#### **DOMNA BANAKOU**

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## **Education**

## PhD in Clinical Psychology and Psychobiology

University of Barcelona 2014 – 2017 Funded by the FI-DGR 2014 Grant for universities and research centres for the recruitment of new research personnel.

#### **MSc in Computer Graphics, Vision and Imaging**

University College London 2009 - 2010

#### **BSc in Computer Science**

Ionian University 2004 – 2009

## Research

#### New York University Abu Dhabi (United Arab Emirates)

**Principal Investigator** (August 2022 – present)

o Tamkeen NYU Abu Dhabi – Faculty Research Funding (76 71220 ADHPG VP211)

#### GetLab, Cyprus University of Technology (Limassol, Cyprus)

**Senior Research Associate** (Sept 2020 – present)

#### **CYENS Centre of Excellence (Nicosia, Cyprus)**

Research Fellow (Sept 2020 – Sept 2022)

o VR for Well-Being Research Group. Principal Investigator: Dr. Despina Michael-Grigoriou.

## Event-Lab, University of Barcelona (Barcelona, Spain)

**Postdoc** (May 2017 – July 2022)

Project: Moments in Time in Immersive Virtual Environments (MoTIVE), ERC
 Advanced Grant (https://doi.org/10.3030/742989). Principal Investigator, Prof. Mel
 Slater.

Research Assistant (Jan 2011 – Apr 2017)

- Project: Beinstein Becoming Einstein: The Influence of Virtual Embodiment on Intelligence (PSI2014-56301-R Ministerio de Economía, Industria y Competitividad of Spain). Principal Investigator, Prof. Mel Slater.
- Project: VERE Virtual Embodiment and Robotic Re-Embodiment
   (https://cordis.europa.eu/project/id/257695). Principal Investigator, Prof. Mel Slater.

#### **University College London (London, UK)**

#### Research Assistant (May 2010 – Sept 2010)

o Project: The exploitation of immersive virtual reality for the study of moral judgements by Leverhulme Trust (https://www.leverhulme.ac.uk/research-project-grants-2009). Principal Investigators, Dr. Sylvia Xueni Pan, Prof. Mel Slater.

## **Teaching**

# New York University Abu Dhabi (Abu Dhabi, United Arab Emirates) Visiting Assistant Professor of Practice

- o <u>IM-UH 1011 Communications Lab</u>, Major Interactive Media (Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025).
- o <u>IM-UH 2320 Games and Play</u>, Major Interactive Media (Fall 2022, Spring 2023, Spring 2024, Spring 2025).
- o <u>IM-UH 2516 Virtual Reality Research and Applications</u> (Fall 2023, Fall 2024).
- o IM-UH 4001 Capstone Project, Major Interactive Media (Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025).
- CS-UH 4001 Capstone Project in Computer Science 1, Major Computer Science (Fall 2023, Spring 2024, Fall 2024).

# Universitat Oberta de Catalunya (Barcelona, Spain) Assistant Professor - MSc in Video Game Design and Programming

M7.458 Videogame programming in Unity3D (Spring 2021, Spring 2022).

#### **Past Teaching**

- o Guest Lecturer, Virtual Reality in Psychology, Executive MSc Behavioural Science, The London School of Economics and Political Science, London, UK (*June 2021*).
- Seminar Lecturer, Experimental research in virtual reality theory and technology, MSc in Brain and Cognition, Department of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona, Spain (Fall 2020).
- O Summer School Lecturer, Experimental research in virtual reality theory, ethics, technology, The Active Self autumn school, Herrsching, Germany (Oct 2019).

o Seminar Lecturer, Experimental research in virtual reality – theory and technology, MSc Interactive Physiology, Faculty of Biology, University of Barcelona (Fall 2014, 2015).

## **Publications** (selected)

Sun W., Banakou D., Świdrak J., Valori I., Slater M., Fairhurst M.T.(2024). Multisensory experiences of affective touch in virtual reality enhance engagement, body ownership, pleasantness, and arousal modulation. *Virtual Reality 28, 162* (4.4, Q1).

