8th European Training School of Riseup-PPD

(Cost Action CA18138, Universidad Loyola)

Training School on Infant's Neurodevelopment Assessment

Seville, Spain Hybrid

22-24 March 2023





A. GENERAL INFO

The main goal of Riseup-PPD COST Action is to establish a Pan-European multidisciplinary network of researchers dedicated to the understanding of Peripartum Depression Disorder (PPD), from its prevention and assessment to its treatment and global impact. https://www.cost.eu/actions/CA18138

WHAT ARE TRAINING SCHOOLS?

Since COST's priority is enhancing research collaboration where ideas and people can grow without borders, Training Schools aim to facilitate capacity building on a topic relevant to the theme of the respective COST Action through the delivery of intensive training on a new or emerging subject.

Training Schools Grants provide support for intensive training on a new or emerging subject of PhD students and Young Researchers and Innovators from participating Inclusiveness Target Countries* (ITC).

Training Schools aim to facilitate capacity building on a topic relevant to the theme of the respective COST Action through the delivery of intensive training on a new or emerging subject.

Participants will be expected to attend and participate at the Training School during the three days and will be given the opportunity to present and discuss their work, and network with other Young Researchers and Innovators, the TS trainers and the members of the Riseup-PPD Cost Action. The Training School will occur in a hybrid format (in-person in Spain and online).

Training School Dates: 22-24 March 2023

Host institutions: Universidad Loyola (Seville, Spain)

Materials: As the TS is taking place both in location and online, it is advised to have a Computer with a stable and fast internet connection. Additional free software may be needed, which will be communicated closer to the date of the Training School.

B. ELIGIBILITY

PARTICIPANTS

Training Schools Grants are open to all participants, but priority will be given for PhD students and Young Researchers and Innovators with a primary affiliation in an institution located in an ITC.

HOW TO PARTICIPATE

Send an application with a letter of motivation explaining how this training will benefit your research project and your scientific career (max. 3500 characters with spaces), stating whether you would like to attend the Training School in person or online, as well as your CV to <u>riseup-</u>

<u>ppd ca18138@fpce.uc.pt</u> and <u>tuvalmr@gmail.com</u> by 6 February, 2023. Applications will be forwarded to the Training School Committee, which will evaluate all submitted applications in the context of their compatibility and relevance with the topic of the Action.

C. EVALUATION CRITERIA

- Being a PhD Student (10 points);
- 2. Being a Young Researcher and Innovator (10 points);
- 3. Being affiliated to an Inclusiveness Target Country¹ (ITC) (10 points);
- 4. Being an active member of Riseup-PPD² (3 points) and being currently conducting research/work within the Action topics (7 points);
- 5. Relevance of the candidates' research and background assessed considering the following (max. 10+10 points)³:
 - 1. Journal quartile (Q) of publications in Peripartum Depression Disorder and other Riseup-PPD-relevant publications;
 - 2. Q of publications outside the Action's scope.

D. FUNDING

SUPPORT FOR SELECTED TRAINEES

The candidates will be ranked according to the evaluation criteria. The top **10 candidates will be selected to be reimbursed** for their expenses according to the COST rules (pp. 82-88; COST-094-21-Annotated-Rules-for-COST-Actions-Level-C-V1.3.pdf). Ten additional candidates may attend in-person without reimbursement of expenses and five will have the opportunity to attend online.

For this training school, the amount to be reimbursed to each eligible trainee must respect the following considerations:

1. Each trainee must register for an e-COST profile at https://e-services.cost.eu and must provide there their bank details;

¹ COST Inclusiveness Target Countries (ITCs) are: Albania, Bosnia-Herzegovina, Bulgaria, Cyprus, Czech Republic, Estonia, Croatia, Greece, Hungary, Lithuania, Latvia, Malta, Montenegro, Poland, Portugal, Romania, Slovenia, Slovakia, The Republic of North Macedonia, Republic of Serbia, Turkey, Armenia, Georgia, Moldova and Ukraine. Researchers from Outermost regions are now also considered ITC: French Guiana, Guadeloupe, Martinique, Mayotte, Reunion Island and Saint-Martin (France), Azores and Madeira (Portugal), Canary Islands (Spain).

