TAYLOR SALO



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PROFILE

Methodologically-oriented cognitive neuroscientist focused in neuroinformatics. Strong technical skills in neuroimaging data processing, analysis, and meta-analysis. Passionate about transparency, reproducibility, and research software development.

EDUCATION

Ph.D. Florida International University, Cognitive Neuroscience

2018 - 2022

- Dissertation: Developing and Validating Open Source Tools for Advanced Neuroimaging Research
- Advisor: Dr. Angela Laird

M.S. Florida International University, Psychology

2015 - 2018

- Thesis: Meta-analytic search term performance and its effect on neuroimaging meta-analytic power
- Advisor: Dr. Angela Laird

B.A. Cornell University, Psychology

2009 - 2013

- Concentration in behavioral and evolutionary neuroscience
- Advisor: Dr. Timothy DeVoogd

EXPERIENCE

Postdoctoral Researcher, Lifespan Informatics & Neuroimaging Center

2022 - PRESENT

Dr. Ted Satterthwaite, University of Pennsylvania

Graduate Assistant, Neuroinformatics and Brain Connectivity Laboratory

2015 - 2022

Dr. Angela Laird, Florida International University

- Co-designed and executed a dense acquisition MRI pilot study.
- Processed and analyzed neuroimaging data for multiple projects.
- Implemented behavioral tasks in PsychoPy for multiple projects.
- Developed, maintained, and/or contributed to several open source software projects.
- Served as a Teaching Assistant for the ABCD-ReproNim Course (https://www.abcd-repronim.org).

Junior Specialist, Translational Cognitive and Affective Neuroscience Laboratory

2013 - 2015

Dr. Cameron Carter, University of California, Davis

- Acquired neuroimaging and behavioral data from healthy controls and patients with psychosis for projects studying the effects of psychosis on cognitive control, emotion regulation, and brain structure.
- Contributed to and maintained a custom codebase for the analysis of neuroimaging and behavioral data.
- Processed and analyzed neuroimaging and behavioral data for several lab projects.
- Administered behavioral tests and cognitive tasks, including the WASI and WRAT, to both control and clinical populations.
- Trained incoming personnel to administer behavioral and cognitive tasks.

Lab Co-Manager/Research Assistant, Laboratory for Lifespan Affective Neuroscience

2011 - 2013

Dr. Barbara Ganzel, Cornell University

- Contributed to projects investigating functional and structural changes associated with subclinical trauma.
- Trained undergraduate students to preprocess and perform data diagnostics on fMRI data.

Undergraduate Research Assistant, Bird Song Behavior Laboratory

2012 - 2013

NIMARE.READTHEDOCS.IO

Dr. Timothy DeVoogd, Cornell University

- Prepared solutions for, and assisted in, intracranial perfusion, dissection, and staining of bird brains.
- Examined avian song-related neural regions microscopically.

SOFTWARE AND PROJECT DEVELOPMENT

Lead Developer

NIMARE

NiMARE (Neuroimaging Meta-Analysis Research Environment) is a Python library for performing meta-analyses, and derivative analyses using meta-analytic data, for neuroimaging research. This tool supports a range of coordinate- and image-based meta-analysis algorithms. NiMARE was conceived at the Code Rodeo sprint in 2018, and since then I have been the lead developer. NiMARE is part of a growing ecosystem of primarily Python-based tools for meta-analysis, including NeuroStore, Neurosynth 2.0, NeuroQuery, and PyMARE.

The Brain Imaging Data Standard

BIDS-SPECIFICATION.READTHEDOCS.IO

Maintainer Team Member

The Brain Imaging Data Standard (BIDS) is a specification for organizing and annotating neuroimaging data. As a member of the maintainers team, I have been responsible for ensuring specification consistency and helping contributors (especially large-scale BIDS extension proposals) add new elements to the specification. In addition to my regular maintainer work, I have also spearheaded the creation of the BIDS schema, which translates portions of the text-based specification into machine-readable YAML files. As of now, this schema directly renders the majority of tables within the specification, and we are in the process of using it in tools built around BIDS, including the BIDS validator, PyBIDS, and bids-matlab.

Tedana Tedana.readthedocs.io

Maintainer Team Member

Tedana (TE-Dependent ANAlysis) is a Python library for denoising multi-echo fMRI data. This library succeeds the meica.py tool, with several new features and a new emphasis on best programming practices. I have been a member of the Tedana maintainers team since 2018. In addition to developing Tedana directly, the maintainers team has also created several associated tools, including mapca, ddmra, godec, aroma, and RICA.

