

BODYinTRANSIT

Sensory-driven Body Transformation Experiences On-the-move

Ref. BODYinTRANSIT-PostDoc1/2:

Post-Doctoral Position in Cognitive Neuroscience or Human-Computer Interaction for Body Transformation Experiences

The [Universidad Carlos III de Madrid](https://www.uc3m.es/) (UC3M) offers a full-time post-doctoral position for the Consolidator Grant Horizon2020 project **BODYinTRANSIT: Sensory-driven body transformation experiences on-the-move**.

Overall description of the research group and project: The successful candidate will join a new, diverse, multi-disciplinary and international research group led by [Prof. Ana Tajadura-Jiménez](https://www.uc3m.es/en/people/ana-tajadura-jimenez) and which combines perspectives of Human-Computer Interaction (HCI), Cognitive Neuroscience and Artificial Intelligence. The main research focus is on multisensory body perception and body-centred technologies that can alter people's body perception, behaviour, emotion and social identity. The research group is part of the [DEI Interactive Systems group](https://www.uc3m.es/en/dei) at the UC3M Department of Informatics.

BODYinTRANSIT is a multidisciplinary project that combines neuroscience research on multisensory body perception; data modelling of the links between body perception, behaviour, emotion and social functioning; wearable-based embodied multisensory interaction design; and field studies in real-life and on-the-move contexts with physically inactive users, somatic practitioners and users with body image concerns, all with the aim to investigate **sensory-driven body transformation experiences on-the-move**. The project addresses scientific questions from these different perspectives, with both quantitative and qualitative methods, and with both, scientific and outreach goals.

BODYinTRANSIT team is formed by HCI/computer scientists, psychologists and cognitive neuroscientists, data scientists, engineers, acousticians, philosophers, ethics experts, designers, professional dancers and clinical practitioners. The international research network for BODYinTRANSIT includes, among others, collaborations with University College London, Birkbeck - University of London, IRCAM - Paris, LMU - Munich, Tilburg University, Ritsumeikan University - Japan, and the Estonian Academy of Arts.

You can read more about the BODYinTRANSIT project and our current research in the following links:

The BODYinTRANSIT Project: <https://bodyintransit.eu/>

The Magicoutfit Project: www.magicoutfit.com

The Magic Lining project (science-art project): <https://vertigo.starts.eu/calls/2017/residencies/magic-lining/detail/>

Job Description: Some specific responsibilities that this position involves include:

- Conduct literature reviews of the state-of-the art of the project research area.
- Design, conduct and analyze data of experimental studies investigating multisensory parameters (e.g. sound, touch) affecting body-perception and emotion, behavior and identity, using a variety of psychophysical, psychophysiological and qualitative methods.
- Work directly with volunteers/users/patients in the lab and outside the lab (e.g. in a medical center).
- Recruitment of volunteers for research studies. Communicate with user centres, clinics/therapists.
- Participate in building the setups and prototypes for the experimental studies.
- Contribute to design and optimize paradigms and technologies to change body perceptions, as well as new ways of measuring these changes.
- Prepare reports on the state of the art, experimental methods and results.
- Contribute to establishing principles for designing body transformation experiences and technologies, including personalization and ethical use.
- Report results at conferences and international peer-reviewed journals.
- Disseminate results in academic and non-academic venues, as well as to user groups and stakeholders.

- Archive research data and publications.
- Participation in the group meetings and project coordination tasks.
- Periodic reporting on the research progress and results to the PI.
- Helping more junior researchers with research tasks.
- Participation in the organization and coordination of workshops and residencies, as well as different outreach activities, such as school science exhibitions, public exhibitions, seminars and talks.

Qualifications PostDoc1:

- A PhD degree relevant to the research project (Cognitive Neuroscience, Experimental Psychology).
- Research experience in multisensory or body perception and in cognitive modelling (e.g., forward internal models of motor-to-sensory transformations, predictive coding and free-energy principles), and have used a range of quantitative research methods from psychology/neuroscience, as demonstrated by a strong track-record with publications in competitive venues and participation in research projects.
- Knowledge of statistics.
- Programming experience (e.g., Matlab, R, e-prime, Neurobs, Python).
- Excellent verbal and written communication skills in English.
- Excellent organization skills.
- Able to work independently and as part of a collaborative research team.
- Decisive, imaginative, approachable and supportive.

