





# The 10<sup>th</sup> International Conference on Conceptual Change Conceptual Change Meets other Disciplines

10th International meeting of the Conceptual Change Special Interest Group (SIG 3) of the

European Association for Research on Learning and Instruction EARLI

# 2-5 June 2016 Florina, Greece

School of Education, University of Western Macedonia

#### **Conference Themes**

Conceptual change is a central area in learning sciences, and has therefore been a focal point for science education research for the past three decades. EARLI SIG 3 invites researchers and practitioners to share their perspectives with colleagues on theoretical and

empirical research questions, including but not limited to the following themes:

student conceptions in various domains (e.g. science, mathematics, social sciences, controversial issues), instructional strategies for inducing conceptual change; conceptual understanding and learning; language, discourse and concept

learning; argumentation; methods in conceptual change research; use of metaphor, analogy and modeling in concept learning; curriculum design for conceptual change; teacher pedagogical content knowledge and instructional materials to support conceptual change teaching; metacognition and conceptual change; conceptual change in history of science.



#### **Summer school on Conceptual Change**

In conjunction with the conference a summer school for PhD students and young researchers will be held two days earlier at the same location. More information you can find <a href="here">here</a>

**DEADLINE TO SUBMIT ABSTRACTS – 20.12.15** 

(for more information visit the conference site)

See below the List of Keynote Speakers







#### **KENOTE SPEAKERS**

### Lucia Mason



Prof. Lucia Mason is a Professor of Educational Psychology at the University of Padova, where she also received her PhD. Before returning to the University of Padova, she had the position of Associate Professor at the University of Lecce in southern Italy. She has been a long-time active member of the European Association for Research on Learning and Instruction, having also organized its biennial EARLI conference in 2003. She has been the past editor-in-chief of Learning and Instruction, EARLI's flagship journal. She is currently member of the editorial board of several high-ranking journals: Journal of Educational Psychology, Contemporary Educational Psychology, Cognition and Instruction, Metacognition and Learning, Instructional Science, and Educational Research Review. She has carried out studies on analogical reasoning, argumentation in group discussions, writing to learn, and refutation text as tools for conceptual change. Her studies also focused on the activation of epistemic beliefs during online information searching and learning from the Internet. Her recent research interest is in the use of process-data, in particular through eye-tracking methodology, to study cognitive processing in learning from illustrated science texts, as well as the connections between cognition and affect. She has published many articles in international journals, several chapters in international volumes, as well as some national volumes. She has also co-edited two international volumes. In 2003 she was the recipient of the EARLI Outstanding Publication award. Her research work has been published in Learning and Instruction, Journal of Educational Psychology, Educational Psychologist, Contemporary Educational Psychology, Computers & Education, Instructional Science, and some other educational journals







## Potvun Patrice



Prof. Patrice Potvin is a full professor of science education, has taught at the Université du Québec à Montréal (Canada) since 2003 and is a member of the Royal Society of Canada. A former elementary and secondary school science teacher, he has participated in many curricular reforms and innovations. He holds the Research Chair on Students' Interest in Science and Technology (CRIJEST), and is also director of the S&T Education Research Team (STERT/EREST), which includes a productive neuroeducational research program. Author of more than 200 articles, books and conference presentations, his interests include neuroeducation, conceptual change, interest in S&T, openended pedagogy, teacher training, ICT in the context of S&T education and evaluation. He has published in many international journals such as *Studies in Science Education, Journal of Research in Science Teaching* and *Frontiers in Human Neuroscience*. He has also published the "school science and technology teaching manual" (« Manuel d'enseignement des sciences et de la technologie : pour intéresser les élèves du secondaire »)







## Ruth Stavi and Reuven Babai



**Prof. Ruth Stavy** is a biochemist by formal training (Ph.D. at the Weizmann Institute of Science, Israel; post doctorate at the Department of Biology, MIT, USA). She was engaged in elementary school science and mathematics curriculum development at the Israeli Science Teaching Center at Tel Aviv University. She served as head of the Department of Teacher Education and head of the Department of Science Education. Professor Stavy has been working for many years on the psychology of science and mathematics education, focusing on the development of students' conceptions and reasoning. Her main interest is the role of intuitive reasoning in science and mathematics and its impact on students' conceptions and reasoning. In the last ten years Professor Stavy is collaborating with Dr. Babai, they employ cognitive and neuroscience techniques such as Reaction Time measurements and brain imaging, in the study of intuitive reasoning in science and mathematics. For more info and publications please visit Prof. Stavy's website: https://education.tau.ac.il/profile/ruth









**Dr. Reuven Babai** is a Molecular Biologist by formal training (Ph.D. at the Tel Aviv University, Israel; post doctorate at the Department of Science Education, Tel Aviv University). Dr. Babai is engaged in secondary and high-school science teacher education in the Department of Mathematics, Science and Technology Education. His research focuses on the students' reasoning and conceptions in science and mathematics. Specifically his interest is in cognitive development and its acceleration and the interference of intuitive reasoning. For the last ten years Dr. Babai is collaborating with Professor Stavy, they employ cognitive and neuroscience techniques such as Reaction Time measurements and brain imaging, in the study of intuitive reasoning in science and mathematics. For more info and publications please visit Dr. Babai's website: <a href="https://education.tau.ac.il/profile/reuvenb">https://education.tau.ac.il/profile/reuvenb</a>









**Prof. Xenia Vamvakoussi** is Assistant Professor of Mathematics Education in the Department of Early Childhood Education, at the University of Ioannina, Greece. She holds a PhD in Cognitive Science, a Msc in Mathematics Education, and a Bsc in Mathematics, from the University of Athens, Greece. Her research is in the area of mathematics learning and instruction, with emphasis on rational number learning and teaching that she looks at from a conceptual change perspective. She has been an Earli member since 2001 and served as SIG 3 co-ordinator from 2005 to 2009.

The conference organizers:

Prof. Haim Eshach Ben Gurion University of The Negev, Beer Sheva, Israel heshach@gmail.com

Prof. Konstantinos P. Christou University of Western Macedonia Florina, Greece kpchristou@gmail.com