The Brazilian Biochemistry and Molecular Biology Society - SBBq

XXXVIII Annual Meeting of SBBq

Program

and

Index

Hotel Monte Real
Águas de Lindóia, São Paulo, Brazil
May 16 to 19, 2009

Welcome Message

Dear Colleagues,

On behalf of the entire organizing committee, we welcome the participants of the XXXVIII Annual Meeting of the Brazilian Biochemistry and Molecular Biology Society (SBBq) in Águas de Lindóia, São Paulo, Brazil.

The Congress aims to offer a broad overview of the frontiers of research and recent developments in many aspects of Biochemistry and Molecular Biology in the Americas and the Iberian Peninsula.

The Annual Meeting of the Brazilian Biochemistry and Molecular Biology Society (SBBq) is currently one of the most traditional events of the Brazilian scientific community. For over three decades, these meetings have provided the scenario and forum for debates concerning the advancement of fundamental knowledge of Biochemical phenomena, their employment for social benefit and integration of this knowledge with other segments of the biological and physicochemical sciences.

We wish to thank all the highly accomplished invited speakers for accepting our invitation to present their work at the Congress, thus contributing to a program that we trust all participants will find interesting.

We also wish to welcome all the participants who came from abroad, hoping that they will find time to experience some of our culture, as well as to discuss Science with us.

Bem-vindos ao Brasil!!!

Débora Foguel
President of SBBq

Martha M. Sorenson
Vice President of SBBq

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Pernambuco	**Vera Lúcia Menezes de Lima** (UFPE)
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Rio Grande do Norte	**Hugo Alexandre de Oliveira Rocha** (UFRN)
Rio Grande do Sul	**Carlos Alberto Saraiva Gonçalves** (UFRGS)

Executive Secretariat

Cynthia Sayuri Bando
Arnaldo Casari
Murilo Campos

Financial Support

We gratefully acknowledge our sponsors

General Information

Badges
SBBq staff will provide badges for all delegates and accompanying persons. Access to scientific sessions and other activities, including social events, will be denied unless badges are used. Badges contribute greatly to promote personal contacts and also guarantee the full attention of the Congress Personnel, as well as security control. Upon losing the badge, a duplicate will be provided at the Secretariat at cost of US$ 50,00.

Information for Speakers:
The Multimedia Desk Room is located on Room 9, near on SBBq Secretariat and is open during the following hours:
Saturday, May 16th – 14:00 to 19:00
Sunday, May 17th – 8:00 to 19:00
Monday, May 18th - 8:00 to 19:00
Tuesday, May 19th – 8:00 to 19:00

Registration Desk
The Registration Desk available for information and distribution of badges, bags and documents for financial support. It is located in the Marques Room.
Saturday, May 16th – 14:00 to 20:30
Sunday, May 17th – 8:00 to 13:00
Tuesday, May 19th – 16h30 to 20h30

SBBq Administration Office
The SBBq Administration Office is open as follows:
Saturday, May 16th – 14:00 to 19:30
Sunday, May 17th – 8:00 to 19:00
Monday, May 18th – 8:00 to 19:00
Tuesday, May 19th – 8:00 to 20:00

Social Programs
Get Together
The welcome reception will be on May 16st, 18:30 to 20:30 on the "Swimming Pool" of Hotel Monte Real. All participants who joined the get together when registering for the conference MUST wear their BADGES for access to the get-together and the invitation.

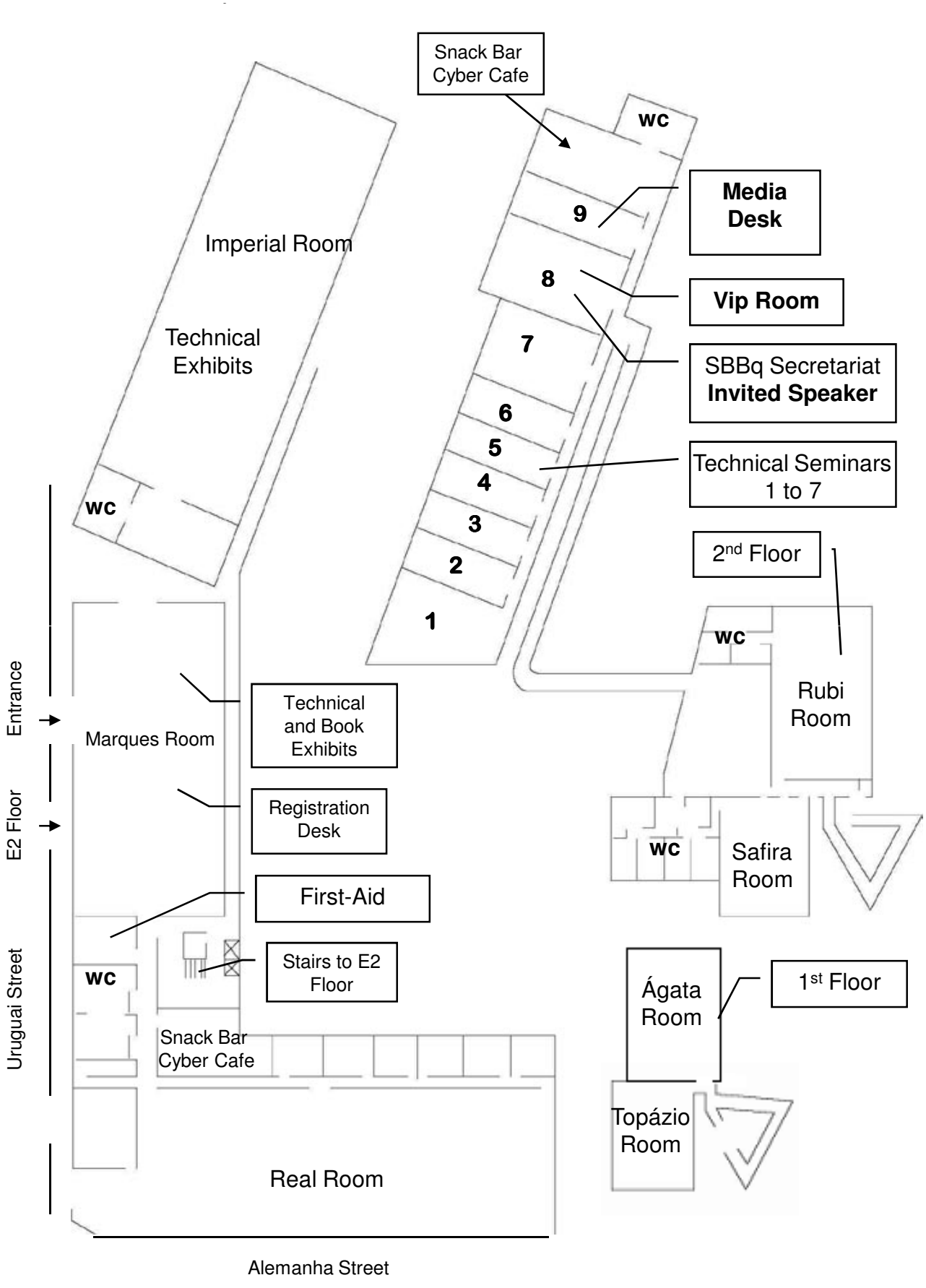
General Assembly
Will be on Tuesday, May 19th, at 18:30
Local: Real Room

SBBq Awards Ceremony
The announcement of SBBq Award for the best poster presentation and XIII Young Talent for in Life Sciences will be on Tuesday, May 19th, at 19:30
Local: Real Room