Nilearn NILEARN.GITHUB.IO

Maintainer Team Member

Nilearn is a popular Python library for neuroimaging data analysis, decoding, and visualization. I joined the Nilearn maintainers team in 2021, and have primarily focused my contributions on improving documentation and general linear model support, including adding cluster-level and TFCE-based correction.

PyMARE PyMARE.readthedocs.io

Lead Maintainer

PyMARE is a Python library for effect-size meta-analysis. PyMARE was developed as a sister library to NiMARE, with a focus on general-purpose meta-analyses. The meta-analytic estimators implemented in PyMARE are then used within NiMARE for image-based meta-analyses. Since PyMARE's primary developer left academia in 2021, I have filled in as its maintainer.

Other open source software

Contributor

I am a regular contributor to several other open source projects, including fMRIPrep, PyBIDS, HeuDiConv, and Neurosynth.

HONORS AND AWARDS

Brain Initiative Principal Investigators Meeting Trainee Travel Award	2019
Organization for Human Brain Mapping Hackathon Travel Award	2017
Organization for Human Brain Mapping Merit Abstract Travel Award	2017

HACKATHONS AND TRAINING

NiMARE/Neurosynth 2.0 Coding Sprint	2022
BIDS Schema Coding Sprint	2022
OHBM Hackathon	2021
BrainHack Donostia	2020
OHBM Hackathon	2020
NIH Code Convergence	2019
NIH Tedana Hackathon	2019
OHBM Hackathon	2019
Coastal Coding	2019
FIU Brainconn Hackathon	2018
BrainHack Montreal	2018
Code Rodeo	2018
OHBM Hackathon	2017
Neurohackweek	2016

PUBLICATIONS

- 1. Zhao C, Jarecka D, Covitz S, Chen Y, Eickhoff SB, Fair DA, Franco AR, Halchenko YO, Hendrickson TJ, Hoffstaedter F, Houghton A, Kiar G, Macdonald A, Mehta K, Milham MP, Salo T, Hanke M, Ghosh SS, Cieslak M, & Satterthwaite TD. (2024). A reproducible and generalizable software workflow for analysis of large-scale neuroimaging data collections using BIDS Apps. *Imaging Neuroscience*.
- 2. Peraza JA, Salo T, Riedel MC, Bottenhorn KL, Poline J, Dockès J, Kent JD, Bartley JE, Flannery JS, Hill-Bowen LD, Lobo RP, Poudel R, Ray KL, Robinson JL, Laird RW, Sutherland MT, Vega Adl, & Laird AR. (2024). Methods for decoding cortical gradients of functional connectivity. *Imaging Neuroscience*.
- 3. **Salo T**, Yarkoni T, Nichols TE, Poline JB, Bilgel M, Bottenhorn KL, Jarecka D, Kent JD, Kimbler A, Nielson DM, Oudyk KM, Peraza JA, Pérez A, Reeders PC, Yanes JA, & Laird AR. (2023). NiMARE: Neuroimaging Meta-Analysis Research Environment. *Aperture*. doi: 10.52294/001c.87681.
- 4. Smith DD, Meca A, Bottenhorn KL, Bartley JE, Riedel MC, Salo T, Peraza JA, Laird RW, Pruden SM, Sutherland MT, Brewe E, & Laird AR. (2023). Task-based attentional and default mode connectivity associated with science and math anxiety profiles among university physics students. *Trends in Neuroscience and Education*.
- 5. Meca A, Peraza JA, Riedel MC, Hale W, Pettit JW, Musser ED, **Salo T**, Flannery JS, Bottenhorn KL, Dick AS, Lobo RP, Ucros LM, Greaves CA, Hawes SW, Sanchez M, Gonzalez MR, Sutherland MT, Gonzalez R, & Laird AR. (2023). Acculturative orientations among Hispanic/Latinx caregivers in the ABCD Study: Associations with caregiver and youth mental health and youth brain function. *Biological Psychiatry Global Open Science*.
- 6. Lobo RP, Bottenhorn KL, Riedel MC, Toma AI, Hare MM, Smith DD, Moor AC, Cowan IK, Valdes JA, Bartley JE, **Salo T**, Boeving ER, Pankey B, Sutherland MT, Musser ED, & Laird AR. (2023). Neural systems underlying RDoC social constructs: An activation likelihood estimation meta-analysis. *Neuroscience & Biobehavioral Reviews 144*.

