

LAUNCH OF THE WINNER PROJECTS OF “ARISLA CALL 2009”

AriSLA is pleased to announce the investment of **more than 1.5 millions of euro** into the projects winners of the “Call for Ideas on ALS Research 2009” published last June 2009.

Funded projects comprise the first **5 proposals** classified upon the accurate selection based on the peer review as a guarantee of the objectivity and impartiality.

The evaluation of the submitted project proposals was assigned to AriSLA International Scientific Committee composed of the most important world experts (<http://www.arisla.org/agenzia.php/comitato-scientifico-internazionale>).

More than **300 researchers** from all over Italy have participated to the Call by submitting overall **105 project proposals**, 53 of which regarded basic research, 15 clinical research, 21 translational research and 16 technological research.

Financial contribution allocated to single project varies from 53.000 to 510.000 euro, that will be disbursed over the period comprised within 2 to 3 years of project duration.

Brief summary of Call 2009 funded projects:

PRALS, P2X7 Receptor in Amyotrophic Lateral Sclerosis

The project aims to study the role of P2X7 receptor in neuroinflammation mediated by microglial activation. This phenomenon is one of the principal early events occurring during both sporadic and familial ALS pathogenesis and, although its role is not yet elucidated, is likely to accelerate the disease progression. Preliminary data in particular suggests that P2X7 receptor is directly implicated in neurotoxicity in ALS models.

Principal Investigator: Nadia D’Ambrosi - Istituto di Neurobiologia e Medicina Molecolare, Consiglio Nazionale delle Ricerche (CNR)

Partner 1: Mauro Cozzolino - Fondazione Santa Lucia IRCCS, Roma

Partner 2: Patrizia Popoli - Istituto Superiore di Sanità, Roma

EXOMEFALS, Identification of candidate disease genes in FALS using a targeted exon capture and resequencing approach

The project aims at establishing the network of clinical and basic researchers in common effort to identify novel genes implicated in familial ALS. ALS causal genes are currently known for only one third of all hereditary cases. Highly innovative approach named “exome screening” will allow to focus only to coding genomic fragments that, despite representing 1% of human DNA, host over 85% of all mutations known to cause diverse genetic disorders.

Principal Investigator: Vincenzo Silani - Università degli Studi di Milano, Dipartimento di Neurologia, IRCCS Istituto Auxologico Italiano, Milano

Partner 1: Cinzia Gellera - Fondazione IRCCS - Istituto Neurologico Carlo Besta, Milano

Partner 2: John Landers - Università del Massachusetts, Worcester, USA

BRINDISYS, Brain-computer interface devices to support individual autonomy in locked-in individuals

ALS is a progressive disorder that causes severe impairment of motor functions in its advanced stages, bringing thus the patient to almost total dependency on “care-giver”, with the consequent devastating effects on patients quality of life and excessively high social care costs. This study falls

into assistive technology field, with an aim to develop a brain-computer interface device that would provide a major autonomy to patients affected by severe motor impairment.

Principal Investigator: Febo Cincotti - Fondazione Santa Lucia IRCCS, Roma

Partner 1: Massimo Mecella - Università degli Studi di Roma "La Sapienza", Dipartimento di Informatica e Sistemistica, Roma

Partner 2: Francesco Amato - Università degli Studi Magna Graecia di Catanzaro, Catanzaro

Partner 3: Maurizio Inghilleri - Università degli Studi di Roma "La Sapienza", Dipartimento Scienze Neurologiche, Roma

Partner 4: Alessia Pizzimenti - Associazione Crossing Dialogues, Roma

RBPALS

Characterization of disease mechanisms mediated by TDP-43 and FUS RNA-binding proteins in Amyotrophic Lateral Sclerosis

The aim of the project consists in fine characterisation of neurodegeneration mechanisms mediated by two proteins, TDP-43 e FUS. In particular, TDP-43 was recently identified as a key molecule in sporadic ALS, and was found to be mutated in some familial ALS cases. Both proteins are involved in mRNA processing and axonal transport, assuring the protein synthesis when and where necessary: this process is of particular importance in cells that, like motoneurons, have elevated metabolism and need to respond rapidly to stimuli.

Principal Investigator: Antonia Ratti – Università degli Studi di Milano, Dipartimento di Neuroscienze, IRCCS Istituto Auxologico Italiano, Milano

Partner 1: Francisco Baralle - ICGEB, Trieste

Partner 2: Antonio Pizzuti - Università degli Studi di Roma "La Sapienza", Roma

CanALS, A Randomized, Double-Blind, Placebo-Controlled, Multicentre Study to Assess the Efficacy on Spasticity Symptoms of a Cannabis Sativa Extract in Motor Neurone Disease Patients

The project aims to evaluate the use of cannabinoids in order to counteract spasticity symptoms in motor neuron disease affected patients. In ALS and similar disorders, such as primary lateral sclerosis, spasticity represents one of the symptoms that affects the most motor capacities and, overall, patients quality of life. Few currently available drugs are endowed with limited efficacy while causing muscular tone loss and other important side effects.

Principal Investigator: Mauro Comola - Fondazione San Raffaele del Monte Tabor, Dipartimento di Neurologia, Milano

Partner 1: Gabriele Mora - Fondazione Salvatore Maugeri IRCCS, Istituto Scientifico di Milano

Partner 2: Massimo Corbo - NEuroMuscular Omniculture (NEMO), Fondazione Serena, Milano