

## Quantum Global 2023

### Nervo vago e attaccamento in pediatria e neonatologia

#### **Modalità**

On-demand

#### **Crediti ECM**

Nessuno

#### **Costo**

- 285,00 € + IVA

#### **Descrizione del corso**

Il Quantum Global 2023 ha portato le più recenti evidenze in ambito neonatologico e pediatrico riguardanti il ruolo del nervo vago, e quindi del sistema nervoso autonomico, nella salute e nello sviluppo neonatale e infantile.

Attraverso le relazioni di eminenti ricercatori italiani e internazionali, sono affrontati temi trasversali a tutte le figure sanitarie:

- dalla gestione neonatale nei reparti di terapia intensiva alla nascita ed evoluzione del legame di attaccamento fra genitori/caregiver e bambini;
- da come il sistema nervoso autonomico impatta sullo sviluppo non solo neurale, ma anche psicologico e globale dell'organismo neonatale, fino all'analisi degli stili di educazione genitoriali;
- dalle ultime scoperte sulle analisi metaboliche in ambito pediatrico utili ad effettuare diagnosi sempre più precise, all'influenza che i fattori di rischio ambientali hanno sul neurosviluppo a partire dal momento del concepimento – e anche prima;
- dal ruolo del microbiota nel regolare l'equilibrio neuro-immunitario ai principi essenziali per instaurare un'ottimale alleanza terapeutica in ambito pediatrico a fronte delle ricerche sul paradigma dell'enattivismo;
- dagli studi che usano tecniche non invasive per valutare l'attività del nervo vago anche a livello fetale fino alle evidenze dei benefici che approcci manuali come l'osteopatia possono portare alla salute neonatale.

Oltre a fornire un quadro il più possibile ampio del ruolo del vago in ambito pediatrico e degli strumenti per valutarlo e per influenzarlo, scopo del corso è favorire l'interdisciplinarietà fra figure professionali diverse, ognuna delle quali gioca un ruolo centrale nel costruire la salute – presente e futura – dei neonati e il loro legame di attaccamento con le figure di accudimento.



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## **Requisiti per partecipare**

Il corso è aperto a tutti i professionisti sanitari, agli osteopati e a tutte le figure coinvolte nella promozione della salute, in particolare nel periodo riguardante i primi 1000 giorni. Il corso è anche aperto anche agli studenti delle suddette professioni.

## **Finalità e obiettivi del corso**

- Conoscere il ruolo del nervo vago e dei fattori ambientali nel neurosviluppo
- Conoscere come si sviluppa lo stile di attaccamento e come questo influenzi la salute nel bambino e nell'adulto
- Scoprire le metodiche più recenti di valutazione dello stato del nervo vago, del sistema nervoso autonomo, del microbiota e dello stato metabolico dell'organismo
- Apprendere il ruolo di terapie integrate, quali le terapie manuali e l'osteopatia, nella cura in ambito neonatologico e pediatrico
- Acquisire una visione d'insieme che permetta di instaurare collaborazioni e progetti inter- e multidisciplinari

## **Elementi distintivi e innovativi del corso**

Tramite la piattaforma eLearning sarà possibile scambiare idee, materiale ed esperienze cliniche con i compagni di corso per instaurare nuove collaborazione e migliorare così ulteriormente la propria formazione.

## **Programma dettagliato del corso**

Il corso dura 12 ore, 13 minuti e 10 secondi.

1. Parte 1: Foundation aspects of the mother-infant relationship (4:43:42)
  - Bonding: The development of bonding and its effects – V. Lingiardi (48:36)
    - i. Slide – Lingiardi.pdf
  - Neurodevelopment: The key elements during the neurodevelopmental stages – E. Burgio (47:55)
    - i. Slide – Burgio.pdf
  - Mother-Infant: The evolution of the mother-infant relationship during the pre-scholar and scholar period – D. Lucangeli (47:15)
    - i. Slide – Lucangeli.pdf
  - Metabolomic: The metabolomics in pediatrics and beyond – V. Fanos (44:58)
    - i. Slide – Fanos.pdf



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- Discussione – Burgio, Lucangeli, Fanos (30:32)
- Vagus: The role of vagus in neonatology – M. Frasch (46:43)
  - i. Slide – Frasch.pdf
- Discussione – Frasch (17:43)