Hadjipanayi C., Banakou D., Michael-Grigoriou D.(2024). Virtual reality exergames for enhancing engagement in stroke rehabilitation: A narrative review. *Heliyon, 10:18, e37581* (3.4, Q1)

Banakou D., Johnston T., Beacco A., Senel G., Slater M. (2024). Desensitizing Anxiety Through Imperceptible Change: Feasibility Study on a Paradigm for Single-Session Exposure Therapy for Fear of Public Speaking. *JMIR Form Res* 2024;8:e52212 (2.0, Q2)

Pavlidou A., Gorisse G., Banakou D., Walther S. (2023). Using virtual reality to assess gesture performance deficits in schizophrenia patients. *Front. Psychiatry* 14:1191601. (4.52, Q1)

Hadjipanayi C., Banakou D., Michael-Grigoriou D. (2023). Art as therapy in virtual reality: A scoping review. *Front. Virtual Real. 4:1065863. doi: 10.3389/frvir.2023.1065863.* (3.86, Q2)

Slater, M., Cabriera, C., Senel, G. Banakou D., Beacco A., Oliva R., Gallego J. (2023). The sentiment of a virtual rock concert. *Virtual Reality 27, 651–675 (2023)*. (4.2, Q1)

Banakou D., Slater M. (2023). A comparison of two methods for moving through a virtual environment: walking in place and interactive redirected walking. *Frontiers in Virtual Reality Sec. Virtual Reality and Human Behaviour 4:1294539*. (3.86, Q2)

Slater M., Banakou D., Beacco A., Gallego J., Macia-Varela, R Oliva M. (2022). A Separate Reality: An Update on Place Illusion and Plausibility in Virtual Reality. *Frontiers in Virtual Reality 3:914392*. (3.86, Q2)

Slater M., Banakou D. (2021). The Golden Rule as a Paradigm for Fostering Prosocial Behavior with Virtual Reality. *Current Directions in Psychological Science: November.* (3.03, Q1)

Banakou D., Beacco A., Neyret S., Blasco-Oliver M., Seinfeld S., Slater M. (2020). Virtual body ownership and its consequences for implicit racial bias are dependent on social context. *R. Soc. Open Sci. 7:201848.* (3.66, Q1)

Banakou, D., Kishore S., Slater M. (2018). Virtually Being Einstein Results in an Improvement in Cognitive Task Performance and a Decrease in Age Bias. *Front. Psychol.* 9(917). (3.8, Q1)

Hamilton-Giachritsis, C., Banakou, D., Quiroga, M.G., Giachritsis C., Slater, M. (2018). Reducing risk and improving maternal perspective-taking and empathy using virtual embodiment. *Sci. Rep. 8(1)*. (4.6, Q1)

Banakou, D., & Slater, M. (2017). Embodiment in a virtual body that speaks produces agency over the speaking but does not necessarily influence subsequent real speaking. *Sci. Rep. 7(1).* (4.6, Q1)

Banakou D., Parasuram D. H., & Slater M. (2016). Virtual Embodiment of White People in a Black Virtual Body Leads to a Sustained Reduction in their Implicit Racial Bias. *Front. Hum. Neurosci.* 10 (601). (2.9, Q2)

Banakou, D., & Slater, M. (2014). Body ownership causes illusory self-attribution of speaking and influences subsequent real speaking. *Proc. Natl. Acad. Sci. (PNAS)* 111, 17678–17683. (11.1, Q1)

Banakou, D., Groten, R. & Slater M. (2013). Illusory ownership of a virtual child body causes overestimation of object sizes and implicit attitude changes. *Proc. Natl. Acad. Sci. (PNAS)* 1 (6), 12846–12851. (11.1, Q1)

## **Conferences and Invited Talks** (selected)

"Embodied interactions in VR for Promoting Social Inclusion", HAPCOR Summer School. TU Dresden, Germany, 4-5 September 2024 (invited speaker).

"How Artificial Character Embodiment shapes user behaviour in multi-modal interactions", 25th International Conference on Multimodal Interaction. Paris, France, 13 October 2023 (keynote speaker).

"Enhancing Prosocial Behavior in VR", Würtual Reality XR-Meeting, Würzburg, Germany, 11 April 2023 (keynote speaker).

"Embodiment for a Kinder Society", The Czech Transformative Tech Community, Deloitte, RedButton Edu and pAloneers., Czech Republic (Online), 16 June 2022 (keynote speaker).