Schedule

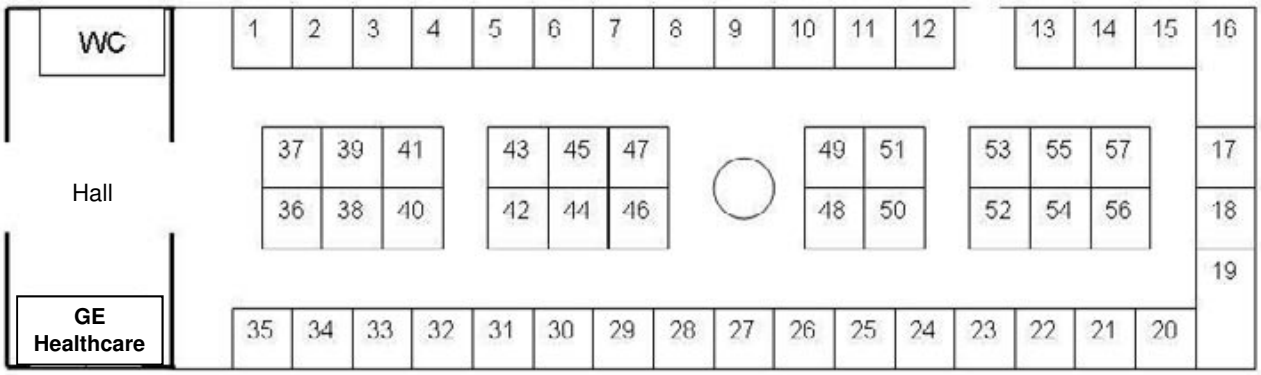
Day	Time	Activity	Room
Saturday 16	14h00 - 20h30	Registration Desk	Marquês
	17h00 - 17h30	Opening Ceremony	Real
	17h30 - 18h30	Opening Conference	Real
	18h30 - 20h00	Get-Together	Swimming Pool
	14h00 - 19h30	Technical and Book Exhibits	Imperial
Sunday 17	08h00 - 10h00	Poster Set up	E2 Floor
	08h30 - 13h00	Registration Desk	Marquês
	08h30 - 10h30	Symposia	Real, Rubi, Agata, Topázio e Safira
	10h30 - 10h55	Coffee Break	Imperial and Marques
	11h00 - 12h00	Conferences	Real, Rubi, Agata
	12h00 - 14h00	Lunch	
	14h00 - 16h00	Symposia	Real, Rubi, Agata, Topázio e Safira
	16h00 - 16h25	Coffee Break	Imperial and Marques
	16h30 - 18h30	Poster Session	Second Floor (E2)
	18h30 - 20h00	Poster Viewing	Second Floor (E2)
	19h00 - 20h00	Forum de Pós Graduação	Rubi
	19h00 - 20h00	Cinema: Ligth, Darkness and The Scientific Method	Real
	09h00 - 18h00	Technical Seminars	Rooms 1 to 7
	10h00 - 20h00	Technical and Book Exhibits	Imperial, Marques
	20h00	Poster Removal	
Monday 18	08h00 - 10h00	Poster Set up	E2 Floor
	08h30 - 10h30	Symposia	Real, Rubi, Agata, Topázio e Safira
	10h30 - 10h55	Coffee Break	Imperial and Marques
	11h00 - 12h00	Conferences	Real, Rubi, Agata, Topázio e Safira
	12h00 - 14h00	Lunch	
	14h00 - 16h00	Symposia	Real, Rubi, Agata, Topázio e Safira
	16h00 - 16h25	Coffee Break	Imperial and Marques
	16h30 - 18h30	Poster Session	Second Floor (E2)
	18h30 - 20h00	Research in Germany (DAAD-FDG)	Real
	18h30 - 20h00	Poster Viewing	Second Floor (E2)
	09h00 - 18h00	Technical Seminars	Rooms 1 to 7
	10h00 - 20h00	Technical and Books Exhibits	Imperial, Marques
	20h00	Poster Removal	
	21h30	Reunião do Conselho	Room 6
Tuesday 19	08h00 - 10h00	Poster Set up	E2 Floor
	08h30 - 10h30	Symposia	Real, Rubi, Agata, Topázio e Safira
	10h30 - 10h55	Coffee Break	Imperial and Marques
	11h00 - 12h00	Conferences	Real, Rubi, Agata, Topázio e Safira
	12h00 - 14h00	Lunch	
	14h00 - 16h00	Symposia	Real, Rubi, Agata, Topázio e Safira
	16h00 - 16h25	Coffee Break	Imperial and Marques
	16h30 - 18h30	Poster Session	Second Floor (E2)
	18h30 - 19h30	SBBq General Assembly	Real
	19h30 - 20h30	Closing Ceremony and SBBq Awards for Poster Presentation and XII Young Life Sciences Talent	Real
	09h00 - 18h00	Technical Seminars	Rooms 1 to 7
	10h00 - 17h00	Technical and Book Exhibits	Imperial, Marques
	20h00	Poster Removal	

Hotel Map


Snack Bar
Cyber Cafe
wc
Media
Desk
9
Imperial Room
8
Vip Room
Technical
Exhibits
7
SBBq Secretariat
Invited Speaker
6
5
Technical Seminars
1 to 7
4
3
wc
2nd Floor
2
1
wc
Rubi
Room
Entrance
Technical
and Book
Exhibits
Marques Room
E2 Floor
Registration
Desk
wc
Safira
Room
First-Aid
Uruguai Street
Stairs to E2
Floor
wc
Ágata
Room
1st Floor
Snack Bar
Cyber Cafe
Topázio
Room
Real Room
Alemanha Street

Technical and Book Exhibit Map

Technical Exhibition – Imperial Room

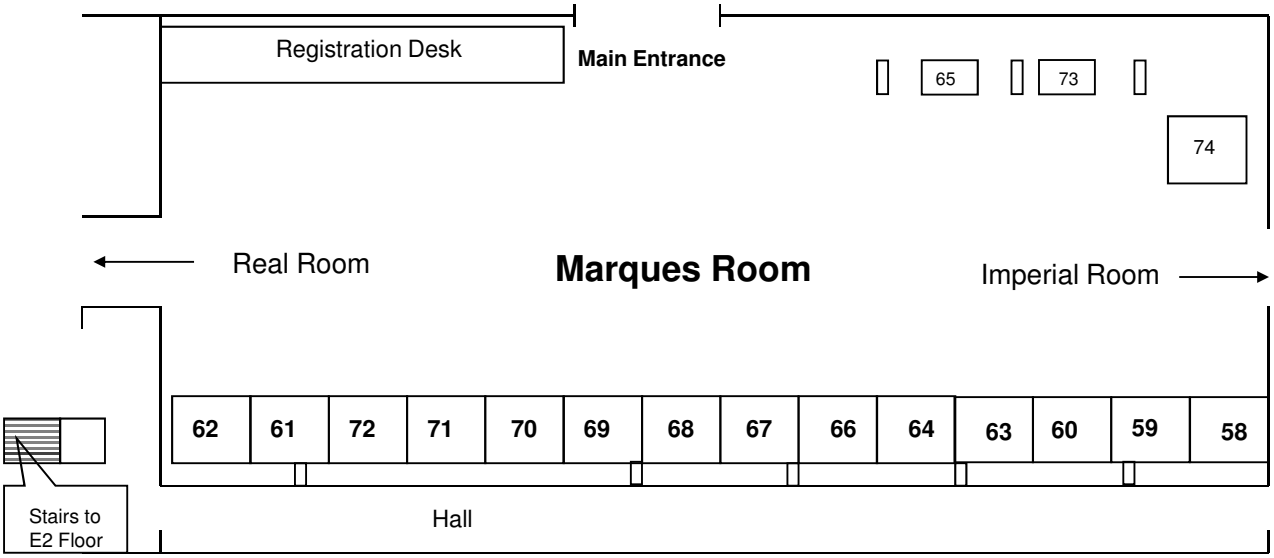


Exhibitors:

Alfaplast (17)
Applied Biosystems (32 e 33)
BD (46 e 47)
Bioeasy Diagnóstica (18)
Bio-Rad (42 e 43)
Bio-Research (8 e 9)
Biosystems (13 e 14)
Biotech (51)
Boc Edwards (41)
Cral Prod. Laboratórios (39)
Dionex (10)
Eppendorf (52 e 53)
Erviegas (44)
Esalab (45)
Femto (1)
Invitrogem (30 e 31)
Lobov Científica (35)
Merck (19 e 20)
Millipore (38)
Molecular Devices (11 e 12)
Nova Analítica (50)
PerkinElmer (4 e 5)
Polimate (29)
Prodimol Biotecnologia (40 e 41)
Qiagen Biotecnologia (36 e 37)
Roche (21, 22 e 23)
Sarstedt (6 e 7)
Sellex (27 e 28)
Shimadzu do Brasil (55 e 57)
Sigma-Aldrich (15 e 16)
Sinapse Biotecnologia (3)
Sinc do Brasil (40)
Sotelab (48 e 49)
Spectrun (2)
Tone Derm Genetic (24)
Uniscience do Brasil (25 e 26)
Waters Technologies (34)

Map without Scale

Technical and Book Exhibition



Book Exhibitors:

Editora Elsevier (58)
Delta Livros (68)
SBS Special Book Service (61 e 62)
Biotech (63)

Exhibitors:

Comercial Graulab (66)
Imprint do Brasil (72)
Incotech (64)
DPUnion (70)
Liobras (71)
LGC Biotecnologia (73)
Quimis (67)
Thorium (69)
CBME-INBECMED (60)
Research in Germany – DAAD/DFG (59)
ABCV (65)

Map without Scale

Contents

17h30

Real Room

Conference Nº 1

Chair: Débora Foguel, Instituto de Ciências Biomédicas (ICB-UFRJ)

From Flavins to Hemes in Cytochromes P450 and Nitric Oxide Synthases During a Lifetime in Science

Bettie Sue Masters, Ph.D., D.Sc., M.D. (Hon.)