- 7. Poudel R, Tobia MJ, Riedel MC, **Salo T**, Flannery JS, Hill-Bowen LD, Dick AS, Laird AR, Parra CM, & Sutherland MT. (2022). Risky decision-making strategies mediate the relationship between amygdala activity and real-world financial savings among individuals from lower income households: A pilot study. *Behavioural Brain Research*.
- 8. Flannery JS, Riedel MC, Hill-Bowen LD, Poudel R, Bottenhorn KL, **Salo T**, Laird AR, Gonzalez R, & Sutherland MT. (2022). Altered large-scale brain network interactions associated with HIV infection and error processing. *Network Neuroscience*.
- 9. Flannery JS, Riedel MC, **Salo T**, Hill-Bowen LD, Poudel R, Adams AR, Laird AR, Gonzalez R, & Sutherland MT. (2022). Interactive effects of HIV infection and cannabis use on insula subregion functional connectivity. *Journal of Neuroimmune Pharmacology*.
- 10. Hill-Bowen LD, Riedel MC, Salo T, Flannery JS, Poudel R, Laird AR, & Sutherland MT. (2022). Convergent gray matter alterations across drugs of abuse and network-level implications: A meta-analysis of structural MRI studies. *Drug and Alcohol Dependence*.
- 11. Pankey BS, Riedel MC, Cowan I, Bartley JE, Lobo RP, Hill-Bowen LD, **Salo T**, Musser ED, Sutherland MT, & Laird AR. (2022). Extended functional connectivity of convergent structural alterations among individuals with PTSD: A neuroimaging meta-analysis. *Behavioral and Brain Functions*.
- Bouget MH, Kamentsky L, Ghosh SS, Mazzamuto G, Lazari A, Markiewicz CJ, Oostenveld R, Niso G, Halchenko YO, Lipp I, Takerkart S, Toussaint PJ, Khan AR, Nilsonne G, Castelli FM, The BIDS Maintainers¹, & Cohen-Adad J. (2022). Microscopy-BIDS: An Extension to the Brain Imaging Data Structure for Microscopy Data. Frontiers in Neuroscience. doi: 10.3389/fnins.2022.871228.
- 13. Karakuzu A, Appelhoff S, Auer T, Boudreau M, Feingold F, Khan AR, Lazari A, Markiewicz C, Mulder M, Phillips C, Salo T, Stikov N, Whitaker K, & Hollander GD. (2022). qMRI-BIDS: An extension to the brain imaging data structure for quantitative magnetic resonance imaging data. *Scientific data*.
- 14. Clement P, Castellaro M, Okell TW, Thomas DL, Vandemaele P, Elgayar S, Oliver-Taylor A, Kirk T, Woods JG, Vos SB, Kuijer JP, Achten E, Osch MJv, Detre JA, Lu H, Alsop DC, Chappell MA, Hernandez-Garcia L, Petr J, & Mutsaerts HJ. (2022). ASL-BIDS, the brain imaging data structure extension for arterial spin labeling. *Scientific Data*.
- 15. Poudel R, Tobia MJ, Riedel MC, Salo T, Flannery JS, Hill-Bowen LD, Dick AS, Laird AR, Parra CM, & Sutherland MT. (2022). Risky decision-making strategies mediate the relationship between amygdala activity and real-world financial savings among individuals from lower income households: A pilot study. *Behavioural Brain Research*. doi: 10.1016/j.bbr.2022.113867.
- Flannery JS, Riedel MC, Hill-Bowen LD, Poudel R, Bottenhorn KL, Salo T, Laird AR, Gonzalez R, & Sutherland MT. (2022). Altered large-scale brain network interactions associated with HIV infection and error processing. Network Neuroscience. doi: 10.1162/netn_a_00241.
- 17. Norgaard M, Matheson GJ, Hansen HD, Thomas A, Searle G, Rizzo G, Veronese M, Giacomel A, Yaqub M, Tonietto M, ..., Salo T, ..., & Ganz M. (2022). PET-BIDS, an extension to the brain imaging data structure for positron emission tomography. *Scientific data*. doi: 10.1038/s41597-022-01164-1.
- Flannery JS, Riedel MC, Salo T, Hill-Bowen LD, Poudel R, Adams AR, Laird AR, Gonzalez R, & Sutherland MT. (2021). Interactive Effects of HIV Infection and Cannabis Use on Insula Subregion Functional Connectivity. *Journal of Neuroimmune Pharmacology*. doi: 10.1007/s11481-021-10005-8.
- DuPre E², Salo T², Ahmed Z, Bandettini PA, Bottenhorn KL, Caballero-Gaudes C, Dowdle LT, Gonzalez-Castillo J, Heunis S, & Kundu P. (2021). TE-dependent analysis of multi-echo fMRI with tedana. *Journal of Open Source Software*. doi: 10.21105/joss.03669.

