

CURRICULUM VITAE

DR. CAROLA SALVI PH.D.

Assistant Professor of Cognitive Neuroscience
John Cabot University
Department of Psychological and Social Sciences

Associate Faculty at University of Texas at Austin,
Department of Psychiatry and Behavioral Sciences

EDUCATION

Ph.D., Doctor of Philosophy, in Experimental Psychology, Linguistics and Cognitive Neuroscience

Department of Psychology, University of Milano-Bicocca, "*Look Outside the Box, to Think Outside the Box: Insight, Eye Movement, and Solution Accuracy*". Started Winter 2009; Convocation Winter 2013.

M.S., Master of Science, in Psychology of Organizations and Consumer Behavior

Department of Psychology, University of Milano-Bicocca, "*An experimental study on fixation and mechanization processes of problem-solving: groupthink effects*". Started Winter 2004; Convocation Winter 2007. With distinction and highest possible honors, (110 of 110 possible, Magna Cum Laude).

B.S., Honors Bachelor of Science, in Psychology

Department of Psychology, University of Milano-Bicocca, "*Pragmatic analysis and processes of a solution in probabilistic reasoning and problem-solving*". Started Fall 2001; Convocation spring 2004.

PROFESSIONAL APPOINTMENTS

- 2023-present **John Cabot University of Rome**, Tenure-Track Assistant Professor, Department of Psychological and Social Sciences.
- 2022-2023 **John Cabot University of Rome**, Visiting Professor, Department of Psychological and Social Sciences.
- 2022-present **University of Texas at Austin**, Associate faculty, Department of Psychiatry and Behavioral Sciences.
- 2019-2022 **University of Texas at Austin**, Research Associate, Department of Psychiatry Behavioral Sciences, Dunsmoor laboratory of Professor Joseph Dunsmoor.
- 2017-2018 **Loyola University of Chicago**, Department of Psychology, *Lecturer*, Introduction to Neuroscience.
- 2014-2019 **Northwestern University**, Postdoctoral Researcher, Department of Psychology, Creative brain laboratory of Professor Mark Beeman.

HONORS, FELLOWSHIPS, and GRANTS

- 2015-2019 **DOD US Air Force** through the Nanotechnology Institute of Northwestern University. *Stimulating creative problem-solving via noninvasive brain stimulation*. Four years of funds.
- 2019 **Postdoctoral position** at Northwestern University, Psychology Department. Project: *Stimulating creative problem-solving via noninvasive brain stimulation [Phase III]*.
- 2019 **Society for Neuroscience of Creativity Award**.

- 2017-2018 **Postdoctoral Fellowship: T32 NIH-funded Training Program in the Neuroscience of Human Cognition** at Northwestern University. Project: *Effects of transcranial direct current stimulation in insight problem-solving [Phase II]*. One year of funds.
- 2017 **Society for Neuroscience of Creativity Award.**
- Summer 2016 **University of Michigan NIH-funded Selected Course in fMRI.** Among the 25 postdocs selected across the U.S. Full course of two weeks at the University of Michigan, fully retributed.
- 2015-2016 **Postdoctoral Fellowship: T32 NIH-funded Training Program in the Neuroscience of Human Cognition** at Northwestern University. Project: *Effects of Motivation and Reward on Creative Problem-Solving [Phase I]*. One year of funds.
- 2013- 2014 **Research Award: Progetto professionalita` "Ivano Becchi"**, sponsored by: "Banco del Monte di Lombardia" at Creative Brain lab of Dr. Mark Beeman, Northwestern University. One year of funds. Project: *Validation of Italian rebus puzzles and compound remote associate problems.* Role: PI.
- 2010- 2011 **Fully Sponsored Visit to Creative Brain lab of Mark Beeman, Northwestern University.** 13 months of funds. Project: *Attention and creative problem-solving.* Role: PI.
- 2009- 2013 **Full Merit-Based Fellowship:** Department of Psychology, the University of Milano-Bicocca for four years.
- 2008 **Research award "DOTE Ricercatori"**, Auxologico Hospital of Milan and University of Milano-Bicocca. Nine months of funds. Project: *Attention in Neglect patients.* Role: RA.
- 2008 **Professional psychologist qualification** for the Italian Psychological Association.
- 2004-07 **Full Merit-Based Fellowship:** Department of Psychology, University of Milano-Bicocca.
- 2001-04 **Full Merit-Based Scholarship:** Department of Psychology, University of Milano-Bicocca

