

Rany Abend, PhD

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RESEARCH AND TEACHING FOCUS

- ▶ Clinical neuroscience research on biomarkers of anxiety and post-trauma and their treatment
- ▶ Development of multimodal representations of fear combining imaging, physiology, behavior, modeling, and clinical data

FACULTY POSITIONS

- 2024- **Associate Professor (tenured)**, Reichman University, Israel.
- 2022-2024 **Senior Lecturer**, Reichman University, Israel.

LEADERSHIP AND ADMINISTRATION POSITIONS

- 2024- **PhD committee**, School of Psychology, Reichman University.
- 2023- **Head of the *Brain and Mind* neuroscience excellence program**, Reichman University.
- 2023- **Head of the *Computer Science and Neuroscience* program**, Reichman University.

TEACHING

- 2023- **Lecturer**, *Clinical Neuroscience: Brain, Psychopathology, and Treatment* (undergraduate), Reichman University
- 2022- **Lecturer**, *Advanced Interdisciplinary Research on Fear and Anxiety* (graduate), Reichman University
- 2022- **Lecturer**, *Current Topics in Clinical Neuroscience* (undergraduate), Reichman University
- 2022- **Lecturer**, *Interdisciplinary Research on Fear and Anxiety* (undergraduate), Reichman University
- 2022- **Lecturer**, *Neurobiological Basis of Psychopathology and Treatment* (undergraduate), Reichman University
- 2006-2015 **Teaching assistant**, *Statistics for Psychology* (undergraduate), Tel Aviv University
- 2009-2011 **Teaching assistant**, *Research Methods and Statistics* (graduate), Tel Aviv University

EDUCATION AND TRAINING

- 2016-2022 **Post-doctoral fellow**, Section on Development and Affective Neuroscience, National Institute of Mental Health (Bethesda, MD). **Supervisor:** Daniel S. Pine, MD, Chief of the Emotion and Development branch.
- 2014-2016 **MA, Clinical Psychology**, the Clinical Psychology Supplementary Program, Tel Aviv University, Israel
- 2010-2016 **PhD, Psychology**, School of Psychological Sciences, Tel Aviv University, Israel
▶ Applied clinical neuroscience research to measure and modify aberrant threat processing as novel treatment for anxiety disorders and PTSD. **Supervisor:** Yair Bar-Haim, PhD.
- 2005-2008 **MA, Psychobiology** (magna cum laude), School of Psychological Sciences, Tel Aviv University, Israel
▶ Pharmacology/lesions in rodent models for schizophrenia treatment. **Supervisor:** Ina Weiner, PhD.
- 2000-2004 **BSc, Computer Science and Business Management** (magna cum laude), through the **Lautman Special Program for Outstanding Students**, Tel Aviv University, Israel.

CLINICAL TRAINING

- 2014-2016 **Clinical psychology practicum**, ambulatory and outpatient psychiatry clinics, Sheba Medical Center, Israel

ADDITIONAL ACADEMIC AND PROFESSIONAL EXPERIENCE

- 2014-2016 **Research site leader**, clinical brain stimulation, Tel Aviv Sourasky Medical Center

	► Industry-academia collaboration to develop novel brain stimulation-monitoring therapeutics
2008-2010	Research and development , MeeMix, Ltd. (internet start-up company) ► Directing research activities on development of music personalization algorithms
2006-2012	Programming cognitive neuroscience experiments , Tel Aviv University and international affiliates

PUBLICATIONS (h-index: 30)

