#### September 12<sup>th</sup>, 2024

# **Ilan Dinstein**

Professor, Psychology Department Professor, Cognitive & Brain Sciences Department Founding Director, Azrieli National Centre for Autism and Neurodevelopment Research Ben Gurion University of the Negev (BGU), Beer Sheva, Israel <u>dinshi@bgu.ac.il</u>

## Citizenship: USA, Israel

Websites: <u>dinshi.com</u>, <u>autismisrael.org</u> Professional profiles: <u>Pubmed</u>, <u>Google Scholar</u>, <u>ResearchGate</u>, <u>ORCID</u>

#### **Education:**

Postdoc 2011-2012	Psychology Department, Carnegie Mellon University
Postdoc 2010-2011	Neurobiology Department, Weizmann Institute
Ph.D. 2004-2010	Center for Neural Science, New York University
B.Sc. 2000-2003	Life Sciences, Tel Aviv University

## **Employment:**

2022-	Professor, Psychology, Cognitive & Brain Sciences, BGU
2022-2024	Senior Visiting Scientist, Simons Foundation Autism Research Initiative
2019-2020	Consultant, KnowMe (eye tracking startup company)
2017-2022	Associate Professor, Psychology, Cognitive & Brain Sciences, BGU
2012-2017	Senior Lecturer, Psychology, Cognitive & Brain Sciences, BGU
2000-2002	Webmaster and database administrator, Onlyu.co.il
1999-2000	Product Manager, Ecliniq (digital health communication startup company)

## Awards and Fellowships:

- 2015 Toronto Prize for Excellence in Research, Ben Gurion University
- 2014 Paedagogica Foundation, Recruitment award for outstanding scientists
- 2013 Alon Fellowship, Israeli Council for Higher Education
- 2013 Sieratzki Award for young neuroscientists, Tel Aviv University
- 2011 NRSA Postdoc Fellowship, Training Grant, Carnegie Mellon University
- 2010 Sir Charles Clore Post-doctoral Fellowship

- 2009 Weizmann Institute Post-doctoral Fellowship
- 2009 Sokol Post-doctoral Research Fellowship, NYU
- 2009 Outstanding Dissertation Award, NYU
- 2007 NRSA Pre-doctoral Fellowship, NIH
- 2004 McCracken Pre-doctoral Fellowship, NYU

# Teaching:

Physiological Psychology (introduction to neuroscience, undergraduate level) Matlab for cognitive psychology (undergraduate level) Matlab for psychobiology (undergraduate level) Python for cognitive psychology (undergraduate level) Python for psychobiology (undergraduate level) Autism and the brain (undergraduate level) Sensory and motor system Development (undergraduate level) Advanced fMRI Methods (graduate level) Advanced EEG Methods (graduate level)

# Positions in academic administration:

2024-	Director, Azrieli National Centre for Autism and Neurodevelopment Research (equivalent workload to running a large university department)
2024-	Head of Psychobiology B.Sc. program in the Psychology Department
2022-2024	Deputy Director, Azrieli National Centre for Autism and Neurodevelopment Research
2021–2022	Director, Azrieli National Centre for Autism and Neurodevelopment Research
2018–2021	Director, National Autism Research Center of Israel
2013–2022	Head of Psychobiology B.Sc. program in the Psychology Department
2014–2021	Head of PhD committee, Cognitive & Brain Sciences Department
2013–2017	Member of the BGU Zlotowski Neuroscience Center Steering Committee
2013–2019	Member of the BGU Brain Imaging Research Center Steering Committee

# **Professional committees**

Grant agency committees (without years to maintain anonymity):

Israeli Science Foundation grant committee in Cognitive Psychology (multiple years) Israeli Science Foundation grant committee in Neurology & Psychiatry (multiple years) Bi-National Science Foundation grant committee in Neuroscience (multiple years) Simons Foundation Autism Research Initiative grant committee (multiple years)

#### Autism Science Foundation grant committee

#### Conference organization committees:

- 2022-Present International Society for Autism Research annual meeting scientific committee, including chairing multiple sessions at each conference.
- 2019-Present Israeli Meeting for Autism Research organizing committee, including chairing multiple sessions at each conference

#### Scientific committees and advisory workgroups:

- 2024 Human Quantitative Phenotyping Workgroup, Coalition for Aligning Science (Sergey Brin Family Foundation)
- 2024 Simons Foundation Autism Research Initiative Strategic Planning Workgroup
- 2021-2022 Azrieli National Centre for Autism and Neurodevelopment Research strategic planning committee, Ben Gurion University
- 2021-2022 Psychology Department strategic planning committee, Ben Gurion University
- 2020-2021 Ben Gurion University strategic planning committee, reducing bureaucracy workgroup
- 2016-2017 Cognitive and Brain Sciences Department strategic planning committee, Ben Gurion University

#### Ad-hoc reviewer

#### Peer reviewed journals

Science, Nature, Neuron, Proceedings of the National Academy of Science, Nature Neuroscience, Nature Communication, Trends in Cognitive Sciences, Current Biology, Journal of Neuroscience, Cerebral Cortex, Biological Psychiatry, Neuroimage, Frontiers in Human Neuroscience, Autism, Autism Research, Journal of Autism and Developmental Disorders, Molecular Autism, Pediatrics, JAMA Pediatrics, Journal of the American Academy of Child and Adolescent Psychiatry, Lancet Psychiatry, and others.

