**The 2<sup>nd</sup> Brazilian Symposium on Medicinal Chemistry** Current Trends in Drug Discovery and Development

## 2º Simpósio Brasileiro em Química Medicinal Tendências Atuais na Descoberta e Desenvolvimento de Fármacos



*Military Institute of Engineering - IME Rio de Janeiro – Brazil, November 22-25, 2004* 

*Instituto Militar de Engenharia - IME Rio de Janeiro, 22 a 25 de Novembro de 2004* 

http://www.brazmedchem.ifsc.usp.br E-mail: brazmedchem@if.sc.usp.br

### Organizing Committee

#### Jose Daniel Figueroa Villar

Instituto Militar de Engenharia (IME) Chairman

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Universidade Federal do Rio de Janeiro (UFRJ) Vice-Chairwoman

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Universidade de São Paulo (USP) Secretary-General

#### Carlos A. Montanari

Universidade Federal de Minas Gerais (UFMG) Advisor to the Chair

## The 2<sup>nd</sup> Brazilian Symposium on Medicinal Chemistry

# Scientific Program

November 22 (Monday)

4:30– 6:00 pm	Registration at the Symposium Venue		
	Opening Session		
6:30 – 7:00 pm	Jose Daniel Figueroa Villar, Brazil Welcome from the Conference Chair		
Opening Conference			
	Anibal E. Vercesi, Brazil Introduction of Speaker		
7:00 – 8:00 pm	George L. Kenyon, USA Creatine Kinase: Structure and function of an Energetic Enzyme		
8:10 – 10:10 pm	Social Event: Welcome Get-Together Reception Military Institute of Engineering - IME		

### November 23 (Tuesday)

Session 1 Ligand and Structure-Based Drug Design Chair: Glaucius Oliva, Brazil	
9:00 – 9:15 am	Glaucius Oliva, Brazil Overview and Introduction
9:15 – 10:15 am	Eliezer J. Barreiro, Brazil Design and Discovery of Novel Symbiotic Lead-Candidates
10:15 – 11:15 am	Hugo Kubinyi, Germany Virtual Screening: Problems and Success Stories
11:15 – 11:30 am	Coffee Break
11:30 – 12:30 pm	Robert D. Clark, USA Integrating Virtual HTS into Combinatorial Library Design
12:30 – 1:30 pm	Osman F. Güner, USA Effective Docking and Scoring: Novel Classification of Protein- Ligand Complexes based on Binding Sites Characteristics
1:30 – 3:00 pm	Lunch
	Session 2 QSAR, ADME/Tox & Drug Design Chair: Magaly Girão Albuquerque, Brazil
3:00 – 3:15 pm	Magaly Girão Albuquerque, Brazil Overview and Introduction
3:15 – 4:15 pm	Yvonne C. Martin, USA A Personal Viewpoint on the Computer Prediction of Biological Activity of Compounds
4:15 – 5:15 pm	Christopher A. Lipinski, USA Filters and Choices in Early Drug Discovery
5:15 – 5:30 pm	Coffee Break
5:30 – 6:30 pm	Bernard Testa, Switzerland Can Drug Metabolism be Predicted?
6:30 – 7:30 pm	Anton J. Hopfinger, USA The 4D-QSAR Paradigm: A General Tool for QSAR, Structure-Based Design and Molecular Similarity Applications

### November 24 (Wednesday)

Session 3 Medicinal Chemistry of Organic Synthesis and Natural Products Chair: Carlos A. Manssour Fraga, Brazil		
9:00 – 9:15 am	Carlos A. Manssour Fraga, Brazil Overview and Introduction	
9:15 – 10:15 am	Barry M. Trost, USA The Impact of New Synthetic Methodology on Strategies to Bioactive Targets	
10:15 – 10:30 am	Coffee Break	
10:30 – 11:30 am	Rosendo A. Yunes, Brazil Natural Products: New Perspectives in Medicinal Chemistry	
11:30 – 12:30 pm	Luiz Carlos Dias, Brazil Approaches to the Stereoselective Synthesis of Biologically Active Natural Products	
12:30 – 2:00 pm	Lunch	
Session 4 Medicinal Chemistry: Sci-Mix Chair: Carlos A. Montanari, Brazil		
2:15 – 2:30 pm	Carlos A. Montanari, Brazil Overview and Introduction	
2:30 – 3:00 pm	Hugo Cerecetto, Uruguay N-Oxide Containing Heterocycles as Trypanocidal drugs	
3:00 – 3:20 pm	Marcelo Santos Castilho, Brazil Development of Enzyme Inhibitors as Potential Antiparasitic Agents	
3:20 – 3:40 pm	Marcelo Zaldini Hernandes, Brazil An Initiative for 3D-QSAR Software Development: The CAMOL experience	
3:40 – 4:10 pm	Carlos Roque D. Correia, Brazil Conformationally Restricted Glutamates. Total Enantioselective Synthesis of Highly Neuroexcitatory Acromelic Acid Analogues	
4:10 – 4:30 pm	Coffee Break	
Poster Session I: 4:30 – 5:30 pm Poster Session II: 5:30 – 6:30 pm Chairs: Jose Daniel Figueroa Villar & Adriano D. Andricopulo, Brazil		

### November 25 (Thursday)

Session 5 Novel Approaches to Drug Discovery and Development Chair: Richard C. Garratt, Brazil	
9:00 – 9:15 am	Richard C. Garratt, Brazil Overview and Introduction
9:15 – 10:15 am	Michael J. McLeish, USA Development of Inhibitors of Phenylethanolamine <i>N</i> - methyltransferase as Potential Antihypertensives with an Unusual Mode of Action
10:15 – 10:30 am	Coffee Break
10:30 – 11:30 am	Claudio Dalvit, Italy Novel NMR Techniques for Efficient and Reliable High- Throughput Screening
11:30 – 12:30 pm	Antonio Carlos Martins de Camargo, Brazil EVASINs, New Antihypertensive Substances from Snake Venom
Closing Remarks	
12:30 – 12:50 pm	Jose Daniel Figueroa Villar, Brazil

#### End of the Symposium