

Ilana Susie Hairston
Curriculum Vitae

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1. Personal Details

- Full name: Ilana Susie Hairston
- Work: Tel Hai Academic College
- Email: hanahai@telhai.ac.il

2. Higher Education

- 1989–1993 B.A. Tel Aviv University in Psychology and General Arts.
Degree received: 1993
- 1993-
(incomplete) M.A. Tel Aviv University in Psychology (Psychobiology).
Thesis submitted Oct. 1998
Supervisors: Prof. Joram Feldon; Prof. Ina Weiner
- 1998–2004 Ph.D. in Neuroscience, Stanford University, Palo Alto, CA
Degree received: 2004 .
Supervisors: Prof. H. Craig Heller; Prof. Robert M. Sapolsky
- 2004–2005 Postdoctoral fellow, Radiology Department, UCS
Supervisor: Prof. Srikantan S. Nagarajan
- 2005–2007 Postdoctoral fellow, Psychology Department. UC Berkeley
Supervisor: Prof. Allison G. Harvey
- 2008–2008 Postdoctoral fellow, Substance Abuse Research, University of Michigan
Supervisors: Prof. Kirk Brower, MD; Prof. Robert Zucker, PHD

• **Other Professional Training:**

- 10/2004: Neuroscan School. Neuroscan/Compumedics training. El-Paso, Texas.
- 11/2004: EEGLAB, UC San Diego.
- 10/2006: Sleep Staging: Alabama School of Sleep Medicine.
- 8/2008: Training Course in fMRI, University of Michigan Functional MRI
Laboratory, Aug. 2008.
- 9/2009: PET Pharmacokinetics Course, University of Michigan, Ann Arbor, June
2009
- 2/2010: Freesurfer Workshop, Athinoula & Martinos Center for Biomedical Imaging,
MGH

• **Awards and Honors**

- 2000, Associated Professional Sleep Societies Research Excellence Award in the
predoctoral category.
- 2001, Pre-Doctoral McCormick Travel Award.
- 2001-2003, Predoctoral NRSA Fellowship (F31), NIMH.
- 2003, Excellence in Teaching Award, Stanford University, Dep. Biological
Science.

- 2004, Sleep Research Society's Merit Based Trainee Travel Award.
- 2004-2005, Post-Doctoral Minority Supplement Award.
- 2005-2007, Post-Doctoral NRSA Fellowship, from The American Psychological Association.
- 2006-2008, United Negro College Fund-Merck Postdoctoral Fellowship.
- 2007, Society for Neuroscience Postdoctoral Travel Award (Women in Neuroscience Subcommittee).
- 2008, Weizmann Institute of Science, Feinberg Postdoctoral Fellowship (declined).
- 2008, Israel Ministry of Science – Eshkol Fellowship (declined).
- 2008, Honorable mention National Sleep Foundation (NSF) and the Sleep Research Society (SRS) Young Investigator Conference

3. Academic Appointments and Academic Administrative Positions in Institutions of Higher Education

- 2009–2011 Research Assistant Professor in Psychiatry, Addiction Research at Univ. of Michigan
- 2011–current Adjunct Research Assistant Professor in Psychiatry, Addiction Research at Univ. of Michigan
- 2011–2016 Senior Lecturer in Behavioral Sciences at The Academic College of Tel-Aviv Yafo
- 2016–current Senior Lecturer in Psychology at Tel Hai Academic College

- **Grant Review Panel**

NIH ad hoc reviewer (R21/U01)
 The National Institute for Psychobiology in Israel
 Israel-Science Foundation
 US-Israel Binational Science Foundation
 CDC ad hoc reviewer

- **Professional Memberships**

- 1999–present Sleep Research Society
- 2011–present Association for Psychological Science
- 2011–present European Sleep Research Society
- 2012–present Israeli Society for Biological Psychiatry
- 2012–present Association for Psychological Science
- 2013–present Israel Sleep Research Society

- **Other Professional Activities:**

- 2016–2018 Chief Technical Officer, SleepBetter, InnovaShell Technologies. Ltd.
- 2017–2018 Editing textbook on Sleep Development, for the Open University
- 2019-current Chair of Gender Diversity Unit (AKA, advisor to the College President on Gender equity)

