

## CURRICULUM VITAE

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### I. EDUCATION

2013–2017	Creighton University School of Medicine, Omaha, NE	M.D.
2009–2013	Creighton University College of Arts and Sciences, Omaha, NE	B.S. Mathematics, GPA: 4.0

### II. POSTDOCTORAL TRAINING

#### A. Residency Training

2018–2021	Dartmouth-Hitchcock Medical Center, Geisel School of Medicine at Dartmouth College, Lebanon, NH	Research-Track Resident
2017–2018	Dartmouth-Hitchcock Medical Center, Geisel School of Medicine at Dartmouth College, Lebanon, NH	Medical Intern

#### B. Fellowships and Postdoctoral Training

2022–2024	Biomedical Data Science, Geisel School of Medicine, Dartmouth College, Hanover, NH (Funding Source: T32 CA134286)	Postdoctoral Research Fellow
2021–2022	Biomedical Data Science, Geisel School of Medicine, Dartmouth College, Hanover, NH (Funding Source: R01MH123482)	Postdoctoral Research Fellow

### III. ACADEMIC APPOINTMENTS

2025–	Dartmouth Geisel School of Medicine, Hanover, NH	Assistant Professor of Psychiatry
2024–	Center for Technology and Behavioral Health	Faculty Affiliate
2021–	Dartmouth-Hitchcock Medical Center, Lebanon, NH	Attending Psychiatrist

### IV. INSTITUTIONAL LEADERSHIP ROLES

2025–	Evergreen AI Initiative	Steering Committee; Project Leadership
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## V. LICENSURE AND CERTIFICATION

2026-	New Jersey Board of Medical Examiners, Licensed
2022-	Vermont Board of Medicine, Licensed
2021-	American Board of Psychiatry and Neurology (Scored in top 15% of test-takers)
2021-	New Hampshire Board of Medicine, Licensed
2019	Yellow Belt Training Course and Certification

## VI. HOSPITAL OR HEALTH SYSTEM APPOINTMENTS

2021-	Adult Psychiatrist, Hanover Psychiatry, Hanover, NH
2021-	Attending Psychiatrist, Dartmouth-Hitchcock Medical Center, Lebanon, NH

## VII. OTHER PROFESSIONAL POSITIONS

2018-	U.S. Army Reserve Medical Corps	MAJOR (O4)
2024	ChatNexus (CA)	Data Scientist Consultant
2019-	Artisight (Machine Vision Technology, artisight.com)	Private Contractor, Software Development

## VIII. PROFESSIONAL DEVELOPMENT ACTIVITIES

2024	US ARMY Basic Officer Leadership Course (BOLC) Phase II
2024	US ARMY Direct Commissioning Course (DCC)
2024	US ARMY Basic Officer Leadership Course (BOLC) Phase I
2023	Amazon Web Services (AWS) Research Immersion Workshop
2022	Data Analysis with R Programming, Google Data Analytics, Coursera
2020	Neural Networks and Deep Learning, Machine Learning Track, Coursera
2020	Sequence Models, Machine Learning Track, Coursera
2020	Advanced NLP with spaCY, DataCamp
2019	Dartmouth SYNERGY RedCap Workshop

## IX. TEACHING ACTIVITIES

### A. Military

2024	Suicide Prevention Lecture (Battle Assembly)
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### B. Institutional

2026	AI in Mental Health: Didactic Lecture for Psychiatry Residency Training Program, Dartmouth Health. Co-developed and co-presented with Sebastian Kolaj, MD, PGY-2
2025	AI in Mental Health: Invited Didactic for Child and Adolescent Psychiatry Fellowship, Dartmouth Health
2020	Department of Psychiatry Journal Club, Dartmouth Hitchcock Medical Center (x2)

- 2019 Department of Psychiatry Journal Club, Dartmouth Hitchcock Medical Center (x2)
- 2019 Substance Use, Social Media, and Artificial Intelligence, VA Medical Center
- 2019 Healthy Aging Lecture, New Hampshire Psychiatric Hospital
- 2018 Department of Psychiatry Journal Club, Dartmouth Hitchcock Medical Center

**C. Supervising Trainees**

- 2021– Clinical supervision of psychiatry residents
- 2020–2021 Supervision of first year residents on call as senior resident
- 2017– Supervision of medical students on psychiatry clerkships and electives
- 2025– Supervision of undergraduate student researchers, Evergreen AI Initiative

