



The University of Mississippi

Interoffice Memorandum

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TO: All School of Pharmacy Personnel

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

DATE: January 30, 2001

SUBJECT: Research News (#1)

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

1. **Dr. Mitch Avery** (P.I. – Medicinal Chemistry) – Synthesis of Epothilones and Related Analogs (NaPro Biotherapeutics), \$150,000 – 11/00-10/03.
2. **Dr. John Bentley** (P.I. – Pharmacy Administration) – Factors Influencing Pharmacists' Perceptions of Ethical Problems: The Role of the Professional Environment, Organization Environmental and Personal Characteristics (University of Mississippi Faculty Small Grants Program), \$3,750.
3. **Dr. Mahmoud ElSohly** (P.I. – NCNPR/RIPS) – Production, Analysis and Distribution of Cannabis and Marijuana Cigarettes (Amendment 1), \$260,062.
4. **Dr. Daneel Ferreira** (P.I. – NCNPR/RIPS) – Synthesis of Radio Labeled Condensed Tannin Precursors (Nobel Foundation), \$65,000 – 11/00-10/03.
5. **Dr. Mark T. Hamann** (P.I. – Pharmacognosy) – Lead Optimization Studies of the Antimalarial Marine Natural Product Manzamine (The World Health Organization), \$20,000 – 12/00-6/01.
6. **Dr. David J. McCaffrey** (P.I. – Pharmacy Administration) – Measuring the Perspectives of Pharmacy Opinion Leaders on the Pharmaceutical Industry (Amgen), \$15,000 – 10/00-10/02.
7. **Dr. Michael Repka** (P.I. – Pharmaceuticals) – Antifungal Denture Adhesive Film (University of Mississippi Faculty Small Grants Program), \$5,000.
8. **Dr. John M. Rimoldi** (P.I. – Medicinal Chemistry); **Dr. John Matthews** (Co-P.I. – Pharmacology) and **Dr. Marc Slattery** (Co-P.I. – Pharmacognosy) – Identification of Neurotoxins from Centaurea: A Systematic Approach (USDA Seed Grant), \$75,000 – 6/00-5/01.
9. **Dr. Marc Slattery** (P.I. – ECHR/RIPS/Pharmacognosy), **Dr. Stephan Threlkeld** (Co-P.I. – Biology), **Dr. Ajit Sadana** (Co-P.I. – Chemical Engineering), **Dr. Christy Foran** (Co-P.I. – ECHR/RIPS) and **Dr. Kristine Willett** (Co-P.I. – Pharmacology) – UM Environmental Signals and Sensors (UMMC/CDC), \$602,352 – 9/00-9/05.

10. **Dr. Marc Slattery** (P.I. – Pharmacognosy) – Drug Discovery: Extracts from Marine Invertebrates and Algae (Merck Co.), \$250,000 – 11/00-10/02.
11. **Dr. Kristine Willett** (P.I. – Pharmacology) – CYP1BI-Dependent Estrogen Metabolism and Oxidative Stress in Two Related Species of Catfish (University of Mississippi Faculty Small Grants Program), \$5,000.

The following **PUBLICATIONS** have appeared:

1. **K. Willett**, P. Gardinali, L.A. Lienesch and R.T. DiGiulio - “Comparative Metabolism and Excretion of Benzo(a)pyrene in 2 Species of Ictalurid Catfish”, *Toxicological Sciences*, **58**, pp.68-76 (2000).
2. **B.C. DeBusk**, SS Chimote, **J.M. Rimoldi** and D. Schlenk - “Effect of the dietary brominated phenol, lanasol, on chemical biotransformation enzymes in the gumboot chiton, *Cryptochiton stelleri* (Middendorf, 1846)”, *Comparative Biochemistry and Physiology Part C*, **127**, pp. 133-142 (2000).
3. S.F. Long, **M.C. Wilson** and **W.M. Davis** – “The Effects of Nandrolone Decanoate on Cocaine-induced Kindling in Male Rats”, *Neuropharmacology*, **39**, pp. 2442-2447 (2000).
4. **A.S. Bouldin**, **M.C. Smith**, B.F. Banahan, **D.J. McCaffrey** and E.M. Croom – “Herbal Supplement Information and the Consumer”, *Drug Information Journal*, **34**, pp. 1339-1353 (2000).
5. **E.A. Abourashed** and **I.A. Khan** – “Microbial Transformation of Kawain and Methysticin”, *Chem. Pharm. Bull.*, **48**, pp. 1996-1998 (2000).
6. **W.M. Davis** – “New Approaches to Treatment of Alcohol Dependence”, *Drug Topics*, pp. 101-110, December 11, 2000.
7. **E. Bedir** and **I.A. Khan** – “New Steroidal Glycosides from the Fruits of *Tribulus terrestris*”, *Journal of Natural Products*, **63**, pp. 1699-1701 (2000).
8. **D.B. Huggett**, **I.A. Khan**, **J.C. Allgood**, **D.S. Block** and D. Schlenk – “Organochlorine Pesticides and Metals in Select Botanical Dietary Supplements” *Bull. Environ. Contam. Toxicol.*, **66**, pp. 150-155 (2001).

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 been issued. Inventors outside of the School of Pharmacy will not be published until after a patent has been issued.

