

Contact Information

Address: Guthrie Hall (GTH), 119A 98195-1525, Seattle, WA 98105, United States
Phone: 052-8944487 / 206-2097156
e-mail: tamark@uw.edu / tamar.kolodny@gmail.com

Research Positions

University of Washington, Seattle, Washington, September 2022-present
Research scientist, Department of Psychology, with Dr. Scott Murray

University of Washington, Seattle, Washington, October 2017-August 2022
Post-doctoral research associate, Department of Psychology, with Dr. Scott Murray

University of Washington, Seattle, Washington, October 2016-October 2017
Visiting scholar, Department of Psychology, with Dr. Ione Fine

[Maternity leaves: 2011, 2014, 2021]

Education

The Hebrew University of Jerusalem, 2011-2018
Ph.D., Cognitive Science Department
Advisor: Prof. Lilach Shalev

The Hebrew University of Jerusalem, 2009-2011
M.A., summa cum laude in Cognitive Science
Advisor: Prof. Lilach Shalev

The Hebrew University of Jerusalem, 2005-2008
B.Sc. in Mathematics and Cognitive Science
Course average: 90.5/100

Fellowships, Grants and Awards

Israel Science Foundation Post-doctoral fellowship in social sciences (2019-2021)

International Society for Autism Research travel award (2019)

Helmsley Scholar, Cold Spring Harbor Laboratory Autism workshop (2019)

The Hebrew University President's Fellowship for outstanding doctoral students (2012-2015)

Menecks Prize for outstanding research in the speech and attention deficits discipline (2011-2013)

Rector scholarship for outstanding M.A. students (2010-2011)

Excellence scholarship for B.A. students (2006-2007)

Ministry of Science and Technology Award for advancing middle school students in math (2006-2008)

Service to the Community

Ad-hoc reviewer for *Psychological Medicine*, *Neuropsychopharmacology*, *Autism Research*, *Neuroimage: Clinical*, *European Child and Adolescent Psychiatry*, *Brain Communications*, *Journal of Attention Disorders*, *Advances in Cognitive Psychology*

Conference reviewer for the *Society for Advancing Chicanos/Hispanics and Native Americans in Science (SANCAS)*

Teaching Experience

Head teaching assistant of the undergraduate course "**Introduction to logic**", Cognitive Science Department, the Hebrew University (2010-2015). Preparing and teaching weekly lectures; writing and grading of exercises and exams (up to 100 students each term).

Teaching assistant of graduate courses, School of Education, the Hebrew University (2010-2011):

- "Attention deficit hyperactivity disorder: methods of treatment and intervention"
- "Neuropsychological aspects of learning disabilities"
- "Attention deficit hyperactivity disorder: diagnosis and treatment"

List of Publications

Numbers and abbreviations in brackets after the reference refer to: (impact factor [*in 2021*]; rank in field / number of titles in field [*according to Journal Citation Indicator (JCI) 2021*]; times cited [*according to Google Scholar*]; times cited [*according to Web of Science*]; times cited not including self-citations [*according to Google Scholar*]; times cited not including self-citations [*according to Web of Science*]).

Kolodny, T., Mevorach, C., & Shalev, L. (2022). Are attention and cognitive control altered by fMRI scanner environment? Evidence from Go/No-go tasks in ADHD. *Brain Imaging and Behavior*, 16, 1003-1013. (3.224; 7/14 Neuroimaging)

Kolodny T., Schallmo M-P., Gerdts, J., Edden, R.A.E., Bernier R.A., & Murray S.O. (2020). Concentrations of cortical GABA and glutamate in young adults with autism spectrum disorder. *Autism Research*, 13(7), 1111-1129. (4.633; 8/53 Behavioral Sciences, 18/78 Developmental Psychology; 22; 15; 20; 13)

Kolodny T., Schallmo M-P., Gerdts, J., Bernier R.A., & Murray S.O. (2020). Response dissociation in hierarchical cortical circuits: a unique feature of autism spectrum disorder. *Journal of Neuroscience*, 40(11), 2269-2281. (6.709; 49/274 Neuroscience; 8; 7; 5; 4)

