

Program for Hiring Postdoctoral Researchers in New Collaborative Projects –
María de Maeztu Unit of Excellence – CIMCYC

Research project: Contextual, Cognitive and Motivational mechanisms of Belief Updating (CoCoMBU)

Principal Investigators:

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Summary: Nowadays, political information is consumed in a wide variety of ways. We learn about current political news from objective, mainstream news media outlets (e.g., reputed and consolidated newspapers, political parties, etc.) as well as from sources where subjective information and opinions prevail, such as personalized social media feeds (e.g., posts, chat groups, memes, etc.). Psychological research on learning has often focused on individuals in isolation, overlooking social contexts and dynamics. However, each political event involves competing views, key political actors advocating for these views and serving as sources of information and frames that activate specific worldviews and values. In addition, people process political information in combination with their preexisting beliefs (what do I already know about this topic/person?), motivations (what is my goal when interacting with this info?) and identities (what does this piece of information do to my self-perception?).

The goal of this collaborative project is to address this real-world complexity by integrating cognitive learning mechanisms with social-psychological factors that influence the formation of political attitudes. Specifically, the researchers will conduct a series of behavioral and survey experiments using large and diverse samples that will evaluate the accuracy of political news related to specific policy issues with significant social implications, namely economic inequality and immigration. Through repeated exposure to news combined with fact-checking feedback, participants will be able to update their beliefs about the issue and learn which sources are trustworthy. Using computational modeling, we will quantify these learning dynamics and examine how contextual and individual factors shape them, providing novel insights into how misperceptions form and persist in ecologically valid information environments.

The CoCoMBU project brings together expertise from theoretical and methodological approaches in social, cognitive and computational psychology to explore the Contextual, Cognitive and Motivational mechanisms of Belief Updating in political contexts. Moreover, CoCoMBU will not only focus on short-term belief updating but also on long-term memory and on whether updates on higher-order beliefs are sustained over time. The findings will support the development of evidence-based strategies to counter resistant beliefs that perpetuate social inequality and inform applications in education, media and public policy.

Position: 1 Postdoctoral Researcher contract - María de Maeztu Unit of Excellence – CIMCYC

Job description: Postdoctoral researcher for the collaborative research project colaborativo “Contextual, Cognitive and Motivational mechanisms of Belief Updating (CoCoMBU)” from the María de Maeztu Unit of Excellence at the Mind, Brain, and Behavior Research Center (CIMCYC) at the University of Granada. The tasks to be performed include:

- Preparation of literature reviews to generate novel research ideas within the scope of the project.
- Pre-registration of experimental designs and hypotheses.
- Design, implementation, and validation of experimental paradigms that measure belief updating and confidence.
- Preparation of the project data management plan.
- Collection, cleaning, and management of experimental data.
- Application of advanced statistical methods, including computational and structural equation models.
- Collaboration with members of the interdisciplinary team to integrate findings into broader research contexts.
- Preparation and co-authorship of publications and dissemination of results at international conferences.
- Participation in the preparation of funding applications.
- Contribution to the supervision and training of doctoral and master's students and research assistants.
- Scientific dissemination activities aimed at non-specialist audiences.

REQUIREMENTS

Qualification: Doctorate

Desirable skills

- High motivation to support Open Science in research.
- Meticulous attention to detail and excellent organisational skills.
- Ability to work on multiple projects simultaneously, set priorities, and meet deadlines.
- Strong interpersonal skills, ability to motivate individuals and groups both independently and as part of different teams.
- Willingness to undertake further training and autonomous learning, where appropriate.

EVALUATION CRITERIA

Training (30%)

- Doctorate in Psychology, Social Psychology, Cognitive Psychology, Cognitive Science, or related fields.
- Master's degree in Social Psychology or similar.
- Master's degree in Cognitive Neuroscience or similar.
- Bachelor's degree in Psychology.
- Training in computational models, research design, and data analysis.
- Programming in e.g. R, Python, Matlab, etc.
- English and/or Spanish language accreditation, if applicable (C1 certificate or equivalent fluency, if applicable).

Experience (40%)

- Methodologies used in cognitive psychology (e.g., experimental design, computational models, mixed models, etc.).
- Methodologies used in social psychology (e.g., psychosocial interventions, survey analysis, structural equations, etc.).
- Skills in R, Python, or other equivalent languages for behavioral and computational modeling.
- Research in belief updating, motivated reasoning, learning mechanisms, and/or social psychology of individual differences.



- Practices related to Open Science (e.g., pre-registration of research plans, publication of research material in open repositories, code used for data collection and/or analysis, anonymized raw data and research results, publication of open preprints in green repositories, etc.).
- Dissemination of research to non-specialist audiences.

Other criteria (30%)

- Experience and international projection of the research career in prestigious centers (e.g., country and centers where the different stages of training were completed: master's, bachelor's, doctorate, and postdoctoral experience; stays at foreign research centers; network of prestigious international collaborations reflected in publications, etc.).
- Letters of recommendation. Letter of motivation for the position.
- Personal interview (if applicable).

OTHER RELEVANT INFORMATION

The working languages at CIMCYC are Spanish and English.

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