

gregorykiar

Research Scientist, Child Mind Institute

 gregory.kiar@childmind.org |  (646) 880-3737 |  gkiar.me
 [gkiar](https://github.com/gkiar) |  [0000-0001-8915-496X](https://orcid.org/0000-0001-8915-496X) |  [g_kiar](https://twitter.com/g_kiar)

education

- 2017–2021 **Ph.D. in Biomedical Engineering** McGill University, Montréal, QC
Thesis work supervised by Alan Evans and Tristan Glatard on a project entitled:
This is Your Brain on Disk: The Impact of Numerical Instabilities in Neuroscience.
Project involved the development of high performance computing infrastructures, the instrumentation and perturbation of neuroimaging pipelines, the evaluation of perturbations in an analytic context, and the application of perturbed derivatives towards data augmentation in machine learning applications. All code and data have been made publicly available.
- 2014–2016 **M.S.E. in Biomedical Engineering** Johns Hopkins University, Baltimore, MD
Thesis work was supervised by Joshua T. Vogelstein on a project entitled:
GREMLIN: Graph Estimation from MR images Leading to Inference in Neuroscience.
All code and data have been made publicly available.
- 2010–2014 **B.Eng in Biomedical and Electrical Engineering** Carleton University, Ottawa, ON
Capstone work was supervised by Leonard MacEachern on a project entitled:
Electrical muscle stimulation with concurrent EMG feedback of the upper arm for applications in stroke rehabilitation.
- 2018 **Software and Data Carpentry Instructor Training** Compute Canada, Toronto, ON
Running workshops in the context of an evidence-based instructional pedagogy.
- 2016 **Exploring the Human Connectome** The Human Connectome Project, Boston, MA
Development and deployment of connectome estimation pipelines.
- 2015 **Presenting Data and Information** Edward Tufte, Baltimore, MD
Cultivate skills in effective communication with scientific figures.

experience

research

- 04/21 – now **Child Mind Institute — Center for Data Analytics, Innovation, and Rigor** New York City, NY
Director, Research Scientist (Senior Scientist Track)
I lead a research center with interconnected teams focused on basic research with multimodal data, research and development for clinically-oriented products and data science applications, and tool engineering for both patient- and clinician-facing products. The expertise across our group relies on a foundation of software engineering and data science, with domain expertise ranging from neuroimaging, computational neuroscience and quantitative psychiatry, and applied machine learning. Across our work, my group produces tools and resources that support both fundamental neuroscience and mental health care through high performance computing, the application of computational statistics, and the incorporation of machine learning tools to overcome common but impactful challenges.

In this role, I develop and execute research programs, obtain funding from both governmental organizations and private foundations or partners, and communicate scholarly outputs to the community. The core of my research portfolio involves evaluating and improving the trustworthiness of tools and techniques used in mental health research to inform decision making surrounding robust applications of data collection and data processing in care directly.

Notable achievements include: i) obtaining and NIH R01 award on first submission at the age of 29, ii) building and managing a Center spanning basic research to product engineering and 15 individual contributors working on over 30 distinct projects and with a 7-figure annual budget, iii) designing and building the Multimodal Brain/Body Imaging Core at the Child Mind Institute (1x Project Manager, 6x PhD-level scientists, 6x Analysts) in 6 months, iv) publishing several first- and senior-authors works in high profile outlets.

- 05/17–04/21 **McGill University — McGill Centre for Integrative Neuroscience** Montréal, QC
Software Developer & Researcher (w/ Dr. Alan C. Evans)
Responsible for the exploration and integration of distributed software services with high performance computing clouds and clusters. Provided software development, training, and support towards the use of analysis tools and services within international collaborations. Focused on the development of methods for evaluating the trustworthiness and stability of neuroimaging tools and experiments.
- 04/19–07/19 **INRIA Rennes, Bretagne Atlantique — Empenn Lab** Rennes, France
Research Intern (w/ Dr. Camille Maumet)
Developed web crawler to scrape public neuroimaging databases for processed functional activation maps. Constructed workflow for metadata-based QC at scale with 10,000s of samples. Designed a convolutional neural network for the identification of consensus activation maps across populations.
- 09/14–05/17 **Johns Hopkins University — Center for Imaging Science** Baltimore, MD
Research Engineer (w/ Dr. Joshua T. Vogelstein)
Developed and maintained an open-source pipeline for structural connectome estimation in humans and implemented statistical algorithms for quality control of data derivatives. Publicly released data products to lower the barrier to entry for neuroscience research. Was chiefly responsible for grant reporting and presentations at conferences and workshops.
- 06/13–05/17 **Carleton University — Dept. of Systems and Computer Engineering** Ottawa, ON
Research Assistant (w/ Dr. Rafik Goubran)
Developed wireless medical data publish-subscribe system for viewing patient vital signs.
- 06/12–09/12 **Carleton University — Dept. of Systems and Computer Engineering** Ottawa, ON
Research Assistant (w/ Dr. Andy Adler)
Developed neural networks for inverse modeling of real and simulated biological systems.
- 06/11–09/11 **Carleton University — Dept. of Biology** Ottawa, ON
Research Assistant (w/ Jeffrey Dawson)
Developed a robotics platform for studying insect locomotion patterns and behavior.
- 01/09–09/09 **Ottawa Hospital Research Institute — Cancer Research Center** Ottawa, ON
Research Assistant (w/ Dr. Jim Dimitroulakos)
Tested combination therapies of Lovastatin+Cisplatin drugs on colon and breast cancer strains.

teaching

- 01/19–01/20 **Concordia University — Continuing Education** Montréal, QC
Instructor & Curriculum Developer
Was responsible for the training of working professionals in the basics of "Big Data Technology," including fundamental tools for software development such as Unix, Git, and Docker, and software for numerical analysis such as Python and R. Was a core contributor in the development of courses within the "Big Data Solutions for Business" diploma program.
- 05/17–05/21 **McGill University, OHBM, Brainhack School, Brain Intensive** Montréal, QC
Neuroinformatics Instructor
Regularly planned and taught a series of workshops introducing neuroscientists and trainees to methods in neuroinformatics. Developed and publicly released all course content on GitHub under "Brainhack101" and "BrainIntensive" communities.
- 04/19–07/19 **Johns Hopkins University — Department of Biomedical Engineering** Baltimore, MD
Teaching Assistant
Was responsible for instruction, evaluation, and content design for: Freshman Modeling and Design for BME (2014, 2015), Systems and Controls (2015), Statistical Connectomics (2015), The Art of Data Science (2016), NeuroData Design (2016). Spent > 500 hours with students.
- 01/15,16,17 **Johns Hopkins University — Center for Imaging Science** Baltimore, MD
Instructor
Was responsible for instruction, evaluation, and content design for an intensive 3-week project-based course on an introduction to connectomics research across multiple scales and experimental modalities. Spent > 300 hours planning, designing content, and with students.
- 09/12–05/14 **Carleton University — Student Academic Success Centre** Ottawa, ON
Facilitator for Peer-Assisted Study Sessions
Instructed and demonstrated mastery of principles in electromagnetism and power engineering. Spent > 300 hours with students.
- 08/13–05/14 **Carleton University — Student Academic Success Centre** Ottawa, ON
Facilitator Team Leader
Provided training, mentoring, and coaching to student instructors in a variety of disciplines. Spent > 100 hours training and working with facilitators.
- 01/13–05/14 **Carleton University — Dept. of Systems and Computer Engineering** Ottawa, ON
Teaching Assistant
Instructed introductory level C++ programming. Led lab sessions and instructional workshops. Spent > 300 hours with students.

