### 03.04 | Wednesday

03.04

04.04

17:00-18:00 Registration 18:00-18:30 Opening Session (in Portuguese) 18:30-19:15 Opening Conference Chairman | Axel Cleeremans

What (if any) parts of creativity are "beyond the brain"? Mark Runko

# 04.04 | Thursday

1 <sup>st</sup> session - The foundations of creativity	
	Moderator   Caroline Watt
09:00-09:15	Opening remarks Caroline Watt
09:15-09:45	The movement, and musicality of mental time travel Nicola Clayton and Mark Baldwin
09:50-10:20	Connections, sensitivity and tangible representations. Unpacking some correlates of creativity and exceptional experiences <b>Christine Simmonds-Moore</b>
10:25-10:55	Breaking barriers: Emerging topics in creativity and insight research <b>Amory Danek</b>
11:00-11:30	Coffee, posters session and contacts with faculty
11:30-12:15	Keynote lecture Myths and truths of the creative mind Anna Abraham
12:30-13:00	Morning Discussion
13:00-14:30	Lunch
14:30-16:00	Oral poster presentations - Grant holders Moderator   <b>Mário Simões</b>
16:00-16:30	Coffee, posters session and contacts with faculty
16:30-17:30	Oral poster presentations - Grant holders Cont.

### 05.04 | Friday 2<sup>nd</sup> session - The expressions of creativity Moderator | Rainer Goebel 09:00-09:15 Opening remarks 09:00-09:15 Opening remarks **Rainer Goebel** 09:15-09:45 Environmental effects on creative output: Studies of the impact of Virtual reality Todd Lubart . 09:50-10:20 Using adversarial collaboration to harness collective intelligence and boost creativity in science Lucia Melloni 10:25-10:55 The creativity code 10:25-10:55 Psi and the creative imagination Marilyn Schlitz 11:00-11:30 Coffee, posters session and contacts with faculty 11:30-12:15 Keynote lecture 11:30-12:15 Keynote lecture The improvising brain: In search of meaning making and thriving Morten Kringelbach 12:30-13:00 Morning Discussion 13:00-14:30 Lunch 13:00-14:30 Lunch 14:30-16:30 Roundtable 14:30-16:30 Parallel Workshops (W) **W1** - Room Medicoteca; without translation - bring your laptop Creativity in art and science AI - artificial creativity and art Moderator | Miguel Castelo-Branco Invited presenter | Penousal Machado **W 2** - Room Braga; without translation Choreography and embodiment: Creating with and without wings and tentacles to develop movements with and without words Moderator | Rui Costa Invited presenters | Mark Baldwin and Nicola Clayton **€200 W 3** - Room Conferências; without translation Synesthetic creativity: A hands-on experience using sound and drawing Moderator | Etzel Cardeña Invited presenter | Christine Simmonds-Moore **W 4** - Auditorium; with simultaneous translation - bring your mobile The sound of creativity: A sensorial pathway from silence to music Moderator | Nuno Sousa Invited presenter | Pedro Abrunhosa 05.04 17:00-18:00 Get-together Cheese & Wine

# 06.04 | Saturday

## 3<sup>rd</sup> session - The edges of creativity

#### Moderator | Stefan Schmidt

# Stefan Schmidt

09:15-09:45 **Neurocinema and the invention of reality** Sergio Neuenschwander

09:50-10:20 Music and psychedelic drugs as tools to explore creativity **Frederick Barrett** 

Marcus du Sautoy

11:00-11:30 Coffee, posters session and contacts with faculty

Creativity in context: The big picture Edward Kelly

12:30-13:00 Morning Discussion

The process of creativity

Moderator | Axel Cleeremans

Participants | Pedro Abrunhosa, Nicola Clayton and Mark Baldwin,

Marilyn Schlitz, Sergio Neuenschwander

### **Registration Fee**

The 14<sup>th</sup> Symposium will be organized only for in-person audience.

€80 - for university students under the age of 25 and PhD students (please enclose copy of your student card and/or university/supervisor declaration).

These amounts include access to all Symposium sessions, coffee breaks and certificate of attendance. It does not include meals. Limited number of registrations.

#### Online registration - www.bialfoundation.com

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# 14<sup>th</sup> SYMPOSIUM OF BIAL FOUNDATION **BEHIND AND BEYOND THE BRAIN** Aquém e Além do Cérebro

Creativity

Casa do Médico - Porto April 3 to 6, 2024

#### **Organizing Committee:**

President **AXEL CLEEREMANS (Brussels)** 

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#### Symposium's Venue

Casa do Médico • Rua Delfim Maia, 405 • 4200-256 Porto Tel. +351 22 507 0100

#### Secretariat

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Anna Abraham | Psychologist and neuroscientist, E. Paul Torrance Professor in the Mary Frances College of Education, University of Georgia, USA Director of the Torrance Center for Creativity and Talent Development. Author of "The Neuroscience of Creativity" and Editor of "The Cambridge Handbook of the Imagination". Scientific interests: interdisciplinary examination of fundamentally human capacities such as creative thinking and other core aspects of the imagination including the reality-fiction distinction, self and social cognition, mental time travel, mental state reasoning, and aesthetic experience.

