# **EPA NEUROIMAGING SECTION REPORT 2022**

# SECTION COMMITTEE MEMBERS:

Chairperson: Prof. Marcella BELLANI Co-chairperson: Prof. Paolo BRAMBILLA Secretary: Dr. Maria NOBILE

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ZOVETTI NICCOLO'; ELISA FONTANA;

#### LAST SECTION COMMITTEE ELECTIONS HELD:

Date: July 2020 Venue: EPA congress

# ACTIVITIES OF THE SECTION IN 2022:

#### **Meetings/events**

EPA Congress 2022\_Symposium 23: Long- and Short-Term Post COVID-19 Neuropsychiatric Disorders: From Clinics to Neuroimaging

#### **Description:**

Organised by the EPA Sections on Consultation Liaison Psychiatry; Psychosomatics and Neuroimaging. The COVID pandemic has dramatically increased the need for help in mental health disorders, and has shown a specific effect of SARS-COV 2 in the brain, with effects that may persist longer than expected. In this joint symposium we will describe new-onset and pre-existing psychiatric disorders/syndromes after covid-19 infection. First, an overview concerning Delirium and covid 19 infection will be presented, including laboratorial and neuroimaging findings. Second the impact of Social isolation due to pandemics and its brain correlations will be explored. Third, Pre-existing and new onset cognitive impairment in patients with covid 19 will be explored. Finally, the evolution of pre-existing and new onset depression and anxiety disorders after covid 19 infection will be discussed in terms of their clinical and possible neuroimaging findings.

"Delirium and COVID-19": From Symptomatology to Laboratorial and Neuroimaging Findings" Social Isolation and its Brain Correlations: From Symptomatology to Neuroimaging Findings "Pre-Existing and New-Onset Cognitive Impairment in Patients with COVID-19"

"Evolution of Pre-Existing and New Onset Depression and Anxiety Disorders after COVID 19 Infection: from Symptomatology to Neuroimaging"

**Partners:** Marcella Bellani (Italy Brambilla P (Italy) Diogo Telles Correia(Portugal) Krzysztof Krysta (Poland)

Location: EPA congress virtual (Budapest) Start date: 04/06/2022 End date: 04/06/2022

# EPA congress 2022\_ On Demand - Symposium 37: Emotion Development and its Relevance in Psychiatric Disorders

#### **Description:**

Organised by the EPA Sections on Neuroimaging and Child and Adolescent Psychiatry. Neurodevelopment represents a period of increased plasticity and vulnerability, during which a complex confluence of genetic and environmental factors influences brain growth trajectories, cognition, emotion regulation and mental health outcomes. In this symposium, we will focus on the link between genes, disease-related behaviour and the brain, using a multidisciplinary perspective bridging epidemiology, genetic, neuroimaging and psychopathology. Specifically, we will discuss how genetic and environmental risks for developmental disorders translate to brain function, structure and connectivity and how this in turn – ultimately- translates to emotion regulation and behavioural development. In addition, we will explore examples of the long-term psychological and behavioural sequelae in individuals with typical and atypical development, particularly focusing on clinical phenotypes associated with emotional dysregulation. Ultimately, we will discuss the key role of genetic and neurobiological markers to improve the early detection and treatment of developmental disorders. The Developing Brain and Emotion Regulation - Implications for Psychopathology. The Impact of Environmental Factors on Brain and Emotion Maturation: from Perinatal Period to Adulthood Emotional Dysregulation: Epidemiology and Genetic Features from Childhood towards Adulthood

Partners: Paolo Brambilla (Italy) Maddalena Mauri (Italy) Chiara Nosarti (United Kingdom)

Location: EPA congress virtual (Budapest) Start date: 04/06/2022 End date: 04/06/2022

# EPA congress 2022\_ On Demand - Symposium 22: Modelling Trauma and Resilience Session Type

# **Description:**

Organised by the EPA Sections on Neuroimaging and Psychotherapy. Resilience is a multifactorial construct that shapes the adaptive individual's response to trauma, preventing the development of stress-related mental illness in the face of adversity. In this symposium, we will describe molecular, neurobiological and psychological mechanisms associated with trauma and resilience and integrate them into a translational perspective. Evidence from both animal and human studies will be discussed for this purpose. Unbalanced approach-avoidance tendencies, a highly prevalent endophenotype of psychopathology, will be discussed as a live example suitable to bring clinic and basic research in molecular psychiatry closer. Indeed, neurobiological substrates of resilience-related behaviours and their relevance in clinics can only be investigated through a translational research based on comparable paradigms between humans and animal models. Lastly, we will focus on the role of resilience as a translational endpoint in the treatment of stress-related disorders. Particularly, we will discuss the putative role of the neurobiological mechanisms underlying resilience in the development of novel interventions for stress-induced disorders that specifically target neural circuitry and brain areas associated with resilience outcomes. Adding new Molecular Insights to a given Endophenotype: the Relevance of Epigenetics in Environmental Stress Response; Neural Network Responses to Traumatic Stress Predicting its Long-term Consequences

Partners: Francesco Rusconi (Italy) Marloes J. Henckens (Netherlands)

Location: EPA congress virtual (Budapest) Start date: 04/06/2022 End date: 04/06/2022

# FUNDING IN 2022

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