funding

grants

- 2025–2027 **National Institutes of Health — NIMH 1R01MH139565** \$889,582.00 USD
Tools for integrating brain microstructure with functional dynamics in human and non-human primates
PI: Thomas Funck Role: Co-Investigator
- 2025–2027 **Brain Canada — PSG2024** \$3,562,500.00 CAD

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| | Building Reproducible AI Frameworks for Brain Health: Brain Health Data Challenge Platform <i>PI: Tristan Glatard Role: Co-Investigator</i> | |
| 2025–2027 | Anonymous Family Foundation AI for Timely and Accurate Diagnoses and Strengthened Support for Families <i>Lead Investigators: Gregory Kiar, Michelle Freund</i> | \$1,000,000.00 USD |
| 2023–2028 | National Institutes of Health — NIMH 1R01MH133334 A Mega-Analysis Framework for Delineating Autism Neurosubtype <i>PI: Adriana di Martino Role: Co-Investigator</i> | \$3,685,297.00 USD |
| 2022–2025 | National Institutes of Health — NIMH 1RF1MH130859 Improving the robustness of neuroimaging through variability in processing pipelines <i>MPIs: Gregory Kiar (contact), Michael P. Milham</i> | \$1,504,004.00 USD |
| 2022–2024 | National Science Foundation — XSEDE/ACCESS MED220009 Preprocessing and sharing of large-scale open neuroimaging datasets <i>PI: Gregory Kiar</i> | \$117,077.80 USD |
| 2022–2023 | National Science Foundation — XSEDE/ACCESS BIO220056 Mapping Large-scale Brain Development between Human and Nonhuman Primate <i>PI: Ting Xu Role: Co-Investigator</i> | \$30,786.95 USD |
| 2021–2023 | Michael J. Fox Foundation Improving the generalizability and robustness of MRI-derived biomarker of Parkinson's Disease through analytical and data variability evaluations <i>PI: Tristan Glatard Role: Consultant</i> | \$305,254.00 USD |
| 2018–2021 | NSERC Canada — CGSD3-519497-2018 Supporting scalable computing in neuroimaging for the exploration of numerical instabilities <i>Student Scholar: Gregory Kiar</i> | \$105,000.00 CAD |

awards

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| 2020 | Canadian Open Neuroscience Platform — Research Scholar Award | \$25,000 CAD |
| 2019 | Sage Bionetworks — Young Investigator Award | \$1,000 USD |
| 2019 | Repronim — Instructor Training Fellowship | \$1,000 USD |
| 2019 | Mitacs Canada — Globalink Research Award | \$6,000 CAD |
| 2018 | NSERC Canada — Michael Smith Foreign Study Supplement | \$5,200 CAD |
| 2017 | McGill University — Healthy Brains for Healthy Lives Doctoral Fellowship | \$15,000 CAD |
| 2017 | Stanford University — CRN Coding Sprint Project Award | \$2,000 USD |
| 2017 | Organization for Human Brain Mapping — Brainhack Travel Award | \$5000 USD |
| 2014–2016 | Johns Hopkins University — Full Tuition Master's Degree Fellowship | \$100,000 USD |
| 2014 | Carleton University — Graduated with Distinction | |
| 2014 | Professional Engineering Ontario — Greatest Social Impact Paper | \$500 CAD |
| 2014 | Carleton University Engineering Alumni — Capstone SEED Fund | \$800 CAD |
| 2014 | IEEE Ottawa-Carleton Chapter — IEEE Papers Showcase Local Winner | \$500 CAD |

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| 2014 | Carleton University — <i>Electronics Project Competition Champion</i> | |
| 2013 | Carleton University — <i>Engineering '65 and '66 Scholarship</i> | \$2,000 CAD |
| 2012 | Carleton University — <i>Clarence C. Gibson Scholarship</i> | \$2,000 CAD |

memberships & extracurriculars

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| 2025 | Clinical Data Management and Analysis Study Section — <i>Guest Member</i> | Bethesda, MD |
| 2021–now | NMIND Consortium — <i>Lead Investigator</i> | Global |
| 2017–now | Various Neuroinformatics Hackathons — <i>Instructor & Organizer</i> | Global |
| 2020–2022 | NSF XSEDE — <i>XSEDE Review Allocation Committee Member</i> | Alexandria, VA |
| 2020 | NSF XSEDE — <i>COVID-19 HPC Consortium Allocation Reviewer</i> | Global |
| 2017–2020 | Canadian Open Neuroscience Platform — <i>Trainee Committee Representative</i> | Montréal, QC |
| 2017–2020 | Organization for Human Brain Mapping Open Science SIG — <i>Treasurer</i> | Minneapolis, MN |
| 2018–2019 | Ludmer Centre — <i>Seeds of Change Student Champion</i> | Montréal, QC |
| 2017–2018 | Organization for Human Brain Mapping — <i>Hackathon Chair</i> | Minneapolis, MN |
| 2017–2018 | Healthy Brains for Healthy Lives Trainee Committee — <i>President</i> | Montréal, QC |
| 2015–2017 | College Prep Program — <i>College Mentor, SAT Coach, Essay Reviewer</i> | Baltimore, MD |
| 2014–2016 | Thread — <i>Volunteer supervisor ("grandparent"), Student Mentor ("family")</i> | Baltimore, MD |
| 2013–2014 | Carleton University Biomedical Engineering Society — <i>President</i> | Ottawa, ON |
| 2010–2011 | Carleton University Student Emergency Response Team — <i>First Responder</i> | Ottawa, ON |

supervision & mentorship

1. Alp Erkent (Data Analyst, Child Mind Institute; 2025–)
2. Laura Newman (Project Coordinator, Child Mind Institute; 2024–)
3. Samuel Alldritt (Data Analyst, Child Mind INstitute; 2024–2025)
4. Jason Kai (Postdoctoral Fellow, Child Mind Institute; 2024–)
5. Gabriel Schubiner (Data Engineer, Child Mind Institute; 2024–)
6. Azaadeh Goharзад (Scientific Software and Engineering Generalist, Child Mind Institute; 2024–)
7. David Lobue (Senior Machine Learning Engineer, Child Mind Institute; 2024–)
8. Tamsin Rogers (Junior Scientific Software Developer; 2024–)
9. Biraj Shrestha (Assistant Research Engineer; 2023–)
10. Reinder Vos de Wael (Senior Scientific Software Developer, Child Mind Institute; 2023–)
11. Mina Alizadeh (PhD Student, Comp. Sci., Concordia University; 2022–)
12. Connor Lane (Software Developer, Child Mind Institute; 2022–2025)
13. Maya Roberts (Data Analyst, Child Mind Institute; 2022–)
14. Florian Rupprecht (Senior Scientific Software Developer, Child Mind Institute; 2022–)
15. Steven Giavasis (Lead Software Developer, Child Mind Institute; 2022–2025)
16. Nathalia Bianchini Esper (Postdoctoral Fellow, Child Mind Institute; 2022–2024)