**X. PRIMARY RESEARCH ADVISING**

2025–	Gabriel Vasquez-Jaffe	Bowdoin College	Therabot Research Program
2025–	Chris Bowers	Bowdoin College	Therabot Research Program
2025–	Cherish Zhao	Bowdoin College	Therabot Research Program
2025–	Ameesha Pani	Dartmouth College	Therabot Research Program, Independent Study
2024–	Julia Pye	Dartmouth College	Therabot Research Program. Awards: Lovelace Scholar Research Grant (Winter 2025; Spring 2025), Leave Term Grant (Summer 2025), Benjamin G. Benner '69 Undergraduate Research Fellowship (Summer 2025), Paul K. Richter and Evalyn E. Cook Richter Memorial Fund Grant (Fall 2025), Dartmouth College Undergraduate Research Grant (Winter 2025)
2023–2024	Ore James	Dartmouth College	Geisel-Jacobson Lab
2023–	Karim Khalil	Dartmouth College	Senior Thesis Advisor
2023–	Janelle Annor	Dartmouth College	Senior Project Co-Advisor
2022–	Jessica Meikle	Dartmouth College	Geisel-Jacobson Lab
2022–	Anastasia Bryan	Dartmouth College	Geisel-Jacobson Lab
2022–	Adaobi Amanna	Minerva University	Geisel-Jacobson Lab
2022–2024	Victor Moreno	Dartmouth College	Geisel-Jacobson Lab
2022–	Jonathan Cartwright	Dartmouth College	Geisel-Jacobson Lab
2022–	Stephen Adjei	Dartmouth College	Geisel-Jacobson Lab
2022–	Abigail Salzhauer	Dartmouth College	Geisel-Jacobson Lab
2021–	Veronica Abreau	Dartmouth College	Geisel-Jacobson Lab
2021–	Camilla Lee	Dartmouth College	Geisel-Jacobson Lab

2021–	Franklin Ruan	Dartmouth College	Neukom Scholarship, Kemeny Computing Prize, Freedman Presidential Scholarship; Medical School Composite Letter Writer
2020–	Bri Trudeau	Dartmouth College	Geisel-Jacobson Lab
2020–2022	Rachel Quist	Dartmouth College	Geisel-Jacobson Lab
2020–	Sukanya Bhattacharya	Dartmouth College	Geisel-Jacobson Lab
2017	Karrisa Tauber	Geisel School of Medicine at Dartmouth	Geisel School of Medicine at Dartmouth

**XI. ADVISING/MENTORING (OTHER)**

(See Section X for primary research advisees.)

***Ph.D. Qualifying Exam Committee Member***

2025–	Yama Chang, Quantitative Biomedical Sciences, Dartmouth College
2025–	Freya Ma, Quantitative Biomedical Sciences, Dartmouth College

**XII. ENGAGEMENT, ADVOCACY, COMMUNITY SERVICE, COMMUNITY EDUCATION**

2026	Op-ed: “Bill doesn’t protect NH from AI harm, it assures it.” New Hampshire Union Leader (with N. C. Jacobson). January 21, 2026. Advocacy against Senate Bill 640, which would restrict validated AI mental health tools while leaving unregulated consumer AI products unaddressed.
2025–2026	Legislative advocacy promoting responsible AI regulation in Vermont and New Hampshire, including engagement with state legislators on frameworks that enable development of safe and effective AI tools for mental health while protecting consumers from unvalidated products.

**XIII. RESEARCH ACTIVITIES**

***A. Sponsored Activity (Grants and Contracts)***

2025–	Evergreen	Steering Committee (70%)	Philanthropic Donations
2024–2025	Use of a Generative AI (Gen-AI) Chatbot for Treating Anxiety and Depression Among Young Adults	MPI	Emergence Capital
2024–	PEDI/PANS Prospective Incidence Study (1R21MH138881)	Co-I / 10%	NIH/NIMH
2024–2025	Use of a Generative AI (Gen-AI) Chatbot for Treating Anxiety and Depression Among Persons with Cannabis Use Disorder (CUD)	MPI	NIDA P30 Grant
2022–2024	T32-CA134286, Dartmouth Cancer Center	Trainee	NCI

	Training Grant		
2021–2022	R01-MH123482 (PI: Jacobson), Mobile Sensing for Mental Health	Postdoctoral Fellow	NIH/NIMH
2019–2021	Dartmouth-Hitchcock Psychiatry Residency, Research Track Funding	Resident	Institutional

**XIV. PROGRAM DEVELOPMENT**

2025–	Development of AI curriculum for psychiatry residents
2019–	Development of research infrastructure and co-management of database for Dartmouth Hitchcock Pediatric Autoimmune Neuropsychiatric Disorders (PANDAS) Clinic