TEACHING

- 2022 -2023 **General Psychology, Science of Creativity, Cognitive Psychology, and Introduction to Neuroscience** at John Cabot University of Rome.
- 2018 -2019 Serie of seminars on **Innovation, Problem-Solving, and The Neuroscience Behind Creative Ideas.** Polsky Center for Entrepreneurship and Innovation. University of Chicago.
- 2018- Fall semester **Introduction to Neuroscience,** at Loyola University, Chicago.
- 2018 Seminars on **Problem-solving, Creativity, and Psychopathology** at Northwestern University, Chicago.
- 2017- Fall semester **Introduction to Neuroscience,** at Loyola University, Chicago.
- 2014- 2019 **English and Italian Languages, Art and Culture.**
- 2011-2012 *Teaching Assistant*
Attention, eye-racking, and psychophysics of vision, at the University of Milano-Bicocca.
- 2008-2013 *Lecturer*
Groupthink, Problem Solving, and Decision Making (2 years) Thinking and Reasoning in Psychology and Economics (2 years), Methodology of research and Statistics (1year), and Psychology of Creativity (1 year), Methodology of Research in Cognitive Sciences (1 year), at the Human Sciences Liceo P. Secco Suardo of Bergamo.
- 2010 *Invited Lecturer*
Workshop on Psychology of Creativity (Brera Academy of Arts).
- 2008 *Trainer, Lecturer*
Innovation, Behavioral Economics, Behavioral Finance, Social Psychology, and Groupinking at SSAV, UNICREDIT.

SOCIAL JUSTICE ACTIVITIES

Art exhibit, Research, and fundraising on domestic violence. In the last year, Prof. Salvi created a collective of Artists and Scientists which aims to raise awareness against domestic violence via art, fundraise, and support research on this problem.

MANUSCRIPTS SUBMITTED

1. Keller, N., **Salvi, C.**, Cooper, and Dunsmoor, J., How curiosity enhances the learning of incidental information. (*Accepted*).
2. **Salvi, C.**, Keller, N., Leiker, E., and Dunsmoor, J., Aha! and D'oh! Experiences Enhance Learning (*Accepted*).
3. Chesebrough, C., **Salvi, C.**, Beeman, M., Oh, Y., and Kounios, J., Waves of Insight: The History of Research on Insight and its Neural Components. (*Accepted*).
4. **Salvi C.**, and Bowden, E. Insight problem-solving: What happens backstage? (*Accepted*).
5. **Salvi C.**, Markers fisiologici dell'insight. *Italian translation for SISTEMI INTELLIGENTI*. (*Submitted*)
6. Iannello, P., Cancer, A., Antonietti, A. and **Salvi, C.**, Orientarsi durante l'emergenza pandemica: Il ruolo della polarizzazione socio-cognitiva nelle situazioni complesse for SISTEMI INTELLIGENTI. (*Submitted*).
7. **Salvi C.**, Vitello, M., Gestalt's perspective on insight, a recap based on recent behavioral and neuroscientific evidence. (*Accepted*)

PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. George, T., & Salvi, C. (2023). Putting the Framework to Work: Comment on "A Systematic Framework of Creative Metacognition" by Lebeda & Benedek. *Physics of Life Reviews*.
2. Yu, Y., **Salvi, C.**, Beker and Beeman, M. (2023) Solving problems with an Aha! increases risk preference, *Thinking & Reasoning*, DOI: [10.1080/13546783.2023.2259552](https://doi.org/10.1080/13546783.2023.2259552)
3. **Salvi, C.**, Markers of insight. (2023). Routledge International Handbook of Creative Cognition.
4. Laukkonen, R. E., Webb, M., **Salvi, C.**, Tangen, J. M., Slagter, H. A., & Schooler, J. W. (2023). Insight and the Selection of Ideas. *Neuroscience & Biobehavioral Reviews*, 105363.
5. Pizzolante, M., Borghesi, F., Sarcinella, E., Bartolotta, S., **Salvi, C.**, Cipresso, M., Gaggioli, A. & Chirico A. (2023). Awe in the Metaverse: Designing and validating a novel online virtual-reality awe-inspiring training. *Computers in Human Behavior*, 148. 107876.
6. **Salvi, C.**, Iannello, P., Cooper, S. E., McClay, M., Dunsmoor, J. E., & Antonietti, A. (2023). Does social rigidity predict cognitive rigidity? Profiles of socio-cognitive polarization. *Psychological Research*, 1-15.
7. **Salvi, C.**, Iannello, P., Cancer, Antonietti, A. (2023). Why don't we get vaccinated? It's a matter of problem-solving abilities and socio-cognitive polarization. *International Journal of Environmental Research and Public Health*, 20(3), 1721.
8. Iannello, P., Cancer, A., **Salvi, C.**, and Antonietti, A. (2023) Executive Functioning and Divergent Thinking Predict Creative Problem Solving in Young Adults and Elderlies. *Psychological Research*.
9. **Salvi, C.**, Barr, N., Dunsmoor, J. E., & Grafman, J. (2022). Insight Problem Solving Reduces Susceptibility to Fake News, Bullshit, and Overclaiming. *Thinking and Reasoning*.
10. **Salvi, C.**, Iannello, P., Cancer, A., McClay, M., Rago, S., Dunsmoor, E. J. and Antonietti, A., (2021). Going Viral: Social and Cognitive Factors Influence Fake News Detection and Proliferation During COVID-19 Pandemic. *Frontiers in Communication*. DOI: 10.3389/fcomm.2020.562588

