

## Curriculum Vitae

### HUGH GARAVAN PhD

#### Contact Details

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#### Overview

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I am a cognitive neuroscientist with a particular interest in the neurobiology of cognitive control and reward and their relationship to various aspects of psychopathology. I have published ~400 papers on these neurocognitive processes and have received funding from the NIH, the NSF, the European Union and from industry. My lab has experience in cutting-edge neuroimaging methodologies for assessing brain function, structure, and connectivity and is constantly developing and applying new methods including, for example, machine learning techniques for identifying multimodal predictors of future behavior in longitudinal studies of neurodevelopment and techniques for developing brain-based classifiers from multi-site data. My lab also has particular experience with the analyses of MRI data from large datasets. For example, in 2012, we published fMRI analyses of impulse control in 1,896 adolescents in which we investigated the relationship between brain activation and individual differences in psychopathology, inhibitory abilities, and substance use and, more recently, published a similar paper characterizing brain activation on three fMRI tasks in a sample of ~6,000 children.

I have a particular interest in the neurobiology of substance dependence. I am, for example, the co-creator of the ENIGMA-Addiction working group which has pooled neuroimaging-genetic data of >24,000 participants for secondary analyses. I have experience with large longitudinal studies including the IMAGEN study, on which I was a site PI, which has been following 2,000 children for over a dozen years. In addition to being a site PI for the ABCD study, I am an Associate Director on its coordinating center. Similarly, I am also a site PI on the Healthy Brain Child Development study at UVM and an Associate Director of its administrative core. Over the years, I have supervised 21 postdoctoral fellows and 42 graduate students and mentored a number of K grant awardees. I am PI on a NIDA-funded T32 that trains pre- and postdoctoral fellows in the application of complex systems (Big Data/Machine Learning) methodologies to large neuroimaging and genetic datasets.

#### Leadership Roles

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In 2003 I became the first Director of Imaging at the new Trinity College Institute of Neuroscience in Dublin (funded by a €28 million grant on which I contributed) where I developed and managed the neuroimaging programs (<https://www.tcd.ie/Neuroscience/>). In addition to leading my lab in Trinity College Dublin, I was a co-Investigator and Dublin site PI for the IMAGEN project, a multi-site, multi-country longitudinal study of adolescent development that recruited over 2,000 participants, a project that anticipated the eventual realization that most neuroimaging studies are very under-powered (<https://imagen-project.org/>). Since moving to the University of Vermont, I have led a large lab of over 20

people including 4 junior faculty and have been PI on a number of R01 and T32 grants. My national leadership roles in the USA include being an Associate Director on the coordinating core of the Adolescent Brain Cognitive Development study which oversees a 21-site study of adolescent development with a sample of ~12,000 children (<https://abcdstudy.org/>). I am also on the coordinating core of the Healthy Brain and Child Development study, a 27-site longitudinal study of ~7,000 pregnant women and their offspring (<https://hbcdstudy.org/>). My largest international leadership role is my creation and leadership of the ENIGMA Addiction working group (<https://www.enigmaaddictionconsortium.com/>). This data pooling neuroimaging and genetics consortium conducts secondary analyses of a dataset that currently contains 24,087 participants from 171 unique studies, contributed by 103 PI's at 71 different institutions in 16 countries and 6 continents. Finally, I have recently created a training and mentorship program for under-represented scholars titled Scientific Training in Addiction Research Techniques (START) for gifted future investigators from historically underrepresented and underserved backgrounds.

