NEUROPSYCHOANALYSIS OF INFANCY
1ST Conference

From Body to Mind: Fetus Child Development

Saturday, May 9th 2026, Rome
Hotel Quirinale, via Nazionale 7.
Hybrid Form

The Child-Development Conference in Neuropsychoanalysis invites scholars and clinicians to a multidisciplinary exploration of early human development, tracing the emergence of mind from the embodied beginnings of life. Under the theme "*From Body to Mind: Fetus-Child Development*" the conference brings together neuropsychoanalysis, developmental neuroscience, psychology, and psychoanalytic theory to examine how subjectivity, individuality, and relational capacities are formed from the earliest stages of existence.

Link for registration and payment: In person (150€), Online (100€)

https://nsaacademy.net/eventi/from-body-to-mind-fetus-child-development

Hotel information: http://www.hotelquirinale.it

Secretary of Congress:
neuroacademysecretary@gmail.com

Dr. Barzel-Raveh Irith: irbarzel@gmail.com

Dr. Rosa Spagnolo: r.spagnolo@libero.it

Morning Session

Chair: A. Clarici

10.00 A. Clarici
Opening

10.30-11.15 K. Fotopolou
Sentience and the Breast: How Psychophysiological Parent-Infant Interactions gives Rise to the Psychological Self

11.15-12.00 I. Barzel-Raveh
The process and the transformational mechanism of imitation: From Chaos to structure, free will, and Creativity

12.00-13:00
Audience Discussion

13:00-14:00
Break

Afternoon Session

Chair: Y. Salz

14.00 Y. Salz
Opening

14.15-15.00 R. Spagnolo
Two bodies-two brains relationship

15.00-15.45 C. Alberini
Learning and memory in early life and the biological basis of individuality

15:45-16:00
Coffee break

16.00-16.45 G. Esposito
The Synchronising Brain in Early Development: Pathways to Attachment, Regulation, and Social Understanding

16.45-17.30 P. Moore
Does the foetus dream?
Sleep organization from foetus to childhood

17.30-18.30
Audience discussion

Andrea Clarici

Bio

Andrea Clarici (MD) is a psychoanalytic psychotherapist and psychiatrist from Trieste (Italy), working clinically in private psychoanalytic practice. He is also a Professor in the course "Advanced Dynamic Psychology" at the Faculty of Psychology and the course "Child Neuropsychiatry" at the Faculty of Medicine, both at the University of Trieste (UNITS, Italy). He trained at the Centro Studi di Psicoterapia Psicoanalitica e Metodologia Istituzionale in Milan with psychoanalysts supervised and inspired by Joseph Sandler (IPA President 1989-1993) and his wife, Ann-Marie. Andrea Clarici is chief coordinator of the Centro di Formazione e Ricerca in Psicoterapia Psicoanalitica (CFR; director dr. Andrea Zanettovich) in Trieste. He worked psychoanalytically with brain-lesioned patients, and at present, he is involved in a project on individual psychoanalytic psychotherapy on patients with different organic or functional disorders at the University of Trieste (Italy).He is also in the staff of the Society of Neuropsychoanalysis as International Liaison Officer. He translated in Italian the "Archeology of the Mind" by Jaak Panksepp and Lucy Biven, then "Clinical Studies in Neuropsychoanalysis" by Karen Kaplan-Solms and Mark Solms and "The brain and the inner world" by Mark Solms and Oliver Turnbull. In 2018 he edited a collection of selected works of Mark Solms, ranging from 1997 to 2017, in a book with the title "La coscienza dell'Es" [The Conscious Id], all these books for Raffaello Cortina Publisher (Milan). In 2024, he also translated "The hidden Spring" [La fonte nascosta, in Italian] for Adelphi Publisher. (Milan). In 2026, he is translating, again for Raffaello Cortina Publisher, the latest book by Mark Solms, "The Only Cure", on the aspects of psychoanalytic treatment as the only causal curative method; the book will be released in December 2026.

