



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: February 21, 2005

SUBJECT: Research News (#1)

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

1. **Dr. Joseph Byrd** (P.I. – Pharmacy Practice) – Professional Services Agreement (Baptist Memorial Hospital North Mississippi), \$56,250.00 – July 1, 2004-June 30, 2005.
2. **Dr. Joseph Byrd** (P.I. – Pharmacy Practice) – Professional Services Agreement (Rehabilitation Centers, Inc., d/b/a Millcreek), \$36,249.00 – January 1, 2005-December 31, 2005.
3. **Dr. Hemant Lata** (P.I. – RIPS/NCNPR) – Evaluation, Characterization and Monitoring Genetic Stability of *In vitro* Conserved Medicinal Plant Germplasm (University of Mississippi Faculty Research Program), \$3,456.00 – January 18, 2005-January 17, 2005.
4. **Dr. Rae Matsumoto** (P.I. – Pharmacology) – Synthesis and Evaluation of -Active Cocaine Antagonists (National Institute on Drug Abuse), \$316,258.00 – December 1, 2004-November 30, 2005.
5. **Dr. Dale Nagle** (P.I. – Pharmacognosy) and **Dr. Yu-Dong Zhou** (Co-P.I. – RIPS/NCNPR) – Marine Natural Products – An Untapped Source of New Drugs for Prostrate Cancer (Department of Defense / 2003 Prostrate Cancer Research Program), \$107,625.00 – November 20, 2004-December 19, 2005.
6. **Dr. David Pasco** (P.I. – RIPS/NCNPR), **Dr. Nirmal Pugh** (Co-P.I. – RIPS/NCNPR), **Dr. Ikhlas Khan** (Co-P.I. – RIPS/NCNPR) and **Dr. Rita Moraes** (Co-P.I. – RIPS/NCNPR) New Immuno-active Compound for Optimizing *Echinacea* (National Institutes of Health / National Center for Complementary and Alternative Medicine), \$282,167.00 – September 15, 2004-July 30, 2005.
7. **Dr. John Williamson** (P.I. – Medicinal Chemistry) and **Dr. Mary Haasch** (Co-P.I. – RIPS/ECHR) – INBRE Mississippi Functional Genomics Network (MFGN) (University of Southern Mississippi / National Institutes of Health), \$100,800.00 – July 27, 2004-May 1, 2005.

The following **PUBLICATIONS** have appeared:

1. K. Cushman, M. Maqbool, **Hemant Lata**, E. Bedir, **Ikhlas Khan** and **Rita Moraes** – “Podophyllotoxin Content and Yield of American Mayapple Leaves in Sun and Shade”, *HortScience*, **40**, pp. 60-63, 2005.
2. **Jeffrey Diers**, **Hari Pennaka**, **Jiangnan Peng**, **John Bowling**, **Stephen Duke** and **Mark Hamann** – “Structural Activity Relationship Studies of Zebra Mussel Antifouling and Antimicrobial Agents from Verongid Sponges”, *Journal of Natural Products*, **67**, pp. 2117-2120, 2004.

