



57th BRAZILIAN CONGRESS OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

Pharmacology in the New Era of One Health

October 21-24, 2025 | CDI / INOVA - USP | São Paulo - Brazil

**1st SYMPOSIUM ON INNOVATION AND NATURAL PRODUCTS
TOWARDS NEW MEDICINES**

ESIB Butantan - October 20

PRELIMINARY PROGRAM

October 21 st , 2025 (Tuesday)			
08h30	Venue Secretariat		
08h30-15h00	SBFTE e Divulgação de Farmacologia na Escola Pública - SBFTEJovem		
09h00-11h00	Meeting of SBFTE Board of Directors and Deliberative Council		
11h00-11h20	Coffee break		
11h20-12h10	Meeting of SBFTE Permanent Forum of Graduate Courses in Pharmacology		
13h00-13h50	Courses		
Cr1 – Principles of Systematic Review (Princípios de Revisão Sistemática) Chair: Adriane Ribeiro Rosa (UFRGS) • Class 1: <i>Overall concepts of systematic review (Conceitos gerais de revisão sistemática)</i> Adriane Ribeiro Rosa (UFRGS)	Cr2 – Applications of Physiology-Based Pharmacokinetics in the Drug Development (Aplicações de Farmacocinética Embasada em Fisiologia na área de desenvolvimento de novos fármacos) Chair: Bibiana Verlindo Araujo (UFRGS)	Cr3 – Neuropsychopharmacology of Reinforcement and Reward Behaviors (Neuropsicofarmacologia de Comportamentos de Reforço e Recompensa) Chair: Helena Maria Tannhauser Barros (UFCSPA) • Class 1: <i>Understanding the factors related to drug addiction using</i>	Cr4 – Experimental Models in Cancer and their Interface with Environmental Pollutants (Modelos Experimentais em Câncer e sua Interface com Poluentes Ambientais) Chair: Juliana Elaine Perobelli (Unifesp-Baixada Santista) • Class 1: <i>Components of the Tumor Microenvironment and Their</i>

	Class 1: <i>What is PBPK, model building and translation of in vitro/in vivo data (O que é PBPK, construção de modelos e translação de dados in vitro/in vivo)</i> Bibiana Verlindo de Araujo (UFRGS)	<i>animal models (Fatores relacionados à dependência de drogas usando modelos animais)</i> Cristina Aparecida Jark Stern (UFPR) (Participation of Luana Freese, Northwestern University, USA – by video)	<i>Modulation by Environmental Pollutants (Componentes do Microambiente Tumoral e sua Modulação por Poluentes Ambientais)</i> Débora Barbosa Vendramini Costa (Michigan State University, USA)
14h00-15h30	E-Poster Session 1 (with coffee break)		
15h40-17h10	Mesa-Redonda		
	RT1 – Research Development Policies in Brazil: How to Ensure Sustainability and Impact? (Políticas de Fomento à Pesquisa no Brasil: Como Garantir Sustentabilidade e Impacto?) (Presented in Portuguese) Chair: Rosane Gomez (Coordinator Permanent Forum of Graduate Courses in Pharmacology, UFRGS) <i>The challenges of Brazilian graduation courses (Os desafios da pós-graduação brasileira)</i> Antonio Gomes de Souza Filho (UFC, CAPES Evaluation Director) <i>The Role of state foundations in promoting research: Challenges and perspectives (O Papel das fundações estaduais no fomento à pesquisa: Desafios e perspectivas)</i> Odir Antônio Dellagostin (UFPEL, President Confap and FAPERGS) <i>The future of science in Brazil: Funding strategies and the role of CNPq (O futuro da ciência no Brasil: Estratégias de financiamento e o papel do CNPq)</i> Ricardo Magnus Osorio Galvão (USP-SP, Presidente do CNPq)		

	<i>The FAPESP Model: Sustainability and efficiency in funding scientific research (O Modelo da FAPESP: Sustentabilidade e eficiência no financiamento da pesquisa científica)</i> Márcio de Castro Silva Filho (USP-Piracicaba, Diretor Científico da FAPESP)
17h20-18h00	Opening Session / Cultural Presentation
18h00-18h50	Opening Lecture (L1) Sergio Ferreira Lecture Vencedor do Prêmio Sênior Pharmacologist (Sponsor Ache) Presented by Soraia K. P. Costa (USP-SP, President SBFTE)

October 22nd, 2025 (Wednesday)