#### Grant agencies (in addition to participation in committees listed above)

Israeli Science Foundation, German Israeli Foundation, Bi-National Foundation, Ministry of Health (Israel), Ministry of Education (Israel), Ministry of Science & Technology (Israel), National Institute for Psychobiology in Israel, Simon's Foundation (USA), National Institute of Health (USA), Marsden Fund (New Zealand), and others.

#### Membership in professional or scientific societies

- 2023 Present American Academy of Sleep Medicine
- 2008 Present International Society for Autism Research
- 2007 Present Society for Neuroscience
- 2009 2022 Israeli Society for Neuroscience

# **Research funding support:**

Over the years I have raised >1,000,000 USD in private donations that were dedicated to autism research at BGU. In addition, I have secured the following research funding.

## Current:

<u>Azrieli Foundation</u> Dinstein, Meiri, Menashe, Golan (PIs) 10/2021 – 9/2028

Azrieli National Centre for Autism and Neurodevelopment Research

The goal of this project is to improve diagnosis and treatment of autism in Israel. This is an expansion of the Ministry of Science grant to build a national autism research center with national collaborations between many scientists and clinicians.

Total support: 40,000,000 NIS (~12,500,000 USD)

Simons Foundation International Dinstein (PI) 10/2024 – 9/2026

Quantification of behavioral and neurophysiological sleep disturbances in autism

The goal of this grant is to use computational and AI techniques to characterize behavioral and neurophysiological sleep problems in autistic adolescents using objective digital phenotyping data recorded with wearable and nearable devices (smartwatch, EEG headband, and mattress sensor) from >3000 nights as part of the Simons Sleep Project.

Total support: 360,000 USD

Israeli Science Foundation Dinstein (PI)

10/2020 - 9/2025

Behavioral and neural variability in children with autism

The goal of this grant is to use neuroimaging and behavioral studies (e.g., eye tracking) to assess variability of brain responses in children with autism.

Total support: 1,600,000 NIS (~515,000 USD)

Israeli Ministry of Science Dinstein, Zigel (PIs) 12/2020 – 12/2024

Quantification of Autism Symptoms using Speech Signal Processing

The goal of this study is to identify autism symptoms from speech recordings of children with autism.

Total support: 1,500,000 NIS (~480,000 USD)

#### Completed:

Merage Foundation

Dinstein (PI)

10/2021 - 03/2022

Creating smart autism daycare centers with technology

The goal of this grant is to use deep-learning algorithms to quantify autism symptoms from video recordings of children with autism in a specialized day care center.

Total support: 100,000 USD

Israeli Ministry of Science Dinstein, Menashe, Golan, Meiri (PIs) 10/2018 - 09/2021

National Knowledge Center for Autism

The goal of this project is to create a research center focused on improving diagnosis and treatment of autism in Israel by establishing a national autism research database and building collaborations between scientists and clinicians.

Total support: 3,000,000 NIS (~950,000 USD)

Simmons Foundation Dinstein (PI) 02/2017 – 01/2018

Sleep EEG abnormalities in toddlers with regressive or classical autism

The goal of this grant is to characterize sleep in children with regressive and classical autism using EEG.

Total support: 70,000 USD

Israeli Science Foundation Dinstein (PI) 10/2014 – 9/2019

Characterizing neural response variability in typical development, autism, and ADHD

The goal of this grant is to characterize trial-by-trial neural response variability using EEG and fMRI in neurotypical, autism, and ADHD populations in an effort to understand the potential impact of neural variability on the development of different cognitive abilities.

Total support: 1,400,000 NIS (~450,000 USD)

German Israeli Fund Dinstein (PI) 01/2015 - 12/2015

Revealing the early neurophysiology of autism

The goal of this grant is to identify early neurophysiological abnormalities in toddlers who develop autism using EEG techniques including recordings during sleep.