### **Current Appointments**

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- **Professor**, Department of Psychiatry, University of Vermont, USA
- **Adjunct Associate Professor**, School of Psychology, Trinity College Dublin, Ireland

### **Education**

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1990	National University of Ireland	B.A.	Honours Psychology
1993	Bowling Green State University	M.A.	Cognitive Psych & Behavioral Neuro
1995	Bowling Green State University	Ph.D.	Cognitive Psych & Behavioral Neuro

### **Previous Professional Positions**

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1995 – 1997	Postdoctoral Fellow, Department of Psychology, Cornell University, USA.
1997 – 1999	Postdoctoral Fellow and Research Scientist, Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, USA.
2000 – 2005	Assistant Clinical Professor, Department of Psychiatry and Behavioral Medicine, Medical College of Wisconsin, USA.
2000 – 2005	Lecturer (Senior Lecturer: 2005-2007), Department of Psychology, Trinity College Dublin, Ireland.
2003 – 2006	Director of Functional Brain Imaging, Trinity College Institute of Neuroscience, Trinity College Dublin, Ireland.
2004 – 2010	Research Scientist V, Nathan Kline Institute, New York, USA.
2005 – 2010	Associate Professor, School of Psychology, Trinity College Dublin, Ireland.

## Post-Graduate Student Supervision

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2004	Jacqueline Kaufman (PhD) *	Kevin Murphy (PhD)
	Catherine Fassbender (PhD)	Nick Kidd (D.Clin.Psych.)
2005	Veronica Dixon (MSc) *	
2006	Clare Kelly (PhD)	
2007	Sharon O’Sullivan (D.Clin.Psych.)	Emma Sheehan (MSc)
	Kelly Janssens (MSc)	Susan MacManus (MSc)
	Erik O’ Hanlon (PhD)	Dearbhla O’ Connor (MSc)
2008	Gloria Roberts (PhD)	Lisa Ronan (PhD)
	Liam Nestor (PhD)	Ciaran Wynne (MSc)
	Alex Pereda (PhD) *	Alice Galvin (MSc)
	Saud Alhusaini (MSc)	Adam Stone (MSc)
2009	Marika Doucet (MSc)	Martina Hughes (MSc)
	Jelena Ivanovic (MSc)	Sameer Datwani (MSc)
	Silvia Mencaraglia (MSc)	Stacey Ball (MSc)
2010	Sarah Jacobson (PhD)	Sharon McElroy (D.Clin.Psych.) *
2011	Finian O’ Brien (PhD) *	
2012	Jane Sanders (PhD) *	
2013	Brendan Behan (PhD)	Ryan Bell (PhD) *
2014	Nick Ortiz (MSc)	Kathryn Olds (MSc)
2017	Brittany Fair (MSc) *	
2019	Nick D’Alberto (PhD)	Phil Spechler (PhD)
	Kelsey Hudson (PhD)	
2022	Sage Hahn	
2023	De Kang Yuan **	
2025	Anthony Barrows **	

\* *Co-supervisor*

\*\* *Indicates anticipated dates of degrees to be awarded*

## Post-Doctoral Supervision

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Andrea Kuebler	Robert Hester	Elena Magno
Cristina Simoes-Franklin	Colm Connolly	Eric O Hanlon
Edmund Lalor	Robert Whelan	Catherine Orr
Scott Mackey	Bader Chaarani	Nick Allgaier
Matt Albaugh	Shana Adise	Max Owens
Jonatan Gonzalez	Zhipeng Cao	Renata Cupertino

Anthony Juliano\*

Elina Thomas

Matt McCabe\*

\* *Current*

### Teaching Experience (Courses Taught)

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Cognitive Psychology	Neuroimaging of Cognitive Processes
Methodology and Statistics	Psychological Disorders
Health Psychology	History of Psychology
Cognitive Neuroscience of Addiction	Learning, Cognition & Behavior
Cognition	Introduction to Functional Neuroimaging
Advanced Cognitive Neuroscience	