The Robert A. Welch Distinguished Professor in Chemistry
Former President of the American Society for Biochemistry and Molecular Biology
(2002-2004). Member of the Institute of Medicine of The National Academies of the United States).
Department of Biochemistry, The University of Texas Health Science Center at San Antonio,
7703 Floyd Curl Drive, San Antonio, Texas 78229-3900

Dr. Bettie Sue Masters will discuss her lifelong interest in mammalian flavoproteins and their structure-function relationships. She contributed to the discovery that NADPH-cytochrome P-450 reductase (CYPOR) was absolutely responsible for electron transfer to cytochromes P450 in the mammalian endoplasmic reticulum; there are 50 such P450's in humans. These studies led her into the study of cytochromes P450 responsible for the production of ω-hydroxylated products of long-chain saturated and unsaturated fatty acids, including arachidonic acid. The ω-hydroxylated product of arachidonic acid, 20-hydroxyeicosatetraenoic acid (20-HETE), has been shown to produce vasoconstriction in certain blood vessels and her laboratory's studies on the gestational age-dependent appearance and disappearance of a cytochrome P450 (CYP4A4) that metabolizes both prostaglandins and arachidonic acid suggested a role of this enzyme in the onset of parturition. Her laboratory, in collaboration with that of Dr. Jung-Ja P. Kim at the Medical College of Wisconsin, published the first structure of CYPOR, which serves as the paradigm for mammalian flavoproteins containing both FAD and FMN as prosthetic groups. Upon the discovery by Dr. Solomon Snyder's group that the 641-C-terminal residues of neuronal nitric oxide synthase (NOS) bear 58% sequence similarity to CYPOR, Dr. Masters' laboratory entered the NOS field to study the structure-function relationships in the NOS enzymes. These studies led to the discovery of heme as the oxygenating prosthetic group and Zn ion at the interface of the heme domain dimer of these enzymes, in addition to the flavins and tetrahydrobiopterin that had already been reported. The crystallographic determination of the structure of the heme domain dimer of endothelial NOS was the first for the constitutive isoforms, endothelial and neuronal NOSs. Recent work has focused on the regulation of the NOS enzymes by both intrinsic and extrinsic factors. The discovery of large inserts in the sequences of constitutive NOSs led to the hypothesis that these inserts served as controlling elements upon their activation by Ca^{+2}/calmodulin and the removal of these sequences (~45 residues) by genetic engineering proved this hypothesis. The C-termini were shown to affect the rates of NOS electron transfer negatively and their removal from all three isoforms resulted in a very large (5-20-fold) stimulation of flavoprotein-mediated electron transport activities and ~20% stimulation (iNOS) or ~45% and ~33% inhibition of nNOS and eNOS, respectively, of the formation of NO. A concerted mechanism of action among these intrinsic elements has been proposed and increased interaction between the FAD- and FMN-binding domains was shown to facilitate and activate the requisite electron transfer activities required for NO formation. X-ray crystallography indicates that large movements of the flavin-binding domains are required for these interactions. The quest for knowledge of the mechanisms of action of the NOS enzymes is required for the design of appropriate selective inhibitors of the production of NO, the excess of which can produce endotoxic shock and death during infection. Recent studies of the human mutations in CYPOR, which have been demonstrated by Dr. Walter L. Miller's laboratory to be responsible for defects in steroidogenesis resulting in sexual dimorphisms with or without Antley-Bixler syndrome (exhibiting craniofacial defects), have led Dr. Masters' laboratory to demonstrate that both FAD- and FMN-binding defects result from several of these mutations. Enzymatic studies have shown that rescue of these mutations in the purified enzymes and in membrane-bound CYPOR can be effected by the re-addition of FAD or FMN. Other mutations that may affect interactions of CYPOR with either cytochromes P450 or heme oxygenase-1 have also been examined, and X-ray structures of these mutants have been obtained.

Time: 08:30 às 10:30

Symposium N° 1
Local: Real Room
Chair: **Adalberto Ramon Vieyra**
Instituto de Biofísica Carlos Chagas Filho (IBCCF-UFRJ)

Vasoactive Peptides: Metabolism, Receptors and Signaling

Activation of Bradykinin B2 Receptors: an Innate Pathway Guiding T cell Development in Mice Orally Infected by the Periodontal Bacteria Porphyromon
Julio Scharfstein
Instituto de Biofísica Carlos Chagas Filho (IBCCF-UFRJ)

Kinin B1 Receptor Deficiency Leads to Leptin Hypersensitivity and Resistance to Obesity
João Bosco Pesquero
Universidade Federal de São Paulo (UNIFESP-EPM)

Angiotensins and Kinins: Much More than Vasoactive Peptides
Claudio Miguel Costa-Neto
Faculdade de Medicina de Ribeirão Preto (FMRP-USP)

The Intrarenal Renin-Angiotensin-System in the Pathophysiology of Hypertension
Luis Gabriel Navar
Tulane University School, USA

Symposium N° 2
Local: Rubi Room
Chair: **Rafael Linden**
Instituto de Biofísica Carlos Chagas Filho (IBCCF-UFRJ)

Gene Therapy

Gene Therapy for Oxidative Damage to the Retina and Optic Nerve
Alfred S. Lewin
University of Florida, Gainesville, USA

The Impact of Double Tumor Suppressor Cancer Gene Therapy
Eugenia Costanzi Strauss
Instituto de Ciências Biomédicas I (ICB1-USP)

New Therapeutic Strategies for Glioblastoma Multiforme
Guido Lenz
Universidade Federal do Rio Grande do Sul (UFRGS)

Induction of Angiogenesis, Arteriogenesis and Vasculogenesis with Growth Factor Genes to Treat Peripheral Artery Diseases
Sang Won Han
Universidade Federal de São Paulo (UNIFESP-EPM)

Symposium N° 3
Local: Agata Room
Chair: **Guilherme Menegon Arantes**
Instituto de Química (IQ-USP)

Computational Enzymology and Biochemistry

Molecular Simulations of Enzyme Catalysis
Martin J. Field
Institut de Biologie Structurale - Jean-Pierre Ebel, Laboratoire de Dynamique Moleculaire, France

Fundamental Mechanisms on the Complexation of Milk Proteins
Fernando Luís Barroso da Silva
Faculdade de Ciências Farmacêuticas de Ribeirão Preto (FCFRP-USP)

Binding and Catalysis to Protein Ensembles
Guilherme Menegon Arantes
Instituto de Química (IQ-USP)

Symposium N° 4
Local: Topázio Room
Chair: **Ivan de Godoy Maia**
Instituto de Biociências de Botucatu (IB-UNESP)

Molecular Aspects of Plant-Microbe Interactions

Molecular Battles Between Plant and Bacteria in the Phyllosphere
Maeli Melotto
University of Texas at Arlington, USA

Modulation of Host Gene Expression during the Initial Steps of Tomato Infection by a Potyvirus
Francisco Murilo Zerbini
Universidade Federal de Viçosa (UFV)

New Insights into the Xanthomonas citri - Orange Interaction
Celso Eduardo Benedetti
Laboratório Nacional de Luz Síncrotron (LNLS)

Genomics of Tree-Fungi Interaction: Witches' Broom Disease on Cacao and SALB on Rubber.
Julio Cezar de Mattos Cascardo
Universidade Estadual de Santa Cruz (UESC)

SP-05. SBBq Conesul Symposium

Chair: **Leda Satie Chubatsu**
UFPR

The Cue Regulon Controls both Aerobic and Anaerobic Copper Resistance in Salmonella
Lucas Blas Pontel
Instituto de Biologia Molecular y Celular de Rosário, Argentina.

Apoptosis Induced by Dengue-2 Virus: Investigation of the Mitochondrial Pathway
Samir Pereira da Costa Campos
IBqM–CCS – UFRJ, Brasil.

Understanding the Mechanisms Involved in Hepatitis C Virus Assembly
Vanessa Lopes de Azevedo Braga
PBE/IBqM/CCS,UFRJ, Brasil.

Structural Characterization of the Siderophore Produced by Herbaspirillum seropedicae Z67
Federico Antonio Rosconi Hill
Laboratorio de Ecología Microbiana, IIBCE, Montevideo, Uruguay.

