

# CONFERENCE ON STILL FACE AND MIRROR NEURONS

The Neuroscience of Psychotherapy



MARCH 27th - 28th - 29th 2020







# CONFERENCE ON STILL FACE AND MIRROR NEURONS THE NEUROSCIENCE OF PSYCHOTHERAPY

The development of human beings' intersubjective nature starts immediately after birth and probably represents the foundational principle of our meaning-making ability. Since the very beginning of our life, relationality plays a key role in our existence: infants' ability to imitate facial expressions not only guarantees their survival, but also allows them to interact with their mothers in an attuned way, thus creating increasingly complex relational exchanges, which are fundamental to their psychobiological development. The discovery of mirror neurons has provided a neurophysiological basis for the Still Face paradigm and made a substantial contribution to the scientific research in this field. How can Psychotherapy build on this valuable knowledge in order to promote individual wellbeing?

The Congress "Still Face and Mirror Neurons – the Neuroscience of Psychotherapy" will give some of the most eminent experts in this field the opportunity to answer this question. A number of internationally well-known Speakers will illustrate the most recent studies on the role of emotional/relational attunement and the individual's relationship with the Self, by exploring both the research implications and the therapeutic applications in this field. They will emphasise how intersubjectivity is not strictly related to the relationship with the Other, but also involves the relationship with the Self, which is one of the main goals of the psychotherapeutic change process.

In addition, different therapeutic approaches and a series of hypotheses on mind functioning – that Neuroscience can support and validate – will also be discussed. Besides this, Speakers will focus on the role of self-recognition in the mirror, as well as on the shame and self-loathing that traumatised individuals typically experience, in order to deeply explore the relational dimension of the Self within the most advanced therapeutic frameworks.



### **PROGRAMME**



### **PETER FONAGY** United Kingdom

Peter Fonagy is Head of the Division of Psychology and Language Sciences at UCL; Chief Executive of the Anna Freud National Centre for Children and Families, London; Consultant to the Child and Family Programme at the Menninger Department of Psychiatry and Behavioural Sciences at Baylor College of Medicine; and holds visiting professorships at Yale and Harvard Medical Schools. He has occupied a number of key national leadership positions including Chair of the Outcomes Measurement Reference Group at the Department of Health, Chair of two NICE

Guideline Development Groups, Chair of the Strategy Group for National Occupational Standards for Psychological Therapies and co-chaired the Department of Health's Expert Reference Group on Vulnerable Children. His clinical interests centre on issues of early attachment relationships, social cognition, borderline personality disorder and violence. He has published over 500 scientific papers, 260 chapters and has authored or co-authored 19 books. He is a Fellow of the British Academy, the Academy of Medical Sciences, the Academy of Social Sciences and the American Association for Psychological Science, and was elected to Honorary Fellowship by the American College of Psychiatrists. He has received Lifetime Achievement Awards from several national and international professional associations including the British Psychological Society, the International Society for the Study of Personality Disorder, the British and Irish Group for the Study of Personality Disorder, the World Association for Infant Mental Health and was in 2015 the first UK recipient of the Wiley Prize of the British Academy for Outstanding Achievements in Psychology by an international scholar.

### EPISTEMIC TRUST AND FREE ENERGY: AN INTEGRATIVE MODEL FOR PSYCHOLOGICAL THERAPY.

Perhaps the most influential neuroscientific model of the last decade derives from Friston's recent free energy model. This computational neuroscience model has enabled psychotherapists and psychopathologists to extend their understanding of the brainmind and integrate it with phenomenological and dynamic models of mental disorder and its treatment. This presentation represents a contribution to this field linking the therapeutic model based on epistemic trust, to Friston's understanding of neurofunctioning based on the concept of free energy. The presentation will review Friston's model as well as the model of epistemic trust, and advance a set of integrative ideas to inspire a new generation of research in this area.



