



Personal Information

Family name, First name: Hüppi Petra Susan

Date and Place of Birth: 26 October 1960; Lucerne, Switzerland; Swiss

ORCID ID: 0000-0002-7383-6648 <https://orcid.org/0000-0002-7383-6648>

Google Scholar ID: <https://scholar.google.com/citations?hl=en&user=SAtyqysAAAAJ>

UNIGE URL: <https://www.unige.ch/medecine/petri/fr/groupe-de-recherche/184huppi/membres-du-groupe/petra-huppi/>

HUG URL: <https://www.hug-ge.ch/developpement-croissance/centre-du-developpement-enfant>

UZH URL: <https://www.uzh.ch/de/explore/management/unirat.html>

USZ URL: <https://www.usz.ch/team/petra-hueppi/>

ChildLab URL: <https://www.campusbiotech.ch/fr/node/468>

Education and Diploma

2003	Full Professor , University of Geneva, Switzerland
1998	Privat-docent , University of Geneva, Faculty of Medicine
1993	Boards of Paediatrics/Neonatology (Switzerland)
1987	US Medical graduation for Foreign Medical Graduates
1986	M.D., Medicine , University of Berne, Switzerland

Current positions

2004 -	Chief, Division of Child Development & Growth, Dept. of Child and adolescent, University Hospital, Geneva, Switzerland
2003 -	Full Professor of Paediatrics of the University of Geneva
1998 -	Visiting Scientist, Dept. of Neurology, Children's Hospital, Harvard Medical School, Boston, USA.

Employment history

2019 -2023	Vice Dean of the Faculty of Medicine, University of Geneva, Switzerland
1998 -2003	Director, Child Development Unit, Dept. of Paediatrics, Children's Hospital, University of Geneva
1996-1997	Charles A Janeway Scholar of the Child Health Research Center, Joint Program in Neonatology/Dept. of Neurology, Harvard Medical School, Children's Hospital, Boston, USA.
1994-1996	Clinical and Research Fellow in Neonatology (Reynolds-Rich-Smith Fellowship), Joint Program in Neonatology, Harvard Medical School, Boston, USA
1990-1994	Senior Pediatric Resident and Fellow, Children's Hospital, Berne
1990	Neonatal/Behavioral Research Fellow, Children's Hospital, Boston (2 months), USA
1988-1990	Resident and Senior Fellow in Neonatology, Department of Neonatology, University Hospital for Obstetrics and Gynecology, Bern, Switzerland
1987-1988	Resident, Department for Anaesthesiology, University Hospital, Bern, Switzerland

Selected Institutional Responsibilities

2018-	Member of the Scientific Advisory Board to NeuroSpin CEA Saclay, Paris
2015-	Member of the Scientific Advisory Board of the Developing Human Connectome dHCP, London (PI D. Edwards)
2016-2022	ESPR Vice-President – European Society for Pediatric Research
2012-2020	National Research Council Member Swiss National Science Foundation (SNSF)
2012-2014	Agence National de Recherche (ANR) France Official member of Research Council

National and International Academic Institutional responsibilities

National

2019-	Elected member of the Board of Trustees of the University of Zurich (UZH) (https://www.uzh.ch/de/explore/management/unirat.html)
2019-	Board of trustees of the University Hospital of Zurich – Representative UZH (https://www.usz.ch/team/petra-hueppi/)

International

2024-	Vice-President Elect, International Society for Magnetic Resonance in Medicine (ISMRM) https://www.ismrm.org/members-only/committee-directory/#executive
-------	--

Philanthropic activities

2012 -	Nestlé Foundation – Member of board of trustees – President (since 2017)
2019-	Gertrude von Meissner – Member of board of trustees
2007-	Fondation Prim'Enfance – Member of board of trustees
2022-	Fondation pour Recherches Médicales (FRM) – Member of board of trustees