2. Parte 2: Clinical elements into the mother-infant relationship (7:19:28)

- COVID: The impact of COVID in neonatology and pediatrics – D. Mileto (32:29)
  - i. Slide – Mileto.pdf
- Neonatology: Vagus and respiration in preterm infants – G. Lista (34:13)
  - i. Slide – Lista.pdf
- Surgery: Surgery complications: a look into the ANS – G. Pelizzo (34:51)
  - i. Slide – Pelizzo.pdf
- Discussione – Mileto, Lista, Pelizzo (15:47)
- Microbiota: Microbiota and Vagus – M. Rescigno (31:14)
  - i. Slide – Rescigno.pdf
- Pediatrics: Pediatrics Constructive evolution and neonatal bonding – C. Panisi (36:53)
  - i. Slide – Panisi.pdf
- Discussione – Rescigno, Panisi (04:57)
- Presentazioni brevi di ricerche selezionate fra i Quantum Call for Abstract (30:12)
  - i. Rinne (07:10)
  - ii. Roitel (05:11)
  - iii. Jaffres (06:18)
  - iv. Cases-Solé (05:44)
  - v. Galli (05:49)
- Mother-Infant: Touch and mother-infant development – G. Spitoni (31:35)
  - i. Slide – Spitoni.pdf
- Enactive inference: The therapeutic alliance in pediatrics – J. Esteves (42:45)
  - i. Slide – Esteves.pdf
- Pediatrics: 15 years of osteopathy for inpatients and outpatients – P. Calzi (23:10)
  - i. Slide – Calzi.pdf
- Discussione – Spitoni, Esteves, Calzi (23:41)



- Pedagogy: Struggles, parenting styles and being present parents: how these factors play a role in the harmonious development of a child, from birth through childhood. From biology to the relationship – Cristina Biollo (39:07)
  - i. Slide – Biollo.pdf
- Presentazioni brevi di ricerche selezionate fra i Quantum Call for Abstract (43:41)
  - i. Pino (05:50)
  - ii. Bramini (05:46)
  - iii. Galli (06:32)
  - iv. Brasca (03:08)
  - v. Pellizzari (06:53)
  - vi. Alberti (05:04)
  - vii. Zanini (05:33)
  - viii. Accardi (04:55)
- Cerimonia di premiazione e conclusioni (14:53)

### ***Presentazione dei docenti (mini CV)***

#### **Cristina Biollo**

- She works as a family mediator and perinatal consultant at public and private local services to support minors and families and breastfeeding. Specialized in perinatal care, with a careful look at the world of pre-term birth and breastfeeding, accompanying the couple to become parents starting from pregnancy with a total perspective of fatigue prevention, support and care.

As a prenatal and perinatal consultant and educator, she takes care of supporting women on maternity leave and the new family emerging from the conjugal couple, with a careful look at the role of the father, care and physiology, towards health and well-being, according to the Touchpoints Model of Brazelton and the observation of the newborn NBO, Auo Meyer, Florence.

Aware of the fact that the birth of the child is the natural continuum of a relationship that already began with pregnancy and which could then be fortified with breastfeeding, she obtained the WHO Unicef certification to be able to accompany mothers and fathers in supporting this wonderful, but times strenuous, path and carries out the clinical practice with more than 600 hours directly supervised by an IBCLC International Board Certified Lactation Consultant. Trained with the Gordon method and NVC - non-violent communication and respectful education in caring for children and listening to the needs of each member of the family. He strongly believes in care work as a space for listening and support, carried out by a team of professional operators who work in productive and generative synergy towards prevention and therefore the well-being and health of the new family.

#### **Ernesto Burgio**

- Graduated in Medicine and Surgery at the University of Pavia and specialized in Pediatric Clinic at the University of Florence. He was President of the Scientific Committee of ISDE



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Italia (2008-2015) and of the Scientific Committee of ISDE (International Society of Doctors for Environment) (2010-2016); member of EPH (Environment & Public Health Panel - European Society for Research and Prevention on Environment and Health) (2010-2012); by ENSSER (European Network of Scientists for Social and Environmental Responsibility) (2010-11); of the Environment and Health Commission of the SIP (Italian Society of Pediatrics) and of the Environment and Health Commission of the FIMP (Italian Federation of Pediatricians). The main object of his research is the effects that environmental transformations have on the genome (epigenetics) and therefore on human and child health.