### Professional Activities

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- Served on external advisory panel to the 2015 NIDA Strategic Plan.
- Former member of the NPAS study section (2014-2018).
- Member of the Scientific Advisory Board of the Organization of Human Brain Mapping (2014 – present).
- Secretary of the Organization of Human Brain Mapping (2011-2012).
- Served as an *ad hoc* grant reviewer for: The National Institute of Health; National Science Foundation; The Economic and Social Research Council, UK; The Newton Trust, UK; Medical Research Council, UK.
- Served on Medical Research Council (UK) Addiction Project Group in developing a new grants programme for addiction research.
- Served as *ad hoc* reviewer for the following journals:
  - Addiction Biology
  - Archives of General Psychiatry
  - Biological Psychiatry
  - Biological Psychiatry: Cognitive Neuroscience and Neuroimaging
  - BMC Psychiatry
  - Brain
  - Brain & Cognition
  - Brain, Behavior and Immunity
  - Brain Structure & Function
  - Cerebral Cortex
  - Cognitive, Affective & Behavioral Neuroscience
  - Cognitive Brain Research
  - Drug & Alcohol Dependence
  - Emotion
  - European Journal of Neuroscience
  - Experimental Psychology
  - Frontiers in Bioscience
  - Frontiers in Neuroscience
  - Human Brain Mapping
  - JAMA Psychiatry
  - Journal of the American Academy of Child and Adolescent Psychiatry
  - Journal of Cognitive Neuroscience
  - Journal of Experimental Psychology: LMC
  - Journal of the International Physiological
  - Society
  - Journal of Studies on Alcohol and Drugs
  - The Lancet
  - The Lancet Psychiatry
  - Memory & Cognition
  - Molecular Psychiatry
  - Nature Communications
  - Nature Neuroscience
  - Nature Reviews Neuroscience
  - Nature Scientific Reports
  - NeuroImage
  - Neuron
  - Neuropsychological Rehabilitation
  - Neuropsychopharmacology
  - NeuroReport
  - Neuroscience
  - Neuroscience & Biobehavioral Reviews
  - Progress in Neurobiology
  - Proceedings of the National Academy of Sciences
  - Psychiatry Research
  - Psychonomic Bulletin & Review
  - Psychopharmacology
  - Science
  - Schizophrenia Bulletin
  - Social, Cognitive and Affective Neuroscience

- The Irish Journal of Psychological Medicine
- The Journal of Neuroscience
- Trends in Cognitive Sciences
- Served on Programme Committee for the International Neuropsychology Society Meeting in Dublin (July 2005), the European Brain and Behaviour Society Meeting in Dublin (September 2005), and the Flux Society Annual Meeting (September 2016).
- Served as PhD external examiner for National University of Ireland, Maynooth; Bangor University, Wales; University of Toronto, Canada; The University of Newcastle, Australia; Monash University, Australia; University of Pittsburgh, USA.
- Outreach and media activities include numerous contributions to print (The Irish Times; The Irish Independent), radio (NPR; Vermont Public Radio; BBC; numerous Irish radio stations) and television (interviews plus documentaries on addiction, anxiety disorders and humour). Generated visual aids for Alzheimers care-giver video. Provided lecture on addiction for continuing medical education for the Irish College of General Practitioners.

### **Other Awards and Honors**

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- Elected a Fellow of Trinity College Dublin in 2004.
- I was named mentor for postdoctoral Fellows Cristina Simoes and Elena Magno who obtained IRCSET (Irish Research Council for Science Engineering and Technology) and IRCHSS (Irish Research Council for the Humanities and Social Sciences) awards totalling approx. €200,000. I was a co-mentor for a K23 award for \$826,000 to Marc Copersino of McClean General Hospital, Harvard.
- I was a named supervisor for the successful Initiatives in Medicine in Ireland PhD bids by Drs. Sanders and O'Brien (approx. €400,000).
- Contributed to the successful PRTL I bid by Trinity College Dublin establishing the Trinity College Institute of Neuroscience (€28 million).

### **Invited Presentations / Conference Talks**

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*Does not include departmental or university talks.*

#### **2001**

Mar – Applied Psychology Unit, Cambridge, UK.

Mar – Beaumont Hospital, Dublin, Ireland.

April – Psychological Society of Ireland, Dublin, Ireland.

Nov – Society for Neuroscience Special Symposium, San Diego, USA.

#### **2002**

Feb – University College Dublin, Dublin, Ireland.

April – Brain Society, Trinity College, Dublin, Ireland.

May – University of Tuebingin, Tuebingin, Germany.

June – National Institute of Mental Health (NIH), Baltimore, USA.

Aug – National Institute of Drug Abuse (NIH), Baltimore, USA.