Research projects as leading Investigator

2022-2026	Swiss National Science Foundation (SNF) (32003B_212714) (PI P. Hüppi) <i>The preterm brain growing up-Functional network dynamics, associated structural substrates and the role of sensory stimulation</i>	CHF 1'112'000
2022-2025	DORA Foundation. <i>Early Music and Maternal Voice Interventions for Improving the preterm infants' brain and physiological development"</i> (PI P. Hüppi)	CHF 120'000
2023-2026	Fonds K. <i>Early Music and Maternal Voice Interventions for improving the preterm infants' brain and physiological development.</i> (PI P. Hüppi)	EUR 150'000
2019-2021	Swiss National Science Foundation (SNF) (320030B_182832/1) <i>Building the path to resilience after preterm birth: cortical development and network based interventions in longitudinal cohorts.</i> (PI P. Hüppi)	CHF 899'922
2016-2019	Horizon 2020: <i>EuroPOND</i> (PI: Daniel Alexandre UCL, Co-I P. Hüppi)	CHF 542'719
2015-2018	Prim'Enfance Foundation. <i>From Cortex to classroom closing the gap between what we know and what we do.</i> (PI P. Hüppi)	CHF 86'205
2015-2018	Swiss National Science Foundation (SNF) (324730-163084) <i>Building the path to resilience in preterm infants: a neuroimaging investigation of the impact of multisensory and neurocognitive interventions.</i> (PI P. Hüppi)	CHF 862'555
2011-2015	Swiss National Science Foundation (SNF) (32473-135817) <i>Development of Emotion and Cognition in Preterm Born Cohorts: Neurostructural and Neurofunctional Correlates from Birth to Early Adolescence.</i> (PI: P Hüppi)	CHF 586'622
2009-2015	SPUM (Swiss Program University Medicine) <i>From Cortex to Classroom: enhancing brain development for premature infants</i> (PI: P. Hüppi)	CHF 3'343'792
2009-2012	European project Framework VII: <i>CONNECT Consortium of neuroimagers for the Noninvasive exploration of brain connectivity and tractography</i> , Nr 23892 (Co-PI: P.Hüppi).	CHF 387'000
2009-2011	Collaborative research agreement between Syntaxin Ltd and University of Geneva. <i>Effect of ablation of growth hormone secretion following treatment with a syntaxin GHRH-chimera on Rodent growth and development early in life, a proof of concept study</i> (Co-PI P Hüppi)	CHF 164.000
2007-2009	Nestlé Research contract: <i>Nutrition for the brain: Experimental studies (rat model of IUGR) on effects of maternal and perinatal nutrition on brain development</i> (PI: P. Hüppi)	CHF 500'000./year
2006-2009	European Project Framework VI: <i>NEOBRAIN Neonatal estimation of brain damage risk and identification of neuroprotectants</i> LSHM-CT-2006-036534, contract Nr 036534 (Co-PI: P. Hüppi)	EUR 180'000
2007-2010	Swiss National Science Foundation (SNF), Grant Nr 3200BO/113632/1, for the project: <i>Development of Executive Functions in children born prematurely in relation to neurostructural brain development</i> (PI: P. Hüppi)	CHF 227'000
2007-2010	Leenaards Prize for the project: <i>Development of Executive Functions in children born prematurely in relation to neurostructural brain development</i> (PI: P. Hüppi)	CHF 400'000
2006-2008	Grant from the "Fonds de péréquation" (Realignment Fund), University Hospitals of Geneva (HUG) for the project: <i>Recherche d'endophénotypes par l'étude électroencéphalographique et neuroanatomique du trouble hyperactivité avec déficit d'attention.</i> (PI: C. Menache-Starobinski; Co-investigators: E. Sforza & P. Hüppi, CA. Haenggeli, A. Malafosse, F. Lazeyras).	
2005-2008	Swiss National Science Foundation (SNF), Grant Nr 3200-108176, co-investigator for the project: <i>Effect of Erythropoietin on the developing brain in very preterm infants.</i> (PI: H. Bucher, Co-PI: P. Hüppi).	
2005-2006	Grant from Novartis Foundation., <i>Endocrine disruptors in development</i> (PI: P. Hüppi)	CHF 50'000
2005-2007	Swiss National Science Foundation (SNF), Grant Nr PNR 405040-108713/1, co-investigator for the project « <i>Role of environmental endocrine disruptors in the aetiology of intrauterine growth retardation and its later consequences such as disorders in brain development and adult-onset obesity</i> » (PIs: M. Aubert, P Hüppi)	CHF 474'172