#### Patrizia Calzi

- Born in 1958, she is actually Director of the Carate Pediatric Complex Structure and INTERIM DIRECTOR OF DESIO PEDIATRICS COMPLEX STRUCTURE. Graduated from the Faculty of Medicine and Surgery at the University of Milan. Attended the School of Specialization in Pediatrics of the University of Milan and the School of Specialization in Neonatology and Neonatal Pathology of the University of Studies in Milan. She worked in several divisions of the Hospital: Ward and first aid activities. Outpatient Department of Neonatal Pathology, Endocrinology paediatrics and paediatric allergy. Adolescent outpatient clinic. Neonatal ultrasound. She has been manager of the Quality and Accreditation System of Hospital Departments; since 2002 certification activity of the Neonatology and Paediatrics departments. Quality System Manager for the SC of Paediatrics Since 2009: councillor of the GSAQ (National Study Group for Accreditation and Continuous Quality Improvement of the Italian Society of Paediatrics) and member of the committee executive of the National Paediatric Network. Since 2011 contact person for STEN and neo-TS (online neonatal transfer file) organizes and manages periodic refresher courses for personnel on resuscitation new-born and stabilization of the new-born. Since 2005 participation in the project "Hospitals and births, maternal impossibility: procedures e instruments" coordinated by the Secret Mother Service of the Province of Milan. In 2014 preparation of guidelines with the aim of ensuring quality and homogeneity of socio-medical intervention in situations of non-recognition of the child at birth. Teaching activity at the SOMA School of Osteopathy (Milan) Teaching activity at the Specific Training Course in General Medicine at the Company San Gerardo Hospital of Monza.

#### Jorge Esteves

- Osteopath and cognitive scientist with a special interest in chronic musculoskeletal pain. He is currently a Professor of Osteopathy and Vice-Principal at Malta ICOM Educational, Honorary Professor at the University College of Osteopathy in London, and researcher with Collaboration for Osteopathic Medicine Research in Italy. His current research interests are focused on the re-conceptualisation of osteopathic care under the enactivist and active inference frameworks. This includes a critical consideration of theories and research from enactivism, embodiment and ecological psychology, free energy principle and predictive coding, interoception and allostasis, chronic pain and persistent physical symptoms, and the neurophysiological and psychological effects of affective touch.



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### Vassillios Fanos

- Full Professor of Pediatrics and Director of the School of Specialty in Pediatrics, University of Cagliari, Italy. Director since 2003 of the Neonatal Intensive Care Unit, Azienda Ospedaliero Universitaria and University of Cagliari. Immediate Past-President of the Union of the Middle-Eastern and Mediterranean Pediatric Societies (UMEMPS), President S.I.P.Ped Italian Society of Pediatric Psychology, President of SI-DOHaD (Italian Society of Developmental Origins of Health and Disease), President Pediatric Italian Iraqi Society, Immediate Past-Treasurer of the European Association of Perinatal Medicine (EAPM), Member of the International Perinatal Collegium. Member for 12 years of the board of the Italian Society of Neonatology, serving as Councillor, General Secretary and Treasurer. Editor-in-Chief of the Journal of Pediatric and Neonatal Individualized Medicine, peer-reviewed, open access ([www.jpnim.com](http://www.jpnim.com)) official Journal of many International Societies including Union of European Neonatal and Perinatal Societies (UENPS) and UMEMPS; indexed in SCOPUS and Web of Science. Consultant referee in more than 60 International Journals and board member in 11. In the last 6 years with metabolomics he won 3 European Projects (1 FP7 European Project, 1 Marie Curie project, 1 LIFE project), 1 PNNR with European grants, 2 CCM Italian projects with more than 11,000.000 euros. Author of more than 700 original papers: 474 on PubMed, and more than 540 on Scopus. Referee for several International Agencies for funding. Areas of interest: Neonatology, Pediatrics, Nephrology, Metabolomics, Microbiomics, Medical Humanities, Pediatric Psychology. Author of 32 books (8 in English). Author of more than 77 chapters of books (more than 30 in English). Speaker (including many Magistral Lectures) in > 150 International Congresses in more than 40 Nations and hundreds of National Congresses. He has organized 18 International Congresses of Neonatology and Pediatrics in Cagliari with participation of more than 12,000 participants from 60 Nations with the High patronage of the President of the Italian Republic (6 years) and UNICEF (4 years). Due to the organization of this meeting, Prof Fanos has been awarded in 2021 as "Italian Knowledge Leader" by the National Institute of Turism, Convention Bureau Italy under the Patronage of Ministry of Turism. In 2019, Prof. Fanos resulted 1st in Europe and 2nd in the world for the research in Neonatology and, in 2020, he resulted 1st in the world for the research in Metabolomics, according to Expertscape ([www.expertscape.com](http://www.expertscape.com), which calculates the world ranking of researchers in subspecialties, taking into account the total number of published papers in the last 10 years, the importance of the Journals and the role of the Authors). Impact Factor > 1,300, Hirsh index: 61 (Google), 49 (Scopus) with > 15,000 citations (Google), > 9,000 (Scopus).