- 2019-current Organizing committee of the Behavioral Sleep Medicine Training Course, of the Israeli Sleep Research Society with External Studies of Tel Aviv University Medical School.
- 2020-current Consultant at MyAir.ai

4. Supervision of Graduate Students

- 2010–2011 Nasreen Z Akbar, postdoctoral student, University of Michigan
- 2012–2013 Mor Sackler, Academic College of Tel Aviv Yafo
- 2013–2014 Eden Ron, Academic College of Tel Aviv Yafo
Avital Sach-Levi, Academic College of Tel Aviv Yafo
Lior Pereg, Academic College of Tel Aviv Yafo
- 2014–2015 Dana Tamir, Academic College of Tel Aviv Yafo
Yaara Tivon, Academic College of Tel Aviv Yafo
Tal Solnik, Academic College of Tel Aviv Yafo
Roni Shpitlani, Academic College of Tel Aviv Yafo
- 2015–2016 Maya Zeltzer, Academic College of Tel Aviv Yafo
Itamar Schwartz, Academic College of Tel Aviv Yafo
Tamar Lehman, Academic College of Tel Aviv Yafo
Chen Assis, Academic College of Tel Aviv Yafo
- 2017– Noa Silberberg, Tel Hai Academic College
- 2018–2020 Barak Buganim, Tel Hai Academic College
- 2018- Rivka Landsman, Tel Hai Academic College
- 2019- Dana Zelinger, Tel Hai Academic College

5. Research Support

- 2001–2003: Predoctoral NRSA Fellowship (F31), NIMH: Sleep and Adult Neurogenesis.
- 2005–2007: The American Psychological Association, Postdoctoral NRSA: Cognitive processing during sleep in primary insomnia: Linking the physiological and psychological aspects of the hyperarousal hypothesis.
- 2006–2008: UNCF-Merck Postdoctoral Fellowship: Sensory Gating During Sleep in Primary Insomnia.
- 2008–2008: University of Michigan, Addiction Research Center Postdoctoral Training Fellowship (T32)
- 2009–2011: Sleep Disturbance in Children and Risk for Future Drinking (co-investigator); MICHR/CTSA Pilot Collaborative Grant Program for Translational and Clinical Research \$25,000
- 2009–2011: Family Study of Risk for Alcoholism over the Life Course (5-R37-AA-007065-24) – Minority Supplement
- 2011 Using odorants to treat sleep apnea and snoring (co-investigator), Johnson & Johnson Medical Device Grants, \$25,000.
- 2011–2013: Brain Endophenotypes Modulating Drug Abuse Risk (3-R01-DA-027261-02-S1) – Administrative Supplement
- 2013–2015: Combined effects of sleep restriction and affect on multi-modal decision making – Internal Research Grant, Academic College of Tel-Aviv Yafo 50,000 NIS

2014–2015	The inter-relationship between parent-infant bonding and infant sleep: A longitudinal study. – Internal Research Grant, Academic College of Tel-Aviv Yafo, 12,500 NIS
2019-2020	Combined Effects of Sleep Restriction and Affect on Multi-Modal Decision-Making, 30,000 NIS.
2021-2022	Learning to Not Feel Pain: The Role of Sleep-Dependent Extinction as a Model for the Chronification of Pain, Co-PI: Prof. Irit Weissman-Fogel; \$10,000, Joint venture Haifa University and Tel-Hai Academic College.
Pending	Parents' Childbirth PTSD and infant's socio-emotional development: mediation of parenting and moderation of infant's temperament and sleep; Co-PI: Dr. Jonathan Handlezalts; CO-I: Prof. Maria Muzik. BSF-2020035