Opening Remarks

Andrea Clarici in his presentation as chair, will retrace what have been the (not many) but important contributions of neuropsychoanalysis of the developmental age since the birth of the NPSA society in 2000. He will highlight the key works and papers in the NPSA literature, especially in the Journal of Neuropsychoanalysis.Dr. Clarici will also outline why the advancement and progress of neuropsychoanalytic research in childhood

have always been considered by the neuropsychoanalytic movement to be of utmost relevance over the past 25 years, yet kept in the background until recent years. It is by no chance that we had the first Congress on Early Childhood Memories and Experiences in 2025, and now this congress in Rome in 2026.

Cristina Alberini

Bio

PhD, Julius Silver, Roslyn S. Silver & Enid Silver Winslow Professor Center for Neural Science, New York University.

Cristina Alberini received her PhD in Immunological Sciences from the University of Genoa (Italy), and then trained in neurobiology as a post-doctoral fellow at Columbia University with Eric Kandel. From 1997 to 2000, she served as an Assistant Professor in the Department of Neuroscience at Brown University, and then as an Associate and Full Professor at Mount Sinai School of Medicine in New York from 2001 to 2011. In 2011, she joined the Center for Neural Science at New York University, where she is currently a Professor of Neuroscience. Alberini's research focuses on understanding the molecular and cellular mechanisms underlying long- term memory formation and strengthening, as well as the role of these mechanisms in cognitive impairments, neurodevelopmental disorders, and neurodegenerative diseases. Her studies focus on various ages of the lifespan and different types of brain cells. Alberini's research identified new mechanisms of early childhood learning and memory, offering a novel perspective on the developmental processes of learning and memory systems. Her work also provided information for improving brain functions and developing potential therapeutics for cognitive impairments and psychopathologies. Alberini underwent psychoanalytic training from 2002 to 2012 at NPAP in New York and received a New York State license in 2013. Alberini received several awards, including the Hirschl-Weill Career Scientist Award, NARSAD Independent Investigator Award, Golgi Medal, Athena Award, NIH-MERIT Award, the 2018 Jacob K. Javits NYU Award, and the NYU Julius Silver, Roslyn S. Silver & Enid Silver Winslow professorship.

Prof. Alberini is an elected member of the American Academy of Arts and Sciences and Cavaliere dell'Ordine della Stella d'Italia.

Abstract

Learning and memory in early life and the biological basis of individuality

Learning and memory in early development have unique features and profoundly influence the rest of one's life; however, they remain poorly understood. While babies can form implicit memories (like motor skills) and statistical learning, the ability to recall specific events and their context (what, when, where) is believed to develop later. Despite babies being better learners, early life episodic experiences exhibit unusual features: a major one is that they are quickly forgotten. This forgetting is considered to explain infantile or childhood amnesia, i.e., the lack of episodic recollections in adulthood. Freud's theory posits that infantile amnesia is primarily due to the repression of early childhood experiences, particularly those related to the Oedipus complex during the phallic stage. This repression, according to Freud, protects the conscious mind from the potentially overwhelming and disruptive impulses of early sexual and aggressive desires. To unravel the behavioral features and underlying mechanisms of infantile learning and memory, we have used rodent models, which, like humans, exhibit infantile rapid forgetting of episodic-like memories. We have found that, contrary to what was previously believed, early life episodic experiences: 1) are not forgotten, but rather stored in a long-term, implicit, and latent form, and can be recovered at later ages, including adulthood; 2) influence later behaviors; 3) require the hippocampus (a result that then has been confirmed in humans), which undergoes a developmental critical period; and 4) promote the development of the medial temporal lobe-dependent memory system in an experience-specific manner. The meaning of this unique critical period, during which memory storage is not explicitly retrievable, remains unclear. Our recent data show that the storage of episodic-like memory in early development supports relearning and new, congruent learning in adulthood by engaging the medial prefrontal cortex and, in addition, the hippocampus, respectively. Collectively, our data support the conclusion that infant learning creates long-lasting cortical memory schemas, which result from individual experiences, allowing subsequent learning and memories to be processed and function more efficiently. Thus, infantile learning and memory lay the groundwork for building an individualized lifelong capacity and efficiency of the learning and memory system by storing information in a somewhat implicit and schematic form.