### Martin Frasch

- Affiliate research faculty member of the Center on Human Development and Disability (CHDD) and the Department of Obstetrics and Gynecology in the School of Medicine at The University of Washington in Seattle, USA. Since 1998, Dr. Frasch has conducted health research in neuroscience and physiology with focus on human brain programming and digital health through theoretical, *in silico*, and animal-model based *in vivo* and *in vitro* as well as human/clinical studies. As an entrepreneur, Dr. Frasch focuses on Digital Health solutions to advance health care delivery in pregnant mothers, children and in the elderly. Dr. Frasch holds patents on fetal



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health monitoring, consults for Delfina and is a co-founder and CEO of Vitalink AI, digital health companies.

#### Vittorio Lingiardi

- Psychiatrist and psychoanalyst, is Professor of Dynamic Psychology at the Faculty of Medicine and Psychology of the Sapienza University of Rome, where from 2006 to 2013 he directed the School of Specialization in Clinical Psychology. His main research interests are the assessment and diagnosis of personality and its disorders, the evaluation of the effectiveness of psychotherapy, the therapeutic alliance, gender identities and sexual orientations. He has published more than 200 articles in Italian and international journals and is the author and editor of numerous volumes. With Nancy McWilliams he is international scientific coordinator of the new edition of the Psychodynamic Diagnostic Manual (PDM-2, Guilford Press, 2016). For Raffaello Cortina Editore he directs the «Psychiatry Psychotherapy Neurosciences» series.

#### Gianluca Lista

- DIRECTOR and MANAGER OF NEONATOLOGY PATHOLOGY AND NEONATAL INTENSIVE CARE at BUZZI Hospital since 2004. He received his PhD from the "Faculty of Health, Medicine and Life Sciences" of the University of Maastricht (The Netherlands) in 2016.

He collaborated as a teacher at the specialization school in Paediatrics I (neonatology specialization) of the University of Milan in the AY 1999/2000, 2001/2002 and 2006/2007.

Adjunct Professor at the School of Specialization in Paediatrics of the University of Milan since the 2014/2015 academic year. He collaborated as a teacher at the "Advanced course of mechanical ventilation in the newborn", organized by the University of Bicocca, in 2007-2008-2009- 2010-2011

He collaborated as a teacher in the Masters in Neonatology at the University of Milan in the 2002/03 academic year and in the specialization course in neonatal intensive care at the University of Milan from 2006 to the current year Active member of the ESCNR (European Scientific Collaboration of Neonatal Resuscitation) since 2010, with which he collaborates in the realization of meetings, scientific publications and randomized clinical studies. Secretary of the ESCNR since 2015.

Member of ESPR since 2015.

He has published in international journals (85 reviewed in Pub Med) and communicated at congresses (over 250 communications), clinical research concerning the therapy of high-risk newborns with particular regard to the sector of mechanical ventilation and assistance of the asphyxiated newborn or with other neurological problems. Co-author of a chapter of the book "Genetics of epilepsy and genetic epilepsies", published by the Mariani Foundation in 2010 and of the chapter on Mechanical Ventilation in Neonatology Textbook 2017 edition.