17. Elizabeth Kenneally (Software Developer, Child Mind Institute; 2022–2024)
18. Jon Cluce (Software Developer, Child Mind Institute; 2021–)
19. Amy Gutierrez (Software Developer, Child Mind Institute; 2021–2023)
20. Teresa George (Software Developer, Child Mind Institute; 2021–2023)
21. Xinhui Li (Software Developer, Child Mind Institute; 2021–2022)
22. Ali Salari (PhD Student, Comp. Sci., Concordia University; via Tristan Glatard; 2019–2022)
23. Hamidreza Heidarzadeh (MSc, Comp. Sci., Concordia University; via Tristan Glatard; 2018–2019)

reviewed for

1. Aperture (Organization for Human Brain Mapping)
2. COVID-19 High Performance Computing Consortium (NSF)
3. Biological Psychiatry (Elsevier)
4. Cluster Computing (Springer)
5. Extreme Science and Engineering Discovery Environment (NSF)
6. Frontiers in Neuroinformatics (Frontiers)
7. Gigascience (Oxford University Press)
8. Journal of Open Source Software
9. Medical Image Analysis (Elsevier)
10. Clinical Data Management and Analysis — CDMA (NIH)
11. Nature Communications Biology (Nature Publishing)
12. Nature Scientific Data (Nature Publishing)
13. Neuroimage (Elsevier)
14. Neuroscience and Biobehavioral Reviews (Science Direct)
15. Practice & Experience in Advanced Research Computing Conference (NSF)
16. Scipy Conference

publications

pre-prints

1. Lane, C., & **Kiar, G.** (2023). A Parameter-efficient Multi-subject Model for Predicting fMRI Activity. In *arXiv [cs.CV]*. arXiv. <http://arxiv.org/abs/2308.02351><http://arxiv.org/abs/2308.02351>
2. Zuanazzi, A., Milham, M., & **Kiar, G.** (2025). How data science competitions accelerate brain health discovery. In *PsyArXiv*. https://doi.org/10.31234/osf.io/cnzjw_v3
3. Luo, A. C., Meisler, S. L., Sydnor, V. J., Alexander-Bloch, A., Bagautdinova, J., Barch, D. M., Bassett, D. S., Davatzikos, C., Franco, A. R., Goldsmith, J., Gur, R. E., Gur, R. C., Hu, F., Jaskir, M., **Kiar, G.**, Keller, A. S., Larsen, B., Mackey, A. P., Milham, M. P., ... Satterthwaite, T. D. (2025). Two axes of white matter development. In *bioRxiv.org*. <https://doi.org/10.1101/2025.03.19.644049>
4. Shafiei, G., Esper, N. B., Hoffmann, M. S., Ai, L., Chen, A. A., Cluce, J., Covitz, S., Giavasis, S., Lane, C., Mehta, K., Moore, T. M., Salo, T., Tapera, T. M., Calkins, M. E., Colcombe, S., Davatzikos, C., Gur, R. E., Gur, R. C., Pan, P. M., ... Satterthwaite, T. D. (2025). Reproducible Brain Charts: An open data resource for

mapping brain development and its associations with mental health. In *bioRxiv.org*.
<https://doi.org/10.1101/2025.02.24.639850>

articles in peer-reviewed journals

1. Ghanem, J., Totzek, J. F., Henri-Bellemare, C., Raucher-Ch  n  , D., **Kiar, G.**, Patel, R., Chakravarty, M. M., Shah, J. L., Joober, R., Malla, A., Lepage, M., & Lavigne, K. M. (2025). White matter integrity and verbal memory following a first episode of psychosis: A longitudinal study. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 137(111294), 111294.
2. Bridgeford, E. W., Powell, M., **Kiar, G.**, Noble, S., Chung, J., Panda, S., Lawrence, R., Xu, T., Milham, M., Caffo, B., & Vogelstein, J. T. (2025). When no answer is better than a wrong answer: A causal perspective on batch effects. *Imaging Neuroscience*, 3, imag_a_00458.
3. Xu, T., **Kiar, G.**, Zuo, X.-N., Vogelstein, J. T., & Milham, M. P. (2024). Challenges in measuring individual differences of brain function. *Imaging Neuroscience*, 3, imag_a_00430.
4. **Kiar, G.**, Mumford, J. A., Xu, T., Vogelstein, J. T., Glatard, T., & Milham, M. P. (2024). Why experimental variation in neuroimaging should be embraced. *Nature Communications*, 15(1), 9411.
5. Li, X., Bianchini Esper, N., Ai, L., Giavasis, S., Jin, H., Feczko, E., Xu, T., Clucas, J., Franco, A., S  lon Heinsfeld, A., Adebimpe, A., Vogelstein, J. T., Yan, C.-G., Esteban, O., Poldrack, R. A., Craddock, C., Fair, D., Satterthwaite, T., **Kiar, G.**, & Milham, M. P. (2024). Moving beyond processing- and analysis-related variation in resting-state functional brain imaging. *Nature Human Behaviour*, 1–15.
6. Chatelain, Y., Tetrel, L., Markiewicz, C. J., Goncalves, M., **Kiar, G.**, Esteban, O., Bellec, P., & Glatard, T. (2024). A numerical variability approach to results stability tests and its application to neuroimaging. *IEEE Transactions on Computers*, 1–10.
7. Luo, A. C., Sydnor, V. J., Pines, A., Larsen, B., Alexander-Bloch, A. F., Cieslak, M., Covitz, S., Chen, A. A., Esper, N. B., Feczko, E., Franco, A. R., Gur, R. E., Gur, R. C., Houghton, A., Hu, F., Keller, A. S., **Kiar, G.**, Mehta, K., Salum, G. A., ... Satterthwaite, T. D. (2024). Functional connectivity development along the sensorimotor-association axis enhances the cortical hierarchy. *Nature Communications*, 15(1), 3511.
8. Poldrack, R. A., Markiewicz, C. J., Appelhoff, S., Ashar, Y. K., Auer, T., Baillet, S., Bansal, S., Beltrachini, L., Benar, C. G., Bertazzoli, G., Bhogawar, S., Blair, R. W., Bortoletto, M., Boudreau, M., Brooks, T. L., Calhoun, V. D., Castelli, F. M., Clement, P., Cohen, A. L., ... Gorgolewski, K. J. (2024). The past, present, and future of the brain imaging data structure (BIDS). *Imaging Neuroscience*, 2, 1–19.
9. Tobe, R. H., Tu, L., Roberts, M., **Kiar, G.**, Breland, M. M., Tian, Y., Kang, M., Ross, R., Ryan, M. M., Valenza, E., Alexander, L., MacKay-Brandt, A., Colcombe, S. J., Franco, A. R., & Milham, M. P. (2024). Age, Motion, Medical, and Psychiatric Associations With Incidental Findings in Brain MRI. *JAMA Network Open*, 7(2), e2355901.
10. Gonzalez Pepe, I., Chatelain, Y., **Kiar, G.**, & Glatard, T. (2024). Numerical stability of DeepGOPlus inference. *PloS One*, 19(1), e0296725.
11. Zhao, C., Jarecka, D., Covitz, S., Chen, Y., Eickhoff, S. B., Fair, D. A., Franco, A. R., Halchenko, Y. O., Hendrickson, T. J., Hoffstaedter, F., Houghton, A., **Kiar, G.**, Macdonald, A., Mehta, K., Milham, M. P., Salo, T., Hanke, M., Ghosh, S. S., Cieslak, M., & Satterthwaite, T. D. (2024). A reproducible and generalizable

