Summary

Stefania Carbonella – *Psycho-Neuro-Endocrine-Immunology, DOHaD and mindfulness: towards an integrated model of prenatal salutogenesis*

In the last thirty years, the DOHaD (Developmental Origins of Health and Disease) paradigm has radically transformed the understanding of the etiology of chronic diseases, shifting the focus from genetic determinism to the biological plasticity of the first years of life. This perspective converges with PsychoNeuroEndocrineImmunology (PNEI).

Rossana Terni – *Parenting: the keystone*

The transition to parenthood has undergone a radical structural and conceptual evolution in recent decades, driven by unprecedented demographic changes and rapidly changing family paradigms. These social changes profoundly reshape the psychological and clinical framework of parenting. At the same time, discoveries in cognitive neuroscience and psychoneuroendocrinoimmunology (PNEI) have revealed that this transition represents a unique biological window, characterized by extraordinary adult neuroplasticity and epigenetic vulnerability.

Eleonora Lombardi Mistura – *Gut microbiota: director of the PNEI of the developmental age*

The epistemological transition of modern pediatrics is marked by the overcoming of the reductionist model in favor of a systemic and integrated vision of the human organism. In this scenario, Psychoneuroendocrinoimmunology (PNEI) offers the theoretical framework to understand how adult health is programmed in the very early stages of ontogenetic development and the intestinal microbiota no longer represents an agglomeration of commensal microorganisms but a real dynamic, plastic and systemic psychoneuroendocrinoimmunological organ, capable of acting as the undisputed director of the pathway.

PNEI review – ISSNe 2532-2826 – DOI: 10.3280/pnei2026oa24089
Copyright © FrancoAngeli This work is released under Creative Commons Attribution – Non-Commercial – No Derivatives License. For terms and conditions of usage please see: http://creativecommons.org

Rosario Savino – *The trajectories of neurodevelopment: a PNEI and evolutionary path between genetics, epigenetics and integrated clinics*

This article examines in depth the neuro-developmental trajectory of the child from conception to the first years of life, focusing on the critical stages of typical and atypical neurodevelopment. Through the lens of Psychoneuroendocrinoimmunology (PNEI), the overcoming of genetic determinism in favor of a dynamic and probabilistic model, where epigenetics plays a central role, is analyzed. The theoretical frameworks of the exposome and DOHaD (Developmental Origins of Health and Disease) are explored, highlighting the impact of environmental factors, maternal-fetal stress and maternal immune activation (MIA) on brain connectomics and on the genesis of neurodevelopmental disorders (NDD), with particular reference to the autism spectrum (ASD).

Gloria Curati – *Body, movement and physical activity. Opportunities for the evolution of the child through affective and therapeutic touch*

The article explores the fundamental role of affective and therapeutic touch and movement in infant neurobiological development, through the paradigm of Psychoneuroendocrinoimmunology (PNEI). Physical contact is not limited to a mechanical act, but constitutes a pre-verbal language and a primary biological modulator, capable of activating C-tactile fibers and stimulating the release of oxytocin.

Federica Lavista – *The pubertal crisis between metamorphosis and identity, between dependence and independence*

The pubertal crisis constitutes a critical developmental stage in which neurobiological transformations, new hormonal structures and unprecedented relational experiences intertwine, configuring the conditions for a progressive redefinition of identity. From a neurobiological point of view, selective synaptic pruning and progressive myelination remodel the reward circuits – the mesocorticolimbic system with the nucleus accumbens (NAc) and the ventral tegmental area (VTA) – influencing motivation, emotional regulation and behavior.

Silvia Moneti – *Taking care of the environment to take care of the baby: from the delivery room to the classroom*

Through a review of the scientific literature, the article explores the role of the built environment as a determinant of child health and development. The evidence examined demonstrates how specific design characteristics, including acoustic quality, lighting, color, thermo-hygrometric comfort and spatial organization, are able to influence neurobiological processes, sensory development, emotional regulation, learning and social inclusion.

PNEI review – ISSNe 2532-2826 – DOI: 10.3280/pnei2026oa24089
Copyright © FrancoAngeli This work is released under Creative Commons Attribution – Non-Commercial – No Derivatives License. For terms and conditions of usage please see: http://creativecommons.org

Silvia Moneti – *The Influence of Healthcare Environment Architecture on the Psycho-Neuro-Endocrine-Immunological System*

This article explores the impact of architectural and environmental design on the psycho-neuro-endocrine-immunological (PNEI) system of acute and chronic patients. It outlines operational design guidelines for orientation, accessibility, circadian lighting, acoustics, clinical aromatherapy, and room personalization. Furthermore, it addresses specialized care settings – including labor and breastfeeding rooms, ICUs and NICUs, prosthetic architecture for cognitive impairments, and home-based care – positioning architecture as an integrated therapeutic tool to foster psychophysical health.

PNEI review – ISSNe 2532-2826 – DOI: 10.3280/pnei2026oa24089
Copyright © FrancoAngeli This work is released under Creative Commons Attribution – Non-Commercial – No Derivatives License. For terms and conditions of usage please see: http://creativecommons.org