¹Member of the BIDS maintainers group

²Contributed equally

- Flannery JS, Riedel MC, Salo T, Poudel R, Laird AR, Gonzalez R, & Sutherland MT. (2021). HIV infection is linked with reduced error-related default mode network suppression and poorer medication management abilities. Progress in Neuro-Psychopharmacology and Biological Psychiatry. doi: 10.1016/j.pnpbp.2021.110398.
- 21. Witt ST, van Ettinger-Veenstra H, **Salo T**, Riedel MC, & Laird AR. (2021). What executive function network is that? An image-based meta-analysis of network labels. *Brain topography*. doi: 10.1007/s10548-021-00847-z.
- 22. Hill-Bowen LD, Riedel MC, Poudel R, **Salo T**, Flannery JS, Camilleri JA, Eickhoff SB, Laird AR, & Sutherland MT. (2021). The cue-reactivity paradigm: An ensemble of networks driving attention and cognition when viewing drug and natural reward-related stimuli. *Neuroscience & Biobehavioral Reviews*. doi: 10.1016/j.neu-biorev.2021.08.010.
- 23. Poudel R, Riedel MC, Salo T, Flannery JS, Hill-Bowen LD, Eickhoff SB, Laird AR, & Sutherland MT. (2020). Common and distinct brain activity associated with risky and ambiguous decision-making. *Drug and alcohol dependence*. doi: 10.1016/j.drugalcdep.2020.107884.
- 24. Botvinik-Nezer R, Holzmeister F, Camerer CF, Dreber A, Huber J, Johannesson M, Kirchler M, Iwanir R, Mumford JA, Adcock RA, ..., **Salo T**, ..., & Rieck JR. (2020). Variability in the analysis of a single neuroimaging dataset by many teams. *Nature*. doi: 10.1038/s41586-020-2314-9.
- 25. Bielczyk NZ, Ando A, Badhwar A, Caldinelli C, Gao M, Haugg A, Hernandez LM, Ito KL, Kessler D, Lurie D, ..., **Salo T**, ..., & Postdoc Special Interest Group (2020). Effective self-management for early career researchers in the natural and life sciences. *Neuron*. doi: 10.1016/j.neuron.2020.03.015.
- Flannery JS, Riedel MC, Bottenhorn KL, Poudel R, Salo T, Hill-Bowen LD, Laird AR, & Sutherland MT. (2020).
 Meta-analytic clustering dissociates brain activity and behavior profiles across reward processing paradigms.
 Cognitive, Affective, & Behavioral Neuroscience. doi: 10.3758/s13415-019-00763-7.
- 27. Morawetz C, Riedel MC, **Salo T**, Berboth S, Eickhoff SB, Laird AR, & Kohn N. (2020). Multiple large-scale neural networks underlying emotion regulation. *Neuroscience & Biobehavioral Reviews*. doi: 10.1016/j.neu-biorev.2020.07.001.
- 28. Esteban O, Ciric R, Finc K, Blair RW, Markiewicz CJ, Moodie CA, Kent JD, Goncalves M, DuPre E, Gomez DE, ..., Salo T, ..., & Gorgolewski KJ. (2020). Analysis of task-based functional MRI data preprocessed with fMRIPrep. *Nature Protocols*. doi: 10.1038/s41596-020-0327-3.
- 29. Bolt T, Nomi JS, Arens R, Vij SG, Riedel M, **Salo T**, Laird AR, Eickhoff SB, & Uddin LQ. (2020). Ontological dimensions of cognitive-neural mappings. *Neuroinformatics*. doi: 10.1007/s12021-020-09454-y.
- 30. Yarkoni T, Markiewicz CJ, de la Vega A, Gorgolewski KJ, **Salo T**, Halchenko YO, McNamara Q, DeStasio K, Poline J, & Petrov D. (2019). PyBIDS: Python tools for BIDS datasets. *The Journal of Open Source Software*. doi: 10.21105/joss.01294.
- 31. Riedel MC, **Salo T**, Hays J, Turner MD, Sutherland MT, Turner JA, & Laird AR. (2019). Automated, efficient, and accelerated knowledge modeling of the cognitive neuroimaging literature using the athena toolkit. *Frontiers in neuroscience*. doi: 10.3389/fnins.2019.00494.
- 32. Gonzalez AA, Bottenhorn KL, Bartley JE, Hayes T, Riedel MC, **Salo T**, Bravo EI, Odean R, Nazareth A, & Laird RW. (2019). Sex differences in brain correlates of STEM anxiety. *NPJ science of learning*. doi: 10.1038/s41539-019-0058-9.
- 33. Bartley JE, Riedel MC, **Salo T**, Boeving ER, Bottenhorn KL, Bravo EI, Odean R, Nazareth A, Laird RW, & Sutherland MT. (2019). Brain activity links performance in science reasoning with conceptual approach. *NPJ Science of Learning*. doi: 10.1038/s41539-019-0059-8.
- 34. Bartley JE, Boeving ER, Riedel MC, Bottenhorn KL, **Salo T**, Eickhoff SB, Brewe E, Sutherland MT, & Laird AR. (2018). Meta-analytic evidence for a core problem solving network across multiple representational domains. *Neuroscience & biobehavioral reviews*. doi: 10.1016/j.neubiorev.2018.06.009.