- software workflow for analysis of large-scale neuroimaging data collections using BIDS Apps. *Imaging Neuroscience*, 2, 1–19.
12. Amunts, K., Axer, M., Banerjee, S., Bitsch, L., Bjaalie, J. G., Brauner, P., Brovelli, A., Calarco, N., Carrere, M., Caspers, S., Charvet, C. J., Cichon, S., Cools, R., Costantini, I., D'Angelo, E. U., De Bonis, G., Deco, G., DeFelipe, J., Destexhe, A., ... Zaborszky, L. (2024). The coming decade of digital brain research: A vision for neuroscience at the intersection of technology and computing. *Imaging Neuroscience*, 2, 1–35.
 13. **Kiar, G.**, Clucas, J., Feczko, E., Goncalves, M., Jarecka, D., Markiewicz, C. J., Halchenko, Y. O., Hermosillo, R., Li, X., Miranda-Dominguez, O., Ghosh, S., Poldrack, R. A., Satterthwaite, T. D., Milham, M. P., & Fair, D. (2023). Align with the NMIND consortium for better neuroimaging. *Nature Human Behaviour*, 7(7), 1027–1028.
 14. Xu, T., **Kiar, G.**, Cho, J. W., Bridgeford, E. W., Nikolaidis, A., Vogelstein, J. T., & Milham, M. P. (2023). ReX: an integrative tool for quantifying and optimizing measurement reliability for the study of individual differences. *Nature Methods*, 20(7), 1025–1028.
 15. Poline, J.-B., Das, S., Glatard, T., Madjar, C., Dickie, E. W., Lecours, X., Beaudry, T., Beck, N., Behan, B., Brown, S. T., Bujold, D., Beauvais, M., Caron, B., Czech, C., Dharsee, M., Dugré, M., Evans, K., Gee, T., Ippoliti, G., ... Evans, A. C. (2023). Data and Tools Integration in the Canadian Open Neuroscience Platform. *Scientific Data*, 10(1), 189.
 16. Nikolaidis, A., Manchini, M., Auer, T., Bottenhorn, K. L., Alonso-Ortiz, E., González-Escamilla, G., Valk, S., Glatard, T., Atay, M. S., Bayer, J. M. M., Bijsterbosch, J., Algermissen, J., Beck, N., Bermudez, P., Bilgin, I. P., Bollmann, S., Bradley, C., Campbell, M. E. J., Caron, B., ... Zwiers, M. P. (2023). Proceedings of the OHBM Brainhack 2021. *Aperture Neuro*, 3, 1–20.
 17. Richie-Halford, A., Cieslak, M., Ai, L., Caffarra, S., Covitz, S., Franco, A. R., Karipidis, I. I., Kruper, J., Milham, M., Avelar-Pereira, B., Roy, E., Sydnor, V. J., Yeatman, J. D., Fibr Community Science Consortium, Satterthwaite, T. D., & Rokem, A. (2023). Author Correction: An analysis-ready and quality controlled resource for pediatric brain white-matter research. *Scientific Data*, 10(1), 247.
 18. Chatelain, Y., Young, N. Y. S., **Kiar, G.**, & Glatard, T. (2023). PyTracer: Automatically Profiling Numerical Instabilities in Python. *IEEE Transactions on Computers. Institute of Electrical and Electronics Engineers*, 72(6), 1792–1803.
 19. PRIMatE Data and Resource Exchange (PRIME-DRE) Global Collaboration Workshop and Consortium. (2022). Toward next-generation primate neuroscience: A collaboration-based strategic plan for integrative neuroimaging. *Neuron*, 110(1), 16–20.
 20. Kruper, J., Yeatman, J. D., Richie-Halford, A., Bloom, D., Grotheer, M., Caffarra, S., **Kiar, G.**, Karipidis, I. I., Roy, E., Chandio, B. Q., Garyfallidis, E., & Rokem, A. (2021). Evaluating the Reliability of Human Brain White Matter Tractometry. *Aperture Neuro*, 1(1).
<https://doi.org/10.52294/e6198273-b8e3-4b63-babb-6e6b0da10669>
 21. **Kiar, G.**, Chatelain, Y., Salari, A., Evans, A. C., & Glatard, T. (2021). Data augmentation through Monte Carlo Arithmetic leads to more generalizable classification in connectomics. *Neurons, Behavior, Data Analysis, and Theory*, 1. <https://doi.org/10.51628/001c.28328>