Characterization of the Expression of DZIP1 and PUM2 in Human Adult Mesenchymal Stem Cells during the Process of Cellular Differentiation
Patrícia Shigunov
Instituto de Biologia Molecular do Paraná

Time: 11:00 to 12:00

Conference Nº 2

Local: Real Room
Chair: **Gilberto Barbosa Domont**
Instituto de Química (IQ-UFRJ)

Amyloid Diseases: An Ion Mobility-Mass Spectrometry Approach to their Molecular Basis
Michael T. Bowers
Dep of Chemistry and Biochemistry, University of California, USA

Conference Nº 3

Local: Rubi Room
Chair: **Sandro Roberto Valentini**, Faculdade de Ciências Farmacêuticas de Araraquara (FCFAR-UNESP)

Translational Control and Cancer
John W.B. Hershey
Dep Biochemistry and Molecular Medicine, University of California, Davis, USA

Conference Nº 5

Local: Topázio Room
Chair: **Ione Salgado**
Instituto de Biologia (IB-UNICAMP)

Nitric Oxide Functions in the Plant Hypersensitive Disease Resistance Response
Massimo Delledonne
Universita degli Studi di Verona, Italy

Time: 14:30 to 16:30

Symposium Nº 6

Local: Real Room
Chair: **Gilberto Barbosa Domont**
Instituto de Química (IQ-UFRJ)

VII Symposium on Proteomics

Venomics: Conceptual Model to Decipher Encrypted Codes in Scarce Proteins
Adriano Monteiro de Castro Pimenta
Instituto de Ciências Biológicas (ICB-UFMG)

The Use of Proteomics for the Study of Infectious and Chronic Diseases
Russolina Benedeta Zingali
Instituto de Bioquímica Médica (IBqM-UFRJ)

Exploring Bothrops Snake Venom Variability by Proteomic Approaches
Solange Maria De Toledo Serrano
Instituto Butantan, SP

Symposium Nº 7

Local: Rubi Room
Chair: **Martha Meriwether Sorenson**
Instituto de Bioquímica Médica, UFRJ

13o Prize in Life Science for Young Scientist

The Functional Architecture of Escherichia coli is Revealed by a Natural Decomposition Approach
Julio A. Freyre-González
Programa de Genómica Computacional, Centro de Ciencias Genómicas, UNAM, Cuernavaca, Morelos, México

Transthyretin Variants: The Bad and the Good Guy
Fernando L. Palhano
Inst. Bioq. Médica – UFRJ, Rio de Janeiro, RJ, Brazil.

Role of Adenosine Receptors and Glucose Concentration in Macrophage Response to Staphylococcus aureus Antigens
Luiz F. de Souza
Dep de Bioquímica, Instituto de Ciências Básicas da Saúde,UFRGS, Porto Alegre, RS, Brasil.

Sirtuin's Action on the Hypothalamic Melanocortin System is Enabled by UCP2
Marcelo de Oliveira Dietrich
Dep of Biochemistry, UFRGS, Porto Alegre, RS, Brazil.

A Strategy to Automatically Infer Precursor Charge States of Electron Transfer Dissociation Tandem Mass Spectra
Paulo C Carvalho
UFRJ, Rio de Janeiro, RJ, Brazil

Symposium Nº 8

Local: Agata Room
Chair: **Ana Maria Oliveira Battastini**
Instituto de Ciências Básicas da Saúde (ICBS-UFRGS)

Ecto-ATPases: the Past, the Present and the Future (ecto-nucleotidases)

The Salivary Apyrases of Blood Sucking Arthropods
José Marcos Chaves Ribeiro
National Institutes of Health (NIH), Lab. of Malaria and Vector Research, USA

Differential Expression of E-Ntpdases Modulates Glioma Growth
Ana Maria Oliveira Battastini
Instituto de Ciências Básicas da Saúde (ICBS-UFRGS)

Ectonucleotidases and Zebrafish: Toxicological and Pharmacological Implications
Carla Denise Bonan
Pontifícia Universidade Católica do Rio Grande do Sul (PUC)

Influence of Thyroid Hormones on Ectonucleotidases in the Cardiac Tissue
Maria Luiza Morais Barreto Chaves
Instituto de Ciências Biomédicas I (ICB1-USP)

Ecto-Nucleoside Triphosphate Diphosphohydrolases in Protozoa Parasites: Looking for a Function.
Jose Roberto Meyer-Fernandes
Instituto de Ciências Biomédicas (ICB-UFRJ)

ATP Diphosphohidrolases/Ecto-ATPases, the Scientific World of JJJ Sarkis
Jorge Almeida Guimarães
Universidade Federal do Rio Grande do Sul (UFRGS)

Symposium N° 9

Local: Topázio Room
Chair: **Marcio De Castro Silva Filho**
Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ-USP)

Complex Regulatory Networks in Plants

RALF, a Plant Peptide Hormone Involved in Tissue Expansion, is Processed by a Convertase Like in Animals and Yeast
Daniel Scherer de Moura
Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ-USP)

Small Regulatory RNAs as Signaling Factors during Leaf Patterning
Fabio Tebaldi Silveira Nogueira
Universidade Estadual de Campinas (UNICAMP)

Nutritional Regulatory Networks in Plants
Michel Georges Albert Vincentz
Instituto de Biologia (IB-UNICAMP)

Thiamine Biosynthesis in Arabidopsis thaliana Reveals an Intricate Pattern of Evolution and Involvement of Distinct Subcellular Compartments
Marcio De Castro Silva Filho,
Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ-USP)

SP-10. SBBq Conesul Symposium

Chair: **Paulo Lee Hoo**
Instituto Butantan

Role of NF-κB in Platelets: Impaired Activation Responses by NF-κB Inhibitors
Elisa Malaver Marin
Hematological Research Institute, National Academy of Medicine. Buenos Aires, Argentina.

Implication of Akt and 14-3-3 in Parathyroid Hormone-Induced Apoptosis in Caco-2 Cells.
Claudia Rosana Gentili
Universidad Nacional del Sur, Bahía Blanca, Argentina.

The Expression of Vitamin C Transporters in Sertoli Cells and their Relevance for the Blood Testis Barrier
Maria Constanza Angulo González
Instituto de Bioquímica, Universidad Austral de Chile, Chile.

Characterization of Surface Proteins from Leptospira interrogans
Marina von Atzingen dos Reis
Centro de Biotecnologia, Instituto Butantan, São Paulo, Brazil.

Alternative Strategy For the Development of a Schistosomiasis Vaccine
Patrícia Placoná Diniz
Centro de Biotecnologia, Brasil.

Time: 08:30 to 10:30

Symposium N° 11

Local: Real Room
Chair: **Célia Regina da Silva Garcia**
Instituto de Biociências (IB-USP)

3rd IUBMB Symposium of Biochemistry and Molecular Biology of Malaria

Structure-Function, Trafficking, and Drug Discovery Studies of Falcipain Cysteine Proteases of the Malaria Parasite Plasmodium falciparum
Phil J. Rosenthal
University of California, San Francisco

Targeting Protein Prenylation for Malaria Therapeutics: A Piggyback Approach
Debopam Chakrabarti
The University Central of Florida, Burnett School of Medicine Science

Mechanisms of Signal Transduction on host-Plasmodium Interactions
Célia Regina da Silva Garcia,
Instituto de Biociências (IB-USP)

Symposium N° 12

Local: Rubi Room
Chair: **Miguel Augusto Rico Botas Castanho**
Universidade de Lisboa, Faculdade de Medicina, Portugal

Membrane-Bioactive Peptides in Health and Disease

What's the Molecular Meaning of MIC When Working with AMPs? Lessons from the Peptides Omiganan and BP100
Miguel Augusto Rico Botas Castanho
Universidade de Lisboa, Faculdade de Medicina, Portugal

Crotamine, Cell Penetrating Peptide, Derived from South American Rattlesnake Crotalus Durissus terrificus
Irina Kerkis
Instituto de Biociências (IB-USP)

Amyloid-Like Fiber Formation Driven by Lipid-Protein Interaction
Manoel José Estevez Prieto
Instituto Superior Técnico, Univ. Tec. de Lisboa, Portugal

Revealing the Mechanism of Interaction between Viral Fusion Peptides and Membranes
Fausto Stauffer Junqueira de Souza
Instituto de Bioquímica Médica (IBqM-UFRJ)

Symposium N° 13

Local: Agata Room
Chair: **Monica Marin**
Universidad de La República, Facultad de Ciência, Montevidéu, Uruguay

Learning Protein Folding to Tackle Conformational Disorders

Protein Folding Activity of Ribosomal RNA is a Selective Target of Two Unrelated Antiprion Drugs Active from Yeast to Mammals
Marc Blondel
Université de Brest, Faculté de Médecine et des Sciences de la Santé, France

Nucleic Acid Binding and Hydration in Protein Misfolding: Insights from Studies of Prion and p53 Tumor Suppressor Proteins
Jerson Lima Da Silva
Instituto de Ciências Biomédicas (ICB-UFRJ)

Prion Protein: Orchestrating Neurotrophic Activities
Vilma Regina Martins
Instituto Ludwig de Pesquisa sobre o Câncer (ILUDWIG)

Protein Misfolding Diseases: The Case of Transthyretin
Débora Foguel
Instituto de Ciências Biomédicas (ICB-UFRJ)

Symposium N° 14

Local: Topázio Room
Chair: **Adriana Rios Lopes**
Instituto Butantan

What we can learn from Arthropods

Insect Digestion: A Historical and Evolutionary Perspective
Adriana Rios Lopes
Instituto Butantan

Gut Microbiota and Some Physiological Aspects of Aedes aegypti Digestion.
Francisco Jose Alves Lemos
Centro de Biociências e Biotecnologia (UENF-CBB)

From Perimicrovillar Membranes to Induction of Digestive Enzymes in Insects
Carlos Peres Silva
Centro de Ciências Biológicas (CBB-UFSC)

Molecular Basis of Enzyme Properties
Sandro Roberto Marana
Instituto de Química (IQ-USP)

From Digestion to Immunity: Role of Insect Beta-1,3-Glucanases
Fernando Ariel Genta
Instituto Oswaldo Cruz (FIOCRUZ)

SP-15. SBBq Conesul Symposium

Chair: Hernan F. Terenzi, UFSC

Urate as a Physiological Substrate for Myeloperoxidase
Flávia Carla Meotti
Dep de Farmacologia, UFSC, Florianópolis, Brazil.