The infant's schemas, i.e., the result of brain development based on the individual's experiences, provide the scaffolding for individuality. The unique features of early memories also lead me to propose that during this developmental stage, the implicit representation of episodic-like memory lays the groundwork for the Freudian unconscious.

Rosa Spagnolo

Bio

Rosa Spagnolo, MD, Child Neuropsychiatrist. Professor, Neuropsychopharmacology, Pharmacy degree, Tor Vergata University, Rome. Psychoanalyst, Full member of the Italian Psychoanalytical Society, IPA member. Co-Chair of the International Psychoanalytic Dialogues Association. Chair of Neuroscience Academy of Art, Music and Psychology. Neuropsychoanalysis Association (NPSA) Member.

Professor Level II - Master - Diagnosis and Treatment of Eating and Weight Disorders – Tor Vergata University, Rome. Lecture: Psychology of Nutrition and Treatment of DCA.

Professor Level I Master International Psychoanalytic Studies, lecture: Neuropsychoanalysis, Roma 3 Ubniversity.

She is the author of several publications, as well as a conference speaker and lecturer, on neuropsychiatric developmental disorders and psychoanalytical topics.

Authored books

R. Spagnolo (2018) Ed.: Building Bridges, The impact of Neuropsychoanalysis on Psychoanalytic Clinical Sessions. Routledge, London, nominated for the Gradiva Awards 2019.

R. Spagnolo, G. Northoff (2022): The Dynamic Self in Psychoanalysis. Routledge, London.

R. Spagnolo, G. Northoff (2022): Il Sè Dinamico in psicoanalisi. Franco Angeli Editore

R. Spagnolo, G. Northoff (2025): O Self Dinâmico Na Psicanálise Bases Neurocientíficas E Casos Clínicos. Climepsi Editores, Lisboa (2025)

Spagnolo R. (2026, IN PRESS): Psychoanalytic and Neuroscientific Framing: Models of the Mind, Routledge, Taylor and Francis Group, London and New York. IN PRESS

Abstract

Two bodies-two brains relationship

Fetal brain development is a complex, highly programmed process that begins in the first weeks of gestation and forms the basis for future cognitive, emotional, and behavioral abilities. The process is initiated by the formation of the neural tube, which serves as the precursor to the central nervous system. This is followed by a period of intense neurogenesis and neuronal migration, which facilitates the organization of brain structures and cortical circuits. This sequence of events, regulated by genetics and molecular processes, is highly sensitive to alterations. Even slight interruptions to these developmental processes can have permanent consequences for neuro/psychological functioning. The maternal uterus constitutes a vital environment for fetal growth and function, thereby necessitating an understanding of the exchanges that occur within this milieu.

Irith Barzel-Raveh

Bio

Dr. Raveh-Barzel is a senior clinical psychologist and Supervisor. She is an organizational consultant and received an award as a young leader and entrepreneur from the Brookdale Institute for her work enhancing infant observation at the Tavistock Clinic in Israel. She was the head clinical psychologist of the Neurodevelopment Infant Development Unit in the Tel Aviv area and of 26 well-baby interdisciplinary clinics. She is one of the leading figures in the development of clinical neuropsychoanalysis in Israel. Her work stands at the forefront of integrating developmental neuroscience, affective systems theory, and psychoanalytic thought into a coherent and clinically applicable model of mind. Dr. Raveh-Barzel advanced the study of normal development as the foundation of subjectivity and relational life. Trained in early neurodevelopmental assessment and deeply influenced by the affective neuroscience of Jaak Panksepp and the neuropsychoanalytic framework of Mark Solms, she has consistently worked to translate emotional systems theory into therapeutic practice.