**XV. ENTREPRENEURIAL ACTIVITIES**

2025–	Therabot Labs LLC, Co-Founder (with Nicholas C. Jacobson, Ph.D.). Spin-out company developing and commercializing generative AI-based mental health treatment technology.
2024	Finalist, BehaviorSense Analytics, The Dartmouth Innovation Accelerator for Digital Health, Dartmouth College
2023	AutoDoc, Telehealth Psychiatry Automated Transcription Service, The Dartmouth Innovation Accelerator for Digital Health, Dartmouth College

**XVI. MAJOR COMMITTEE ASSIGNMENTS, INCLUSIVE OF PROFESSIONAL SOCIETIES**

2025–	Steering Committee, Evergreen AI Initiative, Dartmouth College
2024–	Sigma Xi, The Scientific Research Honor Society, Full Member
2023–	Institute of Electrical and Electronics Engineers (IEEE)
2023–	Society for Ambulatory Assessment (SAA)
2019	American Psychiatric Association (APA)
2019–	British Neuropsychiatry Association (BNPA)
2012–	Phi Beta Kappa, Foundation Member (PBK)
2012–	Pi Mu Epsilon, Member (PME)
2025	IEEE International Conference on Digital Health 2025, Program Committee

**XVII. INSTITUTIONAL CENTER OR PROGRAM AFFILIATIONS**

2024–	Center for Technology and Behavioral Health	Faculty Affiliate
2022–	Department of Epidemiology	Postdoctoral Research Fellow
2021–	Dartmouth-Hitchcock Medical Center	Faculty
2021–	Center for Technology and Behavioral Health	Postdoctoral Research Fellow
2017–2021	Dartmouth-Hitchcock Medical Center	Resident

**XVIII. EDITORIAL BOARDS**

**XIX. JOURNAL REFEREE ACTIVITY**

SAGE Digital Health	3
New England Journal of Medicine AI	2
npj Mental Health Research	1
BMC Digital Health	1
JAMA Network Open	1
American Psychologist	1
Journal of Psychiatric Research	2
Child and Adolescent Psychiatry and Mental Health	1
Scientific Reports (Nature Portfolio)	1
American Family Physician	1
AMIA 2020 Symposium	1
Stress and Health	1
ACM Transactions on Computing for Healthcare	1
Economics and Human Biology	1
HEALTH	1

**Grant Review**

2022                      Invited Grant Reviewer, Puerto Rico Science, Technology & Research Trust

**XX. AWARDS AND HONORS**

2025	Korea Defense Service Medal
2025	Army Commendation Medal
2024	Army Reserve Component Achievement Medal
2024	Biomedical Data Science Travel Award
2024	US ARMY Commander’s Coin Recipient; Direct Commissioning Course
2023	Society for Ambulatory Assessment (SAA) Travel Scholarship
2023	Postdoctoral Scholar Professional Development Award, Dartmouth College
2020	Research Poster Winner, New Hampshire Psychiatric Society
2020	Dartmouth Travel Award for International Research Presentation
2019	Dartmouth Travel Award for International Research Presentation
2018	Gold Humanism and Excellence in Teaching Award, Geisel School of Medicine at Dartmouth
2013–2017	Creighton Family Medicine Scholarship (\$80,000)

**XXI. INVITED PRESENTATIONS**

- 2026 Invited Panelist, “From Crisis to Care: Responsible Technology Solutions for Health Worker Mental Health,” The John Sloan Dickey Center for International Understanding, Dartmouth College, Hanover, NH (May 12, 2026). Panelists: Lisa Marsch, Danny Forger, Zul Merali, Michael V. Heinz; Moderator: Thomas Thesen.
- 2026 Workshop Participant, “Social and Emotional Uses of AI,” CHI 2026 (ACM Conference on Human Factors in Computing Systems), Barcelona, Spain (April 2026).
- 2026 Invited Presentation on AI in Mental Health, Dartmouth Student Health Service at Dick’s House, Dartmouth College, Hanover, NH
- 2026 Panel Discussion: The Personalized Mind, IPPA Summit of AI and Wellbeing (International Positive Psychology Association), Virtual Summit, March 23–27, 2026
- 2025 Dartmouth Brain Science Conference (7th); Expert Panelist on AI in Healthcare
- 2025 Dartmouth Innovation in Medicine & Healthcare Summit, Invited Faculty Pitch on Generative AI in Mental Healthcare; Expert Panelist
- 2025 Invited Presentation on AI in Mental Health; Novelty Behavioral Health
- 2025 Invited Presentation on Generative AI in Mental Health; MIT Media Lab’s Advancing Humans with AI (AHA) research program. Moderated by Dr. Rosalind Picard.
- 2025 Harnessing the Power of AI to Enable Highly Personalized Anytime/Anywhere Mental Health and Substance Use Care, IEEE ICDH 2025, Helsinki, Finland, Invited Panelist
- 2025 Generative AI for Suicide Prevention, IASR and IASP Webinar, Invited Speaker
- 2025 Development and Evaluation of a Generative AI Agent for Treating Mental Health Symptoms, German Society for Psychology Special Interest Group
- 2024 The Computer Will See You Now: An Exploration of New Digital Tools in Mental Health. Invited Speaker, New Hampshire Psychiatric Society Annual Meeting ^
- 2023 “Ecological Momentary Intervention of Anxiety and Depression among Persons Receiving Medication Treatment for Opioid Use Disorder,” Center for Technology and Behavioral Health, Dartmouth College
- 2023 “Digital Health and a Case Study,” Invited Speaker at Nathan Smith Society, Dartmouth College, Hanover, NH
- 2021 “New Applications of Machine Learning in Mental Health,” Department of Psychiatry Grand Rounds Invited Speaker, Dartmouth-Hitchcock Medical Center, Lebanon, NH ^
- 2021 “The ChatBot Will See You Now: Development of a Deep-Learning Powered Therapist,” Invited Speaker at The Center for Technology and Behavioral Health, Dartmouth College, Hanover, NH