Total support: 40,000 €

## **Peer Reviewed Publications:**

Google scholar: h-index: 39, i10-index: 59, total citations: 8888 (September 12<sup>th</sup>, 2024)

- 1. Dinstein, Hasson, Rubin, Heeger, Brain Areas Selective for Both Observed and Executed Movements. J Neurophys. 2007, 98 (3), 1415–1427.
- Dinstein, Thomas, Behrmann, Heeger, A Mirror up to Nature. Current Biology. 2008, 18 (1).
- 3. Dinstein, Human Cortex: Reflections of Mirror Neurons. Current Biology. 2008. 18 (20).
- 4. Nir, **Dinstein**, Malach, Heeger, **BOLD and Spiking Activity.** Nature Neuroscience. 2008, 523–524.
- Nir, Mukamel, Dinstein, Privman, Harel, Fisch, Gelbard-Sagiv, Kipervasser, Andelman, Neufeld, Kramer, Arieli, Fried, Malach, Interhemispheric Correlations of Slow Spontaneous Neuronal Fluctuations Revealed in Human Sensory Cortex. Nat Neurosci 2008, 11 (9), 1100–1108.
- Dinstein, Gardner, Jazayeri, Heeger, Executed and Observed Movements Have Different Distributed Representations in Human AIPS. J Neurosci. 2008, 28 (44), 11231– 11239.
- 7. Dinstein, Thomas, Humphreys, Minshew, Behrmann, Heeger, Normal Movement

Selectivity in Autism. Neuron 2010, 66 (3), 461–469.

- 8. **Dinstein**, Pierce, Eyler, Solso, Malach, Behrmann, Courchesne, **Disrupted Neural Synchronization in Toddlers with Autism**. Neuron 2011, 70 (6), 1218–1225.
- Salomon, Bleich-Cohen, Hahamy-Dubossarsky, Dinstein, Weizman, Poyurovsky, Kupchik, Kotler, Hendler, Malach, Global functional connectivity deficits in schizophrenia depend on behavioral state. J Neurosci, 2011, 31 (35).
- Ovadia-Caro, Nir, Soddu, Ramot, Hesselmann, Vanhaudenhuyse, Dinstein, Tshibanda, Boly, Harel, Laureys, Malach, Reduction in Inter-Hemispheric Connectivity in Disorders of Consciousness. PLoS One 2012, 7 (5).
- 11. Josipovic, **Dinstein**, Weber, Heeger, **Influence of Meditation on Anti-Correlated Networks in the Brain.** Frontiers in Human Neuroscience. 2012.
- 12. Dinstein, Heeger, Lorenzi, Minshew, Malach, Behrmann, Unreliable Evoked Responses in Autism. Neuron 2012, 75 (6), 981–991.
- Di Martino, Yan, Li, ... Dinstein, ... Mostofsky, Milham, The Autism Brain Imaging Data Exchange: Towards a Large-Scale Evaluation of the Intrinsic Brain Architecture in Autism. Mol Psychiatry 2013, 19 (April), 1–9.
- 14. Haigh, Heeger, **Dinstein**, Minshew, Behrmann, **Cortical Variability in the Sensory-Evoked Response in Autism.** J Autism Dev Disord 2014, 45 (5).
- 15. Kadmon Harpaz, Flash, **Dinstein**, **Scale-Invariant Movement Encoding in the Human Motor System.** Neuron 2014, 81 (2), 452–462.
- 16. Haar, Donchin, **Dinstein**, **Dissociating Visual and Motor Directional Selectivity Using Visuomotor Adaptation.** Journal of Neuroscience 2015, 35 (17), 6813–6821.
- 17. **Dinstein**, Heeger, Behrmann, **Neural Variability: Friend or Foe?** Trends Cogn Sci 2015, 19 (6), 322–328.
- Gonen-Yaacovi, Arazi, Shahar, Karmon, Haar, Meiran, Dinstein, Increased Ongoing Neural Variability in ADHD. Cortex 2016, 81, 50–63.
- 19. Haigh, Minshew, Heeger, **Dinstein**, Behrmann, **Over-Responsiveness and Greater** Variability in Roughness Perception in Autism. Autism Research 2016, 9 (3), 393–402.
- 20. Miron, Ari-Even Roth, Gabis, Henkin, Shefer, **Dinstein**, Geva, **Prolonged Auditory Brainstem Responses in Infants with Autism**. Autism Research 2016, 9 (6).
- 21. Haar, Berman, Behrmann, **Dinstein**, **Anatomical Abnormalities in Autism?** Cerebral Cortex 2016, 26 (4).
- 22. Haigh, Gupta, Barb, Glass, Minshew, Dinstein, Heeger, Eack, Behrmann, Differential Sensory FMRI Signatures in Autism and Schizophrenia: Analysis of Amplitude and Trial-to-Trial Variability. Schizophr Res 2016, 175 (1–3).
- 23. Fingher, **Dinstein**, Ben-Shachar, Haar, Eyler, Pierce, Courchesne, **Toddlers later** diagnosed with autism exhibit multiple structural abnormalities in temporal corpus callosum fibers. Cortex, 2016.
- 24. Haigh, Heeger, Heller, Gupta, **Dinstein**, Minshew, Behrmann, **No Difference in Cross-**Modal Attention or Sensory Discrimination Thresholds in Autism and Matched Controls. Vis Res, 2016, 121.
- 25. Heeger, Behrmann, Dinstein, Vision as a Beachhead. Biol Psychiatry 2017, 81 (10).

