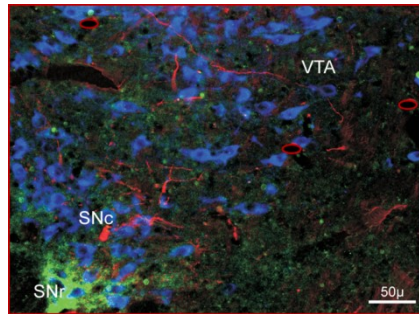




IN CNR Annual Retreat 2017
*Hotel Flamingo Resort,
 S. Margherita di Pula (CA)
 September 28–30, 2017*



1

Program

Thursday, September 28	
- >13:00	Registration and poster set up
14:00-14:30	Opening Remarks
14:30-16:30	Session 1 (6 presentations) BRAIN CELL PHYSIOLOGY AND PATHOLOGY
16:30-16:50	Coffee break
16:50-18:30	Session 2 (5 presentations) NEW IN CNR RESEARCHERS
18:30-19:30	Poster Session 1
20:00-21:30	Dinner
21:30-22:30	Plenary Lecture 1 (Anna Lisa Bonfiglio, CRS4 and University of Cagliari) Innovative technologies for neuroelectronic interfaces
Friday, September 29	
8:30-10:30	Training Course (Imaging_cell) (Gian Michele Ratto, Giorgio Carmignoto, Tommaso Cerullo)
10:30-11:00	Coffee break (sponsored)
11:00-13:00	Session 3 (6 presentations) NEURODEGENERATIVE DISEASES AND VISUAL SYSTEM
13:00-14:30	Lunch
14:30-15:30	Poster Session 2
15:30-16:50	Session 4 (4 presentations) ADDICTION AND BEHAVIOUR
16:50-17:30	Coffee break
17:30-18.30	Plenary Lecture 2 (Francesco Cucca, CNR IRGB) From genes to mechanisms
18:30-19:30	IN meeting
20:00-21:30	Dinner
Saturday, September 30	
8:30-10:10	Training Course (Imaging_network) (Nikos Logothetis, Federica Agosta)
10:10-10:30	Coffee Break
10:30-11:30	Training Course (Imaging_brainstorming)

11:30-12:30	Session 5 (3 presentations) MISCELLANEA
12:30-14:00	Lunch
14:00-15:00	Poster Session 3
15:00-15:15	Closing Remarks

Training course speakers and topics

1. **Gian Michele Ratto (Italy)**, *NEST, CNR Nanoscience Institute, Pisa*. A window with a view: order and chaos in the brain visualized by two photon microscopy.
2. **Giorgio Carmignoto (Italy)**, *CNR Neuroscience Institute, Padova*. Optogenetic dissection of interneuron-type-specific signaling to astrocytes.
3. **Tommaso Cerullo (Italy)**, *Leica Sales Team Leader Life Science Research*. Diving in for deeper insights (20 min sponsor's talk).
4. **Nikos Logothetis (Germany)**, *Max Planck Institute for Biological Cybernetics, Tübingen*. Concurrent physiological multisite-recordings and brain imaging: study of dynamic connectivity related to system and synaptic memory consolidation.
5. **Federica Agosta (Italy)**, *San Raffaele Hospital, Milano*. Neuroimaging insights into network-based neurodegeneration.
6. **Imaging_brainstorming** (schedule in progress)

2

Oral communication's schedule

Session 1 BRAIN CELL PHYSIOLOGY AND PATHOLOGY

1. **Laura Restani (IN CNR)** Beyond motoneurons: transynaptic action of BoNT/A at central cholinergic boutons. Topic: [Physiopathology of the synapse](#)
2. **Elisabetta Menna (IN CNR)** The immune molecule PTX3 controls the trafficking of AMPA receptors at the synapse. Topic: [Physiopathology of the synapse](#)
3. **Irene Corradini (IN CNR and IRCCS Humanitas)** Maternal immune activation delays excitatory-to-inhibitory GABA switch in the offspring. Topic: [Physiopathology of the synapse](#)
4. **Marta Lombardi (IRCCS Humanitas)** Microglia-derived extracellular vesicles regulate the recruitment, proliferation and differentiation of oligodendrocyte precursor cells. Topic: [Glial cell physiology](#)
5. **Patrizia Rosa (IN CNR)** Unveiling the mechanisms underlying oligodendrocyte differentiation: implications in Down syndrome. Topic: [Glial cell physiology](#)
6. **Beatrice Vignoli (Cibio, University of Trento)** Long-term potentiation (LTP) requires synaptic glia for proBDNF processing and recycling of the isolated pro-peptide (BDNFpro). Topic: [Glial cell physiology](#)