*"VR in Healthcare and Rehabilitation"*, Universitäre Psychiatrische Dienste Bern, Bern, Switzerland, 5 June 2022 *(invited speaker).* 

"How to Overcome the Body", VACZINE ART Symposium, Düsseldorf (Online), Germany, 4 July 2021 *(keynote speaker)*.

"Challenging Tech's Path Forward - Avatars for Virtual Reality", SXSW PanelPicker 2021 *(panel speaker)*.

"Being Somebody Else: The Future of Narrative Storytelling", Filmteractive 2019, Łódź, Poland, October 2019 *(invited speaker)*.

## Awards and Grants (selected)

- Faculty Advancement Grant, UAE, 2024.
- Tamkeen 2024 Faculty Research Grant, UAE, 2024.
- Tamkeen 2023 Faculty Research Grant, UAE, 2023.
- Tamkeen 2022 Faculty Research Grant, UAE, 2022.
- FENS-IBRO/PERC grant, Berlin, 2018.
- SIGGRAPH European Contest, IST Austria, 2016.
- "Best Young Researcher" Award University of Barcelona, 2015.
- FI-DGR Grant for universities and research centres for the recruitment of new research personnel, 2014.

## Media References (selected)

- Japan Broadcasting Corporation NHK, "Frontiers The World is Made of Illusions", Oct 31, 2024, by Joe Odagiri and Yu Aoi.
- Popular Mechanics, "What is the Proteus Effect", Oct 16, 2023, by Sarah Wells.
- Epsiloon Magazine, "Effect Proteus Le Pouvoir des Avatars", Oct 9, 2023, by Muriel Valin.
- Observer, "Mind Over Body" Mar 2020, by Alexandra Michel.
- ERT, "Virtual reality and the sense of embodiment" Nov 2019, by Eve Tsirigotaki.
- The Psychologist, "Shuttering the Self" Aug 2019, by Ella Rhodes.
- BBC, "Virtual lives: Could VR change how we think of others?" Oct 11, 2018, by BBC Click.
- Advocator, "A Study Showed Better Results on Cognitive Tasks for People Who Embody Albert Einstein in VR", Jul 13, 2018, by Brad Bennett.
- Bias Film, 2018, directed/produced by Robin Hauser.
- The New Yorker, "Are we already living in virtual reality?" Apr 2, 2018, by Joshua Rothman.
- The New Yorker, "This is your avatar speaking" Feb 20, 2015, by Nicola Twilley.
- BBC, "Can virtual reality be used to tackle racism?" Nov 28, 2013, by Melissa Hogenboom.

## **Academic Activities & Memberships (selected)**

- EAI ArtsIT 2024 General Chair, Abu Dhabi, UAE, November 2024.
- EAI ArtsIT 2024 Local Chair, Abu Dhabi, UAE, November 2024.
- EuroXR 2024 Application Program Chair, Athens, Greece, November 2024.

- ISEA 2022 International Program Committed/Art Jury, Barcelona, Spain, June 2022.
- IEEE VR 2022 Conference Track International Program Committee, Christchurch, New Zealand.
- ICAT-EGVE International Demo Chair Committee, 2018, Limassol, Cyprus.
- SIGGRAPH Volunteer, 2016, Anaheim, USA.
- Brain Awareness Week (BAW) campaign volunteer, University of Barcelona, 2016, Barcelona, Spain.
- IEEE Melecon International Program Committee, 2016, Limassol, Cyprus.
- 1st IR3C PhD Symposium Organizing Committee, 2015, Barcelona, Spain.
- 2nd VERE PhD Symposium Chair Committee, 2014, Barcelona, Spain.
- Guest Associate Editor, Frontiers in Psychology: Personality and Social Psychology.
- Guest Associate Editor, Frontiers in Virtual Environments.
- Guest Associate Editor, Frontiers in Neuropsychology.
- Editor, Frontiers in Psychology: Consciousness Research.
- Editor, Frontiers in Virtual Reality: Virtual Reality and Human Behaviour.
- Editor, Frontiers Research Topics.
- Editor, PLOS ONE.
- ACM Association Member.
- EuroXR Association Member.
- SigmaXi Honor Association Full Member (by nomination only).