#### Daniela Lucangeli

- Full Professor of Developmental Psychology at the University of Padua. Scientific director of the Learning Center network and national president of the CNIS (National Coordination of Specialized Teachers), he is a member of the International Academy for Research in Learning Disabilities (IARLD) and president of Mind4Children, a spin-off of the University of Padua, which supports and promotes the impact of scientific research in actions at the service of human potential. Author of numerous national and international scientific



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publications. In her academic career she has dealt with areas of knowledge ranging from logic to neuroscience, while in clinical practice she deals with learning support strategies and neurodevelopmental disorders.

#### Davide Miletto

- Microbiologist at Clinical Laboratory of Microbiology, Virology and Biomergencies.

#### Cristina Panisi

- Pediatrician expert in immunopathology. She deals in particular with primary immunodeficiencies, respiratory pathology and auto inflammatory syndromes. The clinical and research activity is currently aimed above all at neurodevelopmental disorders in the developmental age, with particular reference to autism spectrum disorder.

She is medical-scientific director of BluLaB, Integrated Innovative Service for Autism, at the Holy Family Institute of Varese, where he carries out the assessments of internal aspects and coordinates the diagnosis and treatment of medical comorbidities. She is a promoter of interdisciplinary research and assistance models (GLIA, Interdisciplinary Working Group for Autism; CHOICE for Paediatrics Care and Health Opportunities in an International Cooperation for the Environment).

Member of the staff of the SPAEE (Service of Psychology of Learning and Education in Developmental Age) of the Catholic University of Milan and lecturer in the specialization course in psychoeducational tutoring for children and adolescents with learning and cognitive-behavioural disorders. Member of the Scientific Committee of SIMA Italian Society of Environmental Medicine.

Member of the panel of experts consulted by ANGSA (National Association of Parents with Autism) and of the Scientific Committee of United for Autism Lombardy.

#### Gloria Pelizzo

- Degree in medicine and surgery. Faculty of Medicine and Surgery, University of Ferrara. Specialization in Pediatric Surgery. University of Ferrara.

Extraordinary temporary professor in Surgery Pediatric at the University of Pavia until 2016. Member of the RCG Royal College of Physicians and Surgeons in Glasgow. Member of RCS London - fellowship ad eundem – at the Royal College of Surgeons London. External examiner in Medicine, surgery and primary health care, Medical College, Health Authority, UAE.

As Public officer she was Member of the CSS Superior Health Council elected in July 2014 for Session L (2014-2017) 2014 Ministry of health. She was Member of the "IRCCS Evaluation Commission"- task of the Ministry of Health 2015.

More than 150 publications on national and international scientific journals.

#### Maria Rescigno

- Graduated in Biology at the University of Milan, she was a researcher at the University of Cambridge (UK) for two years, obtained her doctorate (PhD) in Pharmacology and Toxicology at the National Research Council (CNR) and specialized in Applied Biotechnology at the University of Milano-Bicocca. From 2001 to 2017 she was director of the Research Unit on «Dendritic cells and immunotherapy» at the European Institute of Oncology in Milan and from 2008 to 2013 she was a visiting professor at the University of Oslo. Director of the Immunology Unit of the IEO (European Institute of Oncology) since 2001, professor of biology at the Faculty of Medicine of the University of Milan since 2014



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and founder of Postbiotica, a scientific startup born in January 2016, which has already won more than one recognition, including victory in the MyStart Bcn competition, promoted by the Italian Chamber of Commerce in Barcelona.

Today she teaches General Pathology at the University of Humanitas, where she directs the Unit of Immunology of the mucous membranes and Microbiota and is vicar pro-rector with responsibility for research of the same University.

#### Grazia Spitoni

- Born in 1972, she is currently Associate Professor in Psychometrics at the Department of Dynamic, Clinical and Health Psychology of the Faculty of Medicine and Psychology of the Sapienza University of Rome.

Author of more than 50 international publications and as many in Italian, she has dealt with affective neuroscience and the cognitive evaluation of body representation. Since 2010, he has also been a cognitive-behavioural psychotherapist and supervisor at the Sapienza University of Neuropsychology specialization school.

The liaisons between the experimental and the clinical dimension has influenced the investigation topics which, at present, are part of Neuropsychoanalysis, of whose international society he has been an effective member since 2016. Among the written and edited texts, we mention "When food becoming an obsession" and "Manual of eating disorders" both published by Carocci.



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