### **VITTORIO GALLESE Italy**

Vittorio Gallese is full Professor of Physiology at the Dept. of Neuroscience of the University of Parma, Adjunct Senior Research Scholar at the Dept. of Art History and Archeology, Columbia University, New York, USA and Professor in Experimental Aesthetics at the Institute of Philosophy of the University of London, U.K. He is the coordinator of the PhD Program in Neuroscience and Director of the Doctoral School of Medicine of the University of Parma. Neuroscientist, among his main scientific contributions is the discovery of mirror neurons together with his colleagues of Parma, and

the proposal of a new model of intersubjectivity: embodied simulation theory. He did research and taught at the Universities of Lausanne, Tokyo, Berkeley and Berlin. He is the author of more than 230 scientific articles published in international journals and books, of two books as author and three books as editor. He received the George Miller Fellowship from the University of California at Berkeley in 2001, the Grawemeyer Award for Psychology in 2007, the Doctor Honoris Causa from the Catholic University of Leuven, Belgium in 2010, the Arnold Pfeffer Prize for Neuropsychoanalysis in New York in 2010, the Musatti Prize from the Italian Psychoanalytic Society in Milano in 2014, the Kosmos Fellowship from the Humboldt Universität of Berlin and the Einstein Fellowship at the Berlin School of Mind & Brain of Humboldt University for 2016-2018.

#### INTENTIONAL ATTUNEMENT: FROM MIRROR NEURONS TO INTERSUBJECTIVITY.

The discovery of mirror neurons unveiled the neural mechanisms mediating between the multi-level experiential knowledge we hold of our body, and the implicit certainties we simultaneously hold about others. Such personal body-related experiential knowledge enables our intentional attunement with others. This we-centric space allows us to understand the actions performed by others, and to decode the emotions and sensations they experience. A direct form of "experiential understanding" is achieved by modeling the behaviors of others as intentional experiences on the basis of the equivalence between what the others do and feel and what we do and feel. This modeling mechanism is embodied simulation. By means of embodied simulation we do not just "see" an action, an emotion, or a sensation. Side by side with the sensory description of the observed social stimuli, internal representations of the body states associated with actions, emotions, and sensations are evoked in the observer, as if he/she would be doing a similar action or experiencing a similar emotion or sensation. Mirror neurons are likely the neural correlate of this mechanism.

The sharp distinction, classically drawn between the first- and third-person experience of actions, emotions and sensations, appears to be much more blurred at the level of the neural mechanisms mapping it. The gap between the two perspectives is bridged by the way the intentional relation is functionally mapped at the neural level by mirror mechanisms. By means of a shared neural state realized in two different bodies that nevertheless obey to the same functional rules, the "objectual other" becomes "another self".



#### **ED TRONICK** United States

Ed Tronick, a developmental neuroscientist and clinical psychologist, is a world class researcher and teacher recognized internationally for his work on the neurobehavioral and social emotional development of infants and young children, parenting in the U.S. and other cultures, and infantparent mental health. Dr. Tronick is a University Distinguished Professor of Psychology at the University of Massachusetts, Boston; Director of the UMB Child Development Unit; Research Associate in Newborn Medicine at the Brigham and Women's Hospital; and a Lecturer in Pediatrics at the Har-

vard Medical School. He is also on the faculty of the Maternal and Child Health at the Harvard School of Public Health and Human Development at the Harvard School of Education, and a a member of the Boston Psychoanalytic Society and Institute.

Dr. Tronick developed the Still-face paradigm, which has become a standard experimental prototype for studying social emotional development in the fields of pediatrics, psychiatry, clinical and child psychology, and nursing. In his studies using the still-face he revolutionized our understanding of the emotional capacities and coping of infants and the effects of factors such as maternal anxiety and depression on infant social emotional development. The goals of Dr. Tronick's research are to understand the nature of the process of normal and

abnormal developmental processes which are embedded in the moment by moment emotional and social exchanges of infants and young children and their caregivers.