Qualifications PostDoc2:

- A PhD degree relevant to the research project (Human-Computer Interaction, Multimodal Interfaces, Physical computing).
- Research experience on multisensory or body perception, and have used a range of quantitative and/or qualitative research methods from HCI research with sensor-based systems and wearables, as demonstrated by a strong track-record with publications in competitive venues and participation in research projects.
- Programming experience (e.g., Matlab, R, Python).
- Excellent verbal and written communication skills in English.
- Excellent organization skills.
- Able to work independently and as part of a collaborative research team.
- Decisive, imaginative, approachable and supportive.

Plus (both PostDoc 1 and 2):

- Proven research experience with human volunteers/users.
- Working with fashion / smart-textile / wearables.
- Experience in research in-the-wild.
- Research experience as part of the team of a research project funded by a competitive call.
- Experience in research outreach, organization of events, social media and scientific communication.
- Knowledge of advanced statistics (e.g. multilevel, Bayesian).
- International research network.
- Strong interpersonal skills to work effectively as part of a highly collaborative research team, and to perform studies with volunteers in research studies, as well as to build and maintain relationships with academics and collaborating institutions representing user groups.
- Proactive personality, detail focused.
- Verbal and written communication skills in Spanish.

What we offer:

- Total duration of the contract: 24 months, through renewable 1-year contracts.
- Annual gross salary in the range of 31000- 40000€, commensurate with qualifications.
- Start date: February-April 2022 (flexible).
- The position includes ad hoc training in specific research skills and career development initiatives.

- Become part of a young, dynamic, highly qualified, collaborative team.
- Flexible working environment and schedule.
- Opportunity to travel to international venues to present research activities.
- Opportunity to carry out international research stays with top researchers in the field.
- Opportunity to supervise the activities of MSc and PhD students.
- Health coverage under the National Health System.

Information

Enquiries can be made to Dr. Ana Tajadura-Jiménez, email: atajadur@inf.uc3m.es. Please use the following subject in your email: “**BODYinTRANSIT_postdoc1/2_family name of the applicant**”.

How to apply:

Candidates are invited to send their application (in English) by e-mail to atajadur@inf.uc3m.es with the following subject: “**BODYinTRANSIT_postdoc1/2_family name of the applicant**”. The deadline for applications is **December 2021** (though early applications are strongly encouraged; later applications will be considered until the vacancy is filled).

The following documentation should be attached in a single PDF file:

1. CV (up to 5 pages). Include here any experience in Research, Industry, Science communication, Science management, and a full publication list
2. Highlights of the 3 main research papers.
3. A letter of interest (up to 1 page), explaining why you want to join BODYinTRANSIT and what are your expectations; highlight your strong points.
4. Up to 3 references (with contact details and email), that can provide you with a recommendation letter if further required in the process.

All candidates will have feedback with a message as proof of delivery. Top candidates will be invited to an individual online interview organized by UC3M. The final decision criteria will be based on merits (70%) and the interview (30%).

The Universidad Carlos III de Madrid hires on the basis of merit and is strongly committed to equity and diversity within its community. All qualified applicants are encouraged to apply, they will receive consideration for employment without regard to race, colour, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law. Note that if the successful applicant is neither a European citizen nor a permanent resident of Europe, he or she must be issued a work permit prior to commencing the position.

Brief description of the institution:

Universidad Carlos III de Madrid (UC3M) is a state public university established in 1989. Its main goal is to provide specialised training in Engineering, Law and Social Sciences, Humanities, Communication and Library Science, as well as becoming a leading European research centre.

The University has five centres: 2 Faculties, 1 Technical School, 1 School of Graduate Studies and 1 Doctoral School within 4 Campuses. UC3M is divided in 28 Academic Departments, 28 University Research Institutes and 133 Research Groups. The University has 22.600 students, being similar in size to some of the major European universities, such as Paris II, Uppsala, Maastricht, Tilburg, Cambridge and Oxford. One out of five UC3M students are international. There are over 1200 doctoral students and near 2000 Faculty at UC3M.

UC3M has striven to make research a fundamental pillar of its activity in order to promote its teaching activity, attract talent and create new research areas. The UC3M is among the top Spanish universities for their participation in European level R&D&I programmes.