Biochemical and Functional Analysis of GONST3 and 4, Nucleotide-Sugar Transporters of Arabidopsis thaliana
José Patricio Miranda Marin
Dep de Biología, Facultad de Ciencias, Universidad de Chile

FEZ1 is an Intrinsically Unfolded Protein, Acts in Concert with NEK1 and CLASP2 at Centrossomes and Provokes the "Flower Like" Phenotype in Human Cells
Daniel Carlos Ferreira Lanza
LNLS, Campinas, SP, Brazil.

Structural Studies of Human Purine Nucleoside Phosphorylase: Towards a new Specific Empirical Scoring Function
Rafael Andrade Caceres
Faculdade de Biociências, Laboratório de Bioquímica Estrutural, PUC RS

Comprehensive Comparison of the Interaction of the E2 Master Regulator with its Cognate Target DNA Sites in 73 Human Papillomavirus Types by Sequence Statistics
Mariano Dellarole
Universidad de Buenos Aires, Fundación Instituto Leloir, Argentina.

Time: 11:00 to 12:00

Conference Nº 7

Local: Real Room
Chair: **Carlos Henrique Inacio Ramos**
Instituto de Química (IQ-UNICAMP)

Protein Folding and Misfolding in Cystic Fibrosis
Douglas M. Cyr
University of North Carolina at Chapel Hill, USA

Conference Nº 8

Local: Rubi Room
Chair: **Maria Helena Bueno Da Costa**
Instituto Butantan, São Paulo-SP

Adventures at the Interface: Modeling Structural and Functional Aspects of Biological Reaction Sites Using Colloids and Intramolecular Reactions
Hernan Chaimovich
Instituto de Química (IQ-USP)

Conference Nº 9 – PABMB LECTURE

Local: Agata Room
Chair: **Ana Maria Oliveira Battastini**
Instituto de Ciências Básicas da Saúde (ICBS-UFRGS)

From Vector Spit to Spitomes and Beyond: How Much Work is there to Do?
José Marcos Chaves Ribeiro
Lab. of Malaria and Vector Research, National Institutes of Health (NIH), USA

Conference Nº 10

Local: Topázio Room
Chair: **Eloi De Souza Garcia**
Instituto Oswaldo Cruz (FIOCRUZ), Rio de Janeiro-RJ

Interactions on Symbionts and Antimicrobial Factors in Triatomines
Günther Artur Schaub
Group Zoology/Parasitology, Ruhr-University Bochum, Germany

Conference Nº 11

Local: Safira Room
Chair: **Jose Cesar Rosa**
Faculdade de Medicina de Ribeirão Preto (FMRP-USP)

Glycosylation Fingerprints of Normal, Metastatic and Developmental Cells
Vernon N. Reinhold
University of New Hampshire, Durham, USA

Time: 14:30 to 16:30

Symposium Nº 16
Local: Real Room
Chair: **Andrea Thompson Da Poian**
Instituto de Bioquímica Médica (IBqM-UFRJ)

Molecular aspects of dengue virus infection

Interaction of the Dengue Virus Fusion Peptide with Membranes by NMR: The Essential Role of W101 of the E Glycoprotein for Membrane Fusion
Ronaldo da Silva Mohana Borges
Instituto de Biofísica Carlos Chagas Filho (IBCCF-UFRJ)

IFN-γ -Mediated Immunity in Dengue Virus Infection. Mechanisms of Induction and Action
Mauro Martins Teixeira
Instituto de Ciências Biológicas (ICB-UFMG)

Molecular Epidemiology of Dengue Viruses in Northern Brazil
Marcio Roberto Teixeira Nunes
Instituto Evandro Chagas (IEC-PA)

Cellular Responses to Dengue Virus Replication in Hepatocytes: Implications for Pathogenesis
Andrea Thompson Da Poian
Instituto de Bioquímica Médica (IBqM-UFRJ)

Symposium Nº 17

Local: Rubi Room
Chair: **Marcia Regina Braga**
Instituto de Botânica (IBOT)

Desiccation Tolerance in Plants

An Overview of the Mechanisms of Desiccation Tolerance Using Resurrection Plants as Models: From the Molecular to Whole Plant Physiology
Jill M. Farrant
University of Cape Town Medical School, South Africa

Seed Survival in the Dry State
Henk W.M. Hilhorst
Wageningen University, The Nederlands

Acquisition, Loss and Re-Establishment of Desiccation Tolerance in Orthodox Seeds
José Marcio Rocha Faria
Universidade Federal de Lavras (UFLA)

Desiccation Tolerance in the Brazilian Flora
Sergio Tadeu Meirelles
Instituto de Biociências (IB-USP)

Symposium Nº 18

Local: Agata Room
Chair: **Lewis Joel Greene**
Faculdade de Medicina (FM-USP)

Proteomic Approaches to the Characterization of Cancer Cells

Proteomic Approaches to Understand Chemotherapy Resistance in Leukemias
Eliana Saul Furquim Werneck Abdelhay
Instituto Nacional do Câncer (INCA)

Proteomic Analysis of Ovarian Cancer Cells Reveals Dynamic Processes of Protein Secretion and Shedding of Extra-Cellular Domains
Vitor Marcel Faça
Fred Hutchinson Cancer Research Center, USA

Identification of Tumor Antigens Directed Antibodies
Sandra R.P. Faça,
Fred Hutchinson Cancer Research Center, USA

Clinical Proteomics in Cancer: Lessons from Patient Samples of Glioma and Leukemia
Jose Cesar Rosa
Faculdade de Medicina de Ribeirão Preto (FMRP-USP)

Symposium Nº 19

Local: Topazio Room
Chair: **Adalberto R. Vieyra**
Instituto de Biofísica Carlos Chagas Filho, UFRJ, RJ;
Co-Chair: **Martha Meriwether Sorenson**
Vice President of SBBq, Instituto de Bioquímica Médica, UFRJ

Science Policy: Measuring Research Quality

Introdução e Considerações Iniciais
Adalberto R. Vieyra (Coordinator)
Instituto de Biofísica Carlos Chagas Filho, UFRJ, RJ

The Evaluation of Biological Research in EU and European Countries
Andre Goffeau
Institut des Sciences de la Vie , Université Catholique de Louvain, Belgium

Indicators and Achievement
Fernando Galembeck
Dep de Físico-Química, Instituto de Química, Unicamp

Keep It Simple – But Not Too Simple
Martha Sorenson
Instituto de Bioquímica Médica, UFRJ, RJ

SP-20. SBBq Conesul Symposium

Chair: Monica Marin
Universidad de La Republica, Uruguay

The Role of Superoxide in Infection with Leishmania amazonensis
Juan Preira de Macêdo
Dep de Bioquímica e Imunologia, UFMG, Brazil.

Pancreas B-Cells Morphology, Liver Antioxidant Enzymes and Liver Oxidative Parameters in Alloxan-Resistant and Alloxan-Susceptible Wistar Rats: A Viable Model System For The Study of Concepts into Reactive Oxygen Species
Guilherme Antônio Behr
ICBS, UFRGS Brazil.

Nitration of Arachidonic Acid Modulates PGHS-1 Activity
Lucía Bonilla Cal
Facultad de Medicina, UdelaR, Uruguay.