08h30	Venue Secretariat and SBFTE Secretariat Opening			
08h30-09h20	Courses			
Cr1 – Principles of Systematic Review (Princípios de Revisão Sistemática) (Presented in Portuguese) Chair: Adriane Ribeiro Rosa (UFRGS) • Class 2: Research question, eligibility and data extraction (Questão de pesquisa, elegibilidade dos estudos e extração de dados) Patrícia Martins Bock (UFRGS)	Cr2 – Applications of Physiology-Based Pharmacokinetics in the Drug Development (Aplicações de Farmacocinética Embasada em Fisiologia na área de desenvolvimento de novos fármacos) (Presented in Portuguese) Chair: Bibiana Verlindo Araujo (UFRGS) • Class 2: Key-parameters in PBPK model building: volume of distribution and clearance (Parâmetros chave em PBPK: volume de distribuição e clearance) Natalia Valadares de Moraes (University of Florida, USA)	Cr3 – Neuropsychopharmacology of Reinforcement and Reward Behaviors (Neuropsicofarmacologia de Comportamentos de Reforço e recompensa) (Presented in Portuguese) Chair: Helena Maria Tannhauser Barros (UFCSPA) • Class 2: Neurobiology of addictive-like behavior (Neurobiologia de comportamentos aditivos) Helena Maria Tannhauser Barros (UFCSPA) (Participation of Carine Lampert (Northwestern University, USA – by vídeo)	Cr4 – Experimental Models in Cancer and their Interface with Environmental Pollutants (Modelos Experimentais em Câncer e sua Interface com Poluentes Ambientais) (Presented in Portuguese) Chair: Juliana Elaine Perobelli (Unifesp-Baixada Santista) • Class 2: In Vitro Models for Cancer Research (Modelos in vitro para o Estudo do Câncer) Débora Barbosa Vendramini Costa (Michigan State University, USA)	

09h30-11h00

Symposia/Oral Communication

S1 – Novel Approaches to Cardio- and Neuroprotection Chair: Peter Ferdinandy (Semmelweis University / Pharmahungary Group, Hungary) & Alexandre Denadai Souza (Katholieke Universiteit Leuven, Belgium) • <i>Development of miRNA therapeutics for cardioprotection.</i> Peter Ferdinandy (Semmelweis University / Pharmahungary Group, Hungary) • <i>Pharmacological modulation of endothelial precursor cell-mediated brain capillary repair mechanisms.</i> István A. Krizbai (HUN-REN Biological Research Centre, Hungary / Western University of Arad, Romania)	S2 – Understanding Psychedelics and Non-Hallucinogenic Psychedelic Analogs Chair: Isis Nem de Oliveira Souza (UFRJ) • <i>Beyond the Trip: The Molecular Basis of Lasting Behavioral Effects of 2-Br-LSD and its Comparison to Classical Psychedelics</i> Argel Aguilar Valles (Carleton University, Canadá) • <i>The antidepressant potential of ayahuasca: from preclinical studies to clinical trials</i> Rafael Guimarães dos Santos (USP-RP) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	S3 – Research and Innovation in Natural Product: From Biodiversity to Therapeutic Application Chair: Bagnolia Araujo Costa (UFPB) • <i>Pharmacological potential of food compounds in the management of immuno-mediated inflammatory diseases</i> Marina Sanchez Hidalgo (University of Seville, Spain) • <i>Therapeutic potential of Spirulina platensis for obesity-induced disorders.</i> Bagnolia Araújo Costa (UFPB) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	RT2 – 55 Years of the Postgraduate Course in Pharmacology at the Escola Paulista de Medicina - Unifesp: Training Researchers Who are Up to Date with Science and Innovation in Brazil (55 anos da Pós-Graduação em Farmacologia da Escola Paulista de Medicina – Unifesp: Formando Pesquisadores Atualizados com Ciência e Inovação no Brasil) Chair: Paulo Caleb J. L. Santos (Unifesp-EPM) • <i>History of the Postgraduate Course in Pharmacology</i> (Histórico da Pós-Graduação em Farmacologia) Fábio C. Cruz (Unifesp-EPM) • <i>Current results, Technologies and Innovation</i> (Resultados Atuais, Tecnologias e Inovação) Mirian Akemi Furuie Hayashi (Unifesp-EPM)
---	---	--	--

• <i>Harnessing single-cell and spatial omics to unveil novel therapeutic targets</i> Alexandre Denadai Souza (Katholieke Universiteit Leuven, Belgium)			• <i>Perspectives and Aspects of the Program (Perspectivas e Aspectos do Programa)</i> Miriam G. Jasiulionis (Unifesp-EPM)
--	--	--	---