3. Z. Guo, **Suryanarayana Vangapandu**, A. Nimrod, **Larry Walker** and R.D. Sindelar – “Synthesis of A/B-Ring Partial Analogs of Bruceantin as Potential Antimalarial Agents”, *Medicinal Chemistry*, **1**, pp. 3-11, 2005.
4. Z. Guo, **Suryanarayana Vangapandu**, R.W. Sindelar, **Larry Walker** and R.D. Sindelar – “Biologically Active Quassinoids and Their Chemistry: Potential Leads for Drug Design”, *Current Medicinal Chemistry*, **12**, pp. 173-190, 2005.
5. **Kaleem Mohammed**, **Chowdhury Hossain**, L. Zhang, R.K. Bruick, **Yu-Dong Zhou** and **Dale Nagle** – “Laurenditerpenol, a New Diterpene from the Tropical Marine Alga *Laurencia intricata* that Potently Inhibits HIF-1 Mediated Hypoxic Signaling in Breast Tumor Cells”, *Journal of Natural Products*, **67**, pp. 2002-2007, 2004.
6. J.S. Mossa, F.S. El-Feraly and **Ilias Muhammad** – “Antimycobacterial Constituents from *Juniperus procera*, *Ferula communis* and *Plumbago zeylanica* and their *In Vitro* Synergistic Activity with Isonicotinic Acid Hydrazide”, *Phytotherapy Research*, **18**, pp. 934-937, 2004.
7. E.M.F. Muri, M. Gomes, M.G. Albuquerque, E.F.F.deCunha, R.B.deAlencastro, **John Williamson** and O.A.C. Antunes – “Pseudo-peptides Derived from Isomannide as Potential Inhibitors of Serine Proteases”, *Amino Acids*, 2005.
8. J.H. Poupaert, S. Duarte, E. Colacino, P. Depreux, **Christopher McCurdy** and D.L. Lambert – “Willgerodt-Kindler’s Microwave-Enhanced Synthesis of Thioamide Derivatives”, *Phosphorus, Sulfur, and Silicon*, **179**, pp. 1959-1973, 2004.
9. **Nirmal Pugh**, **Premalatha Balachandran**, **Hemant Lata**, **Franck Dayan**, **Vaishali Joshi**, E. Bedir, T. Makino, **Rita Moraes**, **Ikhlas Khan** and **David Pasco** – “Melanin: Dietary Mucosal Immune Modulator from *Echinacea* and Other Botanical Supplements”, *International Immunopharmacology*, **5**, pp. 637-647, 2005.
10. **Samir Ross**, **Mahmoud ElSohly**, G.N.N. Sultana, **Zlatko Mehmedic**, **Chowdhury Hossain** and **Suman Chandra** – “Flavonoid Glycosides and Cannabinoids from the Pollen of *Cannabis sativa L.*”, *Phytochemical Analysis*, **16**, pp. 45-48, 2005.
11. **Smitha Gouni**, **Bruhaspathy Miriyala** and **John Williamson** – “Phosphomolybdic Acid-Catalyzed Efficient Three-Component Reaction: a Facile Synthesis of Protected Homoallylic Amines”, *Synlett Letter*, 2005.
12. **Steven Stodghill**, A.E. Smith and J.H. O’Haver – “Thermodynamics of Micellization and Adsorption of Three Alkyltrimethylammonium Bromides Using Isothermal Titration Calorimetry”, *Langmuir*, **20**, pp. 11387-11392, 2004.
13. **Steven Stodghill**, A.C. Illapakurthy and **Christy Wyandt** – “Isothermal Titration Calorimetry Method for Determination of Cyclodextrin Complexation Thermodynamics Between Artemisinin and Naproxen Under Varying Environmental Conditions”, *Eur. J. of Biopharm. and Pharm.*, **59**, pp. 325-332, 2005.
14. **Nurhayat Tabance**, E. Bedir, **Daneel Ferreira**, **Desmond Slade**, **David Wedge**, **Melissa Jacob**, **Shabana Khan**, N. Kirimer, K.H. Can Baser and **Ikhlas Khan** – “Bioactive Constituents from Turkish *Pimpinella* Species”, *Chemistry and Biodiversity*, **2**, pp. 221-232, 2005.
15. **Babu Tekwani** and **Larry Walker** – “Targeting the Hemozoin Synthesis Pathway for New Antimalarial Drug Discovery: Technologies for *In Vitro* β -Hematin Formation Assay”, *Combinatorial Chemistry & High Throughput Screening*, **8**, pp. 61-77, 2005.
16. E. Wenzig, O. Kunert, **Daneel Ferreira**, M. Schmid, W. Schuhly, R. Bauer and A. Hiermann – “Flavonolignans from *Avena sativa*”, *Journal of Natural Products*, **68**, pp. 289-292, 2005.
17. Y. Zhang, **Christopher McCurdy**, T.G. Metzger and P.S. Portoghese – “Specific Cross-Linking of Lys233 and Cys235 in the Mu Opioid Receptor by a Reporter Affinity Label”, *Biochemistry*, **44**, pp. 2271-2275, 2005.
18. **Yu-Dong Zhou**, **Yong-Pil Kim**, **Xing-Cong Li**, **Scott Baerson**, **Ameeta Agarwal**, T.W. Hodges, **Daneel Ferreira** and **Dale Nagle** – “Hypoxia-Inducible Factor-1 Activation by (-)-Epicatechin Gallate: Potential Adverse Effects of Cancer Chemoprevention with High-Dose Green Tea Extracts”, *Journal of Natural Products*, **67**, pp. 2063-2069, 2004.

TECHNOLOGY TRANSFER transactions:

(In the interest of protecting confidential information, the names and titles associated with School of Pharmacy invention disclosures and patent applications will no longer be published until after a patent has issued.)

Invention Disclosures Filed in 2005: 0

Patent Applications Pending: 29

Recent Patents Granted: 1

“Fungicidal Properties of Sampangine and its Analogs to Agriculturally Important Fungal Plant Pathogens”

US Patent #: 6,844,353

***Nagle, Dale** [Oxford, MS]; **Wedge, David** [Oxford, MS]*

January 18, 2005

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

- Dr. Dale Nagle gave the Keynote Address and Chaired a Minisymposium in Tromso, Norway: “Innovative biotechnology – Marine natural products in modern drug discovery” – Minisymposium on Innovative Biotechnology, Annual Meeting of the Norwegian Biochemical Society, January 2005.

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 (www.pharmacy.olemiss.edu)!** Thank you.

cc: Dean Barbara G. Wells
Ms. Dabney Weems