

## List of Poster Presentations-2010 WCMCW

### 1. **UV Radiation-Induced Photoproducts of 3-Hydroxyflavone**

Sabia Maini, Ningbo Shu, Ed Krol\*

Drug Design and Discovery Research Group, College of Pharmacy & Nutrition, University of Saskatchewan, 110 Science Place, Saskatoon, SK S7N 5C9

### 2. **Aspirin, Ibuprofen and Indomethacin prodrugs with improved anti-inflammatory activity and low ulcerogenicity; Do we need a nitric-oxide releasing group?**

Sarthak Jain and Carlos A. Velazquez\*

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta T6G 2N8, Canada

### 3. **An aza-Wittig Approach to Sulfinimines and Sulfonamides**

Mariam Ratini, Bryan Hill\*

Department of Chemistry, Brandon University, 270-18<sup>th</sup> Street, Brandon, MB, R7A 6A9

### 4. **Structural characterization of inositol catabolic enzymes**

Karin E. van Straaten, Ryan Stubbing, David R. J. Palmer, David A. R. Sanders

Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK S7N 5C9

### 5. **X-ray crystallographic Studies on the Structure-Function Relationship of UDP-glucose-6-epimerase from *Aspergillus nidulans*.**

Sean Dalrymple, Inder Sheoran, Amira El'Ganiny, Susan Kaminskyj, David Sanders\*

Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK S7N 5C9

### 6. **Microperoxidase-11, a model system to identify the mechanism of myeloperoxidase inhibition by 4-aminobenzoic acid hydrazide.**

Pratik Arvadia, Malyaj Narwaley and Arno G. Siraki\*

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, T6G 2N8

### 7. **Cyclodextrin: Synthesis of Bacterial Inhibiting Glycoclusters using Novel Secondary Face Perfunctionalization**

Michael J. Bosch, Sandra M. Ward, and Dr. Chang-Chun Ling\*

Alberta Ingenuity Centre for Carbohydrate Science, Department of Chemistry, University of Calgary, Calgary, AB

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### 8. **Rational design of gemini surfactants as a new family of non-viral gene delivery systems**

Jagbir Singh,<sup>1</sup> Deborah Michel,<sup>1</sup> Jackson M. Chitanda,<sup>2</sup> Marianna Foldvari,<sup>3</sup> Ronald E. Verrall,<sup>2</sup> Ildiko Badea<sup>1\*</sup>

1. Drug Design and Discovery Research Group, College of Pharmacy and Nutrition, University of Saskatchewan, Canada
2. Department of Chemistry, University of Saskatchewan, Canada
3. School of Pharmacy, University of Waterloo, Canada

### 9. **Unsaturated lipids as potential intra-cellular target of phenyl radical metabolite generated during peroxidase metabolism of aromatic amine xenobiotics.**

Malyaj Narwaley\*, Pratik Arvadia, Arno G. Siraki  
Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta, Edmonton, AB T6G 2N8

### 10. **Design and evaluation of cyclodextrin-substituted gemini surfactant-based topical delivery systems for incorporation of curcumin derivatives as potential treatment for melanoma.**

Deborah Michel,<sup>1</sup> Réka Balogh,<sup>2</sup> Jackson Chitanda,<sup>3</sup> Jagbir Singh,<sup>1</sup> Umashankar Das,<sup>1</sup> Jonathan Dimmock,<sup>1</sup> Ronald E. Verrall,<sup>3</sup> Ildiko Badea,<sup>1\*</sup>

1. Drug Design and Discovery Research Group, College of Pharmacy and Nutrition, University of Saskatchewan, Canada
2. Faculty of Pharmacy, Semmelweis University, Budapest, Hungary
3. Department of Chemistry, University of Saskatchewan, Canada

### 11. **Crystallization studies and preliminary X-ray diffraction analyses of the SADH I86A mutant from *Thermoanaerobacter ethanolicus* and the Mannitol Dehydrogenase from *Thermatoga maritima***

Carla Protsko, Claire Vieille, Maris Laivenieks, Lata Prasad, Louis T. J. Delbaere, and David A. R. Sanders\*  
Department of Chemistry, University of Saskatchewan