Papers published/in press

- Shner-Livne, G., Barak, N., Shitrit, I., **Abend, R.**, Shechner, T. (in press). Developmental Differences in Threat Learning are Associated with Changes in Frontal-Central Theta Activity. *European Child & Adolescent Psychiatry*.
- DeYoung, C. G., Martin, E. A., and the HiTOP Neurobiological Foundations Workgroup. (in press). Using the Hierarchical Taxonomy of Psychopathology (HiTOP) for precision psychiatry. *World Psychiatry*.
- Haham, L., Aderka, I. M., Pine, D. S., **Abend, R.**, Shechner, T. (in press). Adolescence Under Fire: A Multi-method Study of Psychological Vulnerability and Resilience Among Adolescents Impacted by War. *Psychological Medicine*.
- Karp, E., Rubinstein, Z., **Abend, R.**, Lev-Ran, S., Mikulincer, M. (in press). Peri-traumatic consumption of classic psychedelics is associated with lower anxiety and post-traumatic responses three weeks after exposure. *Journal of Psychopharmacology*.
- Byrne, M. E., Haller, S. P., Linke, J. O., Lewis, K. M., Berman, E., Henry, L. M., Pagliaccio, D., Quezada, D., Meyer, M., **Abend, R.**, Kircanski, K., Lazarov, A., Bar-Haim, Y., Brotman, M. A. & Pine, D. S. (in press). Attention Bias Modification Training and CBT for Youth Anxiety Disorders: A Double-Blind Randomized Controlled Trial. *Journal of the American Academy of Child and Adolescent Psychiatry*.
- Kirk, P. E., Kumar, P., Zugman, A., **Abend, R.**, Frank, S., Ringlein, G., Jett, L., Harrewijn, A., Pine, D. S., Kircanski, K. (in press). The Relations Among Anxiety, Movie-Watching, and In-Scanner Motion. *Human Brain Mapping*.
- DeYoung, C. G., Hilger, K., Hanson, J. L., **Abend, R.**, Allen, T. A., Beaty, R. E., Bellgrove, M. A., Blain, S. D., Bzdok, D., Chavez, R. S., Engel, S. A., Feilong, M., Fornito, A., Genç, E., Goghari, V., Grazioplene, R. G., Haxby, J. V., Homan, P., Joyner, K., Kaczkurkin, A. N., Latzman, R. D., Martin, E. A., Passamonti, L., Pickering, A. D., Safron, A., Servaas, M. N., Smillie, L. D., Spreng, N., Tiego, J., Viding, E., Wacker, J. (2025). Beyond Increasing Sample Sizes: Optimizing Effect Sizes in Neuroimaging Research on Individual Differences. *Journal of Cognitive Neuroscience*, 1-12.
- Kitt, E. R., **Abend, R.**, Amelio, P., Galbraith, J., Poe, A., Gee, D. G., Pine, D. S., Harrewijn, A. (2025). Evaluating Gaze on Social Crowd in Pediatric Anxiety Disorders Using Mobile Eye-Tracking. *Journal of Affective Disorders*, 15:369:462-466.
- Ruge, J., Ehlers, M. R., Kastrinogiannis, A., Klingelhöfer-Jens, M., Koppold, A., **Abend, R.**, Lonsdorf, T. B. (2024). How adverse childhood experiences get under the skin: A systematic review, integration and methodological discussion on threat and reward learning mechanism. *eLife*, 13:e92700.
- Mullins, J. L., **Abend, R.**, Michalska, K. J. (2024). Age and Anxiety Moderate the Association Between Cortical Thickness and Anticipatory Threat Responding in Latina Youth. *Social Cognitive and Affective Neuroscience*, 19(1):nsae065.
- Byrne, M. E., Kirschner, S., Harrewijn, A., **Abend, R.**, Lazarov, A., Liuzzi, L., Kircanski, K., Haller, S., Bar-Haim, Y., Pine, D. S. (2024). Eye-tracking measurement of attention bias to social threat among youth: A replication and extension study. *Journal of Mood & Anxiety Disorders*, 8:100075.
- Shner-Livne, G., Barak, N., Shitrit, I., **Abend, R.**, Shechner, T. (2024). Late Positive Potential Reveals Impede Extinction Learning in Adolescents Compared to Adults. *Psychological Medicine*, 6:1-12.
- Abend, R.** Understanding anxiety symptoms as aberrant defensive responding along the threat imminence continuum. (2023). *Neuroscience and Biobehavioral Reviews*, 152.