#### **2003**

- July – Errors, Conflicts, and the Brain, Dortmund, Germany.
- July – British Association for Psychopharmacology, Harrogate, UK.
- Sept – European Behavioural Pharmacology Society, Antwerp, Belgium.

**2004**

- Feb – Nathan Kline Institute, New York, USA.
- Feb – Brookhaven National Laboratories, New York, USA
- Mar – St. Patrick's Hospital, Dublin, Ireland.
- April – Cognitive Neuroscience Society Symposium, San Francisco, USA.
- Oct – National Rehabilitation Hospital, Dublin, Ireland.

**2005**

- Mar – Control in Attention and Action, Amsterdam, The Netherlands.
- July – Inaugural Academic Meeting, Trinity College Institute of Neuroscience.
- July – Conway Institute, University College Dublin, Ireland.
- Sept – National Institute on Drug Abuse, Bethesda, Maryland, USA.
- Nov – Queen's University, Belfast, Northern Ireland.
- Dec – Lausanne, Switzerland.
- Dec – Prefrontal Function Symposium, Leuven, Belgium.

**2006**

- June – Errors, Conflict and Reward, Amsterdam, The Netherlands.
- Sept – Mechanisms of Addiction, Queensland, Australia.
- Sept – University College Galway, Galway, Ireland.
- Nov – University College London, London, UK.
- Nov – Oxford University, Oxford, UK.

**2007**

- Jan – Cambridge University, Cambridge, UK.
- Jan – University College Dublin, Dublin, Ireland.
- Oct – University of Wales, Bangor, UK.
- Sept – European Society for Cognitive Psychology.
- Sept – European Society for Biomedical Research on Alcoholism.

**2008**

- Jan – Pharmacology, Biochemistry & Behavior Conference, Morzine.
- Jan – Alpine Cognition Conference, Champery.
- Feb – Royal Society, London.
- May – Dartmouth College, New Hampshire, USA.

- May – American Psychological Association workshop, Washington D.C.
- Nov – CUBRIC, Cardiff University, Wales.
- Nov – Society for Neuroscience Annual Meeting Symposium, Washington.
- Dec – Dopamine: From Bench to Bedside. NUIG, Ireland

**2009**

- Apr – University of Sussex, UK.
- Mar – Psychiatry Department Grand Rounds, University of Vermont, USA.
- May – Institute of Mental Health, Mannheim, Germany
- June – University of Barcelona, Spain.
- Oct – National Institute on Drug Abuse Symposium, Washington DC, USA
- Oct – National Institute on Drug Abuse, NIH, Baltimore USA
- Nov – Psychology Department, University of Vermont, USA.
- Nov – Montreal Neurological Institute's Killam lecture series, Montreal.
- Dec – The Mind Research Network, University of New Mexico, USA

**2010**

- June – Control and Motivation Symposium, University of Oxford, UK
- July – Department of Psychiatry, Albert Einstein University, New York, USA
- Nov – University Medical Center Hamburg-Eppendorf, Germany

**2011**

- Feb – Incentives and Health, University of Maryland, USA.
- May – Biological Psychiatry annual meeting, Prague, Czech Republic.
- June – Department of Psychology, UCLA, USA.
- June – College on Problems of Drug Dependence annual mtg, Florida, USA.
- Aug – European Behavioral Pharmacology Society, Amsterdam, Holland.
- Oct – Radiology Imaging Center Lecture, University of Vermont, USA.
- Oct – Complex Systems TEDx Event, University of Vermont, USA.

**2012**

- May – McLean Neuroscience Seminar, McLean Hospital, Boston, USA.
- May – Soirée Scientifique, CHU Sainte-Justine, Montréal, Canada.
- June – “Big Science - Imaging Genetics,” OHBM annual meeting, Beijing, China.
- Nov – University of Pittsburgh, Pittsburgh, USA.
- Dec – American College of Neuropsychopharmacology, Florida, USA.

**2013**

- Jan – Winter Conference on Brain Research, Breckenridge, Colorado, USA.
- Feb – Int’l Conf on Applications of Neuroimaging to Alcoholism, New Haven, USA.