INVENTION DISCLOSURES FILED IN 2001

- None

PATENT APPLICATIONS PENDING

- David S. Pasco, Nirmal Pugh, Mahmoud ElSohly, Samir Ross
- David S. Pasco, Nirmal Pugh, Mahmoud ElSohly, Samir Ross
- Mark T. Hamann, Khalid El Sayed et.al.
- Mitchell A. Avery
- Mitchel A. Avery et.al.
- John K. Buolamwini et. al.
- Mahmoud ElSohly, Samir Ross, et al
- N. P. Dhammika Nanayakkara et. al.

RECENT PATENTS GRANTED:

None

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

Dr. Noel Wilkin and Dr. Glenn Browne (Texas Tech University) gave a presentation at The Society for Judgement and Decision Making Meeting in New Orleans in November. The title of the presentation was “An Investigation of the Influence of Information Attributes on Judgments of Relevance and Reliability”. The Society of Environmental Toxicology and Chemistry Meeting was held in Nashville, Tennessee - November 11-16, 2000. The following Poster Presentations, Platforms and Short Courses were presented by the Environmental Toxicology Research Program:

Poster Presentations

1. *Basin characterization by GIS to select wetland study site* - G.L. Easson, H. Robinson, **B.C. DeBusk**, C.A. Britson, S.T. Threlkeld.
2. *Effects of various estrogenic compounds and industrial wastewater discharge on sea urchin development* - **M. Slattery, D.S. Block, B.C. DeBusk**, D. Schlenk.
3. *Evaluation of chlorpyrifos partitioning in sediment: An assessment of chemical mixture and microbial influences* – **D.S. Block, M. Slattery**, W.H. Benson, **J.C. Allgood**.
4. *Effects of 17- Estradiol and Testosterone on the Toxicity of Aldicarb to Japanese Medaka, *Oryzias latipes** – **A.T. El-Alfy**, D. Schlenk.
5. *Reproductive effects of Transgenerational Cadmium exposure* – **B.N. Peterson, J.C. Allgood, C.M. Foran**, W.H. Benson.
6. *Can Maternal fluoranthene exposure provide photo-protection in offspring of the killifish (*Fundulus heteroclitus*)* – T.A.S. Parson, J.N. Meyer, **K.L. Willett**, R.T. DiGiulio.
7. *Toxicological evaluation of a Cyanobacteria-specific Biocide* – **B.D. Holmes, C.M. Foran**, D. Schlenk, **K. Schrader, D. Nanayakkara**.
8. *Metabolic Consequences of estrogen exposure* – **C.M. Foran**, B.K. Larsen.
9. *Relationship between physiological responses and reproductive impairment in Japanese Medaka (*Oryzias latipes*): Effects of ethinylestradiol* - S.C. Thompson, **C.M. Foran**, W.H. Benson.
10. *Variable Response of Male Medaka to Estrogen Exposure*. **K.E. Marsh, E.R. Bennett, C.M. Foran**.
11. *Gonadal development and endocrine responses in Japanese Medaka; exposed to o,p'-DDT in water or through maternal transfer* – T.L. Metcalfe, C.D. Metcalfe, Y. Kiparissis, A.J. Niimi, **C.M. Foran**, W.H. Benson.
12. *Effects of various estrogenic compounds and industrial wastewater discharge on sea urchin development* – **M. Slattery, D.S. Block, B.C. DeBusk**, D. Schlenk.
13. *Effects of cadmium on the hypothalamus-pituitary-gonadal axis in Japanese Medaka: Consequences for reproduction and development* – S.C. Thompson, **C.M. Foran**, W.H. Benson.
14. *Re-inventing the ditch: Using drainage channels for agricultural runoff remediation.* – M.T. Moore, C.M. Cooper, **E.R. Bennett**, S. Smith Jr., J.L. Farris.
15. *Effect of salinity on the uptake, elimination, and toxicity of Aldicarb in male and female Medaka.* - **E. Bernache, A.T. El-Alfy**, D. Schlenk.

Platforms

1. *In Vivo Inhibition of CYP1A by the PAH Fluoranthene* – **K.L. Willett**, D.M. Wassenberg, L.A. Lienesch, W.L. Reichert, R.T. Di Giulio.
2. *Fate & Effects of Copper sulfate in a catfish Aquaculture Facility* - **D.B. Huggett**, B.R. Griffin, J.A. Hargraves, D. Schlenk.
3. *Identification & sequencing of a CYP2 cDNA from channel catfish* – **B.C. DeBusk, X. Zhou**, D. Schlenk.

4. *Identification and sequencing of CYP1A & CYP2 cDNAs from Butterfly fishes: A case for Diet-Driven evolution in a critical biotransformation enzyme* – **B.C. DeBusk, M. Slattery**, D. Schlenk.
5. *Physiological Effects of Transgenerational Cadmium Exposure* – **C.M. Foran**.
6. *Mechanisms of Salinity - Enhanced Toxicity of Aldicarb to Various Euryhaline Fish* – **A.T. El- Alfy**, B.K. Larsen, D. Schlenk.

Short Courses

1. *“Receptors and Signal Transduction in Environmental Toxicology.”* – **K. Willett** - SETAC Coordinator.
2. *“Environmental fate Data: Estimates, Assessments, and Pollution Prevention.”* – **K. Willett** - SETAC Coordinator.

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
Ms. Barbara Lago
Ms. Beverly Urbanek
Ms. Dabney Weems