22. **Kiar, G.**, Chatelain, Y., de Oliveira Castro, P., Petit, E., Rokem, A., Varoquaux, G., Misic, B., Evans, A. C., & Glatard, T. (2021). Numerical uncertainty in analytical pipelines lead to impactful variability in brain networks. *PLoS One*, 16(11), e0250755.<https://doi.org/10.1101/2020.10.15.341495>
23. Bridgeford, E. W., Wang, S., Wang, Z., Xu, T., Craddock, C., Dey, J., **Kiar, G.**, Gray-Roncal, W., Colantuoni, C., Douville, C., Noble, S., Priebe, C. E., Caffo, B., Milham, M., Zuo, X.-N., Consortium for Reliability and Reproducibility, & Vogelstein, J. T. (2021). Eliminating accidental deviations to minimize generalization error and maximize replicability: Applications in connectomics and genomics. *PLoS Computational Biology*, 17(9), e1009279.
24. Levitis, E., van Praag, C. D. G., Gau, R., Heunis, S., DuPre, E., **Kiar, G.**, Bottenhorn, K. L., Glatard, T., Nikolaidis, A., Whitaker, K. J., & Others. (2021). Centering inclusivity in the design of online conferences—An OHBM--Open Science perspective. *GigaScience*, 10(8), giab051.
25. Gau, R., Noble, S., Heuer, K., Bottenhorn, K. L., Bilgin, I. P., Yang, Y.-F., Huntenburg, J. M., Bayer, J. M. M., Bethlehem, R. A. I., Rhoads, S. A., Vogelbacher, C., Borghesani, V., Levitis, E., Wang, H.-T., Van Den Bossche, S., Kobeleva, X., Legarreta, J. H., Guay, S., Atay, S. M., ... Brainhack Community. (2021). Brainhack: Developing a culture of open, inclusive, community-driven neuroscience. *Neuron*, 109(11), 1769–1775.
26. **Kiar, G.**, de Oliveira Castro, P., Rioux, P., Petit, E., Brown, S. T., Evans, A. C., & Glatard, T. (2020). Comparing perturbation models for evaluating stability of neuroimaging pipelines. *The International Journal of High Performance Computing Applications*, 34(5), 491–501.
27. Bosch-Bayard, J., Aubert-Vazquez, E., Brown, S. T., Rogers, C., **Kiar, G.**, Glatard, T., Scaria, L., Galan-Garcia, L., Bringas-Vega, M. L., Virues-Alba, T., Taheri, A., Das, S., Madjar, C., Mohaddes, Z., MacIntyre, L., CHBMP, Evans, A. C., & Valdes-Sosa, P. A. (2020). A Quantitative EEG Toolbox for the MNI Neuroinformatics Ecosystem: Normative SPM of EEG Source Spectra. *Frontiers in Neuroinformatics*, 14, 33.
28. Salari, A., **Kiar, G.**, Lewis, L., Evans, A. C., & Glatard, T. (2020). File-based localization of numerical perturbations in data analysis pipelines. *GigaScience*, 9(12), giaa106.
29. Khundrakpam, B., Vainik, U., Gong, J., Al-Sharif, N., Bhutani, N., **Kiar, G.**, Zeighami, Y., Kirschner, M., Luo, C., Dagher, A., & Evans, A. (2020). Neural correlates of polygenic risk score for autism spectrum disorders in general population. *Brain Communications*, 2(2), fcaa092.
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1. Li, X., Fedorov, A., Mathur, M., Abrol, A., **Kiar, G.**, Plis, S., & Calhoun, V. (2022). Pipeline-Invariant Representation Learning for Neuroimaging. *DMLR Workshop: Data-Centric Machine Learning Research*, abs/2208.12909. <https://doi.org/10.48550/arXiv.2208.12909>
2. Vicuna, M., Khannouz, M., **Kiar, G.**, Chatelain, Y., & Glatard, T. (2021). Reducing numerical precision preserves classification accuracy in Mondrian Forests. *IEEE International Conference on Big Data*, 2785–2790.
3. Salari, A., Chatelain, Y., **Kiar, G.**, & Glatard, T. (2021). Accurate Simulation of Operating System Updates in Neuroimaging Using Monte-Carlo Arithmetic. *Uncertainty for Safe Utilization of Machine Learning in Medical Imaging, and Perinatal Imaging, Placental and Preterm Image Analysis*, 14–23.
4. Mazaheri, M., **Kiar, G.**, & Glatard, T. (2021). A Recommender System for Scientific Datasets and Analysis Pipelines. *16th Workshop on Workflows in Support of Large-Scale Science, Super Computing*.
5. Rioux, P., **Kiar, G.**, Hutton, A., Evans, A. C., & Brown, S. T. (2020). Deploying Large Fixed File Datasets with SquashFS and Singularity. *Practice and Experience in Advanced Research Computing (PEARC)*, 72–76.
6. DuPre*, E., Kiar*, G., Craddock, R. C., Gorgolewski, K. J., Hoffstaedter, F., Keshavan, A., Poline, J. B., Visconti di Oleggio Castello, M., Whitaker, K., & Bellec, P. (2018, January). Organization for Human Brain Mapping Open Science Hackathons: Accessible and Inclusive Neuroinformatics. *2nd Workshop on Hacking and Making at Time-Bound Events*.
7. **Kiar, G.**, Mamatjan, Y., Jun, J., Maler, L., & Adler, A. (2013). Electric localization of weakly electric fish using neural networks. *Journal of Physics: Conference Series*, 434.

book chapters

1. Park, S., Thomson, P., **Kiar, G.**, Castellanos, F. X., Milham, M. P., Bernhardt, B., & Di Martino, A. (2024). Delineating a pathway for the discovery of functional connectome biomarkers of autism. In *Neurophysiological and Neuroimaging Biomarkers in Neuropsychiatry – Etiological and Treatment Implications*. Springer Nature.
2. **Kiar, G.**, Makowski, C., Poline, J. B., Das, S., & Evans, A. C. (2017). The Montreal Neurological Institute Ecosystem: Enabling Reproducible Neuroscience from Collection to Analysis in the Web. In *Neuroinformatics in the Age of Big Data: Working with the Right Data and Tools* (pp. 51–56). Society for Neuroscience.

invited talks & organized workshops

1. Improving the robustness of neuroimaging through exploitation of variability in processing pipelines. *BRAIN Initiative Investigators Meeting — National Institutes of Health (November 2024)*, Presenter.
2. Bridging the gap between neuroimaging and the broader data science ecosystem. *The International Neuroinformatics Coordinating Facility (September 2024)*, Presenter.
3. Improving the robustness of neuroimaging through exploitation of variability in processing pipelines. *BRAIN Initiative Investigators Meeting — National Institutes of Health (October 2023)*, Presenter.
4. NMIND: Align, Test, Engage. *Helmholz International BigBrain Analytics and Learning Laboratory Summit (October, 2023)*, Presenter & Panelist.
5. NMIND: Align, Test, Engage. *Organization for Human Brain Mapping (June 2023)*, Presenter.
6. UNIQUE Student Symposium for Neuro-AI. *UNIQUE MILA (June 2023)*, Panelist.
7. Variation in Brain Imaging – when is it meaningful? (and what can we do about it). *The Center for Biomedical Imaging and Neuromodulation, Nathan Kline Institute (August 2022)*, Presenter.
8. Fuzzy environments for the perturbation evaluation and application of uncertainty quantification. *Chinese Open Science Network (July 2022)*, Presenter.
9. Variation in Brain Imaging - when is it meaningful? (and what do we do about it). *Center for Neurodevelopmental and Imaging Research, Kennedy Krieger Institute (April 2022)*, Presenter.
10. Fuzzy Environments for the perturbation, evaluation, and application of uncertainty quantification via Monte Carlo Arithmetic. *Scipy Conference (July 2021)*, Presenter.
11. Evaluating the Stability of Neuroimaging Pipelines. *National Institute of Mental Health (February 2020)*, Presenter.
12. Comparing Perturbation Models for Evaluating Stability of Neuroimaging Pipelines. *Computational Reproducibility at Exascale — Super Computing Conference (November 2019)*, Presenter.
13. From “Open Science” to “Science”: Shifting the status quo in data sharing, software, and publishing. *Organization for Human Brain Mapping (June 2019)*, Symposium organizer & Presenter.
14. Introduction to Scientific Software Development and Machine Learning. *Healthy Brains for Healthy Lives — McGill University (February 2019)*, Workshop organizer & Presenter.
15. A FAIR Approach to Neuroimaging Analysis with Boutiques. *Organization for Human Brain Mapping (June 2018)*, Presenter.