² An active member is defined as a Riseup-PPD member (regardless of their status as MC member, leader, etc.) that has demonstrated significant contributions to the Action by participating in its activities and engaging with members including, but not limited to, Slack, group meetings, general meetings, etc.

³ Points to be attributed for each type of publication will be given in proportion to the total Q points of those publications against the highest scored participant. Publications will be given the following points: in Q1 4 points, in Q2 3 points, in Q3 2 points, and in Q4 1 point. In other words, we will sum the Q of all publications for each type (relevant/outside the scope), and attribute 10 points to the participant with the highest Q sum. Other participants will be given points by considering their sums in proportion to the highest score (e.g., if the highest score for relevant publications was 20 and the highest score for publications outside the scope was 15 and a given participant scored 10 on the first type and 3.75 on the second type, his/her score would be 5 + 2.5 for a total of 7.5 total points.

To be eligible for reimbursement, trainees must be a health professional, researcher or innovator affiliated with:

- 1. A legal entity in a COST Full Members / COST Cooperating Members;
- 2. A legal entity in a Near-Neighbour Country (NNC);
- 3. European RTD Organisations.

Trainees from the following will not be reimbursed:

- 1. COST Partner Members;
- 2. IPC Institutions:
- 3. IO, EU Commission, Bodies, Offices and Agencies;
- 4. Other trainees not specifically mentioned as being eligible.

E. IMPORTANT DATES

Opening date for applications is January 9, 2023.

The deadline for applications is **February 6**, **2023**.

You will be informed of the outcome of the application by February 20, 2023.

If accepted, you will be expected to attend the training school in its entirety.

F. LOCATION

Universidad Loyola. Av. de las Universidades, s/n, 41704 Dos Hermanas, Sevilla, Espanha. 37°18'24.7"N 5°56'33.0"W

G. PROGRAMME

Training School on Infant's Neurodevelopment Assessment. The Training School is organized by the RISEUP-PPD COST Action, Working Group 2 - Assessment Approaches and Methods in PPD. The main goal of this Working Group is to appraise, develop and define standard procedures to assess women diagnosed with PPD (pre- and post-treatment); collect genetic and epigenetic biomarkers; assess the impact of PPD in the newborn-infant development (0-12 months); and assess interpersonal functioning (the mother-baby dyad and the father-mother-baby triad). The goal of this Training School is to advance and exchange knowledge with health professionals about measures (e.g., brain imaging techniques and developmental assessment scales) used to assess infants' and children's neurodevelopment. It will also include two related workshops on Ethical Aspects of Infant's Neurodevelopment Assessment: Research and Treatment and on Sensory Processing and Infant Neurodevelopment.

Workshop on Ethical Aspects of Infant's Neurodevelopmental Assessment: Research and Treatment. Infant neurodevelopmental assessment in research and treatment is an issue that involves many ethical considerations for researchers, caretaking professionals, infants and their parents. These considerations may also have far-reaching implications for (prevention and mitigation of) vulnerabilities and stigma. The balance between the research participants' rights, their and their parents protection and scientific interests needs knowledge on scientific methods and standards and ethical reflection. This workshop on infant's neurodevelopmental assessment in research and treatment discusses the ethical aspects and perspectives as well as potential tensions between questions of respect for persons, nonmaleficence, and beneficence.

Workshop on sensory processing and infant neurodevelopment. The workshop will provide a synthesis of the effects of sensory-motor processing on infants and children brain function, with a focus on touch and motion. We will also discuss how basic sensory-motor processes are linked to developmental outcomes in typically developing infants and infants at risk of developmental disorders, namely autism. Finally, we will discuss gaps in the literature and how they can be addressed in a way that is meaningful to the research community and families/ stakeholders.

Objectives

Training school

To advance and exchange knowledge with health professionals about different measures used to assess infants' and children's neurodevelopment.

The specific objectives are:

- to provide an overview about developmental scales used to assess neurodevelopment indicators during the first year of life;
- to present an overview of standardized measures used in assessing children's neurodevelopment outcomes and the challenges associated with its implementation across international studies involving different countries;
- to discuss the potentialities of functional near-infrared spectroscopy in identifying potential neural signatures underlying brain alterations in neurodevelopmental disorders in infancy;
- to expand knowledge about EEG data collection and data analysis procedures in pediatric populations and its role in informing about potential EEG markers of neurodevelopmental disorders;
- to present gaps and future directions in the field of infant and child neurodevelopment assessment.