## XXII. BIBLIOGRAPHY

### ***Most Significant Publications***

The following five publications represent the most impactful contributions of my research program, selected on the basis of citation impact, journal prestige, and methodological innovation:

1. **Heinz, M. V.**, Mackin, D. M., Trudeau, B. M., Bhattacharya, S., Wang, Y., Banta, H. A., Jewett, A. D., Salzhauer, A. J., Griffin, T. Z., & Jacobson, N. C. (2025). Randomized Trial of a Generative AI Chatbot for Mental Health Treatment. *NEJM AI*, 2(4), A0a2400802. — First randomized controlled trial of a fully generative AI therapy chatbot, demonstrating a 51% reduction in depressive symptoms. Covered by over 250 news outlets worldwide.
2. **Heinz, M. V.**, Price, G. D., Ruan, F., Klein, R. J., Nemesure, M., Lopez, A., & Jacobson, N. C. (2022). Association of SSRI Use With Abnormal Physical Movement Patterns. *JAMA Network Open*, 5(4), e225403. — Large-scale analysis (N=7,162) using deep learning on nationally representative wearable accelerometer data, identifying movement-based signatures of antidepressant use.
3. Jacobson, N. C., Lekkas, D., Price, G., **Heinz, M. V.**, Song, M., O'Malley, A. J., & Barr, P. J. (2020). Flattening the Mental Health Curve: COVID-19 Stay-at-Home Orders Are Associated With Alterations in Mental Health Search Behavior in the United States. *JMIR Mental Health*, 7(6), e19347. — Most-cited paper in the portfolio (170+ citations); demonstrated real-time shifts in population mental health information-seeking during the pandemic.
4. **Heinz, M. V.**, Price, G. D., Singh, A., Bhattacharya, S., Chen, C.-H., Asyyed, A., Does, M. B., Hassanpour, S., Hichborn, E., Kotz, D., Lambert-Harris, C. A., Li, Z., McLeman, B., Mishra, V., Stanger, C., Subramaniam, G., Wu, W., Campbell, C. I., Marsch, L. A., & Jacobson, N. C. (2025). A longitudinal observational study with ecological momentary assessment and deep learning to predict non-prescribed opioid use. *Journal of Substance Use and Addiction Treatment*, 173, 209685. — Novel integration of smartphone-based ecological momentary assessment with deep learning for real-time prediction of opioid use outcomes in a clinical population.
5. Nemesure, M. D., **Heinz, M. V.**, Huang, R., & Jacobson, N. C. (2021). Predictive modeling of depression and anxiety using electronic health records and a novel machine learning approach with artificial intelligence. *Scientific Reports*, 11(1), 1980. — Foundational work establishing ensemble machine learning pipelines for predicting psychiatric diagnoses from electronic health records; published in Nature's Scientific Reports.

### ***A. Peer-Reviewed Publications in Print, In Press or Other Media***

40. Lampe, E. W., Collins, A. C., Lee, A., Enbar-Salo, N., Griffin, T. Z., Pillai, A., **Heinz, M. V.**, Lekkas, D., Nemesure, M. D., Mackin, D. M., Nepal, S., Campbell, A. T., & Jacobson, N. C. (2026). Interindividual differences in digital phenotypes of major depressive disorder: A passive sensing study using smartphone and wearable sensor data. *Behaviour Research and Therapy*, 187, 104700. <https://doi.org/10.1016/j.brat.2026.104986>
39. Collins, A. C., Lekkas, D., **Heinz, M. V.**, Annor, J., Ruan, F., & Jacobson, N. C. (2025). ChatGPT as therapy: A qualitative and network-based thematic profiling of shared experiences, attitudes,