- June – Philips Neuroscience MRI lunch, OHBM meeting, Seattle, USA.
- June – Japanese Neuroscience Society, Kyoto, Japan.
- Oct – University of Massachusetts Medical School, Massachusetts, USA.

**2014**

- Jan – Winter Conference on Brain Research, Steamboat Springs, Colorado, USA.
- Mar – National Institute on Drug Abuse, Baltimore, USA.
- May – Developmental and Population Neuroscience, University of Michigan, USA.
- May – Biological Psychiatry Annual Meeting, New York, USA.
- June – Int'l Congress on Insight in Psychiatry and Neurological Diseases, Poitiers, France.
- June – Research Society on Alcoholism annual meeting, Seattle, USA.
- June – Organization for Human Brain Mapping annual meeting, Hamburg, Germany.
- Oct – Am. Acad. of Child and Adolescent Psychiatry annual meeting, San Diego, USA.

**2015**

- Mar – Yale's Magnetic Resonance Research Center, New Haven, CO, USA.
- June – International Behavioral Neuroscience Society annual meeting, Victoria, CA.
- Sept – FLUX annual meeting, Leiden, The Netherlands.
- Oct – NIDA mini-convention, Society for Neuroscience annual meeting, Chicago, USA.
- Oct – Molecular Psychiatry annual meeting, San Francisco, USA.
- Nov – University of Rochester, Rochester, USA.
- Dec – ACNP annual meeting, Florida, USA.

**2016**

- Jan – APSARD annual meeting, Washington DC, USA.
- Feb – North Dakota State University, Fargo, USA.
- Apr – CHU Sainte-Justine, Montreal, Canada.
- May – The Neuroscience of Decision-Making, Montreal, Canada.
- June – American Psychiatric Association annual meeting, Atlanta, USA.
- June – Biological Psychiatry annual meeting, Atlanta, USA.
- June – Human Brain Mapping annual meeting, Geneva, Switzerland.
- June – Philips OHBM Neuroscience Lunch Symposium, Geneva, Switzerland.
- Oct – Persistent Maladaptive Behaviors: Why We Make Bad Choices, Rochester, NY.
- Dec – Merrill Palmer Skillman Institute at Wayne State University, Detroit, USA

**2017**

- Jan – Neuroscience Colloquium, University of British Columbia, Vancouver, Canada.
- Jan – Psychiatry Grand Rounds, Mt. Sinai, New York, USA.



- Feb – Child Health Research Center Seminar Series, Columbus, Ohio, USA.
- May – International Society for Research in Impulsivity (InSRI), San Diego, USA.
- June – College on Problems of Drug Dependence symposium, Montreal, Canada.
- Sept – European Behavioural Pharmacology Society, Crete, Greece.
- Sept – Flux annual meeting, Portland, Oregon, USA.
- Oct – Keynote: American Society of Functional Neuroradiology, Portland, Oregon, USA.
- Dec – American College of Neuropsychopharmacology, Palm Springs, CA, USA.
- Dec – UCSF Seminar Series, San Francisco, CA, USA.

### **2018**

- Jan – Winter Conference on Brain Research, Whistler, BC, Canada.
- Mar – Vanderbilt Brain Institute Neuroscience Seminar Series, Nashville, TN, USA.
- Apr – Interdepartmental Drugs of Abuse Seminar Series, Ann Arbor, Michigan, USA.
- May – American Psychiatric Association Meeting, New York, USA.
- May – Biological Psychiatry Annual Meeting, New York, USA.
- May – Keynote: Social and Affective Neuroscience Annual Meeting, New York, USA.
- June – College on Problems of Drug Dependence Annual Meeting, New York, USA.
- Sept – Keynote: Addiction Science Congress, Tehran, Iran
- Oct – DEVSEC: Conference on the Use of Secondary Data, Phoenix, USA
- Nov – Translational Aspects of Stopping Behavior and Cognition, San Diego, USA
- Nov – ENIGMA-Addiction satellite meeting, SFN, San Diego, USA
- Dec – Neuroscience Society, Trinity College Dublin, Dublin, Ireland

