Philip Nicholas Tubiolo

Curriculum Vitae

Date of Preparation

February 5, 2025

Personal Data

Philip Nicholas Tubiolo
Graduate Student
Department of Biomedical Engineering, Stony Brook University

Email: philip.tubiolo@stonybrook.edu

Born: Long Island, New York
United States Citizen

Academic Appointments

Aug 2021 – present	*Graduate Research Assistant* Cognitive Neuroscience and Psychosis Lab (PI: Jared X. Van Snellenberg), Department of Psychiatry and Behavioral Health, Renaissance School of Medicine at Stony Brook University
Feb 2019 – Aug 2021	*Undergraduate Research Assistant* Cognitive Neuroscience and Psychosis Lab (PI: Jared X. Van Snellenberg), Department of Psychiatry and Behavioral Health, Renaissance School of Medicine at Stony Brook University

Education

Aug 2021 – present	*Doctor of Philosophy in Biomedical Engineering*, Department of Biomedical Engineering, Stony Brook University. *Advisor*: Jared X. Van Snellenberg
Aug 2021 – May 2024	*Graduate Certificate in Medical Physics (CAMPEP Accredited)*, Department of Biomedical Engineering, Stony Brook University
Aug 2021 – May 2024	*Master of Science*, Department of Biomedical Engineering, Stony Brook University
Aug 2017 – May 2021	*Bachelor of Engineering (Magna Cum Laude)*, Department of Biomedical Engineering, Stony Brook University

Honors & Awards

2020	*Undergraduate Research and Creative Activities (URECA) Researcher of the Month,* Stony Brook University
2020	*Undergraduate Research and Creative Activities (URECA) Summer Research Scholarship,* Stony Brook University
2020	*Acceptance into the Accelerated BE/MS program,* Department of Biomedical Engineering, Stony Brook University
2017-2020	*Presidential Scholarship*, Stony Brook University
2019	*Undergraduate Research and Creative Activities (URECA) Travel Grant,* Stony Brook University

Professional Organizations and Societies

Membership in Professional Organizations

2022 – present Member, The American Association of Physicists in Medicine
2021 – present Member, Society for Neuroscience
2021 – present Member, Organization for Human Brain Mapping
2021 – present Member, Tau Beta Pi Engineering Honor Society
2021 – present Member, Alpha Eta Mu Beta Biomedical Engineering Honor Society

Professional Certifications and Licensure Exams

2023 American Board of Radiology Medical Physics Certification Exam Part 1 (PASSED)

Ad Hoc Journal Review Service

2024 BMC Medical Imaging

Fellowship and Grant Support

Scholars in Biomedical Sciences 8/2024 – 8/2025
Grant # T32GM148331
National Institute of General Medical Sciences Direct Costs: $28,224
Tuition/Fee Scholarship and Stipend Support
Role: Fellow

Graduate Assistance in Areas of National Need (GAANN) 1/2021 – 8/2024
Grant # P200A210006
U.S. Department of Education Direct Costs: $100,075
Tuition/Fee Scholarship and Stipend Support
Role: Recipient

Educational Contributions

Spring 2024 *Graduate Teaching Assistant*, BME 311: Fundamentals of Macro to Molecular Bioimaging, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: 13 undergraduate students.

Spring 2023 *Graduate Teaching Assistant*, BME 311: Fundamentals of Macro to Molecular Bioimaging, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: 22 undergraduate students.

Spring 2022 *Graduate Teaching Assistant*, BME 311: Fundamentals of Macro to Molecular Bioimaging, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: Approx. 19 undergraduate students.

Fall 2021 *Graduate Teaching Assistant*, BME 311: Fundamentals of Macro to Molecular Bioimaging, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: 29 undergraduate students.

Spring 2020 *Undergraduate Teaching Assistant*, BME 311: Fundamentals of Macro to Molecular Bioimaging, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: 15 undergraduate students.

Spring 2019 *Undergraduate Teaching Assistant*, BME 120: Programming Fundamentals in Biomedical Engineering, Department of Biomedical Engineering, Stony Brook University. Scope: Approx. 4 contact hours weekly. Learners: 54 undergraduate students.

Publications

**Publications marked with an asterisk indicate first or senior author publications.*

Preprints (Submitted for peer review or under revision)

1. Williams, J. C., **Tubiolo, P. N.**, Gil, R.B., Zheng, Z. J., Silver-Frankel, E. B., Haubold, N. K., Abeykoon, S. K., Pham, D. T., Ojeil, N., Bobchin, K., Slifstein, M., Weinstein, J.J., Perlman, G., Horga, G., Abi-Dargham, A. & Van Snellenberg, J. X. (2024). Auditory and Visual Thalamocortical Connectivity Alterations in Unmedicated People with Schizophrenia: An Individualized Sensory Thalamic Localization and Resting-State Functional Connectivity Study. *medRxiv*. https://doi.org/10.1101/2024.12.18.24319241

2. Hao, H, Williams, J.C., **Tubiolo, P.N.**, Silver-Frankel, E.B., Bauer, K., Luceno, S.R., Chan, A.J., Zheng, Z.J., Bobchin, K.R., Kotov, R., Perlman, G., Conway, A.RA., & Van Snellenberg, J.X. (2024). The Latent Structure of Working Memory: A Large Sample Factor Model of Working Memory Capacity. *PsyArXiv*. https://doi.org/10.31234/osf.io/43akq.

