40. **J.S. Williamson** and **C.M. Wyandt** – “New Perspectives on Alternative Medicines”, *Drug Topics*, pp. 57-65, January 2001.

41. M.R. Wofford, **D.S. King**, S.B. Wyatt and D.W. Jones – “Secondary Hypertension: Detection and Management for the Primary Care Provider”, *Journal of Clinical Hypertension*, pp. 124-131, 2000.
42. M.R. Wofford, M.E. Andrew, **D.S. King**, J. Stevens, S.B. Wyatt, D.W. Jones – “Implications of Obesity Guidelines to the Atherosclerosis Risk in Communities Cohort”, *Ethnicity & Disease*, **10**, p. 292, 2000.
43. M.R. Wofford, M.W. Davis, K.G. Harkins, **D.S. King**, J.L. Warnock, S.B. Wyatt and D.W. Jones – “Screening for Primary Aldosteronism in Hypertensive Patients”, *Am J Hypertension*, **13**, 2000.

The following **TECHNOLOGY TRANSFER** transactions have occurred:

*In the interest of protecting confidential information, the titles of invention disclosures and patent applications will not be published until after a patent has issued. Inventors outside of the School of Pharmacy will not be published until after a patent has issued.*

INVENTION DISCLOSURES FILED IN 2001

- Michael Repka, Mahmoud ElSohly et. al.

PATENT APPLICATIONS PENDING

- Ghandehari et. al.
- David Pasco, Nirmal Pugh, Mahmoud ElSohly, Samir Ross
- David Pasco, Nirmal Pugh, Mahmoud ElSohly, Samir Ross
- Mark Hamann, Khalid ElSayed, et. al.
- Mitchell A. Avery
- Mitchell A. Avery et. al.
- Mahmoud ElSohly, Samir Ross, et. al.
- N. P. Dhammika Nanayakkara et. al.

RECENT PATENTS GRANTED:

*“Method of Screening Agents as Candidates for Drugs or Sources of Drugs”*

David Pasco et. al..

USSN: 09/355,940

Issued: March 13, 2001

The following **SPECIAL ANNOUNCEMENTS** are also listed:

- Jean Baker has been elected to the University’s Staff Council as a representative for a three year term, ending in February 2004.
- Dr. Walt Chambliss was selected by the Office of the Inspector General of the American Pharmaceutical Association to participate in a focus group during the APhA Meeting in San Francisco in March. The Office of the Inspector General is conducting a study, in cooperation with the FDA, on the extent to which product labeling serves as a safeguard for the elderly taking dietary supplements.
- Dr. Steve Duke was named Outstanding Senior Research Scientist of 2000 by the Agricultural Research Service, chief scientific research agency of the U.S. Dept. of Agriculture.
- Dr. Melissa Flag, Post Doctoral Research Associate, has been selected as an American Association for the Advancement of Science Fellow in the Office of the Science and Technology Advisor to the Secretary of State in the U.S. State Department, effective September 2001.

- Dr. Mark Hamann has been selected to receive the Outstanding Researcher Award in the School of Pharmacy for 2001.
- Dr. Ikhlas Khan has been selected as guest co-editor from the USA for a special issue of *J. Chromatography B*. He was also chosen as a participant in the two WHO Meetings to be held in Canada in July, 2001.
- Deborah Lincoln, Undergraduate Student, has been awarded an American Society of Pharmacognosy Undergraduate Research Grant in the amount of \$2500 to pursue her studies on molecular modeling.
- Vernon Rayford, Undergraduate Student, has been awarded a Goldwater Scholarship.
- The 2001 Graduate Student Achievement Awards were presented to Nirmal D. C. Pugh (Pharmacognosy) and Saurabh S. Sewak (Pharmacy Administration).

Please continue to send me important research and graduate information so that I might share it with your faculty colleagues. **THIS INFORMATION IS NOW BEING POSTED ON THE SCHOOL OF PHARMACY WEB PAGE!** Thank you.

cc: Interim Dean Robert D. Sindelar  
Dean Designate Barbara G. Wells  
Ms. Barbara Lago  
Ms. Beverly Urbanek  
Ms. Dabney Weems