6. Selected Participation in Conferences

- Nagarajan SS, McGonigle DJ, Sekihara K, Hairston IS. (2004) Training induced plasticity in auditory cortex. BIOMAG, August 8–12.
- Hairston IS, Pasley B, Harvey AG. (2006) The role of changes in local CBF in the effects of sleep deprivation on the BOLD response. Sleep 29: Abstract supplement #0030.
- Hairston IS, Conroy DA, Yau W, Samudra P, Cummiford C, Zucker RA, Zubieta J-K, Heitzeg MM (2010) Sleep Patterns and Plasticity in Pre-Adolescent Children Of Alcoholics 16th Annual Meeting of the Organization for Human Brain Mapping, Barcelona Spain #275 WTh-AM.
- Hairston, I., Cummiford, C. M., Conroy, D. A., Samudra, P. G., Zucker, R. A., Zubieta, J. K., & Heitzeg, M. M. (2012). Sleep Shapes The Brain: A Potential Mechanistic Role For Sleep In Mediating Risk In Children Of Alcoholics. Alcoholism: Clinical & Experimental Research, 36, 67A.
- Perl, O., Plotkin, A., Weissbrod, A., Oksenberg, A., Vander, T., Hairston, I., Sobel, N. (2012), An odor-dispensing device for the treatment of sleep apnea. J Mol Neurosci 51, 1–135 (2013). <https://doi.org/10.1007/s12031-012-9923-1>.
- Hairston, IS, Bergman, O., Sach-Levi A., Pereg Ben-Shitrit, L., Ron, E., Cohen-Zion M. Autonomic Changes After Sleep Restriction – Evidence of an Allostatic Mechanism. 29th Annual Meeting of the Association of Professional Sleep Societies, June 2015, Seattle.
- Handelzalts, JE, Molmen Lichter, M, Hairston, IS and Levy, S. (2019) Neuroticism and optimism associations with postpartum bonding-pathways through postpartum depression and PTSD. 39th Annual Society for Reproductive and Infant Psychology Conference at City University London, September 2019.
- Hairston, IS and Cohen-Zion M., Autonomic Responses to Emotional Stimuli While Sleep Deprived: Evidence of an Adaptive Mechanism. International Society for Affective Disorders (ISAD) London, UK, November, 2019.
- Eva Kimel, Dafna Ben Zion, Anat Prior, Ilana Hairston, Tali Bitan; Sleep Dependent Consolidation in Language Learning among Adults with and without Dyslexia – A Sandbox Submission. Society for the Neurobiology of Language (SNL), Virtual meeting, October 2021.

7. Publications

• Peer Reviewed Publications

1. Weiner I, Feldon J, Tarrasch R, **Hairston IS**, Joel D. (1998) Fimbria-fornix cut affects spontaneous activity, two-way avoidance and delayed non-matching to sample, but not latent inhibition. *Behav Brain Res.* 96: 59.
2. Weiner I, **Hairston IS**, Shayit M, Feldman G, Joel D, and Feldon J. (1998) Strain differences in latent inhibition. *Psychobiology*, 26: 57-64
3. **Hairston IS**, Ruby NF, Brooke S, Peyron C, Denning DP, Heller HC, Sapolsky RM. (2001) Sleep deprivation elevates plasma corticosterone levels in neonatal rats. *Neurosci Lett*, 23: 315(1-2): 29-32.
4. **Hairston IS**, Peyron C, Denning DP, Ruby NF, Flores J, Sapolsky RM, Heller HC, O'Hara BF. (2003) Sleep deprivation effects on growth factor expression in neonatal rats: A potential role for BDNF in the mediation of delta power. *J Neurophysiol.* 91: 1586–1595, 2004
5. Lazarov O, Robinson J, Tang Y-P, **Hairston IS**, Korade-Mirnic Z, Lee VM-Y, Hersh LB, Sapolsky RM, Sisodia SS. (2005) Environmental enrichment reduces A β levels and amyloid deposition in transgenic mice. *Cell*, 120: 701-715. PMID: 15766532
6. **Hairston IS**, Little MTM, Scanlon M, Palmer TD, Sapolsky RM, Heller HC. (2005) Sleep restriction suppresses neurogenesis induced by hippocampus-dependent learning. *J. Neurophys.* 94: 4224-4233. PMID: 16014798
7. **Hairston IS**, Nagarajan SS. (2007) Neural mechanisms of the time-order error: an MEG study. *J Cogn Neurosci.* 19(7): 1163-174. PMID: 17583992
8. **Hairston IS**, Talbot LS, Gruber J, Eidelman P, Harvey AG. (2010) Sensory gating in primary insomnia. *Eur J Neurosci.* 31(11): 2112-2121. PMID: 20529120
9. Talbot LS, **Hairston IS**, Eidelman P, Gruber J, Harvey AG. (2009) The effect of mood on sleep onset latency and REM sleep in inter-episode bipolar disorder. *J Abnorm Psychol.* 2009 Aug; 118(3): 448-58. PMID: 19685943
10. Eidelman P, Talbot LS, Gruber J, **Hairston IS**, Harvey AG. (2010) Sleep Architecture as Correlate and Predictor of Symptoms and Impairment in Inter-episode Bipolar Disorder: Taking on the Challenge of Medication Effects. *J Sleep Res* 19(4): 519-524. PMID: 20408930
11. **Hairston IS**, Waxler E, Seng JS, Fezzey AG, Rosenblum KL, Muzik M (2011). The Role of Infant Sleep in Intergenerational Transmission of Trauma. *Sleep* 34(10): 1373-83. PMID: 21966069
12. Talbot LS, Stone S, Gruber J, **Hairston IS**, Eidelman P, Harvey, AG (2011) Test of the bidirectional association between sleep and mood in bipolar disorder and insomnia, *J Abnorm Psychol*, 121(1):39-50. PMID: 21842957
13. Conroy, DA, **Hairston, IS**, Arnedt, JT, Hoffmann, RF, Armitage, R, Brower, KJ (2012) Dim light melatonin onset in alcohol-dependent men and women compared to healthy controls. *Chronobiology International*, 29(1): 35-42, PMID 22217099.

