Kamila Maria Jozwik

jozwik.kamila@gmail.com

+447803576766

jozwik.kamila – skype

Education

- **Free University Berlin and University of Cambridge**
  Postdoctoral fellow *May 2016 -*
- **University of Cambridge**
  PhD *2011 - 2016*
- **University of Cambridge**
  MPhil in Biological Sciences *2010 - 2011*
- **University of Warsaw**
  BSc in Biological Sciences (Thesis project at Aarhus and Oxford Universities) *2007 - 2010*

Research Experience

PhD

- **Object representations in human and monkey inferior temporal cortex and neural networks**
  We compared the importance of visual features and semantic categories in primate inferior temporal cortex in healthy and autistic subjects, as well as deep neural networks.
  (Supervised by Marieke Mur and Nikolaus Kriegeskorte, MRC Cognition and Brain Sciences Unit, University of Cambridge)
- **Face similarity and identity judgments**
  We defined a function that provides an approximation to the human face similarity judgments using Basel Face Space model and investigated individual differences in face perception.
  (Supervised by Nikolaus Kriegeskorte, MRC Cognition and Brain Sciences Unit, University of Cambridge)
- **The role of sex hormones in the development of autism**
  We characterised neurons developed from Induced Pluripotent Stem Cells (IPSCs) derived from autistic subjects upon testosterone administration through RNA and exome sequencing.
  (Supervised by Simon Baron-Cohen, Autism Research Center, University of Cambridge and Jason Carroll, Cancer Research UK Cambridge Institute, University of Cambridge)
- **Functional dissection of hormonal gene transcription programs in breast cancer**
  We characterised roles of transcription factors (FOXA1, MLL3 and GRHL2) and the mechanism underlying deposition of enhancer histone modification during breast cancer progression.
  (Supervised by Jason Carroll, Cancer Research UK Cambridge Institute, University of Cambridge)

Skills

- Programming in MATLAB
- fMRI, MEG, EEG Analysis
- Representational Similarity Analysis (RSA)
- Decoding Analysis
- Multi-Voxel Pattern Analysis (MVPA)
- Computational Modelling
- Psychophysics
- Genomics, Proteomics and Molecular Cellular Biology
- Bioinformatic Analysis of ChIP-sequencing and RNA-sequencing

Awards

OHBM Marit Abstract Award 2016
Concepts, Actions and Objects conference Abstract Award 2016
Elsevier/Vision Research Travel Grant 2016
Grindley Travel Grant from Experimental Psychology Society 2015
Guarantors of Brain Travel Grant 2015
Cambridge Philosophical Society Conference Grant 2015
Cambridge University Representative for Global Young Scientists Summit, Singapore 2013
Amgen Scholars Travel Award 2013
Darwin College Conference Grant 2013
Cambridge Research Institute PhD studentship 2011
Corbridge Cambridge Trust Scholarship for MPhil Studies 2010
Path to Harvard Competition Winner, Academic Visit to Harvard University and MIT 2010
University of Oxford Scholarship for Research Project 2010
Molecular Biosciences International Student Program Scholarship at Aarhus University 2009
Amgen Research Scholarship at University of Cambridge 2009

Recent training

Computational Vision Summer School at Black Forest 2015
Representational Similarity Analysis Workshop at MRC Cognition and Brain Sciences Unit . 2015
Deep Learning Interest Group at MRC Cognition and Brain Sciences Unit 2015
Mathematical and Computational Modelling in Biology Workshop at University of Cambridge 2014
Bayesian Inference Workshop at University of Cambridge 2014
Computational Neuroscience Course at University of Cambridge 2014
Qualification for fMRI and MEG Tester at MRC Cognition and Brain Sciences Unit 2014
Statistical Parametric Mapping Course at MRC CBU Brain and Cognition Unit 2014
Introduction to Neuroimaging Methods Course at MRC Cognition and Brain Sciences Unit . 2014
Next Generation Sequencing Bioinformatics Workshop at University of Cambridge 2014

Selected conference talks and poster presentations

- **Jozwik, K.M.**, Kriegeskorte, N., Mur, M. *"Visual features versus categories: Explaining object representations in primate IT and deep neural networks with weighted representational modeling"* Poster at Vision Sciences Society conference, 2016

- **Jozwik, K.M.**, Kriegeskorte, N., Mur, M. *"Visual features versus categories: Explaining object representations in primate IT and deep neural networks with weighted representational modeling"* Talk at Concepts, Actions and Objects conference, 2016

- **Jozwik, K.M.**, Kriegeskorte, N., Mur, M. *"Visual features as stepping stones toward semantics: Explaining object similarity in IT and perception with non-negative least squares"* Talk at "Object Representation" nanosymposium at the Society for Neuroscience conference, 2015

- O'Keeffe*, **Jozwik, K.M.***, Kriegeskorte, N. *"Predicting face dissimilarity judgements from Basel Face Space"* Poster at Vision Sciences Society conference, 2015 (*these authors contributed equally to this work)

- **Jozwik, K.M.**, Chernukhin, I., Serandour, A. A., Carroll, J.S. *"Interplay between FOXA1, MLL3 and H3K4methylation at enhancers in breast cancer"* Poster at Cold Spring Harbor conference on Epigenetics, Chromatin and Transcription, 2014

Manuscripts

Published:

- **Jozwik, K.M.**, Kriegeskorte, N., Mur, M. (2015) *"Visual features as stepping stones toward semantics: Explaining object similarity in IT and perception with non-negative least squares"* Special issue "Functional selectivity in perceptual and cognitive systems" Neuropsychologia S0028-3932(15)30199-8. doi: 10.1016/j.neuropsychologia.2015.10.023.

- **Jozwik, K.M.**, Carroll, J.S. (2012) *"Pioneer factors in hormone dependent cancers"* Nature Reviews Cancer 4;12(6):381-5. doi: 10.1038/nrc3263.

In revision:

- **Jozwik, K.M.**, Chernukhin, I., Serandour, A. A., Carroll, J.S. *"FOXA1 directs H3K4 monomethylation at enhancers via recruitment of the methyltransferase MLL3"*

In preparation:

- **Jozwik, K.M.**, Chernukhin, I., Stark R., Carroll, J.S. *"FOXA1 interactome screen in MCF7 and tamoxifen resistant cell lines"*

- **Jozwik, K.M.**, Kriegeskorte, N., Cichy, R. M., Mur, M. *"Visual features versus categories: Explaining object representations in primate IT and deep neural networks with weighted representational modeling"*

- O'Keeffe*, J., **Jozwik, K.M.***, Engel S., Kriegeskorte, N. *"Predicting face similarity judgements from Basel Face Space"* (*these authors contributed equally to this work)

Referees

1. Dr Marieke Mur
   Marieke.Mur@
   mrc-cbu.cam.ac.uk
   +44 01223 273 791
   MRC Cognition and Brain
   Sciences Unit
   University of Cambridge

2. Dr Nikolaus Kriegeskorte
   nikolaus.kriegeskorte@
   mrc-cbu.cam.ac.uk
   +44 01223 273 791
   MRC Cognition and Brain
   Sciences Unit
   University of Cambridge

3. Prof Simon Baron-Cohen
   sb205@cam.ac.uk
   +44 01223 746 057
   Autism Research Center
   Department of Psychiatry
   University of Cambridge