

EUROCORES Programme European Collaborative Research

CNCC Consciousness in a Natural and Cultural Context



The beginning of the 21st century is seeing the topic of consciousness firmly established at the forefront of the scientific arena. Unraveling the mysteries of consciousness is generally considered to be one of the major challenges of modern science. In fact, Science magazine recently ranked the issue of consciousness second on its top 25 of big questions facing science over the next quarter-century.

This area has seen different times such as when debating consciousness was the exclusive domain of philosophers. Today, one of the important challenges is to integrate these philosophical clarifications and conceptualizations with cleverly designed experiments and modern technology. For example, empirical data can serve to challenge and validate theoretical analyses, while conceptual analyses can provide directions and tools for the empirical scientists.

The leading idea behind the EUROCORES Programme "Consciousness in a Natural and Cultural Context" is that consciousness is both a cultural and a biological phenomenon. Consciousness is inherently private and subjective which emerges from the physical properties and organisation of neurons in the brain within a social environment. The Programme offers a valuable framework for researchers from the humanities, social and natural sciences to build joint research projects, in order to foster top-quality consciousness research in Europe.

List of Collaborative Research Projects (CRPs)

Brain, agency, self, intersubjectivity and consciousness (BASIC)

(AHRC, CNRS, DASTI, NSF)

This project examines the relation between phenomenologically relevant markers of self – e.g. a conceptual identification of the notion of "agency" and "ownership" – and particular patterns of brain activity. The aim is to further develop both empirical research and conceptual refinement, integrating into an interdisciplinary research field whose epistemological validity is supported by a solid anchoring in wellestablished research traditions.

Project Leader: **Andreas Roepstorff** University of Aarhus, Denmark

Principal Investigators:

Christopher Frith University College London, UK

Shaun Gallagher University of Central Florida, Orlando, USA

Anthony Jack Washington University, St. Louis, USA

Tatjana Nazir Hôpital Lyon Université, France

Marcus Raichle Washington University, St. Louis, USA

Dan Zahavi University of Copenhagen, Denmark

Associated Partners:

Vittorio Gallese Università degli Studi di Parma, Italy

Patrick Haggard University College London, UK

Evan Thompson University of Toronto, Canada

Kai Vogeley University of Cologne, Germany

Unconscious boundaries of mind; research into the extended mind hypothesis (Boundaries of Mind)

(AHRC, FWO, NWO)

Interaction with the environment can alter our way of conceiving things. Think for example how drawing sketches may help to find the solution to a problem. This project studies such reconceptualization and the factors that may be facilitating as well as impeding. It investigates the influence of preconceptions, the role of our visual system and the flexibility to switch from normal up to clinical limits.

Project Leader: **Ilse Verstijnen** Utrecht University, the Netherlands

Principal Investigators:

Tjeerd Jellema University of Hull, UK

Johan Wagemans University of Leuven, Belgium

The conscious experience of what is reachable: neural, behavioural, cultural and philosophical aspects (CEWR)

(CNRS, MEC, NWO)

Previous studies have suggested that the conscious experience of what is reachable - i.e. in the near space - is related to the true limit of action-capabilities of our own body. Within this theoretical context, the overall aim of the CEWR project is to show that being aware of what is reachable for oneself and others relies on self sensory-motor interactions.

Project Leader: **Yann Coello** Université de Lille, France

Principal Investigators:

Joan Lopez-Moliner Universitat de Barcelona, Spain

Angela Sirigu Université Claude Bernard, Lyon, France

Jeroen Smeets Vrije Universiteit Amsterdam, the Netherlands

Associated Partners:

Bernard Pachoud

Centre de Recherche en Epistémologie Appliquée, Paris, France

Alan Wing University of Birmingham, UK

Consciousness in interaction. The role of the natural and social environment in shaping consciousness (CONTACT)

(AHRC, CNR, NWO)

The brains and bodies of cognitive agents (humans and animals) interact dynamically with both their natural and social environments. This project opposes the claim that brain activity by itself enables conscious experience and instead investigates the claim that explaining consciousness requires studying the interactions of animals and humans - and their brains with the environment.

Project Leader: **Cristiano Castelfranchi** Instituto Scienze e Tecnologie della Cognizione, Roma, Italy

Principal Investigators:

Andy Clark University of Edinburg, UK

Susan Hurley University of Bristol, UK

Enrico Rambaldi Instituto per la Storia del Pensiero Filosofico e Scientifico Moderno, Milano, Italy

Ed S. Tan University of Amsterdam, the Netherlands

Associated Partner:

Thomas Metzinger Johannes Gutenberg - Universität Mainz, Germany

Metacognition as a precursor to self-consciousness: evolution, development & epistemology (METACOGNITION)

(AHRC, CNRS, FWF, NSF)

Metacognition, - i.e., thinking about thinking may not be uniquely human, according to new experimental paradigms. This project critically examines the existence and nature of metacognitive abilities in non-human primates and develops comparative knowledge of metacognitive processes, by exploring how similar these capacities are in non-human animals, human children and human adults. It will also examine how metacognitive processes contribute to self-consciousness.

Project Leader: **Joëlle Proust** CNRS, ENS-EHESS, Paris, France

Principal Investigators:

Johannes Brandl Universität Salzburg, Austria

Hannes Leitgeb University of Bristol, UK

Josef Perner Universität Salzburg, Austria

Bernard Renault CNRS, Hôpital de la Salpétrière, Paris, France

John Smith University of Buffalo / State University of New York, USA

Associated Partner:

Josep Call MPI for Evolutionary Anthropology, Leipzig, Germany The aim of the European Collaborative Research (EUROCORES) Scheme is to enable researchers in different European countries to develop collaboration and scientific synergy in areas where European scale and scope are required to reach the critical mass necessary for top class science in a global context.

The scheme provides a flexible framework which allows national basic research funding and performing organisations to join forces to support excellent European research in and across all scientific areas.

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- Fonds voor Wetenschappelijk Onderzoek Vlaanderen (FWO)
 Fund for Scientific Research – Flanders, Belgium
- Forsknings- og Innovationsstyrelse (DASTI) Danish Research Agency, Denmark
- Centre National de la Recherche Scientifique (CNRS) National Centre for Scientific Research, France
- Consiglio Nazionale delle Ricerche (CNR) National Research Council, Italy
- Ministerio de Educación y Ciencia (MEC) Ministry of Education and Science, Spain
- Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO) Netherlands Organisation for Scientific Research, the Netherlands
- Arts and Humanities Research Council (AHRC), United Kingdom
- National Science Foundation (NSF), United States of America



CNCC Programme

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