- 26. Kanner, Scharfman, Jette, Anagnostou, Bernard, Camfield, Camfield, Legg, **Dinstein**, Giacobe, Friedman, Pohlmann-Eden, **Epilepsy as a Network Disorder (1): What Can We** Learn from Other Network Disorders Such as Autistic Spectrum Disorder and Mood Disorders? Epilepsy and Behavior 2017.
- 27. Haar, Donchin, Dinstein, Individual Movement Variability Magnitudes Are Explained by Cortical Neural Variability. J Neurosci 2017, 37 (37), 9076-9085.
- 28. Haar, **Dinstein**, Shelef, Donchin, **Effector-Invariant Movement Encoding in the Human Motor System**. Journal of Neuroscience 2017, 37 (37), 9054-9063.
- Meiri, Dinstein, Michaelowski, Flusser, Ilan, Faroy, Bar-Sinai, Manelis, Stolowicz, Lea Yosef, Davidovitch, Golan, Arbelle, Menashe, The Negev Hospital-University-Based (HUB) Autism Database. J Autism Dev Disord 2017, 47 (9), 2918–2926.
- 30. Arazi, Gonen-Yaacovi, Dinstein, The Magnitude of Trial-by-Trial Neural Variability Is Reproducible over Time and across Tasks in Humans. eNeuro 2017, 4 (6), 1-12.
- Arazi, Censor, Dinstein, Neural Variability Quenching Predicts Individual Perceptual Abilities. J Neurosci 2017, 37 (1) 97-109.
- Dinstein, Haar, Atsmon, Schtaerman, No Evidence of Early Head Circumference Enlargements in Children Later Diagnosed with Autism in Israel. Mol Autism 2017, 8 (1) 1-9.
- 33. Tzischinsky, Meiri, Manelis, Bar-Sinai, Flusser, Michaelovski, Zivan, Ilan, Faroy, Menashe, Dinstein, Sleep Disturbances Are Associated with Specific Sensory Sensitivities in Children with Autism. Mol Autism 2018, 9 (1) 1-10.
- 34. Van Rooij, Anagnostou, Arango, ..., Dinstein, ..., Thompson, Tosetti, Wallace, Zhou, Buitelaar, Cortical and subcortical brain morphometry differences between patients with autism spectrum disorder and healthy individuals across the lifespan: results from the ENIGMA ASD working group. Am J Psychiatry, 2018, 175 (4), 359-369.
- 35. **Dinstein**, Shelef, **Anatomical brain abnormalities and early detection of autism.** Lancet Psychiatry, 2018, 5 (11), 857-859.
- 36. Postema, van Rooij, Anagnostou, … Dinstein, … Thompson, Fisher, Buitelaar, Francks, Altered Structural Brain Asymmetry in Autism Spectrum Disorder in a Study of 54 Datasets. Nat Communication 2019, 10 (1).
- 37. Arazi, Yeshurun, **Dinstein**, **Neural Variability Is Quenched by Attention**. Journal of Neuroscience 2019, 39 (30).
- 38. Huberman Samuel, Meiri, Dinstein, Flusser, Michaelovski, Bashiri, Menashe, Exposure to general anesthesia may contribute to the association between cesarean delivery and autism spectrum disorder. J Autism Dev Disord 2019, 49 (8), 3127-3135.
- Budman, Meiri, Ilan, Faroy, Langer, Reboh, Michaelovski, Flusser, Menashe, Donchin, Dinstein, Quantifying the Social Symptoms of Autism Using Motion Capture. Sci Rep 2019, 9 (1).
- 40. Levaot, Meiri, **Dinstein**, Menashe, Shoham-Vardi, **Autism Prevalence and Severity in Bedouin-Arab and Jewish Communities in Southern Israel.** Community Ment Health J 2019, 55 (1).
- 41. Daniel, Meindertsma, Arazi, Donner, **Dinstein**, **The Relationship between Trial-by-Trial** Variability and Oscillations of Cortical Population Activity. Sci Rep 2019, 9 (1).