2005-2006	Grant from the Gertrude Von Meissner Foundation for the project: <i>The role of spontaneous general movements assessment in the follow-up of high-risk preterm infants: Comparison with Bayley scales of infant development and advanced magnetic resonance imaging.</i> (Datta AN, Hüppi P, Menache- Starobinski C)	CHF 50'000
2004-2005	Grant of the University Hospitals of Geneva (HUG) called "Fonds de péréquation" for the project: <i>Hypoxia-Ischemia in the developing brain. Correlations between electrophysiological activity, biomarkers of brain injury, advanced Magnetic Resonance Imaging and neurodevelopmental outcome.</i> (PI: P Hüppi)	CHF 50'000
2004-2007	Swiss National Science Foundation (SNF), Grant Nr 32-102127, for the project: <i>Hypoxia-ischemia in the developing brain. Correlations between electrophysiological activity, biomarkers of brain injury, advanced Magnetic Resonance Imaging and neurodevelopmental outcome.</i> (PI: P Hüppi)	CHF 176'118
2004-2007	NICHD. <i>Preterm Foetal Growth Restriction and Developmental Care.</i> (PI: Heidelise Als; Co-investigator: P Hüppi).	
2002-2005	Whitaker Foundation grant, collaborator for the project: <i>Characterization of newborn brain development.</i> (PI: Simon Warfield, Co-investigator: P Hüppi)	
2001-2004	Swiss National Science Foundation (SNF), Grant Nr 3200-063135, co-investigator for the project: <i>Neurobehavioral Phenotype and Brain Development in Velo-cardiofacial Syndrome.</i> (PI: S Eliez, Co-PI: P. Hüppi)	
2000-2005	PPG National Institute of Health (Nr P30HD18655): Consultant for the project: <i>Pathogenesis of Periventricular leukomalacia.</i> (PI: JJ Volpe)	
2000-2003	OERI CFDA 84.035T: Consultant for the project: <i>From cortex to classroom.</i> PI: H. Als) (co-investigator: P Hüppi)	
1999-2003	Swiss National Science Foundation (SNF), Grant Nr 32-56927.99, for the project: <i>Intrauterine growth restriction.</i> (PI: P. Hüppi)	
1996-1997	Charles A Janeway scholarship in child health research, National Institute of Health, Children's Hospital, Harvard University	
1995-1998	Swiss National Science Foundation (SNF), Grant Nr 32-43426.95, for the project: <i>Postnatal brain development: The neonatal period.</i> (E. Bossi, P. Hüppi (Co-PI), C. Boesch, G. Schroth)	
1994-1995	Reynolds-Rich-Smith research fellowship, Harvard University	
1994-1996	Grant from the Swiss Foundation for medical-biological sciences (under the auspice of the Swiss Academy of Medical Sciences): <i>Newborn Brain Imaging</i>	

Mentoring: supervision of graduate students and postdoctoral fellows

Mentoring

- **Lana Vassung** (<https://scholar.google.com/citations?user=TWSexC0AAAAJ&hl=en>) was an international PostDoc on the excellence scholarship of the confederation and was promoted to assistant professor at Harvard medical school
- **Gregory Lodigensky** (<https://scholar.google.com/citations?user=qaU5cYcAAAAJ&hl=en>), trainee and CDC scientifique in my lab is associated Professor for newborn Medicine at St Justine in Montreal Canada
- **Terrie Inder** (<https://www.linkedin.com/in/terrie-inder-3b9b5b11b/>) trained under my guidance in neonatal MR imaging and has become a prominent full professor at Harvard medical School and now in CHOC, University of southern California

6 supervised PhD thesis; 4 supervised MD thesis; 8 supervised MA thesis. 1 PhD and 4 MA thesis currently under my supervision.