Pedro Abrunhosa | At the age of 16 he studied Analysis, Composition and History of Music at Porto School of Music, and, later, at the Conservatory, Porto, Portugal. He got into music through the erudite path; from the most complex to the simplest, towards the purification of language. When he got to jazz, he was a jazz scholar and founded the Porto Jazz School. When he arrived at rock music, he had a backpack full of history and rigor. In 1994 he released his first album "Viagens" and he is now finishing his ninth. In his multi-platinum albums, he reveals his powerful writing, leaving songs that join so many other hymns, legends, adages. With thousands of concerts and sold-out venues, he combines the stage with lectures and discussions in the business and academic world.

Mark Baldwin | Multi-award-winning choreographer, artistic director and visual artist. Academic Visitor, Department of Psychology, University of Cambridge, UK, where he works with Nicola Clayton. Scientific and artistic interests: thinking with and without words; choreography inspired by comparative cognition.

Frederick Barrett | Associate Professor of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine; Faculty of Neuroscience, and Psychological and Brian Sciences, Johns Hopkins University; Director of the Johns Hopkins Center for Psychedelic and Consciousness Research, USA, Scientific interests: the neural basis of cognition and affect; the cognitive neuroscience of music, and the mechanisms underlying acute and enduring effects of psychedelic drugs.

Etzel Cardeña | Thorsen Professor of Psychology and Director of the Center for Research on Consciousness and Anomalous Psychology CERCAP), Department of Psychology, Lund University, Sweden. Scientific interests: the psychology of anomalous experiences/non-ordinary mental expressions, including parapsychological phenomena; neurophenomenology of hypnosis, meditation and dissociation: stream of consciousness.

Miguel Castelo-Branco | Full Professor, University of Coimbra, Portugal. Affiliate Professor, University of Maastricht, The Netherlands, where he has held a Professorship in Psychology in 2000. Before, Postdoctoral fellow, Max-Planck-Institute for Brain Research. Director of IBILI and Scientific Coordinator of the National Functional Brain Imaging Network. Director of CIBIT and former Director of ICNAS. University of Coimbra. Scientific interests: sensory and perceptual neuroscience, and neurobiology of decision-making; social cognition and reward in health and disease, with a focus on autism research.

Nicola Clayton | Professor of Comparative Cognition, Department of Psychology, University of Cambridge, UK, Fellow of Clare College and Fellow of the Roval Society. Director of the Cambridge Centre for the Integration of Science, Technology and Culture. She has worked with Mark Baldwin for almost fifteen years. Scientific and artistic interests: thinking with and without words; choreography inspired by comparative cognition.

Axel Cleeremans | Research Director with the F.R.S-FNRS (Belgium); Director of the Center for Research in Cognition & Neurosciences, Université Libre de Bruxelles: Member of the Roval Academy of Belgium, Scientific Interests: Consciousness: unconscious cognition; computational modelling of cognitive processes; agency; affective neuroscience.

Rui Costa | President and CEO, Allen Institute, Washington, and Professor of Neuroscience and Neurology, Columbia University, New York, USA. Scientific interests: molecular, cellular and systems mechanisms of action generation, sequence and skill learning, goal-directed actions versus habits, across-level approach to study cognitive and sensorimotor disorders (PD, OCD, and autism).

Amory Danek | Postdoctoral Researcher and Lecturer, Department of Psychology, Heidelberg University, Germany. Founder of Insight without Borders (discussion forum for insight researchers across the world). Scientific interests: human problem solving: creativity: meta-reasoning: false insights: memory and magic tricks.

Marcus du Sautoy | Simonyi Professor for the Public Understanding of Science and Professor of Mathematics, University of Oxford, UK. Author of eight books and two plays, he has presented numerous radio and TV series including "The Story of Maths" for BBC. He works extensively with a range of arts organisations bringing science alive for the public. Scientific interests: understanding the world of symmetry using zeta functions, a classical tool from number theory.

Rainer Goebel | Professor of Cognitive Neuroscience, Faculty of Psychology and Neuroscience, Maastricht University, The Netherlands. Founding director of the Maastricht Brain Imaging Centre (M-BIC). Scientific interests: neuronal representations in the brain and how they are processed to enable specific perceptual and cognitive functions; neural correlates of visual awareness; clinical applications in brain computer interfaces (BCIs) and neurofeedback studies.