- 42. Eni, **Dinstein**, Ilan, Menashe, Meiri, Zigel, **Estimating autism severity in young children from speech signals using a deep neural network.** IEEE Access, 2020, 8, 139489-139500.
- 43. Arazi, Meiri, Danan, Michaelovski, Flusser, Menashe, Tarasiuk, **Dinstein**, **Reduced Sleep Pressure in Young Children with Autism**. Sleep 2020, 43 (6), 1-11.
- 44. Dizitzer, Meiri, Flusser, Michaelovski, Dinstein, Menashe, Comorbidity and Health Services' Usage in Children with Autism Spectrum Disorder: A Nested Case-Control Study. Epidemiol Psychiatr Sci 2020.
- 45. Manelis, Meiri, Ilan, Flusser, Michaelovski, Faroy, Kerub, **Dinstein**, Menashe, **Language Regression Is Associated with Faster Early Motor Development in Children with Autism Spectrum Disorder**. Autism Research 2020, 13 (1).
- 46. Kerub, Haas, Meiri, Bilenko, Flusser, Michaelovski, **Dinstein**, Davidovitch, Menashe, **Ethnic Disparities in the Diagnosis of Autism in Southern Israel.** Autism Research 2020.
- 47. Dinstein, Arazi, Golan, Koller, Elliott, Gozes, ..., Zachor, Menashe, Golan, Meiri, The National Autism Database of Israel: A Resource for Studying Autism Risk Factors, Biomarkers, Outcome Measures, and Treatment Efficacy. Journal of Molecular Neuroscience. J Mol Neurosci September 1, 2020, pp 1303–1312.
- Avni, Meiri, Bar-Sinai, Reboh, Manelis, Flusser, Michaelovski, Menashe, Dinstein, Children with Autism Observe Social Interactions in an Idiosyncratic Manner. Autism Research 2020, 13 (6), 935–946.
- 49. Boedhoe, van Rooij, Hoogman, … Dinstein, … Thompson, Stein, Buitelaar, Franke, van den Heuvel, Subcortical Brain Volume, Regional Cortical Thickness, and Cortical Surface Area Across Disorders: Findings From the ENIGMA ADHD, ASD, and OCD Working Groups. Am J Psychiatry 2020, 177 (9), 834–843.
- 50. Tal-Ben Ishay, Shil, Solomon, Sadigurschi, Abu-Kaf, Meiri, Flusser, Michaelovski, **Dinstein**, Golan, Davidovitch, Menashe, **Diagnostic Yield and Economic Implications of Whole-Exome Sequencing for ASD Diagnosis in Israel.** Genes (Basel) 2021, 13 (1).
- 51. Avni, Meiri, Michaelovski, Menashe, Shmuelof, Dinstein, Basic Oculomotor Function Is Similar in Young Children with ASD and Typically Developing Controls. Autism Research 2021, 14 (12), 2580–2591.
- 52. Hendel, Meiri, Flusser, Michaelovski, Dinstein, Menashe, Factors Affecting Family Compliance with Genetic Testing of Children Diagnosed with Autism Spectrum Disorder. J Autism Dev Disord 2021, 51 (4), 1201–1209.
- 53. Ilan, Meiri, Manelis-Baram, Faroy, Michaelovski, Flusser, Binoun-Chaki, Segev-Cojocaru, Dotan, Schtaierman, Menashe, Dinstein, Young ASD Children in Special and Mainstream Education Settings Have Similar Behavioral Characteristics. Autism Res 2021, 14 (4), 699–708.
- Regev, Cohen, Hadar, Schuster, Flusser, Michaelovski, Meiri, Dinstein, Hershkovitch, Menashe, Association Between Abnormal Fetal Head Growth and Autism Spectrum Disorder. J Am Acad Child Adolesc Psychiatry 2021, 60 (8), 986–997.
- 55. Daniel, Dinstein, Individual Magnitudes of Neural Variability Quenching Are Associated with Motion Perception Abilities. J Neurophysiol 2021, 125 (4), 1111–1120.
- 56. Abelson, Meiri, Solomon, Flusser, Michaelovski, **Dinstein**, Menashe, **Association Between** Antenatal Antimicrobial Therapy and Autism Spectrum Disorder-A Nested Case-

Control Study. Front Psychiatry 2021, 12.