11h00-11h20	Coffee-break			
11h20-12h10	Lectures			
	L2 – Skeletal Muscle and Transulfuration Pathway Giuseppe Cirino (University of Naples Federico II, Italy) Presented by			L3 – Leveraging Physiology-based Models in Perinatal Pharmacology and in Drug-Induced Liver Injury Pieter Anaert (Katholieke Universiteit Leuven, Belgium) Presented by Bibiana Verlindo Araújo (UFRGS)
12h10-13h40	Lunch			
12h10-13h40	Meet the Expert (with Lunch Box)	Meeting of the North-Northeast and Central West Region Pharmacology Network (with Lunch Box)	Technical Lectures	
14h00-15h30	Symposia/Roundtable			
S4 – Translational Approach to the Treatment of Parkinson's Disease Chair: Elaine Del-Bel (USP-RP) • <i>Translational approach for a pharmacological modulation of neuropsychiatric symptoms due to disorders of the striatal pathway</i> Louise-Laure Mariani (Sorbonne University, France)		S5 – Sex, Hormones and Age as Determinants for Disease Severity and its Implications On Therapeutics Chair: Aleksander Roberto Zampronio (UFPR) • <i>Using functional MRI to assess sex and age differences in pain processing at the whole-brain level</i>		S6 – Impact of Sex Hormones on Vascular Biology: New Perspectives and Insights Chair: Rita C Tostes (USP-RP) • <i>Estrogen signaling impacting perivascular adipose tissue function in postmenopausal model</i> Tiago Januário da Costa (USP-SP)
		S7 – Basic Pulmonary Pharmacology and Clinical Practice for Respiratory Diseases Chair: Patrícia Machado Rodrigues e Silva Martins (FIOCRUZ) • <i>CT Imaging for Respiratory Diseases: Bridging Experimental Models and Clinical Practice</i>		

• <i>Unraveling the anti-inflammatory mechanism of action of CBD on brain glial cells</i> Patrick Pierre Michel (Paris Brain Institute, France) • <i>Dyskinesia and protection in preclinical models of Parkinson's disease</i> Elaine Del-Bel (USP-RP)	Joyce T. da Silva (University of Maryland, USA) • <i>Sex differences and influence of female-sex hormones on systemic inflammation</i> Aleksander Roberto Zampronio (UFPR) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	• <i>Beyond genders: unraveling testosterone role in the vasculature</i> Jeimison Duarte Santos (USP-RP) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	Lorenzo Ball (University of Genoa, Italy) • <i>Nicotinic receptors in respiratory diseases: Insight from experimental models</i> Carla Máximo Prado (Unifesp-Baixada Santista) • <i>Development and validation of methodology for preclinical evaluation of candidate compounds for the treatment of chronic pulmonary disease through microCT.</i> Patrícia Machado Rodrigues e Silva Martins (Fiocruz)
15h30-15h50	Coffee-Break		
15h50-17h20	E-Poster Session 2		

October 23 rd , 2025 (Thursday)	
08h30	Venue Secretariat and SBFTE Secretariat Opening
09h00-10h30	Symposia/Oral Communication

S8 – Role and Modulation of Cardiac and Neural Ion Channels Chair: Erika Pinter (University of Pécs, Medical School, Hungary) • <i>Decreased cardiac repolarization reserve as a possible mechanism behind drug induced proarrhythmia</i> Andras Varro (University of Szeged, Hungary) • <i>Lipid raft disruption around nociceptive TRP channels provides novel analgesic opportunity</i> Eva Szoke (University of Pécs, Medical School, Hungary) • <i>Regulatory role of TRPA1 receptors in neurodegenerative disorders associated with dementia</i> Erika Pinter (University of Pécs, Medical School, Hungary)	S9 – Therapeutic Potential of Natural Products: From Ancient uses to Modern Practices Chair: Fúlvio Rieli Mendes (UFABC) • <i>Natural products for neurodegenerative diseases: potential candidates, current studies and perspectives</i> Fúlvio Rieli Mendes (UFABC) • <i>Microglial neuroinflammation as a target in drug development: from standardized extract to synthetic analogs</i> Luzia Kalyne Almeida Moreira Leal (UFC) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	S10 – Placenta, Preeclampsia, and Neuroprotection: Emerging Therapies and Future Horizons Chair: Fernanda Regina Casagrande Giachini Vitorino (UFMT) • <i>AQP3: More than a water channel – A potential therapeutic target of aspirin in preeclampsia</i> Alicia Ermelinda Damiano (University of Buenos Aires, Argentina) • <i>Placental and amnion derivatives: From preclinical research to therapeutic innovation</i> Sebastian San Martín (University of Valparaíso, Chile) • <i>Oral Communication 1:</i> • <i>Oral Communication 2:</i>	RT3 – Beyond the Academy Chair: SBFTE Jovem (SBFTE) • <i>To be announced</i>
10h30-10h50	Coffee-break		
11h00-12h30	Symposium: José Ribeiro do Valle Award		