- 35. Brewe E, Bartley JE, Riedel MC, Sawtelle V, **Salo T**, Boeving ER, Bravo EI, Odean R, Nazareth A, & Bottenhorn KL. (2018). Toward a neurobiological basis for understanding learning in university modeling instruction physics courses. *Frontiers in ICT*. doi: 10.3389/fict.2018.00010.
- 36. Ray KL, Lesh TA, Howell AM, Salo T, Ragland JD, MacDonald AW, Gold JM, Silverstein SM, Barch DM, & Carter CS. (2017). Functional network changes and cognitive control in schizophrenia. *NeuroImage: Clinical*. doi: 10.1016/j.nicl.2017.05.001.
- 37. Lopez-Garcia P, Lesh TA, **Salo T**, Barch DM, MacDonald AW, Gold JM, Ragland JD, Strauss M, Silverstein SM, & Carter CS. (2016). The neural circuitry supporting goal maintenance during cognitive control: a comparison of expectancy AX-CPT and dot probe expectancy paradigms. *Cognitive, Affective, & Behavioral Neuroscience*. doi: 10.3758/s13415-015-0384-1.
- 38. Phillips RC, Salo T, & Carter CS. (2015). Distinct neural correlates for attention lapses in patients with schizophrenia and healthy participants. *Frontiers in human neuroscience*. doi: 10.3389/fnhum.2015.00502.