### 12. **Sorption properties of tunable mesoporous microsphere materials**

Rui Guo and Lee D. Wilson\*  
110 Science Place, Room 156, Department of Chemistry, University of Saskatchewan,  
Saskatoon, Saskatchewan S7N 5C9

### 13. **Design, Synthesis and Evaluation of Potent Antimicrobial Peptide (Leucocin A) Analogues with a Disulfide Bridge Replaced by $\beta$ -Turn Sequence**

Krishna Bodapati, Kamaljit Kaur\*  
Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, Alberta, Canada, T6G 2N8

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### 14. **Cytotoxic diethyl ((3E,5E)-3,5-bis(4-methoxybenzylidene)piperidin-4-one) phosphonate induces apoptosis in HL-60 cells**

S Das,<sup>1</sup> U Das,<sup>1</sup> H Sakagami,<sup>2</sup> K Hashimoto,<sup>2</sup> D.K.J. Gorecki,<sup>1</sup> J.R. Dimmock<sup>1\*</sup>

1. Drug Design & Discovery Research Group, College of Pharmacy and Nutrition, University of Saskatchewan, Saskatoon, Saskatchewan S7N5C9

2. Division of pharmacology, Department of Diagnostic and Therapeutic Sciences, Meikai University School of Dentistry, Saitama 350-0238, Japan

### 15. **Synthesis and biological evaluation of N-substituted pantothenamide analogues as antibacterial agents**

Olukayode Akinnusi, Kenward Vong and Karine Auclair \*

Chemistry Department, McGill University, Montreal, QC, H3A 2K6

### 16. **Synthesis of metabolites of Loxapine**

Qizhu Ding, Tingsheng Li, Joe Zhou, John Yao\*,

TC Scientific Inc. Suite 106, 2011 94 Street Edmonton Research Park Edmonton Alberta T6N 1H1

### 17. **N-Heterocyclic Carbene-Catalyzed Ring Expansion of Azacycloalkane-2-Carboxaldehydes for the Synthesis of Lactams.**

Karen Thai<sup>1</sup>, Li Wang<sup>1</sup>, Francois Bilodeau<sup>2</sup>, Michel Gravel<sup>1\*</sup>

1. Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK, Canada, S7N5C9. 2. Research and Development, Boehringer Ingelheim (Canada) Ltd., 2100, rue Cunard, Laval, QC, Canada H7S2G5

### 18. **Simulation and Direct Measurement of Trace Amine Membrane Permeability.**

Mithila R. Shitut<sup>1</sup>, Jarrod Nickel<sup>2</sup>, Bruno Tomberli<sup>2</sup> and Mark D. Berry<sup>1,2\*</sup>.

1. Toxicology Center, University of Saskatchewan and 2. Dept. Chemistry, Brandon University.

### 19. **NHC-Catalyzed Spiro Bis-Indane Formation via Domino Stetter- Aldol-Michael and Stetter-Aldol-Aldol Reactions.**

Eduardo Sánchez-Larios, Janice M. Holmes, Crystal L. Daschner, Michel Gravel\*

Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK S7N 5C9, Canada

### 20. **Preliminary electrospray ionization and MALDI tandem mass spectrometric analysis of novel antineoplastic curcumin analogues.**

L. Usher,<sup>1</sup> A. Cohen,<sup>2</sup> D. Pinto,<sup>2</sup> J. Dimmock,<sup>1</sup> U. Das,<sup>1</sup> D. Gorecki,<sup>1</sup> S. Das,<sup>1</sup> A. El-Aneed<sup>1\*</sup>

1. Drug Design and Discovery Group, College of Pharmacy and Nutrition, University of Saskatchewan

2. NRC, Institute for Marine Bioscience, Halifax, NS

## List of Poster Presentations-2010 WCMCW

**21. Development of inhibitors of dihydrodipicolinate synthase, an antibiotic target.**

Yulia Skovpen, David R. J. Palmer\*

Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK, S7N 5C9

**22. Microbial transformations of bioactive natural products**

William Ring and Athar Ata\*

Department of Chemistry, The University of Winnipeg, 515 Portage Avenue, Winnipeg, MB R3B 2E9

**23. Characterization of NtdB, an enzyme featured in the biosynthesis of the antibiotic NTD.**

Egiroh Omene, David R. J. Palmer\*

Department of Chemistry, University of Saskatchewan, 110 Science Place, Saskatoon, SK, S7N 5C9