12h30-14h00	Lunch		
12h30-14h00	SBFTE Young Assembly		Technical Lectures
14h00-16h00	SBFTE Assembly		
16h10-17h00	Lectures		
	 L4 – Nicotinamide Phosphoribosyl-Transferase (NAMPT) at the Crossroads of Metabolism Inflammation and Cancer Armando Genazzani (President Italian Society of Pharmacology, University of Torino, Italy) Presented by	 L5 – Role of the Immune T Regulatory Cells in Mood Disorders and Alzheimer’s Disease Resilience as Polyphenols Therapeutic Target in Altered Gut-Brain Axis Cross-Talking Giulio Maria Pasinetti (Mount Sinai School of Medicine, USA) Presented by Fulvio Rieli Mendes (UFABC)	
17h00-17h20	Coffee-Break		
17h20-18h50	E-Poster Session 3		

October 24 th , 2025 (Friday)				
08h30	Venue Secretariat and SBFTE Secretariat Opening			
08h30-09h20	Courses			
Cr1 – Principles of Systematic Review (Princípios de Revisão Sistemática) (Presented in Portuguese)	Cr2 – Applications of Physiology-Based Pharmacokinetics in the Drug Development (Aplicações de	Cr3 – Neuropsychopharmacology of Reinforcement and Reward Behaviors (Neuropsicofarmacologia	Cr4 – Experimental Models in Cancer and their Interface with Environmental Pollutants (Modelos	

Chair: Adriane Ribeiro Rosa (UFRGS) Class 3: <i>Bias Risk, concepts and interpretation of meta-analysis (Risco de Viés, conceitos e interpretação de metanálise)</i> Patrícia Martins Bock (UFRGS)	Farmacocinética Embasada em Fisiologia na área de desenvolvimento de novos fármacos) (Presented in Portuguese) Chair: Bibiana Verlindo Araujo (UFRGS) Class 3: <i>Real-world impact of PBPK: applications across drug development (Impacto da PBPK no mundo real: aplicações no desenvolvimento de fármacos)</i> Valva Vozmediano (Clinical Trial and Consulting Services, USA)	de comportamentos de reforço e recompensa) (Presented in Portuguese) Chair: Helena Maria Tannhauser Barros (UFCSPA) Class 3: <i>Animal models of reinforcement and reward in drug dependence (Modelos animais de reforço e recompensa em dependência a drogas)</i> Helena Maria Tannhauser Barros (UFCSPA) / Cristina Aparecida Jark Stern (UFPR)	Experimentais em Câncer e sua Interface com Poluentes Ambientais) (Presented in Portuguese) Chair: Juliana Elaine Perobelli (Unifesp-Baixada Santista) Class 3: <i>In Vivo Cancer Models: Assessing the Impact of Environmental Pollutants on Tumor Development (Modelos in vivo de Câncer: Avaliação dos Impactos de Poluentes Ambientais no Desenvolvimento Tumoral)</i> Débora Barbosa Vendramini Costa (Michigan State University)/Juliana Elaine Perobelli (Unifesp-Baixada Santista)
09h30-11h00	E-Poster Session 4		
11h00-11h20	Coffee-break (brunch)		
11h30-12h20	Lectures		



L6 – Preclinical and Phase I Clinical Development of a Novel Multi-Target Drug Candidate for Chronic Neuropathic Pain

Zsuzsanna Helyes (University of Pécs, Hungary)

Presented by Soraia K. P. Costa (USP-SP, President SBFTE)



L7 – Transforming Molecular Pharmacology into Innovative Drug Discovery

Emer Suavinho Ferro (USP-SP)

Presented by Gilberto De Nucci (Unicamp, USP-SP)

12h30-13h20

L8 Closing Lecture



Molecular Therapeutics Targets for Muscular Dystrophy- the Role of Translational Pharmacology

Emilio Clementi (Iuphar Secretary General, University of Milano, Italy)

Presented by Soraia K. P. Costa (USP-SP, President SBFTE)

13h20-14h00

**Closing Ceremony
Awards Announcement**