PREPRINTS

- 1. Peraza JA, **Salo T**, Riedel MC, Bottenhorn KL, Poline J, Dockès J, Kent JD, Bartley JE, Flannery JS, Hill-Bowen LD, Lobo RP, Poudel R, Ray KL, Robinson JL, Laird RW, Sutherland MT, Vega Adl, & Laird AR. (2023). Meta-analytic decoding of the cortical gradient of functional connectivity. *bioRxiv*.
- 2. Mehta KP, **Salo T**, Madison T, Adebimpe A, Bassett DS, Bertolero M, Cieslak M, Covitz S, Houghton A, Keller AS, Luo A, Dominguez OM, Nelson S, Shafiei G, Shanmugan S, Shinohara R, Sydnor VJ, Feczko E, Fair DA, & Satterthwaite TD. (2023). XCP-D: A Robust Pipeline for the post-processing of fMRI data. *bioRxiv*.
- 3. Van AN, Montez DF, Laumann TO, Suljic V, Madison T, Baden NJ, Ramirez-Perez N, Scheidter KM, Monk JS, Whiting FI, Adeyemo B, Chauvin RJ, Krimmel SR, Metoki A, Rajesh A, Roland JL, **Salo T**, Wang A, Weldon KB, Sotiras A, Shimony JS, Kay BP, Nelson SM, Tervo-Clemmens B, Marek SA, Vizioli L, Yacoub E, Satterthwaite TD, Gordon EM, Fair DA, Tisdall D, & Dosenbach NU. (2023). Framewise multi-echo distortion correction for superior functional MRI. *bioRxiv*.
- 4. Diveica V, Riedel MC, **Salo T**, Laird AR, Jackson RL, & Binney RJ. (2023). Graded functional organisation in the left inferior frontal gyrus: evidence from task-free and task-based functional connectivity. *bioRxiv*.
- 5. Shafiei G, Keller AS, Bertolero M, Shanmugan S, Bassett DS, Chen AA, Covitz S, Houghton A, Luo A, Mehta K, **Salo T**, Shinohara RT, Fair D, Hallquist MN, & Satterthwaite TD. (2023). Generalizable links between symptoms of borderline personality disorder and functional connectivity. *bioRxiv*.
- 6. Luo A, Sydnor VJ, Pines A, Larsen B, Alexander-Bloch AF, Cieslak M, Covitz S, Chen A, Esper NB, Feczko E, Franco AR, Gur RE, Gur RC, Houghton A, Hu F, Keller AS, Kiar G, Mehta K, Salum GA, Tapera T, Xu T, Zhao C, Fair DA, Salo T, Shinohara RT, Milham MP, & Satterthwaite TD. (2023). Functional Connectivity Development along the Sensorimotor-Association Axis Enhances the Cortical Hierarchy. *bioRxiv*.
- 7. Poldrack RA, Markiewicz CJ, Appelhoff S, Ashar YK, Auer T, Baillet S, Bansal S, Beltrachini L, Benar CG, Bertazzoli G, Bhogawar S, Blair RW, Bortoletto M, Boudreau M, Brooks TL, Calhoun VD, Castelli FM, Clement P, Cohen AL, Cohen-Adad J, d'Ambrosio S, Hollander Gd, Iglesia-Vayá Mdl, Vega Adl, Delorme A, Devinsky O, Draschkow D, Duff EP, DuPre E, Earl E, Esteban O, Feingold FW, Flandin G, Galassi A, Gallitto G, Ganz M, Gau R, Gholam J, Ghosh SS, Giacomel A, Gillman AG, Gleeson P, Gramfort A, Guay S, Guidali G, Halchenko YO, Handwerker DA, Hardcastle N, Herholz P, Hermes D, Honey CJ, Innis RB, Ioanas H, Jahn A, Karakuzu A, Keator DB, Kiar G, Kincses B, Laird AR, Lau JC, Lazari A, Legarreta JH, Li A, Li X, Love BC, Lu H, Maumet C, Mazzamuto G, Meisler SL, Mikkelsen M, Mutsaerts H, Nichols TE, Nikolaidis A, Nilsonne G, Niso G, Norgaard M, Okell TW, Oostenveld R, Ort E, Park PJ, Pawlik M, Pernet CR, Pestilli F, Petr J, Phillips C, Poline J, Pollonini L, Raamana PR, Ritter P, Rizzo G, Robbins KA, Rockhill AP, Rogers C, Rokem A, Rorden C, Routier A, Saborit-Torres JM, Salo T, Schirner M, Smith RE, Spisak T, Sprenger J, Swann NC, Szinte M, Takerkart S, Thirion B, Thomas AG, Torabian S, Varoquaux G, Voytek B, Welzel J, Wilson M, Yarkoni T, & Gorgolewski KJ. (2023). The past, present, and future of the brain imaging data structure (BIDS). arXiv.

- 8. Bottenhorn K, Bartley J, Riedel M, **Salo T**, Bravo E, Odean R, Nazareth A, Laird R, Pruden S, & Sutherland M. (2021). Intelligence and academic performance: Is it all in your head?. *bioRxiv*. doi: 10.1101/2021.01.23.427928.
- 9. Bartley JE, Riedel MC, **Salo T**, Bottenhorn KL, Boeving ER, Laird RW, Sutherland MT, Pruden SM, Brewe E, & Laird AR. (2019). Sex and pedagogy influences in physics learning-related reorganization of brain activation. *bioRxiv*. doi: 10.1101/791301.

OPEN DATASETS

1. **Salo T**³, Bottenhorn KL³, Riedel MC, Flannery JS, Kimbler A, Laird RW, & Laird AR. (2020). Dense Investigation of Variability of Affect (DIVA). OpenNeuro [Dataset]. doi: 10.18112/openneuro.ds002278.v1.0.1.

INVITED TALKS AND SOFTWARE DEMONSTRATIONS

- 1. Laird AR & **Salo T**. (2021). Meta-analysis and reproducibility. Presented at Neurohackademy 2021; virtual. More information here.
- 2. **Salo T**. (2021). Hands-on tutorial with NiMARE. Presented at the Organization for Human Brain Mapping 2021 Annual Meeting; virtual. More information here.
- 3. **Salo T** & Uruñuela E. (2020). How to Start an Open Science Project from Scratch: ICA-AROMA. Presented at BrainHack Donostia; virtual. More information here.
- 4. **Salo T**. (2020). BIDS for MRI: Structure and Conversion. Presented at the University of Oldenburg Open and reproducible neuroimaging workshop; virtual. More information here.