Peer-Reviewed Research Publications

1. ***Tubiolo, P.N.**, Williams, J.C. and Van Snellenberg, J.X. (2025), Tale of Two *n*-Backs: Diverging Associations of Dorsolateral Prefrontal Cortex Activation With *n*-Back Task Performance. *Journal of Neuroscience Research*, 103: e70021. https://doi.org/10.1002/jnr.70021

2. ***Tubiolo, P. N.,** Williams, J. C., & Van Snellenberg, J. X. (2024). Characterization and Mitigation of a Simultaneous Multi-Slice fMRI Artifact: Multiband Artifact Regression in Simultaneous Slices. *Human brain mapping*, *45*(16), e70066. https://doi.org/10.1002/hbm.70066

3. Williams, J. C., **Tubiolo, P. N.**, Zheng, Z. J., Silver-Frankel, E. B., Pham, D. T., Haubold, N. K., Abeykoon, S. K., Abi-Dargham, A., Horga, G., & Van Snellenberg, J. X. (2024). Functional localization of the human auditory and visual thalamus using a thalamic localizer functional magnetic resonance imaging task. *Imaging Neuroscience, 2*. https://doi.org/10.1162/imag_a_00360

4. Williams, J. C., Zheng, Z. J., **Tubiolo, P. N.**, Luceno, J. R., Gil, R. B., Girgis, R. R., Slifstein, M., Abi-Dargham, A., & Van Snellenberg, J. X. (2023). Medial prefrontal cortex dysfunction mediates working memory deficits in patients with schizophrenia. *Biological Psychiatry: Global Open Science*. https://doi.org/10.1016/j.bpsgos.2022.10.003.

5. Williams, J. C, **Tubiolo, P. N.**, Luceno, J. R., & Van Snellenberg, J. X. (2022). Advancing motion denoising of multiband resting-state functional connectivity fMRI data. *NeuroImage, 249*. https://doi.org/10.1016/j.neuroimage.2022.118907.

Published Software

1. Williams, J. C., **Tubiolo, P. N.**, Nizambad, S., Zheng, Z. J., Silver-Frankel, E. B., Pham, D. T., Haubold, N. K., Abeykoon, S. K., Abi-Dargham, A., Horga, G., & Van Snellenberg, J. X. (2024). Analysis code for the Auditory and Visual Sensory Thalamic Localizer Task [Computer software]. GitHub, https://github.com/CNaP-Lab/Sensory-Thalamic-Localizer

2. ***Tubiolo, P.N.**, Williams, J. C., Gupta, M., & Van Snellenberg, J. X. (2023). Multiband artifact regression in simultaneous slices (MARSS) [Computer software]. GitHub, https://github.com/CNaP-Lab/MARSS

3. Williams, J. C., Nguyen, T.N.B., & **Tubiolo, P.N.** (2023) Palm-From-Excel [Computer software].

GitHub, https://github.com/CNaP-Lab/Palm-From-Excel

4. Williams, J. C., Nizambad, S., Patel, Y., **Tubiolo, P.N.**, Serrano-Sosa, M., Spuhler, K., Van Snellenberg, J. X., & Huang, C. (2022). Toolkit for MIRA LAB striatal segmentation [Computer software]. GitHub, https://github.com/CNaP-Lab/Toolkit_for_MIRA_LAB_Striatal_Segmentation

5. Williams, J. C., **Tubiolo, P. N.**, Luceno, J. R., & Van Snellenberg, J. X. (2021). Multiband censoring optimization tool (MCOT) for resting-state functional connectivity analyses [Computer software]. GitHub, https://github.com/CNaP-Lab/MCOT

Conference Abstracts and Poster Presentations

1. ***Tubiolo, P. N.,** Williams, J. C., & Van Snellenberg, J. X. (2024). Identification, Characterization, and Mitigation of a Novel Multiband fMRI Signal Artifact. Poster presented at the 30th annual meeting of the Organization for Human Brain Mapping. Seoul, People's Republic of Korea. June 2024.

2. Zhao, T., **Tubiolo, P.N.**, Williams, J.C., Van Snellenberg, J.X., & Huang, C. (2024). An Interpretable Deep Learning Approach for Identifying Working Memory-related Regions in fMRI using Three Large Cohorts. Poster presented at the 32nd annual meeting of The International Society for Magnetic Resonance in Medicine, Singapore.

3. ***Tubiolo P. N.,** Zhao T., Hagan, T. E., Serrano-Sosa, M., Williams, J. C., Huang, C., Van Snellenberg, J. X. (2023) Elucidating Neural Predictors of Working Memory Task Performance Using Interpretable Deep Learning. Poster presented at the 29th annual meeting of the Organization for Human Brain Mapping, Montreal, Quebec, Canada.