- and beliefs on Reddit. *Journal of Psychiatric Research*, 191, 277–284.  
<https://doi.org/10.1016/j.jpsychires.2025.09.057>
38. Kline, E. A., Lekkas, D., Bryan, A. C., Nemesure, M. D., Griffin, T. Z., Collins, A. C., Price, G. D., **Heinz, M. V.**, Oh, J. Y., Pillai, A., Nepal, S., Mackin, D. M., Campbell, A. T., & Jacobson, N. C. (2024). The role of borderline personality disorder traits in predicting longitudinal variability of major depressive symptoms. *Journal of Affective Disorders*, 367, 478–487.  
<https://doi.org/10.1016/j.jad.2024.07.104>
  37. Nepal, S., Pillai, A., **Heinz, M. V.**, Griffin, T. Z., Collins, A. C., Lekkas, D., Nemesure, M. D., Price, G. D., Mackin, D. M., Campbell, A. T., & Jacobson, N. C. (2024). MindScape: Exploring mindfulness in the wild through passively sensed behavioral data. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 8(3), 122:1–122:32.  
<https://doi.org/10.1145/3699761>
  36. Haddox, D., Mackin, D., Griffin, T., **Heinz, M. V.**, Nemesure, M. D., Collins, A. C., Price, G. D., Lekkas, D., Pillai, A., Nepal, S., Campbell, A. T., & Jacobson, N. C. (2025). Psychometric properties and validity of a mobile patient health questionnaire-9 (MPHQ-9) for ecological momentary assessment in depressed adults. *Psychological Assessment*. <https://doi.org/10.1037/pas0001431>
  35. **Heinz, M. V.**, Mackin, D. M., Trudeau, B. M., Wang, Y., Salzhauer, A. J., Griffin, T. Z., & Jacobson, N. C. (2025). Response to Letters about “Randomized Trial of a Generative AI Chatbot for Mental Health Treatment.” *NEJM AI*, 2(9), Alp2500680. <https://doi.org/10.1056/Alp2500680>
  34. Lekkas, D., Collins, A. C., **Heinz, M. V.**, Griffin, T. Z., Pillai, A., Nepal, S. K., Mackin, D. M., Campbell, A. T., & Jacobson, N. C. (2025). Acute suicidal ideation in context: Highlighting sentiment-based markers through the diary entries of a clinically depressed sample. *BMC Psychiatry*, 25(1), 650.  
<https://doi.org/10.1186/s12888-025-07108-4>
  33. **Heinz, M. V.**, Price, G. D., Singh, A., Bhattacharya, S., Chen, C.-H., Asyyed, A., Does, M. B., Hassanpour, S., Hichborn, E., Kotz, D., Lambert-Harris, C. A., Li, Z., McLeman, B., Mishra, V., Stanger, C., Subramaniam, G., Wu, W., Campbell, C. I., Marsch, L. A., & Jacobson, N. C. (2025). A longitudinal observational study with ecological momentary assessment and deep learning to predict non-prescribed opioid use. *Journal of Substance Use and Addiction Treatment*, 173, 209685. <https://doi.org/10.1016/j.josat.2025.209685>
  32. Collins, A. C., Price, G. D., Moreno, V. A., Mackin, D. M., Oh, J. Y., **Heinz, M. V.**, & Jacobson, N. C. (2025). A comparison of objective and subjective measures of physical activity, sedentary and sleep behaviors in depressed and nondepressed individuals. *Journal of Affective Disorders*, 375, 22–26. <https://doi.org/10.1016/j.jad.2025.01.092>
  31. **Heinz, M. V.**, Mackin, D. M., Trudeau, B. M., Bhattacharya, S., Wang, Y., Banta, H. A., Jewett, A. D., Salzhauer, A. J., Griffin, T. Z., & Jacobson, N. C. (2025). Randomized Trial of a Generative AI Chatbot for Mental Health Treatment. *NEJM AI*, 2(4), Aloa2400802.  
<https://doi.org/10.1056/Aloa2400802>
  30. Gallagher, M. R., Collins, A. C., Lekkas, D., Nemesure, M. D., Griffin, T. Z., Price, G. D., **Heinz, M. V.**, Pillai, A., Nepal, S., Mackin, D. M., Campbell, A. T., Winer, E. S., & Jacobson, N. C. (2025).