14. Arzi, A, Shedlesky, L, Ben-Shaul, M, Nasser, K, Oksenberg, A, **Hairston, IS**, & Sobel, N (2012). Humans can learn new information during sleep. *Nature neuroscience*, 15: 1460-65. doi:10.1038/nn.3193
15. Conroy DA, **Hairston IS**, Zucker RA and Heitzeg MM. (2015) Sleep Patterns in Children of Alcoholics and the Relationship with Parental Reports. *Austin J Sleep Disord.* 2: 1-9.
16. **Hairston IS**, Conroy DA, Heitzeg MM, Akbar, NZ, Brower, KJ, Zucker RA. (2016) Sleep Mediates the Link Between Resiliency and Behavioral Problems in Children at High and Low Risk for Alcoholism, *Journal of sleep Research*, 25: 341-349.
17. Perl, O, Arzi, A, Sela, L, Secundo, L, Holtzman, Y, Samnon, P, Oksenberg, A, Sobel N, and **Hairston IS** 2016. Odors Enhance Slow-Wave Activity in Non-Rapid Eye Movement Sleep, *J Neurophysiol*, 115(5), 2294-2302
18. **Hairston IS** and Shpitalni R. (2016) Procrastination is Linked with Insomnia Symptoms: The Moderating Role of Morningness-Eveningness, Personality and Individual Differences 101: 50-56.
19. **Hairston IS**, Deviri D, Solnik-Melino T, Handelzalts JE (2016) Maternal depressed mood moderates the impact of infant sleep on mother–infant bonding, *Archives of Women’s Mental Health*, 19: 1029-1039
20. Soehner AM, Kaplan KA, Saletin J, Talbot LS, **Hairston IS**, Gruber J, Eidelman P, Walker MP, Harvey AG. (2017) You’ll feel better in the morning: Slow wave activity and overnight mood regulation in interepisode bipolar disorder. *Psychological Medicine*, 48: 249-260.
21. **Hairston, IS**, Handelzalts, JE; Assis, C., Kovo, M. (2017) Postpartum bonding difficulties and adult attachment styles: The mediating role of postpartum depression and childbirth-related PTSD. *Infant Mental Health Journal*: 198-208.
22. **Hairston, IS**, Handelzalts, JE, & Matityahu, A. (2018). Construct Validity and Psychometric Properties of the Hebrew Version of the City Birth Trauma Scale. *Frontiers in psychology*, 9, 1726.
23. **Hairston, IS**; Handelzalts, JE; Lehmen-Inbar, T and Kovo, M. (2019). Mother-Infant Bonding is not Associated with Feeding Type: A Community Study Sample. *BMC Pregnancy and Childbirth*, 19 (#125)
24. Handelzalts, JE; **Hairston, IS**, Muzik, M; Matityahu, A & Levy S. (2019) A paradoxical role of childbirth-related PTSD symptoms in the association between personality factors and mother-infant bonding: A cross-sectional study. *Psychological Trauma: Theory, Research, Practice, and Policy* (Oct 28 , 2019)
25. **Hairston, IS**; Cohen-Zion, M (2020) Sleep Restriction Alters Physiological and Emotional Responses to Emotion Induction. *Experimental Physiology*, 105(12), 2207-2215.
26. Handelzalts, JE; Levy, S; Molmen-Lichter, M; **Hairston, IS**; Krissi, H; Wiznitzer, A; Peled, Y. (2021) Attachment styles and maternal sense of competence: The moderated-mediation effects of rooming-in and maternal psychopathology. *Journal of Child and Family Studies*. Accepted.