14. Newsome, P., Ruiz, S. R., Gold, A. L., Pine, D. S., & **Abend, R.** (2023). Fear-potentiated startle reveals attenuated threat extinction in pathological anxiety. *International Journal of Psychophysiology*, 183.
15. Haller, S., Linke, J., Grassie, H., Jones, E., Pagliaccio, D., Harrewijn, A., **Abend, R.**, White, I., Naim, R., Mallidi, A., Berman, E., Lewis, K., Kircanski, K., Silverman, W., Kalin, N., Bar-Haim, Y., Brotman, M. (2024). Cognitive behavioral therapy normalizes fronto-parietal activation in unmedicated patients with pediatric anxiety disorders. *American Journal of Psychiatry*, 181(3):201-212.
16. Shamaï-Leshem, D., **Abend, R.**, Arad, G., Azriel, O. Chong, L., de Jong, P., Dykanb, C., Hajcak, G., Klawohnf, J., Meyer, A., Neophytou, K., Neria, Y., Panagiotou, G., Schneier, F., Soleymanic, A., Yair, N., Pine, D. S., Bar-Haim, Y., Lazarov, A. (in press). The Free-Viewing Matrix Task: A Valid and Reliable Measure of Attention Bias. *Journal of Anxiety Disorders*.
17. Bernstein, R. A., Smith, A. R., Kitt, E., Cardinale, E. M., Harrewijn, A., **Abend, R.**, Michalska, K., Pine, D. S., Kircanski, K. (2024). Threat Appraisal and Pediatric Anxiety: Proof of Concept of a Latent Variable Approach. *Clinical Psychological Science*, 12(4):772-781.
18. Tiego, J., Martin, E. A., DeYoung, C. G., Hagan, K., Cooper, S. E., Pasion, R., Satchell, L., Shackman, A. J., Bellgrove, M. A., Fornito, A., & the HiTOP Neurobiological Foundations Work Group. (2023). Precision behavioral phenotyping as a strategy for uncovering the biological correlates of psychopathology. *Nature Mental Health*, 1:304–315.
19. Morriss, J., **Abend, R.**, Zika, O., Bradford, D., Mertens, G. (2023). Neural and psychophysiological markers of intolerance of uncertainty. *International Journal of Psychophysiology*, 184.
20. Harrewijn, A., Ruiz, S., **Abend, R.**, Haller, S. P., Subar, A., Swetlitz, C., Valadez, E. A., Brotman, M. A., Chen, G., Chronis-Tuscano, A., Leibenluft, E., Bar-Haim, Y., Fox, N. A., Pine, D. S. (2023). Development of brain mechanisms underlying threat bias: relations with childhood social reticence and adolescent anxiety. *Biological Psychiatry: GOS*, 3(4):893-901.
21. Michalska, K., Benson, B., Ivie, E. J., Sachs, J. F., Haller, S. P., **Abend, R.**, Blackford, J. U., Pine, D. S. (2023), Neural responding during uncertain threat anticipation in pediatric anxiety. *International Journal of Psychophysiology*, 183.
22. Bach, D., Sporrer, J., **Abend, R.**, Beckers, T., Dunsmoor, J. E., Fullana, M. A., Gamer, M., Gee, D. G., Hamm, A., Hartley, C. A., Herringa, R. J., Jovanovic, T., Kalisch, R., Knight, D. C., Lissek, S., Lonsdorf, T. B., Merz, C. J., Milad, M., Morriss, J., Phelps, E. A., Pine, D. S., Olsson, A., van Reekum, C. M., & Schiller, D. (2023). Consensus design of a calibration experiment for human fear conditioning. *Neuroscience and Biobehavioral Reviews*, 148.
23. **Abend, R.***, Burk*, D., Ruiz, S. G., Gold, A., Napoli, J. G., Britton, J. C., Shechner, T., Michalska, K. J., Winkler, A. M., Leibenluft, E., Pine, D. S., & Averbeck, B. B. (2022). Computational Modeling of Threat Learning Reveals Links with Anxiety and Neuroanatomy in Humans. *eLife*, 11:e66169.
24. Pettit, J. W., Rey, Y., Marin, C. E., Bechor, M., Lebowitz, E. R., Vasey, M. W., Jaccard, J., **Abend, R.**, Pine, D. S., Bar-Haim, Y., Silverman, W. K. (in press). A Randomized Controlled Efficacy Trial of Attention Bias Modification Treatment for Subthreshold Anxiety in Youth. *Behavior Therapy*.
25. **Abend, R.**, Ruiz, S. G., Bajaj, M. A., Harrewijn, A., Linke, J. O., Atlas, L. Y., Winkler, A. M., & Pine, D. S. (2022). Threat imminence reveals links among unfolding of anticipatory physiological response, cortical-subcortical intrinsic functional connectivity, and anxiety. *Neurobiology of Stress*, 16:100428.
26. Ekhtiari, H., et al. (2022). A Checklist for Assessing the Methodological Quality of Concurrent tES-fMRI Studies (ContES Checklist): A Consensus Study and Statement. *Nature Protocols*, 17.
27. Klein, Z., **Abend, R.**, Shmuel, S., & Shechner, T. (2022). Unique Associations between Conditioned Cognitive and Physiological Threat Responses and Facets of Anxiety Symptomatology in Youth. *Biological Psychology*, 170:108314.
28. Haller, S. P., Chen, G., Kitt, E., Smith, A. R., Stoddard, J., **Abend, R.**, Cardenas, S. I., Revzina, O., Coppersmith, D., Feldman, J., Leibenluft, E., Brotman, M. A., Pine, D. S., Pagliaccio, D. (2022). Reliability of Task-Evoked Neural

Activation during Face-Emotion Paradigms: Effects of Scanner and Psychological Processes. *Human Brain Mapping*, 43(7).