16. Connectome Coding: what is it, how do we do it, and why do we care? *Data science in Neuroscience Symposium — Organization for Human Brain Mapping (June 2018)*, Presenter.
17. OHBM Annual BrainHack & TrainTrack. *Open Science Special Interest Group — Organization for Human Brain Mapping (June 2018)*, Workshop organizer & Presenter.
18. Brainhack Global: Montreal Edition. *McGill University & Universite de Montreal (June 2018)*, Workshop organizer.
19. A Data Driven Approach for Tackling Big Data Connectomics. *Feindel Brain Imaging Lecture — McGill University (February 2018)*, Presenter.
20. Coding for Neuroscientists: An Introduction to Neuroscience Informatics. *Graduate Student Association for Neuroscience — McGill University (January 2018)*, Workshop organizer & Presenter.
21. BigNeuro 2017: Analyzing brain data from nano to macroscale. *Neural Information Processing Systems (Dec. 2017)*, Workshop organizer.
22. Enabling Accessible and Scalable Neuroscience. *Healthy Brains For Healthy Lives — McGill University (November 2017)*, Presenter.
23. Platforms for high performance computing in neuroscience. *Neuroinformatics in the Age of Big Data: Working with the Right Data and Tools — Society for Neuroscience (November 2017)*, Workshop organizer & Presenter.
24. Brainhack101 & Exploratory Data Analysis. *Online Intensive for Brain Science: Computation and Imaging — National Institute of Health (September 2017)*, Presenter.
25. CloudControl: Integrating Quality Control and Pipeline Deployment in the Cloud. *Open Science Special Interest Group — Organization for Human Brain Mapping (June 2017)*, Presenter.
26. Open Science Session Chair. *Open Science Special Interest Group — Organization for Human Brain Mapping (June 2017)*, Workshop organizer & Presenter.
27. Science in the Cloud (SIC): A use-case in MRI Connectomics. *Open Science Special Interest Group — Organization for Human Brain Mapping (June 2017)*, Presenter.
28. Brain Hacking 101. *Open Science Special Interest Group — Organization for Human Brain Mapping (June 2017)*, Presenter.
29. NeuroStorm: Accelerating Brain Science Discovery in the Cloud. *Johns Hopkins University & National Science Foundation (June 2017)*, Workshop organizer.

posters at international peer-reviewed conferences

1. Rupperecht, F., Kai, J., Shrestha, B., Lane, C., Giavasis, S., Glatard, T., Milham, M. P., & **Kiar, G.** (2025). Styx: A Multi-Language API Generator for Command-Line Tools. *Computational Neuroscience*.
2. Rogers, T., Giavasis, S., Cluce, J., Kenneally, E., Shrestha, B., Milham, M. P., & **Kiar, G.** (2025). Leading with documentation — designing a configurable pipeline engine from the docs-down. *Organization for Human Brain Mapping*.
3. Bianchini Esper, N., Santorelli, A., Gonzalez, B., Burke, N., Louviot, S., Erkent, A., Gokhe, A., Strauss, C., Maiorano, C., Kim, I., Perez, F., d'Antonio-Bertagnolli, J., Colcombe, S., Franco, A., **Kiar, G.**, Freund,

- M., & Milham, M. P. (2025). The next generation of data collection is multimodal. *Organization for Human Brain Mapping*.
4. Rupprecht, F., Kai, J., Shrestha, B., Lane, C., Giavasis, S., Glatard, T., Milham, M. P., & **Kiar, G.** (2025). Styx and NiWrap: A Modern Interface Generator for Command-Line Neuroimaging Tools. *Organization for Human Brain Mapping*.
 5. Alizadeh, M., Chatelain, Y., **Kiar, G.**, Glatard, & T. (2025). The impact of numerical variability in fMRI preprocessing on regional and network statistics. *Organization for Human Brain Mapping*.
 6. Lane, C., Kai, K., Milham, M. P., & **Kiar, G.** (2025). Skarf: A library for regularized autoregressive functional connectivity. *Organization for Human Brain Mapping*.
 7. Kim, I., Santorelli, A., Burke, N., Bianchini Esper, N., Gonzalez, B., d'Antonio-Bertagnolli, J., Colcombe, S., Franco, A., **Kiar, G.**, Freund, M., & Milham, M. P. (2025). A Real-Time, Extensible Platform for Multimodal Brain/Body Data Visualization and Initial Processing. *Organization for Human Brain Mapping*.
 8. Shafiei, G., Bianchini Esper, N., Hoffmann, M., Ai, L., Chen, A., Cluce, J., Covitz, S., ., **Kiar, G.**, Salum, G., Milham, M. P., & Satterthwaite, T. (2025). Reproducible Brain Charts: An Open Data Resource for Mapping the Developing Brain and Mental Health. *Organization for Human Brain Mapping*.
 9. Kai, J., Moore, L., Cluce, J., Fayzullobekova, B., Goncalves, G., Hendrickson, T., Lane, C., Lee, E., Lundquist, J., Markiewicz, C., McCollum, R., Newman, L., Reiners, P., Rogers, T., Rupprecht, F., Shrestha, B., Fair, D., Milham, M. P., & **Kiar, G.** (2025). Building accessible and validated neuroimaging software with NMIND. *Organization for Human Brain Mapping*.
 10. Kai, J., Rupprecht, F., Alldritt, S., Byeon, K., Warrington, S., Sotiropoulos, S., Milham, M. P., & Xu, T. (2025). NHP-DWIProc: a diffusion MRI processing suite towards non-human primate datasets. *Organization for Human Brain Mapping*.
 11. Naranjo Rincon, S., Easley, T., Glatard, T., **Kiar, G.**, Shoushtari, S., Kamilov, U., & Bijsterbosch, J. (2025). Neurotranslate: Mapping across MRI brain representations with generative models. *Organization for Human Brain Mapping*.
 12. Luo, A., Meisler, S., Sydnor, V., Alexander-Bloch, A. F., Bagautdinova, J., Barch, D., Bassete, D., ., **Kiar, G.**, ., Rokem, A., & Satterthwaite, T. D. (2025). Two Axes of White Matter Tract Development. *Organization for Human Brain Mapping*.
 13. Rupprecht, F., Lane, C., Vos de Wael, R., Milham, M. P., & **Kiar, G.** (2024). Rethinking How We Wrap Command Line Tools from Python. *Organization for Human Brain Mapping*.
 14. Lane, C., Rupprecht, F., Milham, M. P., & **Kiar, G.** (2024). Benchmarking 200+ pairwise similarity measures for resting-state functional connectivity estimation. *Organization for Human Brain Mapping*.
 15. Naranjo Rincon, S., Easley, T., Glatard, T., **Kiar, G.**, Shoushtari, S., Kamilov, U., & Bijsterbosch, J. (2025). Neurotranslate: Mapping across MRI brain representations with generative models. *Organization for Human Brain Mapping*.