Ethylmalonic and Methylsuccinic Acids Induce Oxidative Stress in Rat Cerebral Cortex
Estela Natacha Brandt Busanello
Instituto de Ciências Básicas da Saúde, UFRGS

Evidence that 3-Hydroxy Fatty Acids Accumulating in LCHAD Deficiency Induce Oxidative Damage and Decrease Non-Enzymatic Antioxidant Defenses in Brain of Young Rats
Anelise Miotti Tonin
Instituto de Ciências Básicas da Saúde, UFRGS

Time: 08:30 to 10:30

Symposium Nº 21

Local: Real Room
Chair and Co-Chair: **Aparecida Sadae Tanaka** and **Rodrigo L.O.R. Cunha**
Universidade Federal de São Paulo (UNIFESP-EPM)

Protease Inhibitors - Aspects and Applications of Low Molecular Weight and Proteic Inhibitors

Serine Protease Inhibitors Isolated from Carribean Marine Invertebrates: Structure-Function
Yamile González González
Universidad Habana, Cuba

From Inhibitors of the Secreted Aspartic Proteases (SAPS) of Candida albicans to New Falcipain Inhibitors
Tanja Schirmeister
Universität Würzburg-Institut für Pharmazie und Lebensmittelchemie, Germany

Structural and Functional Insights of Infestins 1 and 4 in the Blood Feeding of Triatoma infestans.
João Alexandre Ribeiro Gonçalves Barbosa
Laboratório Nacional de Luz Síncrotron (LNLS)

Inhibition of Intracellular Proteolysis in Malaria Parasites
Marcos Leoni Gazarini Dutra
Universidade Federal De São Paulo (UNIFESP-EPM)

Symposium Nº 22

Local: Rubi Room
Chair: **Jose Miguel Ortega**
Instituto de Ciências Biológicas (ICB-UFMG)

Making Use of the Information Provided by Complete Genomes

Linking Genomic Knowledge to Diseases and Drugs
Minoru Kanehisa
Institut for Chemical Research, Kyoto University, Bioinformatics Center, Japan

More Info to Pathways: the Enrichment of COG and Kegg Orthology Databases and the Grouping of Cognate Proteins with Seed Linkage
Jose Miguel Ortega,
Instituto de Ciências Biológicas (ICB-UFMG)

Evolutionary Origins of Human Apoptosis and Genome-Stability Gene Networks
João Carlos Merino Mombach
Universidade Federal de Santa Maria (UFSM)

Remote Homology Detection through Structural Alignment
Alberto M. Davila
Fundaçao Oswaldo Cruz (IOC)

Symposium Nº 23

Local: Agata Room
Chair: **Helio Kiyoshi Takahashi**
Universidade Federal de São Paulo (UNIFESP-EPM)

Functional Roles of Glycoconjugates, Complexed with other Membrane Components, in Defining Cell Growth, Cell-Cell Interaction and Pathogen-Host Cell interactions

Trypanosomatide (Glyco)Lipid Membrane Organization and their Role in the Infectivity
Anita Hilda Straus Takahashi
Universidade Federal de São Paulo (UNIFESP-EPM)

Role of Glycans in Helicobacter pylori Infection and Gastric Carcinogenesis
Celso Albuquerque Reis
Instituto de Patologia e Imunologia da Universidade do Porto (IPATMUP), Portugal

Evaluation of the Minimal Core in Galactofuranose Structure Capable to Stimulate the Immune Response
Guilherme Lanzi Sassaki
Universidade Federal do Paraná (UFPR)

Dermatan Sulfate Inhibits P-Selectin-Dependent Cellular Interaction during Metastasis and Inflammation
Mauro Sergio Goncalves Pavão
Hospital Universitário Clementino Fraga Filho (HUCFF-UFRJ)

SP-24. SBBq Conesul Symposium

Chair: **Hugo Alexandre de Oliveira Rocha**
UFRN

A Role for Phospholipase D in Nitric Oxide induced stomatal closure
Ayelen Mariana Distéfano
IIB-UNMdP. Mar del Plata. Argentina.

Xanthomonas Manipulates Host Defense Response to Produce Disease
Luciano Ariel Rigano
Fundacion Pablo Cassara, Buenos Aires, Argentina.

Molecular Characterization of Pathogen Defense-Related Genes in Coffee
Carla Fernanda Barsalobres Cavallari
Laboratório de Biotecnologia e Genética Molecular, IB, UNESP, 18618-000, Botucatu, São Paulo, Brazil

The First Osmotin Purified from Latex: Biochemical Characterization; Biological Activity and Role in Plant Defense
Cleverson Diniz Teixeira de Freitas
Departamento de Bioquímica e Biologia Molecular, UFC, Brasil.

Variations in Fructan Metabolism of Vernonia herbacea (Vell.) Rusby (Asteraceae) in Response to Water Deficit and their Relation to Drought Tolerance
Paola Mitie Aparecida Garcia
Seção de Fisiologia e Bioquímica de Plantas, Instituto de Botânica, São Paulo, SP.

SP-25. SBBq Conesul Symposium

Chair: **Arnaldo Zaha**, UFRGS

Methylphenidate Alters Ncs-1 Expression in Rat Brain
Gislaine Zilli Réus
Universidade do Extremo Sul Catarinense, Criciúma, SC, Brazil.

Resveratrol and Temozolomide Have Additive Citotoxic Effect, Induce Autophagy and Cell Cycle Alterations in U87-MG cells
Eduardo Cremonese Filippi Chiela
Federal University of Rio Grande do Sul (UFRGS).

HIV Aspartyl Peptidase Inhibitors Interfere with Cellular Proliferation, Ultrastructure and Macrophage Infection of Leishmania amazonensis
Livia de Oliveira Santos
Laboratório de Biologia Molecular e Doenças Endêmicas (FIOCRUZ).

The Role of Glucose Restriction on Amino Acid Metabolism and Lifespan in Yeast
Graciele Almeida de Oliveira
Instituto de Química, Universidade de São Paulo, SP, Brazil.

Involvement of Alternative Respiratory Proteins in Superoxide-Dependent Nitric Oxide Degradation by Plant Mitochondria
Halley Caixeta de Oliveira
Department of Biochemistry, IB, UNICAMP, Brazil.

Time: 11:00 to 12:00

Conference Nº 12

Local: Real Room
Chair: **Glaucius Oliva**
Instituto de Física de São Carlos (IFSC-USP)

From Vessel to Tissue: the Travels of Trypanosoma cruzi
Walter Colli
Instituto de Química (IQ-USP)

Conference Nº 13

Local: Rubi Room
Chair: **Fabio de Oliveira Pedrosa,**
Universidade Federal do Paraná (UFPR)

Genomics and Metagenomics in Biotechnology Using Ultrafast Sequencing Technologies
Alfred Püehler
Center for Biotechnology, University of Bielefeld, Germany

Conference Nº 14

Local: Agata Room
Chair: **Alexander Henning Ulrich**
Instituto de Química (IQ-USP)

Dissecting Interacting Molecular Populations by FRET
Janos Szollosi
University of Debrecen, Faculty of Medicine, Medical and Health Science, Belgium

Conference Nº 15

Local: Topázio Room
Chair: **Pietro Ciancaglini**
Faculdade de Filosofia Ciências e Letras de Ribeirão Preto (FFCLRP-USP)

The Role of Alkaline Phosphatase in Physiological and Pathological Calcification - Novel Therapeutic Strategies
José Luis Millan
Stanford Children's Health Research Center, Burnham Institute for Medical Research, USA

Conference Nº 16

Local: Safira Room
Chair: **Célia Regina da Silva Garcia**,
Instituto de Biociências (IB-USP)

A Functional Link Between a Cytokeleton Modulatory Protein, LIM Kinase 1, and Membrane Type Matrix Metalloproteinase: Implication in Development of Invasive Prostate Cancer.
Ratna Chakrabarti
The University Central of Florida, Burnett School of Medicine Science, USA

Time: 14:30 to 16:30

Symposium Nº 26
Local: Real Room
Chair: **Glaucius Oliva**
Instituto de Física de São Carlos (IFSC-USP)

O Mercado de Trabalho na Indústria para Jovens Doutores em Ciências da Vida

Biopharmaceutical Research and Development
Ney Ribeiro Leite
Divisão de Biotecnologia, Cristália Prod Químicos e Farmacêuticos Ltda

Recepta Biopharma's Challenge: Development of New Treatments Against Cancer
Alécio Antonio Pimenta Junior
Instituto de Física de São Carlos (IFSC-USP)

Disposable Bioreactors: Prognosticating the Future
Marcos Calgaro
GE Healthcare

Biotechnology at Alellyx – Facing the Challenging of Green Biotech
Plinio Tadeu Cristofoletti Junior
Allelyx

Symposium Nº 27
Local: Rubi Room
Chair: **Ana Lucia Tabet Oller Nascimento**
Instituto Butantan

Functional Genomics

Functional Genomics of Xylella fastidiosa
Marco Aurelio Takita
Instituto Agronômico de Campinas (IAC)

Functional Analysis of Xanthomonas axonopodis pv citri Genome
Julio Cezar Franco De Oliveira
Faculdade de Ciências Agrárias e Veterinárias de Jaboticabal (FCAV-UNESP)

Schistosoma mansoni Functional Genomics; Applied to the Development of Vaccines
Luciana Cezar De Cerqueira Leite
Instituto Butantan

Leptospira interrogans: From Post-Genomics to Vaccine Targets
Ana Lucia Tabet Oller Nascimento
Instituto Butantan

Symposium Nº 28
Local: Agata Room
Chair: **Paulo Mazzafera**
Instituto de Biologia (IB-UNICAMP)

Plant Metal Tolerance and Plant Biofortification

FOLATE BIOFORTIFICATION; Metabolic Engineering Strategies and Potential for Human Nutrition
Rocío I. Díaz de la Garza
Tecnológico de Monterrey, Biotecnología e Ingeniería de Alimentos, Mexico

Improving the Nutritional Quality of Cereal Crops
Ricardo Antunes de Azevedo
Escola Superior de Agricultura "Luiz de Queiroz" (ESALQ-USP)

Plant Responses to Heavy Metals Stress
María Patricia Benavides
Universidad de Buenos Aires-Facultad Farmacia y Bioquímica, Argentina

SP-29. SBBq Conesul Symposium
Chair: **Maria de Fátima Dias Costa,** UFBA

Creatine Prevents Na^+,K^+-ATPase Inhibition Induced by Intracerebroventricular Administration of Isovaleric Acid in Cerebral Cortex of Young Rats
César Augusto João Ribeiro
ICBS, UFRGS, Porto Alegre, RS, Brazil

Neuroprotective Effect of Diphenyl Diselenide in Mice Brain Methylmercury Toxicity
Viviane Glaser
Centro de Ciências Biológicas, UFSC.