PRESENTATIONS

- 1. **Salo T**. (2018). NiMARE: A Neuroimaging Meta-Analysis Research Environment. Presented at Brainhack Global 2018; Miami, Florida. More information here.
- 2. **Salo T**, Riedel MC, Bartley JE, Bottenhorn KL, Yarkoni T, Turner MD, Turner JA, Sutherland MT, & Laird AR. (2017). A quantitative evaluation of Neurosynth's annotation methods. Presented at the 23rd annual meeting of the Organization for Human Brain Mapping; Vancouver, British Columbia. More information here.
- 3. Salo T, Riedel MC, Bartley JE, Bottenhorn KL, Yarkoni T, Turner MD, Turner JA, Sutherland MT, & Laird AR. (2017). A quantitative evaluation of Neurosynth's annotation methods. Presented at Florida International University's 2017 Graduate Student Scholarly Forum; Miami, Florida.
- 4. **Salo T** & Renfro A. (2017). Open science tools: GitHub, BIDS, & preregistration. Presented at Brainhack Global 2017; Miami, Florida. More information here.

POSTERS

- 1. Poudel R, Tobia MJ, Riedel MC, Salo T, Flannery JS, Hill-Bowen LD, Laird AR, Dick AS, Parra CM, & Sutherland MT. (2021). Working memory is linked with default mode network deactivation and real-world money saving behavior. Presented at the Organization for Human Brain Mapping 2021 Annual Meeting; virtual.
- 2. Flannery JS, Riedel MC, **Salo T**, Poudel R, Laird AR, Gonzalez R, & Sutherland MT. (2021). Reduced Error-Related Default Mode Network Deactivations Linked with HIV and Poor Medication Management. Presented at the Organization for Human Brain Mapping 2021 Annual Meeting; virtual.
- 3. Bottenhorn KL, **Salo T**, Riedel MC, Musser ED, Robinson JL, Sutherland MT, & Laird AR. (2021). Denoising physiological data collected during multi-band, multi-echo EPI sequences. Presented at the Organization for Human Brain Mapping 2021 Annual Meeting; virtual.