16. Ghanem, J., Totzek, J., Henri-Bellemare, C., Draper, E., Raucher-Ch  n  , D., **Kiar, G.**, Patel, R., Chakravarty, M., Shah, J., Joobar, R., Malla, A., Lepage, M., & Lavigne, K. (2024). White Matter Integrity and Verbal Memory After a First Episode of Psychosis: A Longitudinal Study. *Organization for Human Brain Mapping*.
17. Luo, A., Sydnor, V., Pines, A., Larsen, B., Alexander-Bloch, A. F., Cieslak, M., ..., **Kiar, G.**, ..., Milham, M. P., & Satterthwaite, T. D. (2023). Refinement of Functional Connectivity in Development Aligns with the Sensorimotor-Association Axis. *Organization for Human Brain Mapping*.
18. **Kiar, G.**, Clucas, J., Feczko, E., Goncalves, M., Jarecka, D., Markiewicz, C. J., ..., Milham, M. P., & Fair, D. (2023). NMIND: A Grassroots Collaborative to Elevate Neuroimaging Software. *Organization for Human Brain Mapping*.
19. Bianchini-Esper, N., Covitz, S., Castro, A., ..., **Kiar, G.**, Milham, M. P., Satterthwaite, T., & Franco, A. (2023). A protocol for visual quality control applied to the Reproducible Brain Chart database. *Organization for Human Brain Mapping*.
20. Li, X., Federox, A., Mathur, M., Abrol, A., **Kiar, G.**, Pils, S., & Calhoun, V. (2023). Pipeline-Invariant Representation Learning for Neuroimaging. *Organization for Human Brain Mapping*.
21. Bridgeford, E. W., Powell, M., **Kiar, G.**, Noble, S., ..., & Vogelstein, J. T. (2023). Causal Reasoning is Critical to Understanding Batch Effects. *Organization for Human Brain Mapping*.
22. **Kiar, G.**, Bridgeford, E. W., Clucas, J., Bianchini-Esper, N., Lane, C., Rupprecht, F., Xu, T., & Milham, M. P. (2023). Variations in variability: a word of caution for those navigating the multiverse of methods. *Organization for Human Brain Mapping*.
23. Rupprecht, F., Gutierrez, A., Clucas, J., Giavasis, S., Milham, M. P., & **Kiar, G.** (2023). Developer tools for neuroimaging workflow creation and pre-deployment. *Organization for Human Brain Mapping*.
24. Lane, C., Clucas, J., Bianchini-Esper, N., Xu, T., Milham, M. P., & **Kiar, G.** (2023). Connecting neuroimaging to the broader data science ecosystem. *Organization for Human Brain Mapping*.
25. Clucas, J., Giavasis, S., **Kiar, G.**, & Milham, M. P. (2023). NodeBlocks: Lowering the Barriers to Building into C-PAC. *Organization for Human Brain Mapping*.
26. Li, X., Ai, L., Giavasis, S., Jin, H., Feczko, E., ..., **Kiar, G.**, & Milham, M. P. (2022). Moving Beyond Processing and Analysis-Related Variation in Neuroscience. *Organization for Human Brain Mapping*.
27. Bridgeford, E. W., Powell, M., **Kiar, G.**, Lawrence, R., Xu, T., Caffo, B., Milham, M. P., & Vogelstein, J. T. (2022). Batch Effects are Causal Effects: Applications in Human Connectomics. *Organization for Human Brain Mapping*.
28. Xu, T., **Kiar, G.**, Cho, J. W., Bridgeford, E. W., Vogelstein, J. T., & Milham, M. P. (2022). Shiny Reliability Explorer (ReX): Quantifying and Optimizing Reliability for the Study of Individual Differences. *Organization for Human Brain Mapping*.
29. **Kiar, G.**, Mumford, J., Xu, T., Vogelstein, J. T., Glatard, T., & Milham, M. P. (2022). A hitchhiker's guide (or checklist) to capturing neuroimaging variability. *Organization for Human Brain Mapping*.
30. Chatelain, Y., Tetrel, L., Markiewicz, C. J., **Kiar, G.**, Esteban, O., Bellec, P., & Glatard, T. (2022). Testing the long-term reproducibility of fMRIPrep results. *Organization for Human Brain Mapping*.
31. **Kiar, G.**, Chatelain, Y., Salari, A., ..., Evans, A. C., & Glatard, T. (2021). Leveraging Numerical Instabilities In Connectome Estimation For More Generalizable Models. *Organization for Human Brain Mapping*.