- 57. Gabbay-Dizdar, Ilan, Meiri, Faroy, Michaelovski, Flusser, Menashe, Koller, Zachor, Dinstein, Early Diagnosis of Autism in the Community Is Associated with Marked Improvement in Social Symptoms within 1–2 Years. Autism 2022, 26 (6).
- Regev, Hadar, Meiri, Flusser, Michaelovski, Dinstein, Hershkovitz, Menashe, Association between ultrasonography foetal anomalies and autism spectrum disorder. Brain, 2022, 145 (12), 4519-4530.
- 59. Arazi, Koller, Zachor, Golan, Sadaka, Eytan, Stolar, Atzaba-Poria, Golan, Menashe, Meiri, Gabis, **Dinstein**, Home-Quarantine during the Initial Covid-19 Outbreak in Israel: Parent Perceived Impact on Children with ASD. Heliyon 2022, 8 (6).
- 60. Klorfeld-Auslender, Paz, Shinder, Rosenblatt, **Dinstein**, Censor, **A Distinct Route for** Efficient Learning and Generalization in Autism. Curr Biol 2022, 32 (14).
- Menashe, Regev, Hadar, Meiri, Michaelovski, Dinstein, Hershkovitz, Reply: Methodological Drawbacks in the Alleged Association between Foetal Sonographic Anomalies and Autism. Brain 2022, 145 (10), E92–E94.
- 62. Hacohen, Stolar, Berkovitch, Elkana, Kohn, Hazan, Heyman, Sobol, Waissengreen, Gal, Dinstein, Children and Adolescents with ASD Treated with CBD-Rich Cannabis Exhibit Significant Improvements Particularly in Social Symptoms: An Open Label Study. Transl Psychiatry 2022, 12 (1).
- 63. Nitzan, Koller, Ilan, Faroy, Michaelovski, Menashe, Meiri, **Dinstein**, **The Importance of** Language Delays as an Early Indicator of Subsequent ASD Diagnosis in Public Healthcare Settings. J Autism Dev Disord, 2022.
- 64. Manelis-Baram, Meiri, Ilan, Faroy, Michaelovski, Flusser, Menashe, Dinstein, Sleep Disturbances and Sensory Sensitivities Co-Vary in a Longitudinal Manner in Pre-School Children with Autism Spectrum Disorders. J Autism Dev Disord 2022, 52 (2), 923–937.
- 65. Hoogman, van Rooij, Klein, Boedhoe, …, Dinstein, … Faraone, Francks, van den Heuvel, Paus, Thompson, Buitelaar, Franke, Consortium Neuroscience of Attention Deficit/Hyperactivity Disorder and Autism Spectrum Disorder: The ENIGMA Adventure. Hum Brain Mapp 2022, 43 (1), 37–55.
- 66. Ilan, Faroy, Zachor, Manelis, Waissengreen, Michaelovski, Avni, Menashe, Koller, Dinstein, Meiri, Children with Autism Exhibit Similar Longitudinal Changes in Core Symptoms When Placed in Special or Mainstream Education Settings. Autism 2023, 27 (6).
- 67. Karim, Solomon, Abreu do Valle, Zusman, Nitschke, Meiri, Dinstein, Ip, Lanphear, Lanphear, Hutchison, Iarocci, Oberlander, Menashe, Hanley, Exogenous Oxytocin Administration during Labor and Autism Spectrum Disorder. Am J Obstet Gynecol MFM 2023, 5 (8).
- 68. Alhozyel, Elbedour, Balaum, Meiri, Michaelovski, Dinstein, Davidovitch, Kerub, Menashe, Association Between Early Developmental Milestones and Autism Spectrum Disorder. Res Child Adolesc Psychopathol 2023.
- Einziger, Devor, Ben-Shachar, Arazi, Dinstein, Klein, Auerbach, Berger, Increased Neural Variability in Adolescents with ADHD Symptomatology: Evidence from a Single-Trial EEG Study. Cortex 2023, 167, 25–40.
- 70. Eylon, Tikotzky, Dinstein, Performance Evaluation of Fitbit Charge 3 and Actigraphy

vs. Polysomnography: Sensitivity, Specificity, and Reliability across Participants and Nights. Sleep Health 2023, 9 (4), 407-416.

- 71. Molcho-Haimovich, Tikotzky, Meiri, Ilan, Michaelovski, Schtaierman, Golan, Sadaka, Menashe, **Dinstein**, **Sleep disturbances are associated with irritability in ASD children with sensory sensitivities.** J Neurodev Disord, 2023, 15 (1).
- 72. Sadeh, Meiri, Zigdon, Ilan, Faroy, Michaelovski, Sadaka, **Dinstein**, Menashe, **Adherence to** treatment and parents' perspective about effectiveness of melatonin in children with autism spectrum disorder and sleep disturbances. Child Adolesc Psychiatry Ment Health, 2023, 17 (1).
- 73. Shil, Levin, Golan, Meiri, Michaelovski, Sadaka, Aran, **Dinstein**, Menashe, **Comparison of three bioinformatics tools in the detection of ASD candidate variants from whole exome sequencing data.** Sci Rep, 2023, 13 (1).
- 74. Lesinger, Rosenthal, Pierce, Courchesne, **Dinstein**, Avidan, **Functional connectivity of** the human face network exhibits right hemispheric lateralization from infancy to adulthood. Sci Rep, 2023, 13 (1).
- 75. Ziv, Avni, **Dinstein**, Meiri, Bonneh, **Oculomotor randomness is higher in autistic** children and increases with severity of symptoms. Autism Res, 2024
- 76. Dinstein, Solomon, Zats, Shusel, Lottner, Gershon, Meiri, Menashe, Shmueli, Large increase in ASD prevalence in Israel between 2017 and 2021. Autism Res, 2024.
- 77. Solomon, Elbedour, Meiri, Michaelovski, Sadaka, Ilan, Faroy, **Dinstein**, Menashe, **Sleep** disturbances are associated with greater healthcare utilization in children with autism spectrum disorder. J Neurodev Disord, 2024,
- 78. Barami, Manelis-Baram, Kaiser, Ilan, Slobodkin, Hadashi, Hadad, Waissengreen, Nitzan, Menashe, Michaelovsky, Begin, Zachor, Sadaka, Koler, Zagdon, Meiri, Azencot, Sharf, Dinstein, Automated analysis of stereotypical movements in video recordings of children with ASD. JAMA Open, 2024.
- 79. Rozenblat, Nitzan, Vaisman, Shusel, Rum, Ashtamker, Golan, **Dinstein**, Koller, **Autistic children and their parents in the context of war: Preliminary findings.** Stress Health, 2024.
- 80. Bleimeister, Avni, Granovetter, Meiri, Ilan, Michaelovski, Menashe, Behrmann, **Dinstein**, **Idiosyncratic pupil regulation in autistic children.** Autism Res, 2024.