29. Kitt, E. R., Lewis, K. M., Galbraith, J., **Abend, R.**, Smith, A. R., Lebowitz, E. R., Pine, D. S., Gee, D. G. (2022). Family accommodation in pediatric anxiety: Relations with avoidance and self-efficacy. *Behaviour Research and Therapy*, 154:104107.
30. **Abend, R.**, Gold, A., Britton, J. C., Michalska, K. J., Shechner, T., Winkler, A. M., Leibenluft, E., Averbeck, B. B., & Pine, D. S. (2020). Anticipatory Threat Responding: Relationships with Anxiety, Development, and Brain Structure. *Biological Psychiatry*, 87(10).
31. Tseng, W.-L., **Abend, R.**, Gold, A. L., & Brotman, M. (2021). Neural correlates of extinguished threat recall underlying the commonality between childhood anxiety and irritability. *Journal of Affective Disorders*, 295.
32. Harrewijn, A., **Abend, R.**, Naim, R., Haller, S. P., Stavish, C., Bajaj, M. A., Matsumoto, C., Dombek, K., Cardinale, E. M., Kircanski, K., Brotman, M. A. (2021). Attention bias to negative versus non-negative faces is related to negative affectivity in a transdiagnostic youth sample. *Journal of Psychiatric Research*, Jun;138.
33. **Abend, R.**, Bajaj, M., Coppersmith, D. L., Kircanski, K., Haller, S. P., Cardinale, E. M., Salum, G. A., Wiers, R. W., Salemink, E., Pettit, J. W., Perez-Edgar, K., Lebowitz, E., Silverman, W. K., Bar-Haim, Y., Brotman, M. A., Leibenluft, E., Fried, E. I., & Pine, D. S. (2021). A computational network perspective on pediatric anxiety. *Psychological Medicine*, 51(10).
34. Linke, J. O., **Abend, R.**, Kircanski, K., Stavish, C., Clayton, M., Benson, B. E., Brotman, M. A., Renaud, O., Smith, S. S., Nichols, T. E., Leibenluft, E., Winkler, A. M., & Pine, D. S. (2021). Shared and anxiety-specific pediatric psychopathology dimensions manifest distributed neural correlates. *Biological Psychiatry*, 89(6).
35. **Abend, R.**, Bajaj, M. A., Harrewijn, A., Matsumoto, C., Michalska, K. J., Necka, E., Palacios-Barrios, E., Leibenluft, E., Atlas, L. Y., & Pine, D. S. (2021). Threat-anticipatory psychophysiological response is enhanced in pediatric anxiety and correlates with prefrontal cortex structure. *Journal of Psychiatry and Neuroscience*, 46(2).
36. Cardinale, E. M., Pagliaccio, D., Swetlitz, C., Grassie, H., **Abend, R.**, Costa, V., Averbeck, B., Brotman, M., Pine, D. S., Leibenluft, E., Kircanski, K. (2021). Deliberative Choice Strategies in Youth: Relevance to Transdiagnostic Anxiety Symptoms. *Clinical Psychological Science*, 9(5).
37. Harrewijn, A., Kitt, E. R., **Abend, R.**, Matsumoto, C., Odriozola, P., Winkler, A. M., Leibenluft, E., Pine, D. S., & Gee, D. G. (2021). Comparing neural correlates of conditioned inhibition between children with and without anxiety disorders - A preliminary study. *Behavioural Brain Research*, 399:112994.
38. **Abend, R.**, Bajaj, M. A., Matsumoto, C., Yetter, M., Harrewijn, A., Cardinale, E., Kircanski, K., Lebowitz, E. R., Silverman, W. K., Bar-Haim, Y., Lazarov, A., Leibenluft, E., Brotman, M., & Pine, D. S. (2021). Converging multi-modal evidence for implicit threat-related biases in pediatric anxiety disorders. *Research on Child and Adolescent Psychopathology*, 49(2).
39. Gold, A., **Abend, R.**, Britton, J., Behrens, B., Leibenluft, E., & Pine, D. S. (2020). Age differences in the neural correlates of anxiety disorders: An fMRI study of response to learned threat. *American Journal of Psychiatry*, 177(5).
40. Harrewijn, A., **Abend, R.**, Linke, J., Brotman, M., Fox, N. A., Leibenluft, E., Winkler, A., & Pine, D. S. (2020). Combining fMRI during resting state and an attention bias task in children. *Neuroimage*, 205.
41. **Erdman*, A., Abend*, R.**, Jalon, I., Artzi, M., Gazit, T., Levkovitz, H., Gilboa-Schechtman, E., Hendler, T., & Harel, E. (2020). Ruminative Tendency Relates to Ventral Striatum Functionality: Evidence from Task and Resting-State fMRI. *Frontiers in Psychiatry*, 11(67).
42. **Abend, R.**, Swetlitz, C., White, L. K., Shechner, T., Bar-Haim, Y., Filippi, C., Kircanski, K., Haller, S. P., Benson, B. E., Chen, G., Leibenluft, E., Fox, N. A., & Pine, D. S. (2020). Levels of early-childhood behavioral inhibition predict distinct neurodevelopmental pathways to pediatric anxiety. *Psychological Medicine*, 50(1).