List of supervised PhD thesis

Andrew Boehringer: *Sensory Processing in the Preterm Population from Newborns to Adolescents Including a Dynamic fMRI Approach*, PhD Ongoing. **Serafeim Loukas:** *Methods for functional connectivity and morphometry in neonatal neuroimaging to study neurodevelopment.* PhD student, Ecole polytechnique fédérale de Lausanne (EPFL) 2021; **Gonçalves de Alcantara E Freitas Lorena:** *Dynamics of functional brain networks in preterm-born children*, PhD student 2020; **Joana Sa de Almeida:** *Music intervention and brain plasticity in preterm infants: a neuroimaging investigation* PhD student 2020; **Lordier Lara** *The effect of music on functional processing and functional connectivity of the preterm infants' brain.* Genève, Université, Faculté des Sciences, 2017 (co-directeur Didier Grandjean); **Adam Darqué Alexandra** *Functional integration of sensory stimuli in newborns during the neonatal period investigated with FMRI and high-density EEG.* Genève, Université, Faculté des Sciences, 2017

(co-directeur Prof. Christoph MICHEL); **FISCHI Gomez Elda** *Connectomics across development: towards mapping brain structure from birth to childhood*. Lausanne, Ecole Polytechnique Fédérale de Lausanne, Faculté des sciences et techniques de l'ingénieur, 2015.

Teaching activities

Regular teaching in pre and post graduate training in the Medical Faculty of the University of Geneva.

Reviewing activities

- National and International Project reviewer on various panels (French ANR, European Science foundations (ERC, FET, etc), US National Science Foundation, Wellcome trust, Swiss National Funds (SNF). Reviewer for Pediatric Research, Cerebral Cortex, NeuroImage, PNAS, Early Human Development, JAMA among others.
- 2006 - 2010 European Chief Editor *Pediatric Research*

Active memberships in scientific societies

2017-	European Society for Paediatric Research
2009-	European Association for Developmental Care (EADCare)
2000 -	International Perinatal Collegium
2000 -	European Neonatal Brain Club
1998 -	Société Genevoise des Neurosciences
1992 -	European Society for Magnetic Resonance in Medicine and Biology (ESMRMB)
1991 -	International Society for Magnetic Resonance in Medicine (ISMRM)
1991 -	European/American Society for Pediatric Research (ESPR/SPR)
1988 -	Swiss Society of Neonatology
1988 -	Swiss Society of Pediatrics

Organization of conferences

Chair of numerous international conferences. Organiser of EADCare and Connect Club.

Plasticity and Early Intervention

EADCare - *Music for development & Rehabilitation* - Scientific Symp., Campus Biotech, Geneva, Switzerland, 2021

POND 2018, 2nd International Workshop on Modelling the Progressions of Neurological Disease. Sponsored by EuroPond consortium, Campus Biotech, Geneva

EADCare - *Maternal voices, Music enhances brain development, NICU of tomorrow: how to enhance Development?* Paris 2018

EADCare - *Developmental care in Neonatology and Pediatrics*, Paris 2017

EADCare - *Multisensory processing & developmental care*, Geneva 2016

EADCare - *5th Scientific Symposium*, Brescia, Italy, October 2015

Contribution to Open Sciences

My research is deposited in open archive. With many conferences for the general public and participation in the brain week we have made our research accessible to the wider public. With collaboration such as National Geographic with a readership of 55Mio people we have largely made our research publicly available.

<https://archive-ouverte.unige.ch/home/search?view=list&search=huppi>

Scientific Outreach

24.04.2019 BBC World Services

[Outlook - Why we play music to premature babies](#)

01.2019 | NATIONAL GEOGRAPHIC

"[A Musical Milestone](#)". 'Connected' and High-Tech: Your Medical Future. [The Future of Medicine Issue. 01.2019](#)

Complete list of outreach activities:

<https://www.hug.ch/enfants-ados/developpement-croissance/articles-presse>

Fellowship and Awards

- 2023 **ISMRM Gold Medal Award** -for her exceptional contributions to the field of medical imaging, and as a result of how her groundbreaking research has contributed to a better understanding of early brain development (<https://cibm.ch/celebrating-excellence-in-medical-imaging-prof-petra-s-huppi-wins-ismrm-gold-medal-award/>)
- .2016 **Fellow** of the International Society for Magnetic Resonance in Medicine
- 2011 **Max Cloetta Prize** for Medicine, Switzerland
- 2007 **Prix Leenaards Foundation**, Scientific Award
- 1997 Hans Sigrist Stiftung, Hans Sigrist Stipendium, University of Bern