32. Richie-Halford, A., Bloom, D., ..., **Kiar, G.**, ..., & Rokem, A. (2021). Evaluating the reliability of diffusion-MRI based tractometry. *Organization for Human Brain Mapping*.
33. Levitis, E., Vogel, J., **Kiar, G.**, Funck, T., Ituria, Y., & Evans, A. C. (2020). Validation of an epidemic spreading model to simulate A β spread in familial Alzheimer's disease. *Organization for Human Brain Mapping*.
34. Henri-Bellemare, C., **Kiar, G.**, Lavigne, K., Patel, R., Chakravarty, M. M., & Lepage, M. (2020). Exploring the Relationship Between Early Psychosis Verbal Memory Deficits and White Matter Integrity. *Organization for Human Brain Mapping*.
35. Chung, J., Dey, J., **Kiar, G.**, Priebe, C. E., & Vogelstein, J. T. (2020). Human Structural Connectomes are Heritable. *Organization for Human Brain Mapping*.
36. Bosch-Bayard, J., Rogers, C., Aubert, E., Brown, S. T., **Kiar, G.**, Glatard, T., Galán-García, L., Bringas Vega, T., M. Virues, Das, S., Madjar, C., Mohades, Z., MacIntyre, L., Evans, A. C., & Valdes-Sosa, P. (2020). Incorporating quantitative EEG analysis into the MNI Open Science neuroinformatics ecosystem. *Organization for Human Brain Mapping*.
37. **Kiar, G.**, Salari, A., Hannema, R., Vadariya, M., Dugre, M., Rioux, P., Douglas, P., Brown, S. T., de Oliveira Castro, P., Petit, E., Evans, A. C., & Glatard, T. (2020). Fuzzy: An Ecosystem for Evaluating the Stability of Pipelines Through Monte Carlo Arithmetic. *Organization for Human Brain Mapping*.
38. Bridgeford, E., Wang, S., Yang, Z., Wang, Z., Xu, T., Craddock, C., Dey, J., **Kiar, G.**, Gray-Roncal, W. R., Priebe, C. E., Caffo, B., Milham, M., Zuo, X. N., & Vogelstein, J. T. (2020). Optimal Experimental Design for Big Data: Applications in Brain Imaging. *Organization for Human Brain Mapping*.
39. Beck, N., Rioux, P., **Kiar, G.**, Brown, S. T., Czech, C., Boroday, S., Lecours-Boucher, X., Quesnel, D., Rogers, C., Khalili-Mahani, N., Adalat, R., Glatard, T., Das, S., & Evans, A. C. (2020). New Open Science features in the CBRAIN Platform. *Organization for Human Brain Mapping*.
40. Dockès, J., Chawla, K., Abraham, A., Bazeille, T., Boos, M., Bougacha, S., Bzdok, D., Chevalier, J. A., Dadi, K., de Hollander, G., Delettre, C., DuPre, E., Gale, D., Gorgolewski, K., Gramfort, A., Grigis, A., Guidotti, R., Hammonds, R., Hoyos-Idrobo, A., ... Varoquaux, G. (2020). Nilearn and Nistats: Machine learning and statistics for fMRI in Python. *Organization for Human Brain Mapping*.
41. **Kiar, G.**, Benderoff, E., Charrière, J., Dubé, S., Guérin, L. O., Bonnet, A., Camarasu-Pop, S., Beck, N., Rioux, P., Boroday, S., Brown, S. T., Poline, J. B., Evans, A. E., & Glatard, T. (2019). A FAIR Approach to Neuroimaging Analysis with Boutiques. *Organization for Human Brain Mapping*.
42. Brown, S. T., Rioux, P., Beck, N., Khalili-Mahani, N., Czech, C., Taheri, A., Boroday, S., **Kiar, G.**, Lecours-Boucher, X., Makowski, C., Quesnel, D., Poline, J. B., Adalat, R., Glatard, T., & Evans, A. C. (2019). Advancements in the CBRAIN Platform through the Integration of Community-Based Tools and Standards. *Organization for Human Brain Mapping*.
43. Suarez, L. E., **Kiar, G.**, Doyle, R. A., Evans, A. C., & Misic, B. (2018, September). Reverse Engineering the Human Connectome: Learning Function from Structure. *Resting State Brain Connectivity*.
44. Salari, A., Scaria, L., **Kiar, G.**, & Glatard, T. (2018). Numerical error propagation in the HCP structural pre-processing pipelines. *Organization for Human Brain Mapping*.
45. **Kiar, G.**, Glatard, T., & Poline, J. B. (2018). An Extensible Application Programming Interface for Querying Distributed Neuroscience Datasets. *Organization for Human Brain Mapping*.

46. Yarkoni, T., de la Vega, A., DuPre, E., Esteban, O., Halchenko, Y., Hanke, M., Hayot-Sasson, V., Ivanov, A., **Kiar, G.**, Markiewicz, C., McNamara, Q., Petrov, D., Poline, J. B., Poldrack, R., & Gorgolewski, K. J. (2018). Pybids: Python tools for manipulation and analysis of BIDS datasets. *Organization for Human Brain Mapping*.
47. Doyle, A., **Kiar, G.**, Toussaint, P., Lemaitre, P., & Evans, A. C. (2018). Creativity is Unrelated to Intelligence and Personality: A Machine Learning Study. *Organization for Human Brain Mapping*.
48. Taheri, A., Lurie, J., Abou-Haidar, R., Brown, S. T., Das, S., Doyle, A., Khalili-Mahani, N., **Kiar, G.**, Kostopoulos, P., Lepage, C., Lewis, L., Makowski, C., Rogers, C., Toussaint, P., & Evans, A. C. (2018). PIVT: A Platform Independent Visualization Tool. *Organization for Human Brain Mapping*.
49. **Kiar, G.**, Glatard, T., Brown, S. T., & Evans, A. C. (2018). Clowdr: a micro-service model for scalable, reproducible, and accessible neuroinformatics. *Organization for Human Brain Mapping*.
50. Vogel, J., Ossenkoppele, R., **Kiar, G.**, Hansson, O., & Evans, A. C. (2018). Heterogeneous tau-PET signal in the hippocampus resolves discrepancies between imaging and pathology. *Organization for Human Brain Mapping*.
51. Bridgeford, E., **Kiar, G.**, Chandrashekhar, V., Shen, C., Gray Roncal W. R. Priebe, C. E., Caffo, B., & Vogelstein, J. (2018). A Principled Approach to Statistical Connectomics and Mega-Analysis. *Organization for Human Brain Mapping*.
52. Al-Sharif, N., **Kiar, G.**, Khundrakpam, B., & Evans, A. C. (2018). Exploring whole-brain structural connectivity and cognitive performance in typical development. *Organization for Human Brain Mapping*.
53. Gorgolewski, K. J., Alfaro-Almagro, F., Auer, T., Bellec, P., Capotă, M., Chakravarty, M. M., Churchill, N. W., Cohen, A. L., Craddock, R. C., Devenyi, G. A., Eklund, A., Esteban, O., Flandin, G., Guntupalli, J. S., Jenkinson, M., Keshavan, A., **Kiar, G.**, Raamana, P. R., Raffelt, D., ... Poldrack, R. A. (2017). BIDS apps: Improving ease of use, accessibility, and reproducibility of neuroimaging data analysis methods. *Organization for Human Brain Mapping*.
54. **Kiar, G.**, Gray Roncal, W. R., Mhembe, D., Bridgeford, E. W., Wang, S., Priebe, C. E., Burns, R., & Vogelstein, J. T. (2016). MR Graph with Rich attribUTES DataBase (Mr. GruteDB). *Organization for Human Brain Mapping*.
55. Vogelstein, J. T., & et al. (2015). The Open Connectome Project & NeuroData: Enabling Data Driven Neuroscience at Scale. *Society for Neuroscience*.
56. **Kiar, G.**, Gray Roncal, W. R., Mhembe, D., Bridgeford, E. W., Clark, D., Milham, M. P., Craddock, R. C., Burns, R., & Vogelstein, J. T. (2015). Community Connectomics via Cloud Computing Utilizing m2g: a Reference Pipeline. *Organization for Human Brain Mapping*.

published code

For an up-to-date list of published code projects, please visit the GitHub profile of myself, <https://github.com/gkiar>, or my lab, <https://github.com/childmindresearch>.