As founder of the Israeli Forum for Neuropsychoanalysis and Director of the Neuropsychoanalysis Open School, Dr. Raveh-Barzel has built an international clinical community dedicated to bridging brain, mind, and therapeutic action. In her past role as Clinical Director at Benafshenu, she continued to develop integrative models to address secondary trauma and collective resilience.

Dr. Raveh-Barzel is a founding member and board member of the International Neuropsychoanalysis Society.

Abstract

Mapping the Other, Wiring the Self: The Role of Imitation in Brain Development – A Neuropsychoanalytic Perspective

The last century has seen substantial research on imitation, though it has predominantly been viewed narrowly as a transient, primitive reflex.This research reconceptualizes imitation as a primary, multi-dimensional, and epigenetic learning mechanism that drives structural transformation beginning in utero**.**Grounded in a neuropsychoanalytic framework, this work connects the innate, evolutionary drive to imitate with early brain development, specifically as assessed through "General Movements" (GMs). General movements, which emerge independently as early as eight weeks of gestation and continue into postnatal life, are not merely aimless stereotypies. Rather, they represent the fetus's active engagement with its "evolutionary environment"—the mother's womb. These unique, independent motorial patterns reflect an early imitative reactivity in which the fetus intuitively absorbs, maps, and adapts to maternal physiological and emotional structures**.** Thus, GMs serve as the earliest observable indicators of the developing brain's attempt to map its surrounding reality and biological constraints.

At birth, this intrauterine motor mapping becomes a profound interpersonal tool. The neonate utilizes this ingrained imitation mechanism to map the "other"**.** Through active intermodal behavioral mapping, the infant translates visual and sensory representations of the caregiver into its own proprioceptive space and motor commands. By actively imitating the caregiver's facial expressions, affects, and rhythmic behaviors, the infant effectively "takes in" the other's structures to navigate a complex, novel world. Crucially, this continuous process of mimicking the other is not simple, mechanical replication; it is a creative, transformative mechanism used to minimize uncertainty and "free energy"**.** As the infant repetitively imitates the other, it bridges the gap between its innate, objectless drives—originating in the brain's SEEKING system— and the external reality. The repetitive integration of the other's structures into the infant's neural pathways facilitates a gradual departure from primary narcissism.By continuously imitating and assimilating the other, the infant organizes its internal world, thereby gradually consolidating a "core

self". In conclusion, imitation is a vital neuropsychoanalytic bridge connecting early motor development, social cognition, and identity formation.

General movements are the earliest physical manifestation of this imitative mapping, which ultimately empowers the infant to internalize the other, resolve predictive errors, and creatively construct a cohesive, autonomous self.

Aikaterini (Katerina) Fotopoulou

Bio

Aikaterini (Katerina) Fotopoulou, PhD, DC Psych, is a Professor in Psychodynamic Neuroscience at University College London. Her lab focuses on topics and disorders that lie at the borders between neurology and psychology, funded initially by a Starting Investigator Grant 'Bodily Self' and more recently a Consolidator grant 'METABODY' from the European Research Council.

Katerina is the Director of the UCL Centre for Equality Research in Brain Sciences (the ERB Centre), the President of the European Society for Cognitive and Affective Neuroscience (ESCAN), the co- founder of the International Association for the Study of Affective Touch (IASAT), a fellow of the Association of Psychological Science, and the past Secretary of the International Neuropsychoanalysis Society, and the editor of the volume: Fotopoulou, A., Conway, M.A., Pfaff, D. From the Couch to the Lab: Trends in Psychodynamic Neuroscience. Oxford University Press, 2012.