Workshop on Ethical Aspects of Infant's Neurodevelopment Assessment: Research and Treatment

To examine, through a selection of hands-on, interactive exercises, the ethical considerations and practical implications that face PPD researchers and caretaking PPD professionals during the infant neurodevelopmental assessment. The objective of this workshop session is to cultivate an awareness of and to discuss possible solutions to or strategies for dealing with some of the ethical issues around vulnerability and harm, protection and governance in research and treatment related to PPD. The participants will learn to recognize and describe ethical questions in the infant's neurodevelopmental assessment, and evaluate the role of ethics in the PPD research and treatment. In particular, the participants will acquire more specific understanding on issues such as notions of vulnerability, harm, stigma and respect for persons. In addition to understanding these and other necessary limitations, the participants will acquire new skills in research and treatment in infant's neurodevelopmental assessment and a wider understanding of their ethical implications to many stakeholders.

Workshop on sensory processing and infant neurodevelopment

Learn about the effects of sensory-motor processing on infants and children brain function, particularly touch and motion. The objective of this workshop is twofold. First, it aims to discuss how basic sensory-motor processes are linked to developmental outcomes either in typically developing infants and pediatric populations at risk of developmental disorders, namely autism. Lastly, it aims to provide and discuss possible gaps in identifying early markers of sensory and motor processing that can be altered in infants diagnosed with/at-risk of neurodevelopmental problems.

Target Audience

Health professionals and academics (professors, researchers, students)

No previous experience is required, but participants to should bring their own laptops.

H. ORGANISERS

Local Organiser

Elena Coronilla Ruiz

Adriana Garcia Lupato

Emma Motrico (Member of Riseup-PPD's Task Force COVID-19)

Scientific Committee

Members of Riseup-PPD's Working Group 2 (Assessment Approaches and Methods in PPD) Ilaria Lega and Alkistis Skalkidou Members of Riseup-PPD's Working Group 2 (Assessment Approaches and Methods in PPD) and Working Group 3 (Neuroimaging and Neurophysiological Data Acquisition and Analysis in PPD)

Anna-Lisa Schuler, Vera Mateus, and Sara Cruz

Members from Riseup-PPD's Working Group 4 (Ethical standards and procedures for clinical research in PPD)

Susanne Uusitalo

I. TRAINERS

Workshop on Ethical Aspects of Infant's Neurodevelopment Assessment: Research and Treatment

Ilona Autti-Rämö

Faculty of Medicine, University of Helsinki, Finland

Susanne Uusitalo

Philosophy, University of Turku, Finland

Workshop on sensory processing and infant neurodevelopment

Helga O. Miguel

Pediatric Anesthesiology & Critical Care Section, Department of Perioperative Medicine, National Institutes of Health, Bethesda, MD, USA

Training School

Sara Cruz

Department of Psychology, School of Philosophy, Psychology & Language Sciences, University of Edinburgh, Edinburgh, UK

Raquel Costa

EPIUnit - Instituto de Saúde Pública, Universidade do Porto, Porto, Portugal

Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Universidade do Porto, Porto, Portugal

Hei-Lab:Digital Human-Environment Interaction Lab. Faculty of Psychology, Education and Sports, Lusófona University, Porto, Portugal

Vera Mateus

Universidade Portucalense Infante Dom Henrique, Porto, Portugal

Center for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), at the Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

Anna-Lisa Schuler

Lise Meitner Research Group Cognition and Plasticity, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany



OVERVIEW
Training School on Infant's Neurodevelopment
Assessment (WG2-led)
22-24 March 2023

Introduction

Description:

Training School on Infant's Neurodevelopment Assessment. The Training School is organized by the RISEUP-PPD COST Action, Working Group 2 - Assessment Approaches and Methods in PPD. The main goal of this Working Group is to appraise, develop and define standard procedures to assess women diagnosed with PPD (pre- and post-treatment); collect genetic and epigenetic biomarkers; assess the impact of PPD in the newborn-infant development (0-12 months); and assess interpersonal functioning (the mother-baby dyad and the father-mother-baby triad). The goal of this Training School is to advance and exchange knowledge with health professionals about measures (e.g., brain imaging techniques and developmental assessment scales) used to assess infants' and children's neurodevelopment. It will also include two related workshops on Ethical Aspects of Infant's Neurodevelopment Assessment: Research and Treatment and on Sensory Processing and Infant Neurodevelopment.