- Anhedonia in flux. *Journal of Affective Disorders*, 372, 27–36.  
<https://doi.org/10.1016/j.jad.2024.11.059>
29. Pillai, A., Spathis, D., Nepal, S., Collins, A. C., Mackin, D. M., **Heinz, M. V.**, Griffin, T. Z., Jacobson, N. C., & Campbell, A. (2025). Beyond Prompting: Time2Lang - Bridging Time-Series Foundation Models and Large Language Models for Health Sensing. *Proceedings of CHIL 2025*, PMLR 287, 268–288. <https://proceedings.mlr.press/v287/pillai25a.html>
  28. Jasser, M. T., Ferland, T., Bocian, T., Goff, M., Gauch, A., **Heinz, M. V.**, Joffrey, E., Morse, R., Albert, D., Frankovich, J., Madan, J. C., & Jasser, M. (2025). Acute Onset Neuropsychiatric Conditions in Children and Adolescents following SARS-CoV-2 Infection: A Case Series. *Developmental Neuroscience*, 47(4), 316–330. <https://doi.org/10.1159/000545349>
  27. Price, G. D., Collins, A. C., Mackin, D. M., **Heinz, M. V.**, & Jacobson, N. C. (2025). Use of passively collected actigraphy data to detect individual depressive symptoms. *Journal of Psychopathology and Clinical Science*, 134(1), 31–40. <https://doi.org/10.1037/abn0000933>
  26. Tlachac, M., **Heinz, M. V.**, Bryan, A. C., LaPreay, A., Dimas, G. L., Zhao, T., Jacobson, N. C., & Ogden, S. S. (2025). Datasets of Smartphone Modalities for Depression Assessment: A Scoping Review. *IEEE Transactions on Affective Computing*, 1–20. <https://doi.org/10.1109/TAFFC.2025.3568385>
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  24. Bryan, A. C. \*, **Heinz, M. V. \***, Salzhauer, A. J., Price, G. D., Tlachac, M. L., & Jacobson, N. C. (2024). Behind the Screen: A Narrative Review on the Translational Capacity of Passive Sensing for Mental Health Assessment. *Biomedical Materials & Devices*, 2(2), 778–810. \* Co-first Author <https://doi.org/10.1007/s44174-023-00150-4>
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- constantly evolving dynamical system. *Journal of Psychopathology and Clinical Science*, 133(2), 155–166. <https://doi.org/10.1037/abn0000884>
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5. Price, G. D., **Heinz, M. V.**, Nemesure, M. D., McFadden, J., & Jacobson, N. C. (2022). Predicting symptom response and engagement in a digital intervention among individuals with schizophrenia. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsyt.2022.807116>
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### **B. Manuscripts in Review and Preprint**

- Damien Lekkas, Heinz, M.V., Amanda C. Collins, Anastasia Bryan, Jenny Y. Oh, Nicholas C. Jacobson (2024). When Widespread Crises are Personally Relevant: A Longitudinal Mixed Model Analysis of COVID Perceived Stress in a Sample with Major Depressive Disorder. In Review.
- Subigya Nepal, Weichen Wang, Arvind Pillai, Xuhai Xu, Shayan Mirjafari, Mikio Obuchi, Michael Heinz, Matthew Nemesure, Damien Lekkas, Tess Griffin, Robert Klein, Ben Buck, Nicholas Jacobson, Dror Ben-Zeev, Deanna Barch, Andrew Campbell. Identifying Mental Health Diagnoses with Mobile Phone Sensing (2022).
- Nemesure, M. D., Heinz, M. V., Klein, R. J., McFadden, J. R. & Jacobson, N. C. Predictive Modeling Approach to Evaluate Individual Response to a Physical Activity Digital Intervention for Subjects with Major Depressive Disorder. (2021). <https://psyarxiv.com/3kjh/>
- Greg M. Silverman, Raymond L. Finzel, Heinz, M.V., Jake Vasilakes, Reed McEwan, Benjamin C. Knoll, Christopher J. Tignanelli, Hongfang Liu, Hua Xu, Xiaoqian Jiang, Genevieve B. Melton, Serguei VS Pakhomov. Extraction of UMLS Concepts from Clinical Notes using Ensembles of NLP Systems. <https://arxiv.org/abs/2108.02255>

### **C. Book Chapters**

2. **Heinz, M.V.**, Price, G., Song, S., Bhattacharya, S. & Jacobson, N.C. (2022). Passive Sensing and Generalized Anxiety Disorder. In I.C. Passos, F.D. Rabelo-da-Ponte, & F. Kapczinski (Eds.), *Digital Mental Health – A Practitioner’s Guide*: Springer Nature.
1. **Heinz M.V.**, Thomas NX, Nguyen ND, Griffin TZ, Jacobson NC. Technological advances in clinical assessment. In: Asmundson GJG, editor. *Comprehensive clinical psychology*. 2nd edition. Elsevier: 2022. p. 301–320. ISBN 9780128222324.