43. **Abend R.**, Rosenfelder, A., Shamaï, D., Pine, D. S., Assaf, Y., & Bar-Haim, Y. (2020). Does attention bias modification induce structural brain changes? A commentary on Abend et al. (2019) – Response. *Biological Psychology*, 146.
44. Lazarov, A., Suarez-Jimenez, B., Levy, O., Coppersmith, D., Bar-Haim, Y., Pine, D. S., **Abend*, R. & Neria*, Y.** (2020). The Nosology and Symptom Structure of Clinical PTSD and Co-Morbid Depressive Symptoms - A Network Analysis Approach. *Psychological Medicine*, 50(13).
45. De Mathis, M. A., Batistuzzo, M. C., Bar-Haim, Y., **Abend, R.**, Miguel, E. C., Moraes, N., Requena, G., Pine, D. S., Salum, G. A., & Shavitt, R. G. (2020). Attentional Bias in specific cleaning and ordering dimensions of obsessive-compulsive disorder. *Journal of Affective Disorders*, 73.
46. **Abend R.**, Rosenfelder, A., Shamaï, D., Pine, D. S., Assaf, Y., & Bar-Haim, Y. (2019). Brain Structure Changes Induced by Attention Bias Modification Training. *Biological Psychology*, 146.
47. Filippi, C., Subar, A. R., Sachs, J. F., Kircanski, K., Winkler, A., Buzzell, G., Pagliaccio, D., **Abend, R.**, Fox, N. A., Leibenluft, E., & Pine, D. S. (2020). Developmental pathways to social anxiety and irritability: Error monitoring as a moderator. *Development and Psychopathology*, 32(3).
48. **Abend, R.**, Pergamin-Hight, L., Naim, R., Fox, N. A., Pine, D. S., & Bar-Haim, Y. (2019). Age Moderates Learning Processes during Attention Bias Modification Treatment for Social Anxiety Disorder. *Journal of Abnormal Child Psychology*, 47(5).
49. Pettit, J.W., Bechor, M., Rey, Y., Vasey, M.W., **Abend, R.**, Pine, D.S., Bar-Haim, Y., Jaccard, J., & Silverman, W.K. (2019). A randomized controlled trial of attention bias modification treatment in youth with treatment-resistant anxiety disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*, 59(1).
50. Kircanski, K., White, L. K., Tseng, W-L., Wiggins, J. L., Frank, H., Sequeira, S., Zhang, S., **Abend, R.**, Towbin, K. E., Stringaris, A., Pine, D. S., Leibenluft, E., & Brotman, M. A. (2018). A computational approach to differentiating neural mechanisms of irritability and anxiety in youth. *JAMA Psychiatry*, 75(6).
51. Michalska, K. J., Feldman, J., **Abend, R.**, Gold, A., Dildine, T., Palacios-Barrios, E., Leibenluft, E., Towbin, K., Pine, D. S., & Atlas, L. Y. (2018). Anticipatory effects on perceived pain in healthy and anxious children. *Psychosomatic Medicine*, 80(9).
52. **Gilam*, G., Abend*, R.**, Shani, H., Ben-Zion, Z., & Hendler, T. (2019). The anger-infused Ultimatum Game: a reliable and valid paradigm to induce and assess anger. *Emotion*, 19(1).
53. Arad, G., **Abend, R.**, Pine, D. S., & Bar-Haim, Y. (2019). A Neuromarker of Clinical Outcome in Attention Bias Modification Therapy for Social Anxiety Disorder. *Depression and Anxiety*, 36(3).
54. **Abend, R.**, Sar-el, R., Gonen, T., Vaisvaser, S., Bar-Haim, Y., & Hendler, T. (2019). Modulating emotional experience using electrical stimulation of the medial prefrontal cortex: a preliminary tDCS-fMRI study. *Neuromodulation*, 22(8).
55. **Gilam*, G., Abend*, R.**, Gurevitch, G., Erdman, A., Baker, H., Ben-Zion, Z., & Hendler, T. (2018). Attenuating anger and aggression with neuromodulation of the vmPFC: a simultaneous tDCS-fMRI study. *Cortex*, 109.
56. Lazarov, A., Suarez-Jimenez, B., **Abend, R.**, Naim, R., Shvil, E., Helpman, L., Zhu, X., Papini, S., Duroski, A., Rom, R., Schneier, F., Pine, D. S., Bar-Haim, Y., & Neria, Y. (2018). Bias-Contingent Attention Bias Modification and Attention Control Training in Treatment of PTSD: A Randomized Control Trial. *Psychological Medicine*, 1-9.
57. **Abend R.**, & van 't Wout, M. (2018). Commentary: Augmentation of Fear Extinction by Transcranial Direct Current Stimulation (tDCS). *Frontiers in Behavioral Neuroscience*, 12:121.
58. Salum, G.A., Petersen, C.S., Jarros, R.B., Toazza, R., DeSousa, D., Borba, L. N., Castro, S., Gallegos, J., Barrett, P., **Abend, R.**, Bar-Haim, Y., Pine, D.S., Koller, S.H., & Manfro, G.G. (2018). Attention bias modification and cognitive behavioral therapy for childhood anxiety disorders: a factorial randomized trial of efficacy. *Journal of Child and Adolescent Psychopharmacology*, 28(9).