Katerina has received several awards for her research, including the FKNE-ALBA Diversity Award by the Federation of European Neuroscience Societies (2025), the Distinguished Young Scientist Award (2014), by the World Economic Forum, and the prestigious Early Career Award of the International Neuropsychology Society (2016) and the Early Career Award of the Neuropsychoanalysis Society (2015). For details on research projects and more than 150 scientific publications, see www.katfotlab.com

Abstract

Sentience and the Breast: How Psychophysiological Parent-Infant Interactions gives Rise to the Psychological Self

Abstract: I will argue that the development of our embodied, psychological self is gradual and occurs through regulatory, allostatic interactions with caregivers, from the womb through infancy and throughout childhood. As in other mammals, patterned sensory input during sensitive developmental windows sculpts the formation of neural circuits in the brain and prepares infants to regulate their own states within the statistical regularities of the environment they will live in.

Hence, caregivers' sensitivity to the infant's states, and the predictability of the sensory environment they expose their infant to are key drivers of neurodevelopment. By contrast, unpredictable patterns of parental sensory and emotional input have long-lasting implications for cognitive development and psychopathology.

I present theoretical and empirical work showing how the development of psychological selfhood is shaped by parental, allostatic regulation in childhood, emphasizing the role of affective touch and sensitive feeding during early embodied interactions in the development of key brain circuits, and tracing disorders of embodied selfhood in eating and somatic disorders.

Josef Salz, M.A.

Bio

Senior clinical psychologist - supervisor. Consulting in various organizations and leading groups in coping with life-changing events and trauma. Supervisor in various schools of psychotherapy, supervising clinical psychologists and mental health professionals. Organizing programs and annual conferences for clinical psychologists. Former member and head of the Israeli clinical psychologists professional committee, Council of Psychologists in Israel. Former head of the central mental health clinic and head of the bereavement and injury and their families.

Abstract

Josef Salz will raise the 2 bodies - 2 minds issue as an intersubjective process and a crucial subject for understanding humans . From Freud on child birth and early stages in early childhood to Winnicott on mother - child to Intersubjective theory. He will raise the issue of the developmental process before birth, on the fetus as a learning and developing human being. On the issue of the mother providing a containing and holding environment

for the baby and the fetus and later the baby as an independent subject using early primary stages of the seeking system according to Neuropsychoanalysis to discover the world and survive. Based on the crucial task of memory in these early processes as presented both in research and in clinical work it will be presented by the 2 distinguished lecturers and he will mention Irith Barzel Raveh idea on the role of Imitation and its contribution to understanding prenatal development and lifelong effects.

Gianluca Esposito

Bio

Department of Psychology and Cognitive Science, University of Trento, Italy

Gianluca Esposito, Ph.D. is Professor and Director of the Department of Psychology and Cognitive Science (DiPSCo) at the University of Trento, Italy, and Editor-in-Chief of the Journal of Genetic Psychology (ORCID: 0000-0002-9442-0254). Trained as a Developmental Clinical Psychologist, his research investigates the neurobiological foundations of social interaction, attachment, and socio-cognitive development across typical and atypical trajectories. His work integrates neuroimaging (fMRI, fNIRS, EEG), psychophysiology, genetic approaches, and advanced data modeling to examine caregiver–infant interaction in humans and across mammalian species (including mice and marmosets). By combining developmental neuroscience and clinical psychology, his research explores how early relational processes shape regulatory mechanisms and risk for psychopathology.

Professor Esposito has held academic positions in Italy, Singapore, Japan, the United Kingdom, and the United States, including appointments at Nanyang Technological University and the RIKEN Brain Science Institute. He has authored over 330 peer-reviewed publications, and his work has been widely cited across psychology, neuroscience, biology, and education.

His research has received international recognition and funding from agencies in Europe, Asia, and North America.