Kolodny T., Mevorach C., Stern P., Biderman N., Ankaoua M., Tsafirir S., & Shalev L. (2020). Fronto-parietal engagement in response inhibition is inversely scaled with attention-deficit/hyperactivity disorder symptom severity. *Neuroimage: Clinical*, 25, 102119. (4.891; 5/14 Neuroimaging; 9; 5; 8; 4)

Murray, S. O., **Kolodny, T.**, Schallmo, M-P., Gerdts, J., & Bernier, R. A. (2020). Late fMRI response components are altered in autism spectrum disorder. *Frontiers in human neuroscience*, 14, 241. (3.473; 161/274 Neuroscience, 29/79 Psychology; 2; 1; 2; 1)

Schallmo M-P., **Kolodny T.**, Kale, A.M., Millin, R., Flevaris, A.V., Edden, R.A.E., Gerdts, J., Bernier R.A., & Murray S.O. (2020). Weaker neural suppression in autism. *Nature communications*, 11(1), 1-13. (17.694; 6/73 Multidisciplinary Sciences; 19; 11; 17; 11)

Schallmo M-P., Millin R., Kale A., **Kolodny T.**, Edden R.A.E., Bernier R.A., & Murray S.O. (2019). Glutamatergic facilitation of neural responses in MT enhances motion perception in humans. *Neuroimage*, 184, 925-931. (7.4; 2/14 Neuroimaging, 38/274 Neuroscience, 15/136 Radiology Nuclear Medicine & Medical Imaging; 10; 7; 6; 3)

- Millin R., **Kolodny T.**, Flevaris A.V., Kale A.M., Schallmo M-P., Bernier R.A., & Murray S.O. (2018). Reduced auditory cortical adaptation in autism spectrum disorder. *eLife*, 7, e36493. (8.713; 8/94 Biology; 31; 21; 28; 17)
- Murray S.O., Schallmo M-P., **Kolodny T.**, Millin R., Kale A.M., Thomas P., Rammsayer P., Troche S.J., Bernier R.A., & Tadin D. (2018). Sex differences in visual motion processing. *Current Biology*, 28(17), 2794-2799. (10.9; 3/94 Biology, 26/296 Biochemistry & Molecular Biology, 31/194 Cell Biology; 31; 21; 26; 16)
- Kolodny T.**, Mevorach C., & Shalev L. (2017). Isolating response inhibition in the brain: Parietal versus frontal contribution. *Cortex*, 88, 173-185. (4.644; 7/53 Behavioral Sciences, 100/274 Neuroscience, 13/90 Experimental Psychology; 38; 24; 36; 22)
- Kolodny T.**, Ashkenazi Y., Farhi M., & Shalev L. (2017). Computerized Progressive Attention Training (CPAT) vs. Active Control in Adults with ADHD. *Journal of Cognitive Enhancement*, 1(4), 526-538. (new journal, ranking unavailable; 1; 1)
- Shalev L., **Kolodny T.**, Shalev N., & Mevorach C. (2016). Attention functioning among adolescents with multiple learning, attentional, behavioral and emotional difficulties. *Journal of Learning Disabilities*, 49(6), 582-596. (3.407; 3/44 Special Education, 8/73 Rehabilitation; 17; 11; 9; 8)

List of Papers in Progress

The following section refers only to manuscripts for which **results and analyses are completed** and a **manuscript draft exists**.

- Kolodny T.**, Schallmo M-P., Edden R.A.E., & Murray S.O. (*in preparation*). Accounting for test-retest reliability and power to design better GABA-edited Magnetic Resonance Spectroscopy studies.
- Smullen D., Bagshaw A., Shalev L, & Mevorach C. & **Kolodny T.** (*in preparation*). White matter properties in fronto-parietal tracts predict parietal functional activation during response inhibition in ADHD.
- Smullen D., **Kolodny T.**, Bagshaw A. & Mevorach C. (*in preparation*). ADHD and sleep quality: the mediating role of somatic and cognitive pre-sleep arousal.
- Kolodny T.**, Abu-Akel A., Mevorach C., & Shalev L. (*in preparation*). Diametric effects of ADHD and anxiety on executive functioning.
- Stern P., **Kolodny T.**, Tsafirir S., & Shalev L. (*submitted*). Unique patterns of eye movements characterizing inattentive reading in ADHD.
- Stern P., **Kolodny T.**, Tsafirir S., & Shalev L. (*in preparation*). Near and far transfer effects of cognitive training in adult ADHD.