### THE STILL-FACE AND THE DYNAMIC PROCESS OF HUMAN MEANING MAKING

The fundamental significance of making meaning for humans about themselves in relation to the world of people, the inanimate world and to their own self is instantiated by the Still-Face paradigm. The findings on the Still-Face show that making of meaning is a dynamic process made at multiple brain and systems – psychobiological or neurosomatic - systems. While meanings can be made and are made endogenously, they are more typically co-created with another in an active exchange of information. That exchange is messy. It is characterized by mismatches and matches of meanings and their repair. Successful meaning making results in an expansion of consciousness and generates attachment and relationships, resilience and trust. Failure to make meaning shrinks and constricts consciousness, and generates distrust and fragility. Research on humans from my laboratory on genetics, physiology, emotions, epigenetics and caretaker-child and adult interactions will be presented to illustrate this conceptualization. The talk will use video tapes of the Still-Face in infants, children, and adults to elaborate my thinking.



#### **DAVID S. ELLIOTT** United States

David S. Elliott, Ph.D. is a clinical psychologist who received his doctorate from Harvard University in 1989. He is co-author of the bookAttachment Disturbances in Adults: Treatment for Comprehensive Repair (Norton, 2016), which was given the Pierre Janet Writing Award from the International Society for the Study of Trauma and Dissociation. He is Faculty and Chair of the Advisory Board at the International School for Psychotherapy, Counseling, and Group Leadership (St. Petersburg, Russia), was President of the Rhode Island Psychological Association (USA), and has

held leadership positions in several mental health advocacy organizations. His psychotherapy practice is based in the USA, and he consults and teaches internationally on psychotherapy, attachment, personality and self development.

# HEALING ATTACHMENT INSECURITY WITH THE HELP OF IMAGINED IDEAL PARENT FIGURES IN PSYCHOTHERAPY

Effective treatments for attachment insecurity include recognition of the vital role of the felt sense of being empathically attuned to by important others. As psychotherapists, we try our best to be attuned and responsive, and to express and mirror qualities of being that help our patients to feel protected and cared for, seen and known, valued and valuable, and appreciated and loved. Though we can be very helpful in these ways, there is a practical limitation to this mode of treatment: Our insecure patients carry internal working models of themselves as children being in some form of problematic relationship with their parents. A new and positive adult relationship with a psychotherapist is certainly beneficial, but it is unlikely to replace or most efficiently change the original problematic internal working model. As a complement to the 'therapist as good attachment figure' approach, "ideal parent figures" can be part of the therapeutic process toward attachment security. When an adult patient, in the context of a safe and attuned therapeutic relationship, imagines being and feeling as a young child and interacting with imagined parents who embody all the qualities of being and behavior that feeljust right to the patient-as-child, the original problematic internal working model becomes replaced by a new, positive, secure attachment relationship model. This approach is consistent with and complementary to the principles and implications of polyvagal theory, memory reconsolidation, and relational and body-oriented psychotherapies.



### **BENEDETTO FARINA Italy**

Benedetto Farina, Ph.D., MD, is an Italian Psychiatrist, Psychotherapist and Neuroscientist. He is Full Professor of Clinical Psychology at the European University in Rome. He is member of the Scientific Committee of the International Society for the Study of Trauma and Dissociation. Furthermore, he is member of the Editorial Boards of both the Journal of Trauma and Dissociation and the International Journal of Multidisciplinary Trauma Studies. In 2015, the Journal of Trauma and Dissociation awarded him the Richard P. Kluft Award for the best article.

# BUTTER IS SLIPPERY. THAT'S WHY PSYCHOTHERAPISTS SHOULD CONSIDER NEUROSCIENTIFIC PLAUSIBILITY OF THEIR THEORIES.

in collaboration with Dr. Claudio Imperatori

Psychotherapy is a well-established and effective treatment. It is constituted by a wide range of interventions and techniques and most of them are empirically validated, as well as organized in theoretical models. These theories and the resulting practices are built, consistently, to hinder the psychopathogenic and maintenance processes of different mental disorders and psychological problems. Generally speaking, pathogenic theories are based on hypotheses related to mind functioning and development. On the one hand, even if psychopathogenic hypotheses, as well as psychotherapy practices and theories, are increasingly tested by empirical research, they need to be neuroscientifically plausible or they may lead to wrong believes and practices. On the other hand, neuroscientific discoveries have often generated new hypotheses for psychological and psychopathogenic theories that have consistently allowed psychotherapists to develop innovative treatments. This presentation will provide examples of how neuroscience has either contradicted or validated different psychopathogenic and psychotherapeutic theories, and inspired new ones.