Session 2 NEW IN CNR RESEARCHERS

1. **Silvia Bassani (IN CNR)** The role of the female epilepsy protein PCDH19 between synapse and nucleus. Topic: [Other topics](#)
2. **Kostantinos Lefkimmiatis (IN CNR)** Using FRET-based sensors to study the cAMP/PKA axis at the outer mitochondrial membrane. Topic: [Other topics](#)
3. **Elisa Greotti (IN CNR)** mCerulean3-based Cameleon sensor to explore mitochondrial Ca²⁺ dynamics *in vivo*. Topic: [Other topics](#)
4. **Pietro Avanzini (IN CNR)** When timing matters: the mirror mechanism observed through the lens of intracerebral recordings. Topic: [The mirror neuron system](#)
5. **Anna Letizia Allegra Mascaro (IN CNR)** *In vivo* optical imaging of rehabilitation-induced cortical plasticity after stroke. Topic: [Plasticity; Environmental, Training, Dietary \(ETD\) interventions](#)

Session 3 NEURODEGENERATIVE DISEASES AND VISUAL SYSTEM

1. **Elisabetta Tronci (University of Cagliari)** Pre- and post-synaptic alterations induced by BDNF over-expression in the 6-OHDA-lesioned rat model of Parkinson's disease.
Topic: [Neurodegenerative diseases and bioenergetics](#)
2. **Giorgia Pallafacchina (IN CNR and Università di Padova)**. Loss-of-function mutations in the *SIGMAR1* gene cause distal hereditary motor neuropathy by impairing ER-mitochondria tethering and Ca²⁺ signaling. Topic: [Neurodegenerative diseases and bioenergetics](#)
3. **Giulia Costa (University of Cagliari)** Long lasting neurotoxic effects of MDMA administration during adolescence. Topic: [Neurodegenerative diseases and bioenergetics](#)
4. **Grazia Rutigliano (IN CNR e Scuola S. Anna)** TAAR1 mediates the protective effect of 3-iodothyronamine against β -Amyloid-dependent neuronal impairment.
Topic: [Neurodegenerative diseases and bioenergetics](#)
5. **Elena Tantillo (Scuola Normale and Pisa Science Foundation Onlus)** Bidirectional neuron-glioma interactions: effects of glioma cells on synaptic activity and its impact on tumor growth. Topic: [Physiology, plasticity and pathological conditions of the visual system](#)
6. **Guido Marco Cicchini (IN CNR)** Plasticity in retinitis pigmentosa and retinal prostheses.
Topic: [Physiology, plasticity and pathological conditions of the visual system](#)

3

Session 4 ADDICTION AND BEHAVIOUR

1. **Liana Fattore (IN CNR)** A multidisciplinary approach to characterize the pharmacological and toxicological effects of the ketamine analog methoxetamine (MXE) in rats. Topic: [Neurobiology of addiction and behaviour](#)
2. **Fabrizio Sanna (University of Cagliari)** Involvement of dopamine in the differences in sexual behaviour between Roman High and Low avoidance rats: behavioural, pharmacological and neurochemical findings. Topic: [Neurobiology of addiction and behaviour](#)
3. **Nicholas Pintori (University of Cagliari)** Influence of JWH-018 repeated administration on the responsiveness of mesolimbic and mesocortical dopamine transmission to rewarding stimuli. Topic: [Neurobiology of addiction and behaviour](#)
4. **Nicola Simola (University of Cagliari)** Rat 50-KHz ultrasonic vocalizations and glucocorticoid signaling: effects of corticosterone, mifepristone and metyrapone on calling initiation and on calling stimulated by social contacts or amphetamine. Topic: [Neurobiology of addiction and behaviour](#)

Session 5 MISCELLANEA

1. **Simona Francia (IN CNR and VIMM)**. Role of the odorant receptor at the axon terminal.
Topic: [Other topics](#)
2. **Eleonora Grespan (IN CNR)** Mechanisms of the impaired incretin action in type 2 diabetes: a modelling study. Topic: [Mathematical models](#)
3. **Clara De Palma (Ospedale Sacco and IN CNR)** Autophagy controls neonatal myogenesis by regulating the GH/IGF1 system. Topic: [Mitochondrial and neuromuscular physiology](#)

Organized under the auspices of



Università di Cagliari



REGIONE AUTÒNOMA DE SARDIGNA
REGIONE AUTONOMA DELLA SARDEGNA



Sponsors



Consiglio Nazionale delle Ricerche
Dipartimento di Scienze Biomediche

