B²AlzD² Workshop

B²AlzD² is a "laboratory without walls" created as a mean to structure cooperation between teams within FaBiT Department in Bologna and Brazilian Partners, who share a common scientific and training mission. In particular, B²AlzD² aims reinforce the existing collaborations and to empower high-level research and training in the extremely challenging field of Alzheimer's Drug Discovery.

For this reason, B²AlzD² intersects a recent international cooperation project between U Würzburg, U Barcelona and U Bologna ("Hybrid Molecules and Polypharmacology in Drug Discovery and Development" founded under German Research Foundation, DFG DE 1546/8-1) and the Cost Action CA15135 (Multi-target paradigm for innovative ligand identification in the drug discovery process, MuTaLig). Thus, B²AlzD²'s ambitious goal is to act as a privileged hub between Brazilian and EU activities in the Alzheimer's disease (AD) drug discovery field.

Scientific Committee

Prof. Maria Laura Bolognesi (Chair)
Prof. Manuela Bartolini
Prof. Barbara Monti

FIBRA
Fondazione Culturale Italo Brasiliana

Anton Paar

Venue

Department of Pharmacy and Biotechnology
Via Belmeloro, 6
40126
Bologna - Italy

Organizing Committee

Annachiara Gandini (Ph. +39 3488225711)
Michele Rossi
Luca Santangelo
Luca Zambardi

FIRST BRAZIL-BOLOGNA ALZHEIMER'S DRUG DISCOVERY (B²AlzD²) WORKSHOP

Universidade de Brasília
Universidade Federal do Rio de Janeiro
UFRJ
Universidade Federal de Minas Gerais

Polypharmacology and multi-targeting paradigms in AD drug discovery: *complexity against complexity*

Thursday, March 22nd *Social dinner*

Friday, March 23rd

8.45 - 9.10 *Registration*

9.10 - 9.30 *Welcome and Opening*: Prof. Alessandra Scagliarini (Vice-Rector for International Relations), Prof. Maurizio Recanatini (Head of Department of Pharmacy and Biotechnology), Prof. Maria Laura Bolognesi

9.30 - 10.00 Prof. Carlos Alberto Manssour Fraga, UFRJ (BR), "Searching for Neuroactive Drug Candidates: Contributions of LASSBio-UFRJ to the Discovery and Development of Anti-Alzheimer Prototypes"

10.00 - 10.30 Prof. Michael Decker, UNIWUE (DE), "Novel Approaches in Alzheimer Research: Selective Enzyme Inhibitors and GPCR Ligands, Their Rational Combination and Application as Tool Compounds"

10.30 - 11.00 *Coffee break*

11.00 - 11.30 Prof. Diego Muñoz-Torrero, UB (ES) "4-Aminoquinoline-based acetylcholinesterase inhibitors as a template for the design of multitarget anti-Alzheimer agents"

11.30 - 11.45 Dr. Peterson De Andrade, Ribeirão Preto-USP (BR), "Highly potent and selective1,2,3-triazolyl amino acid inhibitors toward butyrylcholinesterase"

11.45 - 12.00 Dr. Bruna Silva Terra, UFMG (BR), "Synthesis and antiradical properties of two new donepezil-lipoic acid hybrids"

12.00 - 12.15 Dr. Simona Sestito, UniPi (IT), "L-Cysteine mediated activation of a memantine pro-drug: a new agent for Alzheimer's Disease"

12.15 - 12.45 Prof. Luiz Antonio Soares Romeiro, UnB (BR), "*O luxo do lixo*: medicinal chemistry strategies for rationally discovering multi-target drugs from waste materials"

12.45 - 14.00 *Light Lunch*

14.00 - 14.30 Prof. Stefano Alcaro, UMG (IT), "Facilitating the discovery of multi-target-directed ligands (MTDL) through the cooperation of pan-EU countries"

14.40 - 15.00 Prof. Andrea Cavalli, UNIBO (IT), "Computational methods in multi-target drug discovery"

15.00 - 15.15 Gülşah Bayraktar, Ege University (TR), "Design and synthesis of 1,4-dihydropyridine derivatives as potential cholinesterase inhibitors with H_2S releasing group"

15.15 - 15.30 Francesca Seghetti, UNIBO (IT), "Targeting neuroinflammation-associated pathways with naturally inspired molecules"

15.30 - 15.45 Dr. Edoardo Fabini, UNIBO (IT), "Improving best-in-class selection in drug discovery for Alzheimer's disease through arrays of sensing surfaces"

15.45 - 16.00 *Break*

16.00 - 16.20 Prof. Andrea Tarozzi, UNIBO (IT), "Multifunctional pharmacological targets and neuroprotection in Alzheimer's disease"

16.20 - 16.40 Prof. Giampaolo Zuccheri, UNIBO (IT), "Addressing the complexity of amyloid fibrils through Atomic Force Microscopy: a tool for drug discovery"

16.40 - 16.55 Vito Antonio Baldassarro, UNIBO (IT), "The pre-plaque stage of Alzheimer's disease: focus on the neurovascular unit and hypoxia-related molecular mechanism"

16.55 - 17.15 Prof. Andrea Milelli, UNIBO (IT), "HDACIs in Multi-target Drug Discovery: New Players for New Therapeutic Avenue"

17.15 - 17.30 *Closing remarks*: Prof. Maria Laura Bolognesi

20.00 - 22.00 *Dinner*