#### ***D. Applications and Software Development***

5. Heinz, MV, Jacobson, N.C. (2023). Open Source Web Platform for Phone Verification and Study Randomization. Available via Github mvh57.
4. Heinz, MV, Haslett, W., Zhou, K., Quist, R., Jacobson, N.C. (2022). Web Platform for Collecting Manually Curated Data for AI-driven Therapist. (<https://www.therasource.net>).
3. Heinz, MV, Koby, TR (2019). Algorithm for Detecting Positioning of Endoscopic Camera in Human Tissue. In *Use By Artisight*.
2. Heinz, MV (2019). Algorithm for automated detection and registration of bluetooth n-angulation devices. In *operation 2019–2022*.
1. Heinz, MV, Antosh, R. (2014–). QuidPro. A Collaborative Q&A Bank for Medical Education. [www.quidpro.net](http://www.quidpro.net), 200+ registered users.

#### ***E. Peer-Reviewed Presentations and Abstracts***

24. Lampe E.W., Collins, A.C., Lee, A., Enbar-Salo, N., Griffin T.Z., Pillai, A., Heinz, M.V., Lekkas D, Nemesure M.D., Price, G.D., Mackin D.M., Nepal S., Campbell, A.T., Jacobson, N.C. (2025, November) Interindividual Differences in Digital Phenotypes of Major Depressive Disorder. Paper presented at ABCT 59th Annual Convention, New Orleans, LA.
23. Michael V. Heinz et al. Using EMA with Deep Learning to Predict Non-Prescribed Opioid Use, Treatment Retention, and Medication Nonadherence. 2024 CTN Annual Scientific Meeting. Arlington, VA.
22. Gallagher, M. R. et al. (2024, November). Anhedonia in flux. Poster at 58th annual ABCT meeting, Philadelphia, PA.
21. Michael V. Heinz et al. Using EMA with Deep Learning to Predict Non-Prescribed Opioid Use. Society for Ambulatory Assessment (2024). Ann Arbor, MI.
20. Emily A. Kline et al. (2024) The role of borderline personality disorder traits in predicting longitudinal variability of MDD symptoms. SAA (2024). Ann Arbor, MI.
19. Haddox, D. et al. (2024). Psychometric Properties of an EMA PHQ-9. Poster at 58th ABCT meeting, Philadelphia, PA.
18. Sukriti Ghosh et al. Automatic Descriptive Classification of Self-Reported Traumatic Experiences Using a Pre-Trained LLM. ADAA (2024).
17. Subigya Nepal et al. (2023) LifeSense: In-the-Wild Smartphone Images for Depression Detection. Digital Mental Health & AI Symposium, Dartmouth College.

16. George D. Price et al. (2023) Predicting Future MDD Symptom Variability With Wearable Movement Data. Digital Mental Health & AI Symposium, Dartmouth College.
15. Heinz, M.V. et al. (2023) Detecting Use of Antidepressants Using Wearable Movement Data and Deep Learning. Digital Mental Health & AI Symposium, Dartmouth College.
14. Moreno, V. A. et al. (2023, November). Recall Biases and Self-Reporting in MDD. Poster at 57th ABCT meeting, Seattle, WA.
13. Tlachac, ML, Reisch, M, and Heinz, MV. Mobile Communication Log Time Series to Detect Depressive Symptoms. 45th IEEE EMBC. Sydney, Australia, 2023.
12. Collins, A. C. et al. (2023, November). Semantic signals in self-reference. Talk at 57th ABCT meeting, Seattle, WA.
11. Michael V. Heinz et al. A Novel Deep Learning Approach Using Time Series Actigraphy for MDD Detection. SAA (2023) Amsterdam, Netherlands. Full Paper Presentation. #
10. George D. Price et al. Predicting Future MDD Symptom Variability With Wearable Movement Data. ADAA 2023, Washington D.C.
9. Price, G. et al. (2022, March) Detecting Use of Antidepressants Using Wearable Movement Data. ADAA Conference, Denver.
8. Fields, A, Heinz, MV et al. (2021 April). Maintenance ECT in the Treatment of OCD with Somatic Symptoms. Poster, NH Psychiatry, Lebanon, NH.
7. Jacobson, N. C., Heinz, MV, & Kim, J. (2021, April). Designing A Generative Mental Health Chatbot. In Annals Of Behavioral Medicine (Vol. 55).
6. Heinz M et al. (2020, September) Topiramate Induced Psychosis. Poster, NH Psychiatric Society, Lebanon, NH. Poster Prize (\$50) Winner.
5. Nemesure, M.D., Heinz, M.V. et al. (2020, November). Predictive Modeling of Psychiatric Illness using EMRs. Oral symposium at ABCT, Philadelphia, PA. #
4. Nemesure M et al. (2020) Predictive Modeling of Psychiatric Illness using EMRs. APA Annual Meeting, Philadelphia, PA. (Canceled due to COVID-19.)
3. Heinz M et al. (2020, March) Topiramate Induced Psychosis. Poster, British Neuropsychiatry Association, London, UK.
2. Meng X\*, Heinz MV\* et al. (2019, August) Understanding Urgency in Radiology Reporting. Poster, MEDINFO, Lyon, France.
1. Wilson B, Heinz MV et al. Feedback CPR: Breathing New Life Into Evaluations. Panelist, APA 2019 Conference, San Francisco, CA.