- **Book chapters and reviews:**

Reviews

1. **Hairston IS**, Knight RT. (2004) Sleep on it. *Nature*, 430 (6995): 27–28
2. **Hairston IS**. (2012) Sleep and Hazardous Drinking in the Elderly: A Clarion Call for Increased Clinical and Translational Research. *J Addict Res Ther*, 3:3

Book Chapters

1. Harvey IG, **Hairston IS**, Gershon A, Gruber JL. (2008) Special considerations for treatment of insomnia. In: Ed. CA Kushida, *Handbook of Sleep Disorders*, pp. 117-127. 2nd edition. Taylor and Francis Group
2. Harvey IG, **Hairston IS**, Gruber J, and Gershon A (2008) Anxiety and Sleep. In: MM Antony and MB Stein, *Oxford Handbook of Anxiety and Related Disorders*, pp. 611-623. Oxford University Press.
3. **Hairston IS**. (2008) Sleep and neurogenesis – New opportunity or more of the same? In: Ed. M. P. Klausen, *Neurogenesis Research Advances*, pp. 11-65. Nova Science Publishers.
4. **Hairston IS**, Akbar NZ, and Conroy DA. (2013) Insomnia Due to Drug or Substance Abuse and Dependence. In: Kushida C. (ed.) *The Encyclopedia of Sleep*, vol. 2, pp. 229–235. Waltham, MA: Academic Press
5. **Hairston IS** (2014) Sleep and Addictions: Linking Sleep Regulation with the Genesis of Addictive Behavior, in Watson, R (ed): *Modulation of Sleep by Obesity, Diabetes, Age, and Diet*, pp. 341-347. Elsevier: Academic Press
6. Perl, O, Arzi A, **Hairston IS** and Sobel N. (2017) Sleep and Smell, in: (ed.) Büttner, A: *Springer Handbook on Odor*, pp. 861-880, Springer International Publishing, Switzerland.
7. **Hairston IS** (2020) Sleep and Addictions: Linking Sleep Regulation with the Genesis of Addictive Behavior, in Watson, R (ed): *Modulation of Sleep by Obesity, Diabetes, Age, and Diet*, 2nd Edition, Elsevier: Academic Press
8. Hadler NL, **Hairston IS** and Conroy DA (2021) Insomnia due to drug or substance abuse and dependence, Reference Module in Neuroscience and Biobehavioral Psychology, Elsevier <https://doi.org/10.1016/B978-0-12-822963-7.00014-1>.

- **Articles submitted / under review**

1. Infant Sleep Problems and Perceived Temperament in the First Year of Life, Association with Maternal Factors. **Hairston, IS**, Majilevich, E, Handelzalts, JE.

- **In preparation**

- ◇ Rumination and Emotion Regulation Strategies Effects on Sleep Quality.

- ◇ Hairston I.S. and Kuperstein-Hadar N, Gender and Ethnicity effects on identification of facial expressions: Validation of an Israeli facial expression dataset. (article in Hebrew, submitted).

- **Technical Publications**

1. **Hairston IS** (2018). The Use of WatchPAT for Home Sleep Testing Assessment of Sleep-Related Disordered Breathing (SDB) in Heart Disease Patients - Clinical & Operational Benefits. (<https://bit.ly/2pKjCfl>)