Selected Conferences Presentations (Talks are marked with *)

- ***Kolodny T.**, Smullen D., Bagshaw A., Shalev L., & Mevorach C., Maladaptive frontoparietal connectivity as a mechanism of deficient response inhibition in ADHD. A talk given at the *International ADHD Congress* at Tel-Aviv, Israel, June 2022.
- ***Kolodny T.**, Schallmo M-P., Gerdts J., Bernier R.A., & Murray S.O., Assessing test-retest reliability of occipital GABA and Glx measurements with MEGA-PRESS. A talk given at the *GABA symposium* at Salt Lake City, Utah, November 2019.
- ***Kolodny T.**, Schallmo M-P., Gerdts J., Bernier R.A., Edden, R.A.E., & Murray S.O., Accounting for test-retest reliability and power to design better GABA-edited magnetic resonance spectroscopy studies. A talk given at the annual meeting of the *Society for Neuroscience* at Chicago, Illinois, October 2019.
- Kolodny T.**, Schallmo M-P., Gerdts J., Bernier R.A., & Murray S.O., Typical concentration of GABA and Glutamate in young adults with autism spectrum disorders. A poster presented at the annual meeting of the *International Society for Autism Research* at Montreal, Canada, May 2019.
- Kolodny T.**, Millin R., Schallmo M-P., Kale A.M., Bernier R.A., & Murray S.O., The regulation of neural responses in autism spectrum disorders. A poster presented at the annual meeting of the *Society for Neuroscience* at San Diego, California, November 2018.
- Kolodny T.**, Millin R., Schallmo M-P., Kale A.M., Bernier R.A., & Murray S.O., Hyper-upregulation of abnormally low neural response along the visual pathway in autism. A poster presented at the 18th annual meeting of the *Vision Sciences Society (VSS)* at St. Pete, Florida, May 2018.
- Kolodny T.**, Stern P., Ankaoua M., Kataev N., Mevorach C., Tsafirir S., & Shalev L., Neural markers of efficient response inhibition in parietal cortex. A poster presented at the 17th annual meeting of the *Vision Sciences Society (VSS)* at St. Pete, Florida, May 2017.
- Kolodny T.**, Luria R., & Shalev L., Differential effects of sustained attention on early ERP components among adults with and without ADHD. A poster presented at the 19th *European Society for Cognitive Psychology (ESCoP) conference* at Cyprus, September 2015.
- ***Kolodny T.**, Shalev N., Mevorach C., & Shalev L., Attention functioning among adolescents with multiple learning, attentional, behavioral and emotional difficulties. A talk at the 19th *European Society for Cognitive Psychology (ESCoP) conference* at Cyprus, September 2015.
- Kolodny T.**, Seidel N., Azulai O., & Shalev L., Intra-individual variability of reaction time differentiates between attention and reading disorders. A poster presented at the 22th *annual meeting of the Israeli Society for Neuroscience (ISFN)* at Eilat, Israel, December 2012.
- Spanier A.B., **Kolodny T.**, Geva A.B., & Shalev L., Neuropsychological subtypes among adults with and without ADHD, as revealed by unsupervised community detection algorithms. A poster presented at the 22th *annual meeting of the Israeli Society for Neuroscience (ISFN)*, Israel, December 2012.
- Kolodny T.** & Shalev L., Quantifying the interference effect in a Stroop-like task among adults with and without ADHD. A paper presented at the *International conference "Selection and Control Mechanisms in Perception and Action"*, Jerusalem, Israel, April 2010.