Changes in Ryanodine Receptor Expression and Activity in Hippocampal Neurons Exposed to BDNF or Amyloid b Peptide Oligomers.
Andréa Cristina Paula Lima
CEMC & ICBM, F. Medicina, U. Chile, Santiago, Chile.

Lipid Mediators and Vector Infection: Trypanosoma rangeli Inhibits Rhodnius prolixus Hemocyte Phagocytosis by Modulation of Phospholipase A_2 and PAF-Acetylhydrolase Activities.
Marcela Barbosa de Figueiredo
Instituto Oswaldo Cruz – FIOCRUZ, RJ, Brasil.

Neuropeptides in Rhodnius prolixus
Sheila Ons
Centro Regional de Estudios Genómicos. Universidad Nacional de La Plata, Buenos Aires, Argentina.

SP-30. SBBq Conesul Symposium

Chair: **Nadja Cristhina De Souza Pinto Lardner**
(IQ-USP)

Human Regulatory Ki-1/57 is a Novel Intrinsically Unstructured Protein Involved in Mechanisms of Pre-mRNA Splicing
Gustavo Costa Bressan
Instituto de Biologia/UNICAMP.

Role of the N-terminal Starch Binding Domains on Kinetic Properties of Starch S synthase III from Arabidopsis thaliana
Hugo Alberto Valdez
Lab. de Bioquímica y Biología Molecular de Plantas IBINTECH, CONICET-UNSAM, Chascomus, Argentina.

The Peculiar Interaction between Mammalian Prion Protein and RNA
Mariana Pierre de Barros Gomes
IBqM, UFRJ, Brazil.

Native, Non-Native and Nonspecific and Interactions in the Kinetics of DNA Sequence Recognition
Ignacio Enrique Sánchez
Fundación Instituto Leloir and IIBBA-CONICET, Buenos Aires (Argentina).

Fitness Landscape of Metallo-B-Lactamase-Mediated Antibiotic Resistance
Pablo Emiliano Tomatis
Instituto de Biologia Molecular y Celular de Rosario, Argentina.

Panorama da Pesquisa em Bioquímica na Alemanha Atual e as Possibilidades de Intercâmbio entre Brasil e Alemanha
Local: Salão Real, 18 de maio de 2009, segunda- feira, das 18h30 às 20 horas

Palestrantes:
Dr. Gunther Schaub, Ruhr-University, Bochum, Germany
Dr. Alfred Puehler, Bielefeld University, Germany
Dr. Tanja Schirmeister, University of Wurzburg, Germany
Marcio Weichert, Assessor de Marketing e Comunicação, DAAD - Serviço Alemão de Intercâmbio Acadêmico
Dr. Helmut Galle, Representante Acadêmico da DFG - Fundação de Pesquisa Científica Alemã

Participação dos Alunos no Processo de Reformulação do Programa de Pós Graduação
Local: Salão Rubi, 17 de maio de 2009, domingo às 19 horas
Informações Adicionais: Fernando Postalli Rodrigues, Coordenador Discente, PG Bioquímica USP-RP

Light, Darkness and The Scientific Method
Dourado, L., Rangel, D., Machado, A., Marcos, B., Vieira, B. M., de Meis, L. (UFRJ)
Apresentação de DVD (duração 1 hora)
Local: Salão Real, 17 de maio 2009, domingo às 19h

Você é o que você come!
Apresentador: Prof Mauricio Luz (Fiocruz)
Público Alvo: Alunos da Rede Estadual de Ensino de Águas de Lindóia
Local: Salão Ágata
Sábado: 17 às 19h: Filme: Supersize me
Domingo: 16:30-17:30: Jogo da Dieta
Segunda: 16:30-17:30: Você tem fome de que? Discussão com uma nutricionista

Poster Session

Sunday 17th, Monday 18th and Tuesday 19th

E2 Floor

Please put your poster up between 8:00 and 10:00 the day it will be discussed, and take it down at 20:00

Authors must be available for poster discussion between 16:30 and 18:30

Poster may be visited until 20:00

Topics		Sunday	Monday	Tuesday
A	Bioenergetics and Membranes		1 – 20	21 – 44
B	Upper Eukaryote Biochemistry and Molecular Biology		1 – 20	21 – 40
C	Biochemistry in Pathologic States		1 – 15	16 – 30
D	Insect Biochemistry and Molecular Biology	1 – 42	43 - 82	
E	Plant Biochemistry and Molecular Biology		1 – 30	31 – 86
F	Viral and Bacterial Biochemistry and Molecular Biology		1 – 30	31 – 55
G	Lower Eukaryote Biochemistry and Molecular Biology		1 – 30	31 – 51
H	Biotechnology	1 – 45	46 – 65	66 – 107
I	Metabolic Control	1 – 18		
J	Cell Growth and Development	1 – 14		
K	Education in Biochemistry	1 – 18		
L	Enzymes	1 – 50	51 – 79	80 – 108
M	Carbohydrate Structure and Function		1 – 15	16 – 50
N	Protein Structure and Function	1 – 45	46 – 85	86 – 164
O	Immunochemistry	1 – 07		
P	Drugs Actions	1 – 25		
Q	Cell Biochemistry		1 – 36	37 – 66
R	Neurochemistry	1 – 30		
S	Biologically Active Peptides	1 – 30	31 – 50	
T	Free Radical and Reactive Oxygen Species	1 – 50	51 – 79	
U	Others	1 – 18		
V	Bioinformatics	1 – 15		
W	Proteomics		1 – 20	21 – 40

DOMINGO DIA 17/05

Sala 4 – EPPENDORF

14:30 - 15:30

New Concept for Automatic Pipetting - Nucleic Acid Purification and qPCR Setup
Dr. **Rafal Grzeskowiak** - Especialista de Produto em Automação da Eppendorf AG, Hamburgo, Alemanha

High cost and complexity often prohibits automation being applied for low to mid throughput tasks. A solution is presented: epMotion as an easy-to-use, highly flexible automation platform increasing precision and quality of the routine pipetting tasks: PCR/qPCR, nucleic acid purification with various kits, cell culture and assays, genomic applications and general multi-step pipetting.

16:30 - 18:00

How to improve determination of nucleic acids, proteins, fluorescent dyes or enzymes activities?
Dr. **Rafal Grzeskowiak** - Especialista de Produto em Automação da Eppendorf AG, Hamburgo, Alemanha

As these are mainly routine applications, measurements may differ from the expected results. The new BioPhotometer plus from Eppendorf is friendly user, robust and a reliable photometer with fixed wavelengths, which is especially suitable for these applications. It will be easy to prevent time-consuming troubleshooting.

Sala 5 - INVITROGEN

8:00 - 9:00

Novos equipamentos Invitrogen, tirando a sua rotina da rotina!
Eliane Resende, Technical Sales Specialist Invitrogen Brasil

9:00 - 10:00

Laboratório Nacional de Células-Tronco Embrionárias (LaNCE): desafios e perspectivas para a utilização de células-tronco pluripotentes nas pesquisas básica e pré-clínica no Brasil
Dr. Stevens Rehen, Instituto de Ciências Biomédicas da UFRJ

10:00 - 11:00

Novas tecnologias para a pesquisa em celulas tronco pluripotentes induzidas.
Marcelo Bravo, Technical Leader, Invitrogen Latin America

Sala 5 – APLIED BIOSYSTEM

14:00 - 14:30

Next Generation Sequencing – Overview
Sheila Gregório Purim, PhD, Senior Field Applications Specialist, Molecular & Cellular Biology, Applied Biosystems do Brasil

14:30 - 15:30

De Novo and Methagenomics with the Solid System
Todd P. Michael, Ph.D. Assistant Professor Waksman Institute of Microbiology - Department of Plant Biology and Pathology, School of Environmental and Biological Sciences, Rutgers, The State University of New Jersey

15:30 - 16:30

SOLiD transcriptomics; its not just Sequencing.
Michael Rhodes, Applications Manager, High Throughput Discovery, Applied Biosystems

16:30 - 18:00

Recentes Avanços em Instrumentação, Software e Reagentes para Proteômica e descoberta de Biomarcadores.
Mateus Gulart Campos, M.Sc., Supervisor de Vendas, Mass Spectrometry Systems Division, Applied Biosystems do Brasil

A Applied Biosystems apresenta suas novidades em instrumentação, software e reagentes para Proteômica e descoberta de biomarcadores. Serão apresentadas as novidades sobre os sistemas de espectrometria de massas MALDI TOF/TOF e sistemas híbridos triploquadrupolo - Ion Trap linear, com ênfase no mais recente lançamento da Applied Biosystems/MDS Analytical Technologies: o sistema AB SCIEX QTRAP 5500 LC/MS/MS. Adicionalmente, serão abordados os avanços em aplicações específicas como pesquisa de modificações pós-traducionais, imagem por MALDI (MALDI Imaging), tecnologia e reagentes para proteômica quantitativa.