Workshop on Ethical Aspects of Infant's Neurodevelopmental Assessment: Research and Treatment. Infant neurodevelopmental assessment in research and treatment is an issue that involves many ethical considerations for researchers, caretaking professionals, infants and their parents. These considerations may also have farreaching implications for (prevention and mitigation of) vulnerabilities and stigma. The balance between the research participants' rights, their and their parents protection and scientific interests needs knowledge on scientific methods and standards and ethical reflection. This workshop on infant's neurodevelopmental assessment in research and treatment discusses the ethical aspects and perspectives as well as potential tensions between questions of respect for persons, nonmaleficence, and beneficence.

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Anna-Lisa Schuler, Vera Mateus, and Sara Cruz

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Susanne Uusitalo

Trainers

Workshop on Ethical Aspects of Infant's Neurodevelopment Assessment: Research and Treatment

Ilona Autti-Rämö

Faculty of Medicine, University of Helsinki, Finland

Susanne Uusitalo

Philosophy, University of Turku, Finland

Workshop on sensory processing and infant neurodevelopment

Helga O. Miguel

Pediatric Anesthesiology & Critical Care Section, Department of Perioperative Medicine, National Institutes of Health, Clinical Center, Bethesda, MD, USA

Training School:

Sara Cruz

Department of Psychology, School of Philosophy, Psychology & Language Sciences, Page 3 of 6

University of Edinburgh, Edinburgh, UK

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EPIUnit - Instituto de Saúde Pública, Universidade do Porto, Porto, Portugal Laboratório para a Investigação Integrativa e Translacional em Saúde Populacional (ITR), Universidade do Porto, Porto, Portugal

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Vera Mateus

Universidade Portucalense Infante Dom Henrique, Porto, Portugal Center for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), at the Faculty of Psychology and Educational Sciences, University of Coimbra, Portugal

Anna-Lisa Schuler

Lise Meitner Research Group Cognition and Plasticity, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

Local Sites

Loyola University - Developmental Psychology at the Department of Psychology, Seville, Spain

Online access (if applicable)

To be confirmed

Made possible with the support of



Funded by









SCHEDULE AND TRAINERS

Training School on Infant's Neurodevelopment
Assessment (WG2-led)
22-24 March 2023

22nd March 2023

Time (CET)	What
9:00am – 11:00am	Workshop on Ethical Aspects of Infant's Neurodevelopmental Assessment: Research and Treatment (Ilona Autti-Rämö & Susanne Uusitalo)
11:00am – 11:15am	Coffee Break
11:15am – 1:00pm	Workshop on Sensory Processing and Infant Neurodevelopment (Helga O. Miguel)
	End of Workshops
	Lunch break
2:00pm – 5:00pm	Training School - Session I Neurodevelopment Assessment in Infancy (Sara Cruz)
	End of session
	23 rd March 2023
Time (CET)	What
9:00am – 1:00pm	Training School - Session II Healthcare and neurodevelopment assessment in childhood: challenges in the implementation of standardized measurements across different countries (Raquel Costa)
	Lunch break
2:00pm – 5:00pm	Training School - Session III Potentialities of functional near-infrared spectroscopy in neurodevelopment assessment (Vera Mateus)
	End of session

24 th March 2023	
Time (CET)	What
9:00am – 1:00pm	Training School - Session IV EEG data collection and analysis procedures in assessing neurodevelopment in pediatric populations (Anna-Lisa Schuler)
2:00pm – 4:00pm	Training School - Session V Future directions in the assessment of infant and child neurodevelopment (Sara Cruz & Vera Mateus)
	End of session

Workshop on Ethical Aspects of Infant's Neurodevelopmental Assessment: Research and Treatment



Ilona Autti-Rämö (born 11th July 1957) graduated from medical school in 1982 and specilized in pediatric neurology in 1993. She worked as a clinical neuropediatrician until 2004 but started to worked within evidence based medicine in late 1990 (editor at the Finnish

EBM guidelines at Duodecim). 2004-2007 she worked as a senior medial officer at the Finnish Office for Health Technolocy Assessment (FinOHTA) and started to develop ethical evaluations for health decision making. She worked as the head of rehabilitation research at the Social Insurance Institute (SII) (2007-20014), chief medical officer for the SII (20014-2018) and the General Secretary at the Council for Choices in Health Care in Finland at the Ministry of Social affairs and Health (2018-2022). She retired in 2022 but continues to work as a medical expert at the Council for Choices in Health Care in Finland and with several research groups as adjunct Professor at the University of Helsinki and as a vice member of the Finnish national ethical committee. She has over 100 peer reviewed published scientific articles.