Abstract

The Synchronizing Brain in Early Development: Pathways to Attachment,

Regulation, and Social Understanding

Early human development is fundamentally relational. The concept of the synchronizing brain describes how alignment of neural activity, physiology, and behaviour between caregiver and infant supports attachment formation and affect regulation. Using hyperscanning and autonomic measures, research shows that brain-to-brain synchrony—particularly within prefrontal regions involved in social cognition—emerges during sensitive caregiving interactions and is shaped by parental stress and attachment patterns. Reduced synchrony has been associated with anxious attachment and elevated parental distress, highlighting the role of embodied attunement in organizing early relational experiences. From a neuropsychoanalytic perspective, repeated episodes of co-regulation may scaffold the formation of internal working models, allowing the infant to move from bodily regulation toward mental representation and social understanding.

Synchrony is thus proposed as a foundational mechanism linking early somatic coordination to the development of subjectivity, empathy, and reflective capacities. In this view, the mind emerges not in isolation but through rhythmic, embodied exchanges that transform biological regulation into

psychological structure.

Paul Moore

Bio

Pól Ó Mórdha/Paul Moore is a psychologist and psychoanalytic psychotherapist practicing privately in Dublin and Carlow, Ireland. He serves as an Assistant Professor in the Department of Psychiatry at the School of Medicine, Trinity College Dublin, and is the Course Director of the M.Sc. in Psychoanalytic Psychotherapy. He lectures on psychoanalysis and neuropsychoanalysis at Trinity College and other universities and postgraduate programs and is a visiting faculty member at the National Psychological Association for Psychoanalysis (NPAP) in New York.

He is a former Chair of the Irish Institute of Psychoanalytic Psychotherapy (IIPP) and a Training Analyst with the IIPP. Additionally, he is a founding member and group leader of Neuropsychoanalysis Ireland and serves as an associate editor for the journal Neuropsychoanalysis.

His PhD research, conducted in collaboration with Prof. Oliver Turnbull's Emotion Research Lab at Bangor University in North Wales, centers on neuropsychoanalysis, memory, and psychoanalytic treatment in cases of profound amnesia. His published clinical case studies explore the neural correlates of psychotherapy, paying particular attention to the role of basic emotion systems in the therapeutic process. His work draws on Jaak Panksepp's affective neuroscience, as well as on frameworks such as predictive processing and active inference, to bridge psychoanalysis and neuroscience. Besides practicing general psychoanalytic psychotherapy, he specializes in working with individuals who have experienced brain injuries and those on the autism spectrum.

Abstract

Does the foetus dream? Sleep organization from foetus to childhood

The question 'Does the foetus dream?' cannot be answered by simply equating dreaming with any single sleep stage. Developmental sleep organization refers to the way sleep patterns and stages emerge and change throughout early life, while affective integration describes the process by which emotional experiences are synthesized within the mind. This presentation links developmental sleep organization, which shapes the early foundations of mental activity, to current neuropsychoanalytic perspectives that view dreaming as a function of affective integration, suggesting that the development of sleep architecture may influence how

emotional experiences are processed even before birth. The talk outlines what can and cannot be inferred from prenatal and early-life sleep research. In late gestation and very pre-term development (approx. 28–30 weeks' gestational age), sleep is dominated by what is referred to as 'active sleep' with maturation bringing increasing quiet sleep and more stable state regulation (Collins et al., 2015). Building on Roffwarg's (1966) seminal ontogenetic hypothesis, early active sleep is treated less as evidence of narrative dream experience and more as endogenous stimulation that supports brain development when waking input is limited.

Important neuropsychoanalytic contributions come from Karl Friston's Free Energy Paradigm (Friston et al., 2006), and from Solms' demonstration of a double dissociation between REM physiology and dreaming: pontine mechanisms can generate REM, while dreaming depends on forebrain mechanisms that are dopaminergically modulated (Solms,

2000).

On this basis, foetal ‘dreaming’ is approached cautiously as affect-toned proto-mentality rather than reportable imagery. Psychoanalytic perspectives (Freud, Klein, Winnicott, Bion) translate these findings into clinically relevant concepts, excitation-binding, valanced self-states, holding and rhythm, and dreaming as metabolization (alpha-function), with implications for prematurity and parent–infant clinical work. Emphasis is placed on developmental function rather than phenomenology.