Sala 7 - GE Healthcare

10:00 - 11:00

Bioreatores WAVE: Inovando a Indústria Biofarmacêutica
Marcos Roman Calgaro, Ph.D. Especialista de Produto da GE Healthcare Life Sciences, América Latina.

A demanda por processos biotecnológicos dinâmicos e efetivos resulta no aumento do uso de materiais e sistemas descartáveis. Os bioreatores WAVE estão redefinindo os processos "upstream", pois apresentam fácil programação, sem necessidade de estabelecer processos de limpeza e sanitização e reduzido risco de contaminação cruzada. **Retirar convite no stand**

14:00 - 15:00

Preparação de Amostras, as soluções da GE Healthcare para Proteínas.
César Zuin, Especialista de Produtos da GE Healthcare Life Sciences, América Latina.

Os resultados nas análises de proteínas serão tão bons quanto as amostras com as quais você inicia o experimento. A GE Healthcare apresenta um conjunto de kits e reagentes que trará confiança, facilidade de uso, reprodutibilidade e consistência à preparação de amostras para eletroforese, espectrometria de massas e Western Bloting.
Retirar convite no stand

SEGUNDA FEIRA DIA 18/05

SALA 2 – DP-UNION

08:00 - 12:00

Sistemas de Ressonância Plasmônica de Superfície – RPS/SPR
Palestrante: Sr. **Rick Cope,** especialista em sistemas RPS/SPR

A dpUNION, em parceria com a ICX Technologies, tem o prazer de convidá-lo a participar da palestra que apresentará novos sistemas para determinação de cinética e interação biomolecular em tempo real em diversas concentrações.

SALA 3

08:00 - 12:00

Reservado para a **WATERS**

SALA 3 – BD Biosciences

13:00 - 18:00

O Uso da Citometria de Fluxo na Quantificação Simultânea de Proteínas e na Sinalização Celular
Palestrante: **Rodrigo Pestana Lopes** - Especialista de Aplicações BD Biosciences

Apresentação de técnicas utilizando a citometria de fluxo como metodologia de escolha para: (i) quantificação simultânea de múltiplas proteínas - imunoensaio do tipo sanduíche (captura e detecção) utilizando 50uL de amostra; e (ii) estudos de vias de sinalização célula-específica - detecção direta de sítios fosforilados de proteínas intracelulares.

SALA 4 – EPPENDORF

9:30 - 10:30

How to improve determination of nucleic acids, proteins, fluorescent dyes or enzymes activities?
Dr. **Rafal Grzeskowiak** - Especialista de Produto em Automação da Eppendorf AG, Hamburgo, Alemanha

As these are mainly routine applications, measurements may differ from the expected results. The new BioPhotometer plus from Eppendorf is friendly user, robust and a reliable photometer with fixed wavelengths, which is especially suitable for these applications. It will be easy to prevent time-consuming troubleshooting.

11:00 - 12:00

New Concept for Automatic Pipetting - Nucleic Acid Purification and qPCR Setup
Dr. **Rafal Grzeskowiak** - Especialista de Produto em Automação da Eppendorf AG, Hamburgo, Alemanha

High cost and complexity often prohibits automation being applied for low to mid throughput tasks. A solution is presented: epMotion as an easy-to-use, highly flexible automation platform increasing precision and quality of the routine pipetting tasks: PCR/qPCR, nucleic acid purification with various kits, cell culture and assays, genomic applications and general multi-step pipetting.

SALA 4 – ROCHE

13:00 - 18:00

Fundamentos e Aplicações da Tecnologia de PCR em Tempo Real - LightCycler 480
Palestrante: **Adriana de Godoy, Ph.D.** Especialista de Produtos - Roche
Sinapse: Princípio da técnica de PCR em Tempo Real, vantagens em relação a PCR convencional, tipos de sonda utilizados, formatos de detecção e aplicações.

The Genome Sequencer FLX System: get the complete picture with long sequence reads
Palestrante: **Sandra Valéria de Sá, Ph.D.** *Sequencing Product Specialist - Roche*

Sinapse: The GS FLX System, with its long, highly accurate reads, puts affordable high throughput sequencing in the hands of the entire research community. Obtaining an unbiased view of the phylogenetic composition and functional diversity within a microbial community is a central objective of metagenomic analysis. A versatile tool - Use the GS FLX to identify and analyze non-coding RNAs, develop genotyping assays, methylation patterns, ncRNA detection, splice variant analysis, SuperSAGE expression profiling, Epigenetics. The GS FLX provides the most complete picture of human genetic variation, on both the genome and the transcriptome level.

SALA 5 – 8h as 12h e 13h as 18h

Reservado para a **QIAGEN**

Sala 7 - GE Healthcare

10:00 - 11:00

Solução completa para aquisição e análise de imagem: Colorimétrica, quimioluminescente, fluorescente, e radioativa.
Gustavo Arbex Avelar, Ph.D. e Maurício Marques, Ph.D. especialistas de Produtos da GE Healthcare Life Sciences, América Latina.

Se você faz eletroforese 1D ou 2D, Western/Northern/Southern blotting, 2D DIGE, microarray ou contagem de colônia, a GE Healthcare tem a solução para sua aplicação. Oferecemos versatilidade e excelente sensibilidade na detecção e análise de imagens. Combinando nossa linha de reagentes de marcação de ácidos nucléicos e proteínas com a tecnologia de detecção de imagens apresentamos a solução completa para sua pesquisa (Typhoon, Storm, Image Scanner, Image Quant, Ettan DIGE e Agilent Scanner).
Retirar convite no stand

14:00 - 15:00

Microarray como ferramenta para análise de expressão gênica, alterações cromossômicas e micro-RNA.
Regina Maki Sasahara, Ph.D., Especialista de Produto da GE Healthcare Life Sciences, América Latina.

A plataforma de microarray da Agilent está baseada em uma abordagem integrada, flexível e aberta voltada para genômica investigativa em diversos modelos experimentais. Os array da Agilent permitem ao pesquisador realizar análises de expressão gênica, CGH (Comparative Genomic Hybridization), miRNA além de um programa de "arrays" customizados, possibilitando o seu uso com outro material genético diferente dos oferecidos em catálogo em múltiplos formatos.
Retirar convite no stand

TERÇA FEIRA DIA 19/05

Sala 7 - GE Healthcare

10:00 - 11:00

Análise celular multiparamétrica por microscopia de fluorescência para estudos in vivo *de processos celulares e sinalização celular.*
Sandra Rosa da Silva – Gerente de Produto, América Latina.

Análise de vários parâmetros celulares simultaneamente, combinando imagem de microscopia de fluorescência usando IN Cell Analyser 1000 e agorítimos específicos, permitindo um grande número de ensaios celulares *in vivo,* tais como: análise de sinalização celular, ativação de receptores, toxicidade, ciclo celular, morfologia, transito de organelas e proteínas, análise funcional de iRNA, diferenciação celular entre outros.
Retirar convite no stand

14:00 - 15:00

DeCyder MS – uma poderosa ferramenta para análise dados de LC-MS e LC-MS/MS.
Maurício Marques, Especialista de produtos - GE Healthcare Life Sciences, América Latina

A tecnologia de análise proteômica revela seus resultados de diferentes maneiras, como por exemplo, através de géis bidimensionais, espectros de LC-MS e LC-MS/MS, dentre outras maneiras. O aperfeiçoamento dessas técnicas tem sido muito grande nos últimos anos e dentre esses aperfeiçoamentos, poderosos softwares tem sido desenvolvidos, tais como o ImageMaster 2D Platinum, DeCyder 2D e DeCyder MS. Este ultimo é um software que integra ferramentas de detecção, de comparação entre amostras, visualização e análises estatísticas para analisar grandes quantidades de dados de LC-MS e LC-MS/MS a fim de obter uma quantificação relativa e identificação de peptídeos e proteínas.
Retirar convite no stand