### **2019**

- Jan – Medical University of South Carolina, Charleston, SC, USA
- Feb – Vermont BrainBee, VT, USA
- Apr – German Society for Child and Adolescent Psychiatry, Mannheim, Germany
- June – Organization for Human Brain Mapping annual meeting, Rome, Italy
- June – College on Problems of Drug Dependence annual meeting, San Antonio, USA
- Aug – European Behavioural Pharmacology Society, Braga, Portugal
- Nov – Polygenic Scores, Genetics, and Brain Imaging, Montreal Canada
- Nov – Public lecture on cannabis and adolescence, Dublin, Ireland
- Dec – ABCD Data Use symposium, ACNP, Florida
- Dec – Cannabinoids: Risks and Benefits Across the Lifespan? ACNP, Florida

### **2020**

- Jan – University of Wisconsin, Milwaukee, WI, USA
- Feb – Trinity College Institute of Neuroscience, Trinity College Dublin, Ireland.

- Sept – FLUX annual meeting, on-line.
- Sept – Addressing Neuroimaging Challenges Across Populations and Settings, NIH.
- Oct – ENIGMA-International Society of Addiction Medicine, on-line
- Oct – ABCD ReproNim: An ABCD Course on Reproducible Data Analysis, on-line
- Oct – College of Psychiatrists of Ireland, Online Winter Conference
- Oct – International Society for Addiction Medicine annual meeting, on-line
- Oct – Interdisciplinary Center of Addiction Research, University of Würzburg, on-line

### **2021**

- Jan – American Professional Society of ADHD and Related Disorders, USA, on-line.
- Mar – University of Kansas Spring Seminar Series, USA, on-line.
- May – PHACS Spring Meeting, USA, on-line

### **2022**

- Jan – MGH Center for Addiction Medicine Grand Rounds, USA, on-line.
- Jan – International Behavioral Neuroscience Society annual meeting, Glasgow Scotland
- Sept – FLUX annual meeting, Paris France

### **2023**

- Sept – Division of Addictions at Yale, USA.
- Oct – Rural Drug Addiction Research Center, University of Nebraska–Lincoln, USA

### **Current Grant Funding (misc grant subcontracts and supplements excluded)**

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- 19/21 ABCD - USA Consortium: Research Project  
04/2020 – 03/2027. Total Award Amount (including Indirect Costs): \$11,655,958
- ABCD-USA Consortium: Coordinating Center  
04/2020 – 03/2027. Total Award Amount (including Indirect Costs): \$1,045,877
- ENIGMA- Addiction: Pooling of Existing Datasets to Identify Brain and Genetic Correlates of Addiction  
07/2018 – 06/2023. Total Award Amount (including Indirect Costs): \$3,310,325
- Training in Complex Systems and Data Science Approaches Applied to the Neurobiology of Drug Use  
07/2018 – 06/2023. Total Award Amount (including Indirect Costs): \$1,271,445
- ABCD-USA Consortium: Data Analysis, Informatics and Resource Center  
04/2020 – 03/2027. Total Award Amount (including Indirect Costs): \$ 1,022,049
- 20/24 The Healthy Brain and Child Development National Consortium  
10/2021-06/2026 Total Award Amount (including Indirect Costs): \$5,559,097
- The Healthy Brain and Child Development National Consortium Administrative Core

9/2021-06/2026. Total Award Amount (including Indirect Costs): \$12,500,000

- NIH RECOVER: A Multi-site Observational Study of Post-Acute Sequelae of SARS-CoV-2 Infection in Pediatric Populations

10/2021 – 05/2023 Total Award Amount (including Indirect Costs): \$ 432,027

## **Publications**

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### **Google Scholar Search:**