³Contributed equally

- 4. Bottenhorn KL, Salo T, Bartley JE, Flannery JS, Sutherland MT, & Laird AR. (2021). IDConn: A Python pipeline for investigating individual differences in functional brain connectivity. Presented at the Organization for Human Brain Mapping 2021 Annual Meeting; virtual.
- 5. Salo T, Yarkoni T, Nichols TE, Bottenhorn KL, Gorgolewski KJ, Riedel MC, Kent JD, Glerean E, Bilgel M, Wright J, Reeders P, Nielson DN, Yanes JA, Perez A, Sutherland MT, & Laird AR. (2020). NiMARE: A Neuroimaging Meta-Analysis Research Environment. Presented at the Organization for Human Brain Mapping 2020 Annual Meeting; virtual.
- 6. Bottenhorn KL, Bartley JE, Riedel MC, **Salo T**, Bravo EI, Odean R, Nazareth A, Laird RW, Pruden SM, Sutherland MT, Brewe E, & Laird AR. (2020). Intelligence and academic performance: Is it all in your head? Presented at the Organization for Human Brain Mapping 2020 Annual Meeting; virtual.
- 7. Salo T, Yarkoni T, Kent JD, Gorgolewski KJ, Glerean E, Bottenhorn KL, Bilgel M, Wright J, Reeders P, Nielson DN, Nichols TE, Riedel MC, Sutherland MT, & Laird AR. (2019). NiMARE: A Neuroimaging Meta-Analysis Research Environment. Presented at the 25th annual meeting of the Organization for Human Brain Mapping (Rome, Italy). More information here.
- 8. Poudel R, Riedel MC, **Salo T**, Flannery JS, Hill LD, Laird AR, & Sutherland MT. (2019). Common and distinct brain regions associated with risky- and ambiguous decision-making. Presented at the SANS annual meeting (Miami, Florida). More information here.
- 9. **Salo T**, Bottenhorn KL, Nichols TE, Riedel MC, Sutherland MT, Yarkoni T, & Laird AR. (2018). NiMARE: A Neuroimaging Meta-Analysis Research Environment. Presented at INCF Neuroinformatics 2018 (Montreal, Quebec) and at the annual Brain Initiative Principal Investigators Meeting (Washington D.C.). More information here.
- Bottenhorn KL, Salo T, Sutherland MT, & Laird AR. (2018). Quantitative comparison of functional decoding approaches across meta-analytic frameworks. Presented at INCF Neuroinformatics 2018 (Montreal, Quebec). More information here.
- 11. Riedel MC, **Salo T**, Hays J, Turner MD, Sutherland MT, Turner JA, & Laird AR. (2018). Automating annotations of the cognitive neuroimaging literature using ATHENA. Presented at INCF Neuroinformatics 2018 (Montreal, Quebec). More information here.
- 12. Yarkoni, T, de la Vega, A, DuPre, E, Esteban, O, Halchenko, YO, Hanke, M, Hayor-Sasson, V, Ivanov, A, Kiar, G, Markiewicz, C, McNamara, Q, Petrov, D, Salo T, Nielson, D, Poline, JB, Poldrack, R, & Gorgolewski, K. (2018). Pybids: Python tools for manipulation and analysis of BIDS datasets. Presented at the 24th annual meeting of the Organization for Human Brain Mapping (Singapore). More information here.
- 13. DuPre, E, Kundu, P, Esteban, O, Markello, R, Whitaker, K, **Salo T**, & Spreng, N. (2018). Introducing a BIDS-compliant multi-echo fMRI preprocessing pipeline. Presented at the 24th annual meeting of the Organization for Human Brain Mapping (Singapore). More information here.
- 14. Kohn, N, Riedel, MC, **Salo T**, Laird, AR, Eickhoff, SB, & Morawetz, C. (2018). Meta-analytic brain networks underlying emotion regulation. Presented at the 24th annual meeting of the Organization for Human Brain Mapping (Singapore). More information here.
- 15. **Salo T**, Riedel, MC, Bartley, JE, Bottenhorn, KL, Yarkoni, T, Turner, MD, Turner, JA, Sutherland, MT, & Laird, AR. (2017). A quantitative evaluation of Neurosynth's annotation methods. Presented at the 23rd annual meeting of the Organization for Human Brain Mapping (Vancouver, British Columbia). More information here.
- 16. Bartley, JE, Riedel, MC, **Salo T**, Boeving, ER, Odean, R, Bravo, E, Laird, RW, Pruden, S, Brewe, E, Sutherland, ME, Laird, AR. (2017). Understanding the neural substrates of physics problem solving: Brain mechanisms and behavior correlates. Presented at the 23rd annual meeting of the Organization for Human Brain Mapping (Vancouver, British Columbia). More information here.

- 17. Poudel, R, Riedel, MC, Hill LD, Flannery, JF, Salo T, Laird A.R, Sutherland M.T. (2017). Behavioral decoding of functionally related brain areas consistently linked to drug cue reactivity. Presented at Florida International University's 2017 Graduate Student Scholarly Forum (Miami, Florida). More information here.
- 18. Riedel, MC, Poudel, R, **Salo T**, Eickhoff SB, Fox, PT, Laird, AR, & Sutherland, MT. (2016). Co-activation based parcellation of the human insula. Presented at the 22nd annual meeting of the Organization for Human Brain Mapping (Geneva, Switzerland). More information here.
- 19. Lesh, TA, Maddock, RJ, Salo T, Tanase, C, Ragland, JD, Niendam, TA, Solomon, M, & Carter, CS. (2015). Diffusion Measures of Free Water and 1H-MRS Measures of Glutathione in First Episode Patients with Schizophrenia A Multi-Modal Investigation of an Inflammatory Model for Psychosis. Presented at the 15th biennial meeting of the International Congress on Schizophrenia Research (Colorado Springs, CO) and at the annual meeting of the American College of Neuropsychopharmacology (Phoenix, AZ).
- 20. Phillips, RC, **Salo T**, & Carter, CS. (2014). Default mode network activity precedes attention lapse in healthy subjects. Presented at the 44th annual meeting of the Society for Neuroscience (Washington D.C.) and at the second annual Northern California Consciousness meeting (Davis, CA).

ADDITIONAL SKILLS

- Python, MATLAB, and bash programming.
- Open source software development.
- Community development and support.
- Behavioral task programming with PsychoPy and E-Prime.
- FMRI processing, analysis, and meta-analysis, using a range of tools, including Nilearn, Nipype, fMRIPrep, AFNI, SPM, and NiMARE.
- Neuroimaging study design.

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