11. **Salvi, C.**, Leiker, E., Baricca, B., Molinari, M. A., Nichelli, P., Grafman, J., & Dunsmoor, J., (2021). The effect of dopaminergic replacement therapy on creative thinking and insight problem-solving in Parkinson's Patients. *Frontiers in Psychology*.
12. Sprugnoli G., Rossi S., Liew S. L., Bricolo E., Costantini G., **Salvi C.**, Musaeus C. S., Pascual-Leone A., Rossi A., Santarnecchi E., Enhancement of Insight reasoning by tRNS of the right temporal lobe. (2021). *Cogn Affect Behav Neurosci* DOI: 10.3758/s13415-021-00885-x.
13. Cohen-Zimmerman, S., **Salvi, C.**, & Grafman, J. (2020). Patients-based approaches to understanding intelligence and problem-solving. *The Cambridge Handbook of Intelligence and Cognitive Neuroscience*.
14. **Salvi, C.**, & Bowden, E. The relation between state and trait risk-taking and problem-solving. (2020). *Psychological Research*. doi.org/10.1007/s00426-019-01152-y
15. **Salvi, C.**, Simoncini, C., Beeman, M. & Grafman, J., Pupil dilation signals Aha! Moments. *Neuroimage* (2020). <https://doi.org/10.1016/j.neuroimage.2020.116933>
16. **Salvi, C.**, McKinley, R., Bikson, M., Beeman M., and Grafman, J. Right temporal transcranial direct current stimulation improves insight problem-solving. *Nature, Scientific Reports* (2020).
17. Santarnecchi, E., G. Sprugnoli, E. Bricolo, G. Costantini, S. L. Liew, C. S. Musaeus, **Salvi, C.**, Pascual-Leone, A. Rossi, and S. Rossi. (2019) "Gamma tACS over the temporal lobe increases the occurrence of Eureka! moments." *Nature, Scientific Reports* 9, no. 1: 5778-5778. 10.1038/s41598-019-42192-z
18. Palmiero, M., Piccardi, L., Nori, R., Palermo, L., **Salvi, C.**, & Guariglia, C. (2019). Creativity: Education and rehabilitation. *Frontiers in Psychology*. DOI: 10.3389/fpsyg.2019.01500
19. Danek, A., **Salvi, C.**, (2018). Moment of truth: Why Aha! Experiences are correct. *Journal of Creative Behavior*. 10.1002/jocb.380.
20. Cohen-Zimmerman, S., **Salvi, C.**, Krueger, F., Gordon, B., and Grafman J. (2018). Intelligence Across the Seventh Decade in Patients with Brain Injuries Acquired in Young Adulthood. *Trends in Neuroscience and Education*. 13, 1-7.
21. Cristofori, I., **Salvi, C.**, Beeman, M. & Grafman, J. (2018). The Effects of Expected Reward on Creative Problem Solving. *Cognitive, Affective, & Behavioral Neuroscience*. 1-7.
22. **Salvi, C.**, Costantini, G., Pace, A. & Palmiero, M. (2018). Validation of the Italian Remote Associate Test. *Journal of Creative Behavior*. 1-13. 10.1002/jocb.345
23. Hogeveen, J., **Salvi, C.**, & Grafman, J. (2016). "Emotional intelligence": Lessons from Lesions. *Trends in Neurosciences*, 39(10), 694–705. <http://doi.org/10.1016/j.tins.2016.08.007>
24. Palmiero, M., Piccardi, L., Nori, R., Palermo, L., **Salvi, C.**, Guariglia, C. (2016). Creativity and Mental Imagery. *Frontiers in Psychology*. doi: 10.3389/fpsyg.2016.01280.
25. **Salvi, C.**, Bowden, E. (2016). Looking Nowhere for Creativity: Where do we look when we look for new ideas? *Frontiers in Psychology*. DOI:10.3389/fpsyg.2016.00161
26. **Salvi, C.**, Bricolo, E., Bowden, E., Kounios, J. & Beeman, M. (2016). Insight solutions are correct more often than those achieved by analysis. *Thinking and Reasoning*. DOI: 10.1080/13546783.2016.1141798
27. **Salvi, C.**, Cristofori, I., Beeman, M. & Grafman, J. (2016). The politic of insight. *Quarterly Journal of Experimental Psychology*. DOI: 10.1080/17470218.2015.1136338
28. **Salvi, C.**, Bricolo, E., Franconeri, S., Kounios, J. & Beeman, M. (2015) Sudden Insight is associated with shutting down visual inputs. *Psychonomic Bulletin & Review*. DOI: 10.3758/s13423-015-0845-0
29. **Salvi, C.**, Costantini, G., Bricolo, E., Perugini, M., & Beeman, M. (2015). Validation of Italian rebus puzzles and compound remote associate problems. *Behavioral Research Methods*. 1-22. DOI: 10.3758/s13428-015-0597-9
30. **Salvi, C.**, (2015). "Aha! Ho indovinato" Cosa avviene nel nostro cervello quando abbiamo un lampo di genio. *AIRInforma Journal*. ("Aha! I got it" What happens in our brain when we have an insight).
31. Bricolo, E., **Salvi, C.**, Martelli, M., Arduino, L. S. & Daini, R. (2015). The effects of crowding on eye movement patterns in reading. *Acta Psychologica*, 160, 23-34. doi: 10.1016/j.actpsy. 2015.06.003
32. Bricolo, E., **Salvi, C.**, Martelli, M., Arduino, L.S., & Daini, R. (2010). Crowding affects eye- movement patterns in word reading. *Perception* 39, supplement, 29. <http://hdl.handle.net/10281/21692>
33. Legrenzi, P., & **Salvi, C.** (2008). Dual processes in reasoning and judgment. *SISTEMI INTELLIGENTI / a. XX, n. 1, April 2008*. Il Mulino: Bologna. doi: 10.1422/26719

BOOKS

Salvi, C., Smith, S., and Wiley, J., (2024). *The Emergence of Insight. Cambridge University Press.*

BOOK CHAPTERS

Salvi, C., Markers of insight. (2023). *Routledge International Handbook of Creative Cognition.*

Cohen-Zimmerman, S., **Salvi, C.,** and Grafman J. (2020). Patient-Based Approaches to Understanding Intelligence and Problem-Solving. In *The Cambridge Handbook of Intelligence and Cognitive Neuroscience.*