59. **Abend, R.**, de Voogd, L., Salemink, E., Wiers, R., Perez-Edgar, K., Fitzgerald, A., White, L.K., Salum, G.A., He, J., Silverman, W.K., Pettit, J.W., Pine, D.S., & Bar-Haim, Y. (2018). Attention bias to threat and symptoms of anxiety in children and adolescents. *Depression and Anxiety*, 35(3).
60. **Lazarov*, A., Abend*, R.**, Seidner, S., Pine, D. S., & Bar-Haim, Y. (2017). The Effects of Training Contingency Awareness during Attention Bias Modification on Learning and Stress-Reactivity. *Behavior Therapy*, 48(5).
61. White, L. K., Sequeira, S., Britton, J. C., Brotman, M. A., Gold, A. L., Berman, E., Towbin, K., **Abend, R.**, Fox, N. A., Bar-Haim, Y., Leibenluft, E., & Pine, D. S. (2017). Complementary Features of Attention Bias Modification Therapy and Cognitive Behavioral Therapy in Pediatric Anxiety Disorders. *American Journal of Psychiatry*, 174(8).
62. Goldman, K. J., Shulman, C., Bar-Haim, Y., **Abend, R.**, & Burack, J. A. (2017). Attention allocation to facial expressions of emotion among persons with Williams and Down syndromes. *Development and Psychopathology*, 29(4).
63. **Abend, R.**, Jalon, I., Gurevitch, G., Sar-el, R., Shechner, T., Pine, D. S., Hendler, T., & Bar-Haim, Y. (2016). Modulation of Fear Extinction Processes using Transcranial Electrical Stimulation. *Translational Psychiatry*, 6(10).
64. Horovitz, O., Roitburd, B. L., **Abend, R.**, Ziskind, D., & Shechner, T. (2016). Distraction versus training attention away from threat: How to best wait for the dentist? *Australian Journal of Psychology*, 68(3).
65. Lazarov, A., **Abend, R.**, & Bar-Haim, Y. (2016). Social Anxiety is Related to Increased Dwell Time on Socially Threatening Faces. *Journal of Affective Disorders*, 193.
66. Naim, R., **Abend, R.**, Wald, I., Eldar, S., Levi, O., Fruchter, E., Ginat, K., Halpern, P., Sipos, M. L., Adler, A. B., Bliese, P. D., Quartana, P. J., Pine, D. S., & Bar-Haim, Y. (2015). Threat-Related Attention Bias Variability and Post Traumatic Stress. *American Journal of Psychiatry*, 172(12).
67. Badura-Brack, A., Naim, R., Ryan, T., Levy, O., **Abend, R.**, Khanna, M. M., McDermott, T. J., Pine, D. S., & Bar-Haim, Y. (2015). Effect of Attention Training on Attention Bias Variability and PTSD Symptoms: Randomized Controlled Trials in Israeli and U.S. Combat Veterans. *American Journal of Psychiatry*, 172(12).
68. **Abend, R.**, Pine, D. S., Fox, N. A., & Bar-Haim, Y. (2014). Learning and Memory Consolidation Processes of Attention-Bias Modification in Anxious and Nonanxious Individuals. *Clinical Psychological Science*, 2.
69. **Abend, R.**, Dan, O., Maoz, K., Raz, S., & Bar-Haim, Y. (2014). Reliability, Validity and Sensitivity of a Computerized Visual Analog Scale Measuring State Anxiety. *Journal of Behavior Therapy and Experimental Psychiatry*, 45(4).
70. **Iacoviello*, B.M., Wu*, G., Abend*, R.**, Murrough, J.W., Feder, A., Fruchter, E., Levinstein, Y., Wald, I., Bailey, C. R., Pine, D. S., Neumeister, A., Bar-Haim, Y., & Charney, D.S. (2014). Attention Bias Variability and Symptoms of Posttraumatic Stress Disorder. *Journal of Traumatic Stress*, 27(2).
71. Bechor, M., Pettit, J. W., Silverman, W. K., Bar-Haim, Y., **Abend, R.**, Pine, D.S., Vasey, M., & Jaccard, J. (2014). Attention bias modification treatment for children with anxiety disorders who do not respond to cognitive behavioral therapy: A case series. *Journal of Anxiety Disorders*, 28(2).
72. Sipos, M., Bar-Haim, Y., **Abend, R.**, Adler, A. B., & Bliese, P.D. (2014). Post-Deployment Threat-Related Attention Bias Interacts with Combat Exposure to Account for PTSD and Anxiety Symptoms in Soldiers. *Depression and Anxiety*, 31(2).
73. Maoz, K., **Abend, R.**, Fox, N.A., Pine, D.S., & Bar-Haim, Y. (2013). Subliminal Attention Bias Modification Training in Socially Anxious Individuals. *Frontiers in Human Neuroscience*, 7(389).
74. **Abend, R.**, & Bar-Haim, Y. (2013). Threat-Related Attention Bias in the Early Stages of Cognitive-Behavior Therapy Action for Panic Disorder. *Biological Psychiatry*, 73(11).
75. **Abend, R.**, Karni, A., Sadeh, A., Fox, N. A., Pine, D. S., & Bar-Haim, Y. (2013). Learning to Attend to Threat Accelerates and Enhances Memory Consolidation. *PLOS One*, 8(4).

