

- CURRICULUM VITAE -

Name: Gerard Eric Dwyer
Born: Melbourne, Australia - 3rd September 1985
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CURRENT POSITION

2019 Postdoctoral Researcher, Department of Biological and Medical Psychology, University of Bergen
- Position as Member of Hugdahl ERC2 lab

EDUCATION

2019 Philosophiae Doctor (PhD)
Department of Biological and Medical Psychology, University of Bergen, Bergen, Norway
- Doctoral Thesis: "New approaches to the use of magnetic resonance spectroscopy for investigating the pathophysiology of auditory-verbal hallucinations"

2013 Master of Science in Medical Biology – Biomedical Image Sciences
Department of Biomedicine, University of Bergen, Bergen, Norge
- Master Thesis: "Quantitative measurement of GABA with clinical MR-spectroscopy"

2007 Bachelor of Science – Biochemistry & Biotechnology
Swinburne University of Technology, Melbourne, Australia
- Bachelor Projects: "Neuregulin 1- β : Expression and activation of NMDA receptors and the pathogenesis of schizophrenia" and "5-HT Receptor Agonists in Migraine Therapy"

RELEVANT WORK EXPERIENCE

2015 – 2019 PhD Candidate
Department of Biological and Medical Psychology – University of Bergen, Bergen, Norway

2013 – 2015 Research Assistant
Department of Biological and Medical Psychology – University of Bergen, Bergen, Norway
- Research Assistant to NFR project "Behavioural and imaging studies of hallucinations"

2010 Laboratory Support Technician
Bio21 Molecular Science and Biotechnology Institute, Melbourne, Australia

TEACHING AND SUPERVISION

- 2020 – 2021 Supervisor for master student – Project: “Investigating relationship between thalamic GABA and midbrain neuromelanin levels”
- 2018 – 2020 Exam censor
- PSY1100 – “Introduction to psychology”, Høgskolen Kristiania (2020)
 - PSYK140 – “Behaviour, health and nutrition”, University of Bergen (2018 – 2020)
 - PROPSY303/MAPSYK319A – “Biological Psychology”, University of Bergen (2019)
 - LOGO319 – “Introduction to statistics for logopedics”, University of Bergen (2019-2020)
- 2016 – 2020 Supervisor for bachelor projects for PROPSY304 – “Cognitive neuroscience”, University of Bergen
- “Investigating the relationship between patients’ emotional and behavioural responses to schizophrenia” (2020)
 - “Dopamine hypothesis of schizophrenia” (2018)
 - “Measuring changes in the concentration of GABA associated with anodal tDCS in the pSTG” (2016)
- 2018 Lecture and fMRI demonstration for PROPSY304 – “Cognitive Neuroscience”, University of Bergen
- 2017 – 2020 Lecturer for PSYK114 – “Developmental, cognitive and biological psychology”, University of Bergen
- 2018 – 2020 Lecturer for PSYK111 – “Introduction to psychology and the history of psychology”, University of Bergen
- 2019 – 2020 Lecturer for LOGO318 – “Introduction to statistics for logopedics”, University of Bergen
- 2019 – 2020 Lecturer for LOGO319 – “Research methods and research ethics”, University of Bergen
- 2019 Lecturer for IGSIN913 – “IGSIN course in integrated neuroscience”, University of Bergen
- 2019 – 2020 Seminar leader for LOGO318 – “Introduction to statistics for logopedics”, University of Bergen
- 2019 Seminar leader for PSYK140 – “Behaviour, health and nutrition”, University of Bergen
- 2019 Co-supervisor for master student– Project: “The role of glutamate in prediction error”
- 2018 MRI demonstration for MTEK100 – “Medical technology in practice”
- 2018 Co-supervisor for Erasmus exchange master student – Project: “Simultaneous acquisition of glutamate, glutamine and GABA metabolite levels on a 3 T MRI system”, University of Bergen and University of Utrecht

PEDAGOGICAL EDUCATION

- 2016 UPED634B – “Basis competence in teaching students at bachelor and master level” (5 ECTS), University of Bergen

ADMINISTRATIVE EXPERIENCE

- 2016 - 2017 First sub for faculty board member, group B – Faculty of Psychology, University of Bergen
- 2017 Department board member, group B – Department of biological and medical psychology, University of Bergen

OTHER SKILLS

LANGUAGES: English Native language, good communication skills, oral and written
Norwegian Fluent, both oral and written, completed "Test of Norwegian – advanced level (Bergenstesten) in 2019

IT: Word, Excel, Powerpoint, SPSS
MR-spectroscopy analysis: LCModel, TARQUIN, Gannet, OSPREY
fMRI analysis: SPM-12 (Statistical Parametric Modelling)
Basic competence with R, Python, Matlab and Linux

RESEARCH AND PUBLICATIONS

Dwyer, G. E., Craven, A.R., Bereśniewicz, J., Kazimierczak, K., Erslund, L., Hugdahl, K., Grüner, R. (in press) Simultaneous measurement of the BOLD effect and metabolic changes in response to visual stimulation using the MEGA-PRESS sequence at 3 T. *Frontiers in Human Neuroscience – Brain Imaging and Stimulation*

Dwyer, G. E. (2019). *New Approaches to the Use of Magnetic Resonance Spectroscopy for Investigating the Pathophysiology of Auditory-Verbal Hallucinations* (Doctoral dissertation), University of Bergen, Bergen, Norway)

Brix, M. K., Dwyer, G. E., Craven, A. R., Grüner, R., Noeske, R., & Erslund, L. (2019). MEGA-PRESS and PRESS measure oxidation of glutathione in a phantom. *Magnetic Resonance Imaging*, 60, 32-37

Saleh, M. G., Rimbault, D., Mikkelsen, M., Oeltzschner, G., Wang, A. M., . . . Dwyer, G.E., . . . Noeske, R. (2019). Multi-vendor standardized sequence for edited magnetic resonance spectroscopy. *NeuroImage*, 189, 425-431

Dwyer, G. E., Craven, A. R., Hirnstein, M., Kompus, K., Assmus, J., Erslund, L., . . . Grüner, R. (2019). No effects of anodal tDCS on local GABA and Glx levels in the left posterior superior temporal gyrus. *Frontiers in neurology*, 9, 1145

Dwyer, G. E., Hugdahl, K., Specht, K., & Grüner, R. (2018). Current Practice and New Developments in the Use of In Vivo Magnetic Resonance Spectroscopy for the Assessment of Key Metabolites Implicated in the Pathophysiology of Schizophrenia. *Current Topics in Medicinal Chemistry*, 18(21), 1908-1924

Brix, M. K., Erslund, L., Hugdahl, K., Dwyer, G. E., Grüner, R., Noeske, R., . . . Craven, A. R. (2017). Within-and between-session reproducibility of GABA measurements with MR spectroscopy. *Journal of Magnetic Resonance Imaging*, 46(2), 421-430