Edward Kelly | Professor, Division of Perceptual Studies, Department of Psychiatry and Neurobehavioral Sciences, School of Medicine, University of Virginia, Charlottesville, USA. Co-director of Ray Westphal Neuroimaging Laboratory. Scientific interests: neuroimaging studies of exceptional psi subjects and psi-conducive states of consciousness, and both scientific and philosophical theories of consciousness

and mind/brain relations.

Morten Kringelbach | Professor of Neuroscience, Universities of Oxford, UK, and Aarhus. Denmark. Founding Director of Centre for Eudaimonia and Human Flourishing, Linacre College. His research uses advanced analysis methods on precise paradigms in healthy people, as well as in at-risk and diseased populations. Scientific interests: reverse-engineer the human brain to elucidate the heuristics that allow us to survive and flourish.

Todd Lubart | Professor of Psychology, B Jniversity Paris Cité, France. Serves on he editorial board of several journals concerning creativity and innovation,

received the Berlyne award (American Psychological Association), the NAGC Torrance Award, and was a junior member of the Institut Universitaire de France. President of the International Society for the Study of Creativity and Innovation. Scientific interests: measures of creative potential; environmental support for creativity using virtual reality; development of creativity through game play and the use of generative AI for creativity.

Penousal Machado | Associate Professor. Department of Informatics Engineering, University of Coimbra, and coordinator of the Cognitive and Media Systems group of CISUC, Portugal. President of SPECIES (Society for the Promotion of Evolutionary Computation). Author of more than 200 refereed journals and conference papers and recipient of several scientific awards, his work was presented in venues such as the National Museum of Contemporary Art and MoMA, NY, USA. Scientific interests: artificial intelligence; evolutionary computation; computational creativity; information visualization.

Lucia Melloni | Head of the Neural Circuits, Consciousness, and Cognition Research Group, Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany, and Research Professor. Department of Neurology. NYU Grossman School of Medicine, USA, Scientific interests: understanding the neural underpinnings of how we see (perception), how and why we experience what we see (consciousness), and how those experiences become imprinted in our brain (learning and memory), as well as the interplay between these processes.

creative potentials.

Sergio Neuenschwander | Full Professor, Brain Institute, Federal University of Rio Grande do Norte, Natal, Brazil, Scientific interests: neuronal mechanisms of visual perception; role of cortical dynamics in perceptual

organization; information transfer in the retinogeniculate system.

Mark Runco | Director of Creativity Research & Programming, Southern Oregon University, USA. Founding Editor (now Editor Emeritus) of the Creativity Research Journal, Chief Editor of the Journal of Creativity. Co-Editor of the Encyclopedia of Creativity. Scientific interests: cognitive bases of creativity and divergent thinking; educating to fulfill



Marilyn Schlitz | Professor of Transpersonal Psychology, Sofia University, Bulgaria, and CEO/President Emeritus and Senior Fellow. Institute of Noetic Sciences, USA. Social scientist, award-winning author, filmmaker, and dynamic

public speaker. She has published several books and hundreds of articles in scholarly journals and popular publications, and has lectured in diverse venues across the world, including the United Nations. Scientific interests: clinical, laboratory, and field-based research into consciousness, human transformation, and healing.



Stefan Schmidt | Professor of Systemic Family Therapy and Head of the Academic Section of Systemic Health Research, Department of Psychosomatic

Medicine and Psychotherapy, University Medical Centre, Freiburg, Germany. Scientific interests: systems approaches in health research, psychophysiology, consciousness research, mindfulness meditation, experimental parapsychology, exceptional experiences and placebo research.



Christine Simmonds-Moore | Professor of Psychology, Psychology program Department of Anthropology, Psychology and Sociology, University of West Georgia, USA. Director of the Exceptional Experiences Research Lab [EERL]. Scientific interests: exceptional experiences (ExE); paranormal beliefs and disbeliefs; individual difference correlates of ExE (including positive schizotypy, transliminality, synesthesia, ASMR, and interoception); mental health correlates of ExE; altered states of consciousness.

Mário Simões | Retired Professor of Psychiatry and Consciousness Sciences, Faculty of Medicine of Lisbon, Portugal. Scientific interests: psychology and psychophysiology of altered states of consciousness; ethnomedicine; human exceptional experiences and psychology and spirituality.



Nuno Sousa | Professor at the School of Medicine, University of Minho. Director of the Clinical Academic Center (2CA) -Braga and Researcher at ICVS, University

of Minho, Braga, Portugal. Scientific interests: neurobiology of stress and brain network plasticity.

Caroline Watt | Holder of the Koestler Chair of Parapsychology, and founder member of the Koestler Parapsychology Unit, Psychology Department, University of Edinburgh, Scotland. Scientific interests: testing the psi hypothesis using the ganzfeld method; replication and methodological issues in parapsychology.

<u>-</u>MDDA Ð 11 ē, BA m  $( \cap$ Porto Casa do Médico -April 3 to 6, 2024 *σ*