Book chapters

1. Somerville, Y. & **Abend, R.** (2025). The organization of anxiety symptoms along the threat imminence continuum. In J. Blackford & M. Milad (Eds.), *New discoveries in the brain sciences of fear and anxiety: from basic to clinical neuroscience*. Springer Series in Behavioral Neuroscience.

Papers under review/revision

1. Ben-Zvi Feldman, S., Dayan, O., Somerville, Y., Kao, C-H., Cohen, S., Glickman, O., Ruiz, S. G., Newsome, P., Linke, J. O., Shechner, T., Pine, D. S., Lopez-Guzman, S., & **Abend, R.** Behavior in motivational conflicts is determined by magnitude of potential outcomes and relates to anxiety levels.
2. Costa, D. L. C., De Mathis, M. A., Bar-Haim, Y., **Abend, R.**, Morais, I., Salum, G. A., Miguel, E. C., Shavitt, R. G., Batistuzzo, M.C. Attentional bias modification treatment for obsessive-compulsive disorder: a randomized clinical trial.
3. Kirk, P. A., Qamar, P., Zugman, A., **Abend, R.**, Pine, D. S., & Kircanski, K. Pediatric Anxiety and Movie-Evoked Brain-Heart Communication.
4. Qamar, P., Lebowitz, E. R., **Abend, R.**, Pine, D. S., Kirk, P. A. Assessing Behavioral Threat Avoidance in Pediatric Anxiety with Naturalistic Games.
5. Fishman, J., Cohen, O., **Abend, R.**, Haaker, J. & Shechner, T. Overgeneralization of Observational Learned Threat Predicts Anxiety in War-Exposed Adolescents: A Longitudinal Study.
6. Kirk, P. A., Qamar, P., Lentz, J., Zugman, A., **Abend, R.**, Kircanski, K., Pine, D. S. Linking Subjective Experience of threat anticipation to Brain Function in Pediatric Anxiety using Natural Language Processing.

FUNDING

Donation (PI; 2024): Neural mechanisms of MDMA-assisted psychotherapy for PTSD.

Israel Science Foundation (Co-PI; 2023-28): Anticipating threat: Identifying a novel circuit-based biomarker for pediatric anxiety.

US-Israel Binational Science Foundation (Co-PI; 2023-27): Perturbed fear learning in children growing up in proximity to military-conflict and its effect on the development of pediatric anxiety disorders.

NARSAD Young Investigator Grant (PI; 2020-22): A neural marker of pediatric anxiety treatment response.

The Kety NIMH Memorial Award (PI; 2019-20): A neural marker of pediatric anxiety treatment response.

