

18TH SUMMER SCHOOL OF NEUROSCIENCE

Coordinator: **Prof. Filippo Drago**

Scientific Director: **Prof. Maurizio Popoli**

RESILIENCE AND SUSCEPTIBILITY TO STRESS: A KEY TO UNDERSTANDING PSYCHIATRIC ILLNESS

In memory of **Bruce McEwen**

On-line course

Catania, Italy - July 12-16, 2021

PROGRAM

Monday July 12

Stress and connectivity across the brain: large-scale networks

- 08.30-09.00 **Opening**
Filippo Drago, Maurizio Popoli
- Morning lectures*
- 09.00-10.30 **Nuno Sousa** (Braga)
Stress and brain connectivity - what's new?
- 10.30-11.00 **Interactive discussion**
- 11.00-12.30 **Erno Hermans** (Nijmegen)
Stress-related changes in large-scale brain network balance
- 12.30-13.30 **Interactive discussion**
- Afternoon lecture*
- 15.00-16.30 **Massimo Di Giannantonio** (Chieti)
Stress and psychopathology: psychoactive illegal substances as therapeutic factors
- 16.30-17.00 **Interactive discussion**

Tuesday July 13

Gene-environment interaction, early-life stress and epigenetics

- Morning lectures*
- 09.00-10.30 **Francesca Cirulli** (Rome)
Role of stress and nutrition in fetal programming of brain development and mental health
- 10.30-11.00 **Interactive discussion**
- 11.00-12.30 **Elisabeth Binder** (Munich)
Molecular mechanisms of gene x adversity interactions: implications for risk or resilience to psychiatric disorders
- 12.30-13.30 **Interactive discussion**
- Afternoon lecture*
- 15.00-16.30 **Isabelle Mansuy** (Zurich)
How stress experiences leave traces in descendants: epigenetic mechanisms in the germline
- 16.30-17.00 **Interactive discussion**

Wednesday July 14

Acute stress and trauma

- Morning lectures*
- 09.00-10.30 **Johannes Bohacek** (Zurich)
The acute stress response in the multi-omic era

- 10.30-11.00 **Interactive discussion**
- 11.00-12.30 **Talma Hendler** (Tel Aviv)
Neurobehavioral trajectories of trauma in humans
- 12.30-13.30 **Interactive discussion**
- Afternoon lecture*
- 15.00-16.30 **Simona Cabib** (Rome)
Psychobiology of functional and dysfunctional coping with traumatic experiences
- 16.30-17.00 **Interactive discussion**

Thursday July 15

Synaptic stress, hormones and neurometabolism

- Morning lectures*
- 09.00-10.30 **Maurizio Popoli** (Milan)
Hard time for stressed synapses: a matter of resilience or vulnerability
- 10.30-11.00 **Interactive discussion**
- 11.00-12.30 **Carmen Sandi** (Lausanne)
Stress and the individual: Behavioral, endocrine and neurometabolic factors that define differential stress adaptations
- 12.30-13.30 **Interactive discussion**
- Afternoon lecture*
- 15.00-16.30 **Marian Joels** (Utrecht)
The ups and downs of animal models in stress research
- 16.30-17.00 **Interactive discussion**

Friday July 16

Stress, comorbidity and optogenetics

- Morning lectures*
- 09.00-10.30 **Andrea Sgoifo** (Parma)
Stress: the parasympathetic chance for resilience
- 10.30-11.00 **Interactive discussion**
- 11.00-12.30 **Anna Beyeler** (Bordeaux)
Scope and limitations of optogenetics in circuit neurosciences
- 12.30-13.00 **Interactive discussion**
- 13.00-13.30 **Closing remarks**
Filippo Drago



For information:

<https://www.studioconsulenzafarmacologica.com/resilience-and-susceptibility-to-stress-a-key-to-understanding-psychiatric-illness/>

For registration:

<https://form.jotform.com/CoProm/registration-form-ciissn-2021>

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