<http://scholar.google.com/citations?user=EwNVxgEAAAAJ&hl=en>

h-index 105

i10-index 343

Citations 46,782

### **Commentaries and Reports:**

1. **Garavan H.** Stopping to Think About Stopping. Biol Psychiatry Cogn Neurosci Neuroimaging. 2020;5(5):476-477. doi:10.1016/j.bpsc.2020.03.009
2. **Garavan H, Chaarani B.** Reply to: Neural Remodeling Begins With the First Cigarette [published online ahead of print, 2020 Mar 17]. Biol Psychiatry Cogn Neurosci Neuroimaging. 2020;S2451-9022(20)30024-0. doi:10.1016/j.bpsc.2020.01.005
3. Compton WM, Dowling G, & **Garavan H.** (2019). Ensuring the Best Use of Data in Scientific Inquiry: The Adolescent Brain Cognitive Development Study. JAMA Pediatrics. doi: 10.1001/jamapediatrics.2019.2081
4. **Garavan H, & Albaugh MD.** (2019). Connecting with Resilience. Biological Psychiatry 85, 621-622.
5. **Garavan H** (2019). Advancing addiction research through expert consensus. Addiction 114(6), 1111-1112.
6. **Garavan H** (2005). Overview of the application of functional neuroimaging to studying addiction: with particular reference to cognitive neuroscience investigations. UK Government Foresight Report.

### **Book Chapters:**

1. Spechler PA, Ivanciu A, & **Garavan H.** (2019). Risk and Protective Factors for Substance Use and Addiction. In "Textbook of Addiction Treatment: International Perspectives", 2<sup>nd</sup> edition. Springer Nature
2. Chaarani B, Hudson KE, Spechler PA, Foxe JJ, Potter A, & **Garavan H.** (2017). The Neural Basis of Response Inhibition and Substance Abuse. In "Wiley-Blackwell Handbook of Cognitive Control." Tobias Egner (Ed); Wiley-Blackwell.

3. **Garavan H**, Potter A, Brennan K, & Foxe JJ. (2015). Neural Bases of Addiction-Related Impairments in Response Inhibition. In "Wiley-Blackwell Handbook on the Cognitive Neuroscience of Addiction." Stephen J Wilson (Ed); Wiley-Blackwell.
4. Stanger C, & **Garavan H**. (2014). Potential Neural Influences in Contingency Management for Adolescent Substance Use. In "Neuroimaging and Psychosocial Addiction Treatment" Sarah Feldstein Ewing, Katie Witkiewitz, & Francesca Filbey, (Eds). Palgrave Macmillan.
5. Icke, I., Allgaier, N.A., Danforth, C.M., Whelan, R.A., **Garavan, H.**, Bongard, J.C., and the IMAGEN Consortium. (2014). A Deterministic and Symbolic Regression Hybrid Applied to Resting-State fMRI data. In Moore J., Kotanchek M., Riolo R. (Eds.), Genetic Programming Theory and Practice XI, 2013, Springer.
6. **Garavan, H.** (2011). Impulsivity and Addiction. In "Neuroimaging in the Addictions" B. Adinoff & E. A. Stein (Eds). ISBN: 978-0-470-66014-0
7. **Garavan, H.**, Kaufman, J.N., & Hester, R. (2010). Acute Effects of Cocaine on the Neurobiology of Cognitive Control. In "The Neurobiology of Addiction: New Vistas." T.W. Robbins, B.J. Everitt & D.J. Nutt (Eds). Oxford University Press.
8. **Garavan, H.**, & Murphy, K. (2009). Experimental Design. In "fMRI Techniques and Protocols (Neuromethods)." Massimo Filippi (Ed). Human Press.
9. **Garavan, H.**, Lingford-Hughes, A., Jones, T., Morris, P., Rothwell, J. & Williams, S. (2007). Neuroimaging. In Nutt D, Robbins T, Stimson G, Ince M & Jackson A. Drugs and the future: brain science, addiction and society. Elsevier, London.
10. Robertson, I., & **Garavan, H.** (2004). "Vigilant Attention." In The Cognitive Neurosciences, 3<sup>rd</sup> Edition, Gazzaniga, M. (Ed.). MIT Press.
11. **Garavan, H.**, Hester, R., & Fassbender, C. (2004). "fMRI studies of the midline cortex's role in error-detection." In M. Ullsperger & M. Falkenstein (eds.) Errors, Conflicts, and the Brain. Current Opinions on Performance Monitoring. Leipzig: MPI of Cognitive Neuroscience.