SOME RECENT PRESENTATIONS

1. Something bad might happen: Linking evolutionary, clinical, and neuroscience perspectives to redefine anxiety. (2025). Clinical Psychology department seminar, Erasmus University Rotterdam, the Netherlands. Invited talk.
2. Methodological variations of the fear conditioning paradigm. (2025). 16th European Meeting on Human Fear Conditioning. The Netherlands. Invited symposium chair.
3. Something bad might happen: Linking evolutionary, clinical, and neuroscience perspectives to understand anxiety. (2025). School of Psychology seminar, University of Haifa, Israel. Invited talk.
4. Capturing excessive passive avoidance behavior in pathological anxiety using a novel lab paradigm. (2024). *Society of Biological Psychiatry* annual meeting, Austin, TX.
5. Pathological anxiety and conditioned threat-anticipatory physiological responding during fear learning. (2023). *Society of Biological Psychiatry* annual meeting, San Diego, CA.
6. Aberrant brain function reconfiguration during naturalistic fear induction in pediatric anxiety disorders: novel approach with implications for pathophysiological mechanisms. (2022). *American College of Neuropsychopharmacology* annual Meeting, Phoenix, AZ.
7. Cognitive threat biases and development. *Association for Cognitive Bias Modification webinar*. (2022). Invited talk.

8. Adaptive and maladaptive fear: From basic neuroscience to clinical application. *Reichman University seminar*, Israel. (2021). Invited talk.
9. On adaptive and maladaptive fear. *Inst. of Cognitive Neuroscience*, University College London, London. (2021). Invited talk.
10. Novel Avenues in the Study of Fear Learning Mechanisms. *Association for Behavioral and Cognitive Therapies*, 54th Annual Meeting. (2020). Symposium chair and presenter.
11. Something bad might happen: Insights from threat-anticipatory learning on anxiety across age. *Cognitive Neuroscience Seminar*, Florida International University, FA. (2019). Invited talk.
12. Insights from anticipatory threat learning on anxiety. *NIMH Investigator Seminar Series*, NIH, MD. (2019). Invited talk.

HONORS / AWARDS

- Elected to the Israel Academy of Sciences and Humanities, Young Scholars Forum (2024-25).
- Award for excellence in academic leadership; School of Psychology, Reichman University (2024).
- American College of Neuropsychopharmacology travel award (2022).
- ScienceAbroad travel award (2021).
- Society of Biological Psychiatry travel award (2020).
- NIMH Fellowship travel award (2019).
- NIH Intramural Research Program travel award (2019).
- Kety NIMH Memorial Award for Clinical Research (2019).
- Post-doctoral fellowship award, Tel Aviv University (2015-16).
- Awards for excellence in teaching, Tel Aviv University (2007, 2012-15).
- Awards for outstanding academic achievement, Tel Aviv University (2006, 2014-15).
- The Lautman Program for Outstanding Students, Tel Aviv University (full tuition, 2000-04).

COMMUNITY

Community organization/membership

- Reichman University Brainstorm Neuroscience forum (founder)
- The Hierarchical Taxonomy of Psychopathology (member)
- Israel Trauma Coalition (member)
- Association for Cognitive Bias Modification (co-founder)
- ENIGMA-Anxiety consortium (member)
- TAU-NIMH Attention Bias Modification Treatment international initiative (co-founder)
- International Network of tES-fMRI (member)

Journal editor

- Editor, *BMC Psychology* (Springer Nature)
- Special issue editor, *the International Journal of Psychophysiology* (neural and physiological correlates of uncertainty)

Ad-hoc journal peer reviews

American Journal of Psychiatry; Biological Psychiatry; eLife; Journal of Neuroscience; Translational Psychiatry; Neuropsychopharmacology; Journal of Neuroscience Research; Neurobiology of Stress; Psychological Medicine; Biological Psychiatry: CNI; Journal of the American Academy of Child and Adolescent Psychiatry; Neuroscience and Biobehavioral Reviews; Scientific Reports; Chronic Stress; Neuropsychologia; Depression & Anxiety; Social, Cognitive, & Affective Neuroscience; Cortex; Journal of Child Psychology and Psychiatry; Brain Structure & Function; Journal of Anxiety

Disorders; Journal of Consulting and Clinical Psychology; Behavioural Brain Research; Journal of Affective Disorders; Behaviour Research and Therapy; Clinical Psychological Science; BMC Psychology; Brain Stimulation; International Journal of Psychophysiology; Heliyon; Developmental Cognitive Neuroscience; Motivation and Emotion; Assessment; Sleep; Brain and Behavior; Cognition & Emotion; Frontiers in Behavioral Neuroscience; BMC Psychiatry; PLOS ONE; Anxiety, Stress, & Coping; Biological Psychiatry: GOS; Neuroscience; European Child & Adolescent Psychiatry; Journal of Behavior Therapy and Experimental Psychiatry; Developmental Psychobiology; Cognitive, Affective, and Behavioral Neuroscience.

Grant reviews

- Israel Science Foundation (ISF, Israel)
 - Deutschen Forschungsgemeinschaft (DFG, Germany)
 - Fonds de la Recherche Scientifique (FNRS, Belgium)
 - Research Grants Council (Hong Kong)
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