### **MARINA CIRIO** Italy

Marina Cirio is a Psychologist and a Psychotherapist. She has enriched her professional training with recent contributions in the field of Psychotherapy and Neuroscience. She has developed Mindful Interbeing Mirror Therapy (MIMT) together with Alessandro Carmelita, thus contributing to expand both the clinical implications and the research work on the therapeutic interventions that can be used with different types of patients. After using this innovative approach for years, Dr. Cirio is going to conduct - together with Dr. Carmelita - a new training course in MIMT that will allow many other therapists to learn and un-

derstand this new way of relating to clients, which can facilitate a real and profound change.

### MINDFUL INTERBEING MIRROR THERAPY: BEYOND THE RECOVERY FROM TRAUMA.

The Still Face Paradigm and the mechanism of mirror neurons are two foundational principles of Mindful Interbeing Mirror Therapy (MIMT): as a matter of fact, both of them have emphasized – in a scientific way – the innate relational dimension that characterises the processes of Self construction and existential meaning-making of every human being. By using the mirror, therapists can explore the client's relationship with their own Self since the very beginning, while the concept of "Self" is objectified as an "Other" with whom the client interacts. Consequently, the intersubjective dimension of humanity is experienced in a new way, which contributes to making change faster. Based on a conscious, targeted activation of the specific neurobiological circuits regulating face recognition and the identification of emotions related to facial expressions, MIMT is an effective form of psychotherapy, conceived as a process of reconstruction of the Self. The therapeutic goal is helping the client recreating a deep sense of connection with and belonging to their own image, reflected by the mirror; in addition, MIMT aims to overcome the shame and self-loathing that typically characterise traumatised clients, by helping them experiencing a new self-compassion.



### HARRY FARMER United Kingdom

Dr Harry Farmer is currently a Research Associate in Virtual Reality in the CREATE lab at the University of Bath's Department of Psychology. He completed his PhD in Psychology at Royal Holloway, University of London in 2014 and worked as a Research Associate in Social Neuroscience at UCL's Institute of Cognitive Neuroscience between 2014 and 2018. His research focus is the relationship between the self and social cognition and encompass a wide range of methodological techniques including conceptual analysis, psychophysics, physiological recording,

neuroimaging and virtual reality. He has authored 13 articles in peer reviewed journals including Psychological Science and Neuropsychologia. His past work has explored how the plasticity of self-representation at both the bodily and conceptual level can be used to modulate social attitudes including prejudice. He has also carried out work in the computational modelling of learning about similarity between self and other and is currently Empirical Lead on the Estranged From the Self, Estranged from the Other's project which explores the relationship between abnormal experiences of the self in Depersonalisation and social interaction in clinical and non-clinical populations. He is a member of the Experimental Psychology Society and the Institute of Electrical and Electronics Engineers

## MIRRORS TO THE SOUL: SELF-FACE REPRESENTATION AND SOCIAL MIRRORING.

The ability to accurately recognise one's own face has long been held to be one of the key markers of higher level consciousness. Recent research has given us an increased understanding of the contribution that the integration of information from several different sensory channels including vision, touch and our internal senses of proprioception and interoception make to the representation of self face. In addition work in social neuroscience has shown the important role that the mapping of other people's actions, facial expressions and touch and pain experiences onto one's own sensory systems (mirroring) plays in the development of empathic responses, perspective taking and the . In this talk I will draw on research from the cognitive neurosciences to illustrate how self-face perception both influences and is influenced by social interactions with others. First, I present evidence that tactile and motor mirroring of others can lead to increased perceived facial similarity and with it an increased sense of affiliation and trust. I will then outline research demonstrating that this relationship also works in reverse with trustworthy behaviour and increased social affiliation modulating the response of both the tactile and motor mirror systems. Finally I will present recent work examining how disruptions to the sense of self see in the condition of depersonalisation lead to disrupted mirroring in both the tactile and motor domains.