#### Available Preprints (currently under peer review):

- 81. Eni, Ilan, Michaelovski, Golan, Meiri, Menashe, **Dinstein**, Zigel, **Reliably quantifying the** severity of social symptoms in children with autism using ASDSpeech. medRxiv, 2023, https://doi.org/10.1101/2023.10.27.23297600
- 82. Ben-Arie, Shelef, Meiri, Menashe, **Dinstein**, Arazi, **Increased extra-axial cerebrospinal fluid and benign external hydrocephalus in early autism.** bioRxiv, 2024, <u>https://doi.org/10.1101/2024.01.04.574160</u>
- 83. Litman, Sauerwald, Snyder, Foss-Feig, Park, Hao, Dinstein, Theesfeld, Troyanskaya. Decomposition of phenotypic heterogeneity in autism reveals distinct and coherent genetic programs. medArxiv, 2024, https://www.medrxiv.org/content/10.1101/2024.08.15.24312078v1

# **Book chapters:**

1. Ilan Dinstein, Marlene Behrman Mirror Neuron System. Encyclopedia of Autism Spectrum Disorders, Springer, 2013, 1867-1877.

# Invited lectures (last five years):

# <u>2024</u>

Colloquia, Holland Bloorview Kids Rehabilitation Hospital, Toronto, Canada Special Seminar, Azrieli Foundation, Toronto, Canada Special Seminar, Princeton Precision Health Center, Princeton University, USA Colloquia, Department of Medical Neuroscience, Dalhousie University, Canada <u>2023</u>

Coalition for Aligning Science meeting (Sergey Brin Foundation), California, USA Special Seminar, Center for Autism Research, Childrens Hospital of Philadelphia, USA

Special Seminar, Drexel Autism Institute, Drexel University, USA

Special Seminar, Genetics Department, University of Philadelphia, USA

Special Seminar, Sleep and Neurodevelopment Service, National Institute of Health, USA

Investigators meeting, Simons Foundation Autism Research Initiative, USA

Symposium, Israeli Meeting for Autism Research, BGU

Colloquia, Seaver Autism Center, Icahn School of Medicine at Mount Sinai, USA

Colloquia, Institute of Psychiatry, Psychology & Neuroscience, King's College London, UK

Colloquia, Department of Neuroscience, Einstein College of Medicine, USA

Symposium on Autism and Rare Genetic Diseases, Center for Translational Neuroscience, Brown University, USA

## <u>2022</u>

Colloquia, Department of Psychology, Princeton University, USA

Special Seminar, Sleep research group, Roche, Switzerland

Colloquia, Autism Research Centre, Cambridge, UK

<u>2021</u>

Colloquia, Martinos Center for Biomedical Imaging, MGH/Harvard, USA

Sleep and Autism Workshop, Simons Foundation Autism Research Initiative, USA

Colloquia, Child Development Center, Health Ministry, Beer Sheva, Israel

Colloquia, Child Development Center, Soroka University Medical Center, Beer Sheva, Israel 2020

BASIS annual scientific meeting, King's College of London, UK

Colloquia, Psychology Department, City University of New York, USA

Special Seminar, Psychology Department, Simon Fraser University and University of British Columbia, Vancouver, Canada

Colloquia, Autism Center, Hebrew University Jerusalem, Israel

## Mentorship:

<u>3 Postdocs:</u>		
Dr. Gil Gonen Yaacobi	2012-2015 (working in industry)	
Dr. Alokananda Rudra	2015-2017 (research fellow at Durham University)	
Dr. Einat Waizbard	Expected 2025	
13 PhD Students:		
Shlomi Haar	Completed 2017 (research fellow at Imperial College London)	
Ayelet Arazi	Completed 2020 (postdoc at Hamburgh Medical University)	
Noa Fingher	Completed 2021 (clinician working with autistic children)	
Michal Ilan	Completed 2021 (clinical manager of Azrieli National Centre for Autism and Neurodevelopment Research)	
Yaniv Paz	Completed 2021 (working in industry)	
Keren Lesinger	Completed 2022 (clinical psychologist)	
Alona Haimovich	Expected 2024	
Tal Barami	Expected 2025	
Tanya Nitzan	Expected 2025	
Marina Eni	Expected 2025	
Liora Manelis	Expected 2025	
Moran Bachrach	Expected 2025	
Micha Hacohen	Expected 2026	
15 MA Students:		
Oren Miron	Completed 2015	
Roy Talman	Completed 2016	
Hila Rosenthal	Completed 2017	
Inbar Avni	Completed 2019	
Edan Daniel	Completed 2019	
Liora Manelis	Completed 2020	
Nitzan Gabbay	Completed 2021	
Gal Eylon	Completed 2022	