### **Published Articles:**

1. Xiaolei Lin, Runye Shi, Shitong Xiang, Tianye Jia, Trevor Robbins, Jujiao Kang, Tobias Banaschewski, Gareth Barker, Arun Bokde, Sylvane Desrivieres, Herta Flor, Antoine Grigis, **Hugh Garavan**, Penny Gowland, Andreas Heinz, Rüdiger Brühl, Jean-Luc Martinot, Marie-Laure Paillère Martinot, Eric Artiges, Frauke Nees, Dimitri Papadopoulos Orfanos, Tomas Paus, Luise Poustka, Sarah Hohmann, Sabina Millenet, Juliane Frohner, Michael Smolka, Nilakshi Vaidya, Henrik Walter, Robert Whelan, Gunter Schumann, Barbara Sahakian, Jianfeng Feng, and IMAGEN Consortium. Investigating grey matter volumetric trajectories through the lifespan at the individual level. Nature Communications.

2. Marchitelli R ... Garavan H ... Coupled changes between ruminating thoughts and resting-state brain networks during the transition into adulthood. *Molecular Psychiatry*.
3. Weng J ... **Garavan H** ... A robust brain network for sustained attention from adolescence to adulthood that predicts later substance use. *eLife*
4. Zhang Z ... **Garavan H** ... Distinct personality profiles associated with disease risk and diagnostic status in eating disorders. *Journal of Affective Disorders*.
5. Keller KL, Pearce AL, Fuchs B, Rolls BJ, Wilson S, Geier C, Rose E, **Garavan H**. PACE: a novel eating behavior phenotype to assess risk for obesity in middle childhood. *The Journal of Nutrition*.
6. Martinot JL, ... **Garavan H**, ... and The IMAGEN Consortium. Coupled changes between ruminating thoughts and resting-state brain networks during the transition into adulthood. *Molecular Psychiatry*.
7. Makowski C, Brown TT, Zhao W, Hagler DJ, Parekh P, **Garavan H**, Nichols TE, Jernigan TL, & Dale AM. Leveraging the Adolescent Brain Cognitive Development Study to improve behavioral prediction from neuroimaging in smaller replication samples. *Cerebral Cortex*.
8. Korologou-linden ... **Garavan H** ... Genetics impact risk of Alzheimer's disease through mechanisms modulating structural brain morphology in late life. *Journal of Neurology, Neurosurgery, and Psychiatry*.
9. Cao Z, Zhan G, Qin J, Cupertino RB, Ottino-Gonzalez J, Murphy A, Pancholi D, Hahn S, Yuan D, Callas P, Mackey S, & **Garavan H**. Unraveling the molecular relevance of brain phenotypes: A comparative analysis of null models and test statistics. *NeuroImage*.
10. Bristol SC, Johnson ME, Thompson WK, Albaugh M, Potter A, **Garavan H**, Allgaier N, Ivanova MY. Prospective Associations of Family Conflict with Alcohol Expectancy in the Adolescent Brain Cognitive Development Study: Effects of Racial and Ethnic Identity. *Frontiers in Psychiatry*
11. Bari A. Fuchs, Alaina L. Pearce, Barbara J. Rolls, Stephen J. Wilson, Emma J. Rose, Charles F. Geier, **Hugh Garavan**, Kathleen L Keller Cerebellar response to visual portion size cues is associated with the portion size effect in children. *Nutrients*.
12. Ekhtiari H ... Garavan H ... Parameter Space and Potential for Biomarker Development in 25 Years of fMRI Drug Cue Reactivity. *JAMA Psychiatry*.
13. A Systematic Review Lorenzetti V, ... **Garavan H**, ... Investigating the roles of sex, and dependence on hippocampal and amygdala subregions in cannabis users: Findings from a multi-site study from the ENIGMA Addiction Working Group. *Cannabis and Cannabinoid Research*
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