## **MILITARY SERVICE**

2025	Mobilization to South Korea with 321st Combat Operational Stress Control (COSC)
2022–	Assignment to 451st Medical Detachment
2018–	U.S. Army Reserve Officer (MAJOR, O4). Army Medical Department Professional Management Command.

**AREAS OF EXPERTISE**

Large Language Models

Digital Mental Health

Mood and Anxiety Disorders

Natural Language Processing

Research Participant Recruitment and Engagement

Web Application Development

## SELECTED MEDIA & PRESS

Therabot was covered in over 300 stories from over 250 news outlets, including NBC, the New York Times, the Washington Post, and Forbes. (2025)

- 2026 “DSG Senators consider solutions to student mental health ‘crisis.’” The Dartmouth. January 2026.
- 2026 Jacobson, N. C. & Heinz, M. V. “Bill doesn’t protect NH from AI harm, it assures it.” The Washington Post (Ripple). January 21, 2026.
- 2026 “AI and Mental Health: Benefits, Risks, & Expert-Backed Prompts.” Newsweek. 2026.
- 2026 “Using AI as a Therapist? Why Professionals Say You Should Think Again.” CNET. 2026.
- 2025 “Are A.I. Therapy Chatbots Safe to Use?” The New York Times. 2025.
- 2025 “Kids Are in Crisis. Could Chatbot Therapy Help?” The New York Times. 2025.
- 2025 “If You Use AI For Therapy, Here Are 5 Things Experts Recommend.” The Washington Post. 2025.
- 2025 “The (Artificial Intelligence) Therapist Can See You Now.” NPR Shots Health News. April 7, 2025.
- 2025 Trang, B. “Dartmouth put its AI therapy chatbot through the RCT wringer.” STAT News. April 2, 2025.
- 2025 “The first trial of generative AI therapy shows it might help with depression.” MIT Technology Review. March 28, 2025.
- 2025 “Regulators struggle to keep up with AI therapy apps.” Associated Press (syndicated to NBC, Houston Chronicle, US News). September 2025.
- 2025 “Therabot for the treatment of mental disorders” (commentary on Therabot trial, by Bakoyiannis). Nature Mental Health. 2025.
- 2025 “Assessing generative artificial intelligence for mental health” (commentary on Therabot trial, by Torous & Topol). The Lancet. 2025.
- 2025 “Does AI Therapy Have a Future?” Communications of the ACM. December 2025.
- 2025 “Study Finds AI Chatbot Can Improve Mental Health.” Psychology Today. March 2025.
- 2025 “Mental Health AI Chatbot Rivals Human-Based Therapy in Less Time.” Medscape. 2025.
- 2025 “How to Build a Therapeutic Chatbot.” Psychiatric News (APA). 2025.
- 2025 “Generative AI chatbot ‘promising’ for mental health treatment.” Healio. April 10, 2025.
- 2025 BBC Radio 4 PM interview on Therabot and generative AI therapy. 2025.
- 2025 “Rise of the therapy chatbots.” BBC Science Focus Magazine. 2025.
- 2025 “Researchers Weigh the Use of AI for Mental Health.” Undark Magazine. November 4, 2025.
- 2024 “The MoodCapture App May See That You’re Depressed Before You Do.” The Daily Beast. 2024.
- 2024 Van Der Watt, E. “AI smartphone app can detect depression from facial cues.” Daily

- AI. March 4, 2024.
- 2024 “AI enables phones to detect depression from facial cues.” United Press International (UPI). February 27, 2024.
- 2024 “Smartphone App with AI Detects Depression Onset from Facial Expressions.” HCPLive. 2024.
- 2024 “Phone App Uses AI to Detect Depression From Facial Cues.” Dartmouth College News. February 2024.
- 2023 Barath, H. “From Ideas to Impact: Symposium on Digital Therapeutics.” Dartmouth News. October 2023.
- 2022 Green, S. “Detecting Potential Medication Side Effects in Treating Depression and Anxiety.” Dartmouth Geisel School of Medicine News. April 2022.