#### **RUTH LANIUS Canada**

Ruth Lanius, MD, PhD, Professor of Psychiatry is the director of the post-traumatic stress disorder (PTSD) research unit at the University of West-ern Ontario. She established the Traumatic Stress Service and the Traumatic Stress Service Workplace Program, services that specialized in the treatment and research of Posttraumatic Stress Disorder (PTSD) and related comorbid disorders. She currently holds the Harris-Woodman Chair in Mind-Body Medicine at the Schulich School of Medicine & Dentistry at the University of Western Ontario. Her research interests focus on study-

ing the neurobiology of PTSD and treatment outcome research examining various pharmacological and psychotherapeutic methods. She has authored more than 150 published papers and chapters in the field of traumatic stress and is currently funded by several federal funding agencies. She regularly lectures on the topic of PTSD nationally and internationally. She has recently published a book 'Healing the traumatized self: consciousness, neuroscience, treatment' with Paul Frewen.

# THE TRAUMATIZED SELF IN THE MIRROR: OVERCOMING SHAME, SELF-LOATHING, AND DISSOCIATION.

Self-statements such as 'When I look in the mirror, I see a monster', or 'when I look in the mirror, I do not recognize myself' represent the reality of many individuals who have endured chronic developmental trauma. Not only does trauma often have devastating effects on an individual's sense of self, its impact is also felt the relationship with others, leaving the traumatized person feeling ashamed of their existence and estranged from the world. These feelings of shame can have profound effects on the ability to experience positive emotions, may lead the traumatized individual to feel non-deserving of experiencing pride, joy, and love and may fuel feelings of self-loathing. Moreover, these experiences can trigger severe hyperand hypo-arousal states that often have the effect of pushing the traumatized self outside the boundaries of the window of tolerance, rendering the individual dissociated from his/ her own body and the world around them. Self-mutilation is also common, an action that is often driven by feelings of disgust and shame about the self. This lecture will address specific strategies of how to deal with shame and related self-dysfunction, including self-loathing and self-mutilation. In addition, targeted interventions that can help to increase self-compassion will be illustrated, with the goal of reaching the restoration of the self. Implications of traumarelated self-disturbance for mindful interbeing mirror therapy will also be described. Finally, neurobiological mechanisms underlying self-dysfunction, positive emotion intolerance, and self-mutilation will be described. At the conclusion of the lecture, participants will have the ability to: i) describe the effects of long-term traumatization on the self; ii) identify the cognitive and affective sequelae of disturbances in the sense of self; iii) identify interventions strategies aimed at restoring the sense of self and reducing symptom states; and iv) describe the neurobiological underpinnings of self-dysfunction, shame, and self-mutilation.



### **ALESSANDRO CARMELITA Italy**

Alessandro Carmelita is a Psychologist and a Psychotherapist, as well as a Trainer and Supervisor in Schema Therapy certified by the ISST. After having been trained by some of the most important experts in the field of Psychotherapy and Interpersonal Neurobiology, he has created an innovative therapeutic approach named Mindful Interbeing Mirror Therapy (MIMT) and has developed it together with Marina Cirio. He has traveled around the world to train Psychologists and Psychotherapists in using this revolutionary approach with their clients. Besides this, Dr. Carmelita

has conducted 56 editions of the international training programme in Schema Therapy and has trained/supervised hundreds of therapists.