Micha Hacohen	Completed 2022
May Segev	Completed 2022
Michal Ashtamker	Completed 2023
Laila Igbaria	Completed 2023
Tuvia Eizenstein	Expected 2024
Noa Peretz	Expected 2024
Hadar Krasnolob	Expected 2025

#### Undergraduate Students:

Mentoring a diverse group of >25 undergraduate students in research projects as part of their undergraduate thesis work in the Psychobiology program or Cognitive and Brain Sciences program.

## Graduate student committees:

Member of >20 graduate student committees for students in Psychology, Cognitive and Brain Sciences, Biomedical Engineering, Industrial Engineering, Computer Science, Public Health, Physiology and Cell Biology, and other departments at Ben Gurion University.

External examiner in >10 graduate student exams at Bar Ilan University, Hebrew University, Tel Aviv University, and Haifa University.

## Conference proceedings (last two years):

#### <u>2024</u>

- 1. Hacohen, Levy, Kaiser, Dinstein, Simons Sleep Project (SSP): An open science resource for accelerating scalable digital phenotyping research in autism and related neurodevelopmental conditions. Society for Neuroscience, 2024
- Hacohen, Kaiser, Levy, Dinstein, Using wearable devices to quantify sleep and behavior in autistic adolescents and their siblings at home. Gordon Research Conference on Sleep regulation and function, 2024.
- Dinstein, Eni, Meiri, Menashe, Faroy, Ilan, Golan, Zigel Quantifying social communication difficulties with automated speech analysis. International Society for Autism Research, 2024
- 4. Menashe, Sadeh, Zigdon, Ilan, Faroy, Michaelovski, Sadaka, Dinstein, Meiri, Adherence to treatment and effectiveness of Melatonin in children with autism spectrum disorder. International Society for Autism Research, 2024
- Rozenblat, Nitzan, Vaisman, Shusel, Rum, Golan, Dinstein, Koller, Psychological fallout after the October 7<sup>th</sup> attacks in Israel and children's adjustment in the ensuant war. International society for the study of behavioral development, 2024.

#### <u>2023</u>

6. Hacohen, Eylon, **Dinstein**, **Detecting Sleep Onset: comparing automated sleep staging and a frequency-based algorithms.** Society for Neuroscience, 2023

- 7. Manelis-Baram, Barami, Soskin, Sofer, **Dinstein**, **Facial expression production in young children with ASD.** International Society for Autism Research, 2023
- 8. Barami, Kaiser, Hadashi, Slobodkin, Manelis-Baram, Hadad, Ilan, Waissengreen, Nitzan, Meiri, Menashe, Sharf, Azencot, **Dinstein**, **Automated detection of video segments containing stereotypical movements in young children with ASD.** International Society for Autism Research, 2023.
- Ziv, Avni, Meiri, Dinstein, Bonneh, Oculomotor randomness as a marker for autism and its severity in children: a large sample study. International Society for Autism Research, 2023
- Molcho-Haimovich, Meiri, Tikotzky, Dinstein, Structured psycho-education intervention for ameliorating sleep problems in children with autism. International Society for Autism Research, 2023
- 11. Shil, Arava, Sadigurschi, Abu-Kaf, Meiri, Michaelovski, Sadaka, Aran, Dinstein, Golan, Menashe, Autscore – an integrative scoring approach for prioritization of ultra-rare candidate ASD genetic variants from whole exome sequencing data. International Society for Autism Research, 2023
- 12. Regev, Shil, Bronshtein, Hadar, Meiri, Fluser, Michaelovski, **Dinstein**, Hershkovitch, Menashe, **Genetic variations associated with ultrasonography fetal anomalies in children with autism spectrum disorder.** International Society for Autism Research, 2023
- 13. Mizrahi, Eni, Bilik, **Dinstein**, Zigel, **Multi-channel speech signal processing for** evaluating autism in children. Israeli Meeting for Autism Research, 2023.
- 14. Bachrach, Ilan, Waissengreen, Faroy, Michaelovski, Sedaka, Meiri, Menashe, **Dinstein**, **Preschool children with ASD are more likely to be placed in special education if they exhibit aberrant behaviors.** Israeli Meeting for Autism Research, 2023.