Susanne Uusitalo, PhD, MA earned her doctoral degree in philosophy 2015 and is currently a senior researcher at the Department of Philosophy at the University of Turku, Finland. She is the Head of Finnish unit of the International Chair in Bioethics and Leader of the RISEUP-PPD Working group 4: Ethical standards and procedures for clinical research in PPD. She

works with ethics in academia and society, she is for instance a member of the Finnish national ethical committee ETENE, a member of the Finnish national committee on medical research ethics TUKIJA and an ethics expert at the Council for Choice in Health Care in Finland. Her interests lie in bioethics and research ethics.

Workshop on sensory processing and infant neurodevelopment



Helga O. Miguel research focus on the brain correlates of sensory processing, namely somatosensory processing, in typical development and in neurodevelopmental disorders. Helga's training is multidisciplinary and covers topics in motor control and learning, psychology, and cognitive neuroscience. She uses a combination of behavioral and

neuroscience methods to learn more about sensation, perception, and emotion in typically developing infants and children, and in infants/ children with autism spectrum disorders (ASD) and other neurodevelopmental disorders. Helga currently works in the Pediatric Anesthesiology & Critical Care Section at the Clinical Center (CC) – National Institutes of Health (NIH), USA and her research explores the use of functional near infra-red spectroscopy and electroencephalography to characterize brain function in vulnerable populations. Helga currently uses these methodologies to examine nociception and pain in individuals with intellectual disability and with/autism.

Trainers of the Training School on Infant's Neurodevelopment Assessment



Sara Cruz, Ph.D., is a teaching fellow in Developmental Psychology and a researcher at the University of Edinburgh, UK. Sara has been developing research activities in the field of Clinical Psychology, specifically, in the neurodevelopmental field, with a particular interest in studying the neuropsychophysiological correlates of cognition and

behavior, in infancy and childhood. She has experience and a multidisciplinary expertise in using combined neuropsychophysiological methodologies and developmental assessment instruments with infants (e.g., NBAS) and children (e.g., Bayley Scales). Sara's research interests are dedicated to uncovering the interplay between the brain, cognition, and behavior, in typically and atypically developing populations, evidenced by her scientific publications and involvement in multiple research projects.



Raquel Costa, PhD in Clinical Psychology at Universidade do Minho. Integrated researcher at the Epidemiology Research Unit of the Institute of Public Health, University of Porto, and at the Laboratory for Integrative and Translational Research in Population Health (ITR), University of Porto. Collaborative researcher at the Hei-Lab:Digital Human-Environment Interaction Lab. of the

Faculty of Psychology, Education and Sports, Lusofona University. Assistant Professor at the Lusofona University. Researcher in several financed projects related to perinatal mental health and neurodevelopmental oucomes during childhood.



Vera Mateus, PhD, is currently a research fellow at the Universidade Portucalense Infante Dom Henrique and a collaborator researcher at Center for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC), at the Faculty of Psychology and Educational Sciences, University of Coimbra.

She is also a researcher at COST Action CA18138 Research Innovation and Sustainable Pan-European Network in Peripartum Depression Disorder (Riseup-PPD). Her current research interests are focused on infant and child's sociocognitive development, especially joint attention, in typical and at-risk samples (e.g., prematurity); the influence of parent-infant relationship on the infant's development; perinatal mental health; and neural processing of social stimuli using functional near-infrared spectroscopy (fNIRS).



Anna-Lisa Schuler is a Post-Doc researcher at the Max Planck Institute for Human Cognitive and Brain Sciences. She is interested in multimodal imaging (M/EEG, (f)MRI) and brain modulation (TMS, entrainment) and their combination. She has experience in psychiatric and neurological research and is especially interested in language processing. In this regards she

has investigated prenatal brain markers for cognitive development during childhood.