# MINDFUL INTERBEING MIRROR THERAPY: BEYOND THE RECOVERY FROM TRAUMA.

The Still Face Paradigm and the mechanism of mirror neurons are two foundational principles of Mindful Interbeing Mirror Therapy (MIMT): as a matter of fact, both of them have emphasized – in a scientific way – the innate relational dimension that characterises the processes of Self construction and existential meaning-making of every human being. By using the mirror, therapists can explore the client's relationship with their own Self since the very beginning, while the concept of "Self" is objectified as an "Other" with whom the client interacts. Consequently, the intersubjective dimension of humanity is experienced in a new way, which contributes to making change faster. Based on a conscious, targeted activation of the specific neurobiological circuits regulating face recognition and the identification of emotions related to facial expressions, MIMT is an effective form of psychotherapy, conceived as a process of reconstruction of the Self. The therapeutic goal is helping the client recreating a deep sense of connection with and belonging to their own image, reflected by the mirror; in addition, MIMT aims to overcome the shame and self-loathing that typically characterise traumatised clients, by helping them experiencing a new self-compassion.

# TIME TABLE

### ■ FRIDAY MARCH 27<sup>TH</sup>

8.30 - 9.00	Registration
9.00 - 9.30	OPENING
9.30 - 11.00	Peter Fonagy: "Epistemic trust and free energy: an integra-
	tive model for psychological therapy".
11.00 - 11.30	COFFEE BREAK
11.30 - 13.00	Vittorio Gallese: "Intentional attunement: from mirror neur-
	ons to intersubjectivity".
13.00 - 14.00	LUNCH BREAK
14.00 -15.30	Ed Tronick: "The Still-Face and the Dynamic Process of Hu-
	man Meaning Making"
15.30 - 16.00	COFFEE BREAK
16.00 - 17.30	PANEL

### ■ SATURDAY MARCH 28<sup>TH</sup>

9.00 - 10.30	David S. Elliott: "Healing Attachment Insecurity with the Help
	of Imagined Ideal Parent Figures in Psychotherapy".
10.30 - 11.00	COFFEE BREAK
11.00 - 12.30	Benedetto Farina: "Butter is slippery. That's why psycho-
	therapists should consider neuroscientific plausibility of their
	theories".
12.30 - 13.30	LUNCH _BREAK
13.30 - 15.00	Marina Cirio: "Mindful Interbeing Mirror Therapy: beyond the
	recovery from trauma".
15.00 - 15.30	COFFEE BREAK
15.30 - 17.00	PANEL

#### SUNDAY MARCH 29H

9.00 - 10.30 Harry Farmer: "Mirrors to the Soul: Self-Face Representation and Social Mirroring".
10.30 - 11.00 COFFEE BREAK
11.00 - 12.30 Ruth Lanius: "The Traumatized Self in the Mirror: Overcoming Shame, Self-Loathing, and Dissociation".
12.30 - 13.30 LUNCH BREAK
13.30 - 15.00 Alessandro Carmelita: "MindFul Interbeing Mirror Therapy: beyond the recovery from trauma."
15.00 - 15.30 COFFEE BREAK
15.30 - 17.00 PANEL

#### LANGUAGE

English

#### LOCATION

London

#### **REGISTRATION FEES**

- First early bird fee: £300 within October 31st 2019
- Second early bird fee: £350 within December 31st 2019
  - University sttudents: £260

#### **REGISTRATION**

Please visit our website **www.uk.international-isc.com** to register for the conference or ask for a registration form at **segreteria@isctraining.com**. If you have any questions or need additional details and/or assistance, please email us at the following address: **trainings@international-isc.com** 

#### **CANCELLATION POLICY**

Please note that, if you wish to cancel your registration, the following rules will be applied:

- if you cancel your registration within 3 months before the start of the event, you will be entitled to receive a 70% refund of the amount paid for the ticket.
- if you cancel your registration within 2 months before the start of the event, you will be entitled to receive a 40% refund of the amount paid for the ticket.
- if the above-mentioned deadlines are not respected, you will not be entitled to receive any refund.

#### **INFO**

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