4. Zhao T., **Tubiolo P. N.,** Hagan, T. E., Williams, J. C., Van Snellenberg, J. X., Huang, C. (2023) Using Interpretable Deep Learning on Task fMRI Data to Understand Brain Regions Related to Working Memory – A Repeatability Study. Poster presented at the 31st annual meeting of The International Society for Magnetic Resonance in Medicine, Toronto, Ontario, Canada.

5. Chan, A., Carlson, S., York, C., Arif, M., Xiao, E., **Tubiolo, P. N.,** Silver-Frankel, E., Williams, J.C., & Van Snellenberg, J.X. (2023). Internal Consistency of Working Memory Task Measurements. Poster presented at the Celebration of Undergraduate Research & Creativity, Stony Brook, NY.

6. Serrano-Sosa, M., **Tubiolo P. N.,** Hagan, T. E., Williams, J. C., Huang, C., Van Snellenberg, J. X. (2022) Elucidating Brain Networks Subserving Working Memory Task Performance Using Interpretable Deep Learning. Poster presented at the American College of Neuropsychpharmacology (ACNP) 61st Annual Meeting, Phoenix, AZ.

7. Williams, J. C., Zheng, Z. J., **Tubiolo, P. N.**, Luceno, J. R., Gil, R. B., Girgis, R. R., Slifstein, M., Abi-Dargham, A., & Van Snellenberg, J. X. (2022). Medial Prefrontal Cortex Dysfunction Mediates Working Memory Deficits in Patients With Schizophrenia. Poster presented at the American College of Neuropsychpharmacology (ACNP) 61st Annual Meeting, Phoenix, AZ.

8. ***Tubiolo, P. N.**, Williams, J. C., Luceno, J. R., & Van Snellenberg, J. X. (2022) Mitigation and characterization of a multiband fMRI artifact in simultaneously acquired slices. Poster presented at the 28th annual meeting of the Organization for Human Brain Mapping, Glasgow, Scotland.

9. Williams, J. C., Zheng, Z. J., Luceno, J. R., **Tubiolo, P. N.**, Gil, R. B., Girgis, R. R., Lieberman, J. A., Slifstein, M., Abi-Dargham, A., & Van Snellenberg, J. X. (2022). Medial Prefrontal Cortex Dysfunction

Mediates Working Memory Deficits in Schizophrenia. Poster presented at the 28th annual meeting of the Organization for Human Brain Mapping, Glasgow, Scotland.

10. Williams, J. C., Zheng, Z. J., Luceno, J. R., **Tubiolo, P. N.**, Gil, R. B., Girgis, R. R., Lieberman, J. A., Abi-Dargham, A., & Van Snellenberg, J. X. (2021). Medial prefrontal cortex dysfunction mediates working memory deficits in schizophrenia. Poster presented at the 50th annual meeting of the Society for Neuroscience, Virtual Conference.

11. *__Tubiolo, P. N.__, Williams, J. C., Luceno, J. R., & Van Snellenberg, J. X. (2021). Identification and characterization of a simultaneous multi-slice (multiband) fMRI signal artifact in simultaneously acquired slices. Poster presented at the 50th annual meeting of the Society for Neuroscience, Virtual Conference.

12. *__Tubiolo, P. N.,__ Williams, J. C., Luceno, J. R., Van Snellenberg, J. X. (2021) Detection and Mitigation of a Simultaneous Multi-Slice (Multiband) fMRI Signal Artifact in Simultaneously Acquired Slices. Poster presented at the Celebration of Undergraduate Research & Creativity, Virtual Conference.

13. *__Tubiolo, P. N.__, Williams, J. C., & Van Snellenberg, J. X. (2020). Comprehensive evaluation of benchmarks for motion artifact removal in multiband resting-state fMRI. Poster presented at the Annual Meeting of the Biomedical Engineering Society, Virtual Conference.

14. *__Tubiolo, P. N.__, Zheng, Z. J., Eichert, A, Williams, J. C., Silver-Frankel, E., Luceno, J. R., Boccasini, W., Bobchin, K., Van Snellenberg, J. X. (2020) Identifying Neural Correlates of Working Memory Impairments in Schizophrenia through fMRI. Poster presented at the Celebration of Undergraduate Research & Creativity, Virtual Conference.

15. *__Tubiolo, P.N.__, Zheng, Z. J., Eichert, A., Williams, J. C., Silver-Frankel, E., Luceno, J., Boccasini, W., Bobchin, K., & Van Snellenberg, J. X. (2019). Identifying Neural Correlates of Working Memory Impairments in Schizophrenia through fMRI. Poster presented at the Biomedical Engineering Society Annual Meeting, Philadelphia, PA.

16. Silver-Frankel, E., Zheng, Z. J., **Tubiolo, P.N.**, Espinoza, L., Calder, A., La, K., Piekarz, A., Boccasini, W., Bobchin, K., Williams, J. C., & Van Snellenberg, J. X. (2019). Linear modeling of individual differences in working memory and cognitive performance. Poster presented at the Celebration of Undergraduate Research & Creativity, Stony Brook, NY.