Stanford

Mahendra T. Bhati

- Clinical Professor, Psychiatry and Behavioral Sciences
- Clinical Professor, Neurosurgery

CLINICAL OFFICE (PRIMARY)

- **Psychiatry Clinic**

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Bio

BIO

Dr. Bhati is an interventional psychiatrist with expertise in psychiatric diagnosis, psychopharmacology, and neuromodulation. He completed postdoctoral research studying language abnormalities and transcranial magnetic stimulation (TMS) evoked potentials in schizophrenia. He was a principal investigator for the DSM-5 academic field trials, and his research experiences included roles as an investigator in the first controlled clinical trials of deep brain stimulation (DBS) and low-field synchronized TMS for treatment of depression. His current interests include studying magnetic resonance imaging (MRI) and augmented reality to target TMS, vagus nerve stimulation (VNS) and DBS for treatment-resistant depression, responsive neurostimulation (RNS) for treatment of impulse and fear-related disorders, and focused ultrasound (FUS) for treatment-resistant obsessive compulsive disorder and depression. Dr. Bhati founded and directs a clinical fellowship in Interventional Psychiatry at Stanford.

CLINICAL FOCUS

- Psychiatry
- Psychopharmacology
- Neuromodulation

ACADEMIC APPOINTMENTS

- Clinical Professor, Psychiatry and Behavioral Sciences
- Clinical Professor, Neurosurgery

ADMINISTRATIVE APPOINTMENTS

- Training Director, Interventional Psychiatry Fellowship, Stanford University Hospital, (2021- present)
- Director of Electroconvulsive Therapy, Stanford University Hospital, (2016-2022)
- Section Chief of Interventional Psychiatry, Stanford University, (2016-2022)

HONORS AND AWARDS

- Innovator Grant Award, Stanford University Department of Psychiatry (2018)

- Health Care Hero, University of Pennsylvania Health System (2014)
- Earl Bond Award, University of Pennsylvania Department of Psychiatry (2013)
- Irma Bland Award for Excellence in Teaching Residents, American Psychiatric Association (2012)
- Stunkard Faculty Award, University of Pennsylvania Department of Psychiatry (2010)
- Junior Investigator Grant Award, University of Pennsylvania (2007)
- Travel Fellowship Award, Society of Biological Psychiatry (2006)
- Ruth L. Kirschstein National Research Service Award, National Institutes of Health (2005-2007)
- Clinical Research Scholar, National Institutes of Health (2002-2005)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American College of Psychiatrists (2018 - present)
- Affiliate, Stanford Neurosciences Institute (2017 - present)
- Member, Society of Biological Psychiatry (2017 - present)
- Psychiatric Disease Steering Committee, Focused Ultrasound Foundation (2016 - present)
- Member, International Society for ECT and Neurostimulation (2009 - present)
- Diplomate, American Board of Psychiatry and Neurology (2006 - present)
- Member, American Society of Clinical Psychopharmacology (2005 - present)
- Member, American Psychiatric Association (1997 - present)
- Member, American Medical Association (1997 - 2019)

PROFESSIONAL EDUCATION

- Postdoctoral research, University of Pennyslvania , Neuropsychiatry (2007)
- Residency, University of Pennsylvania , Psychiatry (research track) (2005)
- Medical Education: Louisiana State University Health Sciences Center Registrar (2001) LA
- B.S., Emory University , Biology (1996)
- B.A., Emory University , Chemistry (1996)

LINKS

- Stanford Psychiatry: http://med.stanford.edu/psychiatry.html
- Stanford Neurosurgery: http://med.stanford.edu/neurosurgery/people/research_faculty.html
- Stanford Brain Stimulation Lab: https://bsl.stanford.edu/
- Stanford Interventional Psychiatry Clinic: https://med.stanford.edu/psychiatry/patient_care/intvpsych.html
- Stanford Interventional Psychiatry Fellowship: https://med.stanford.edu/psychiatry/education/interventionalpsych.html
- Stanford Neurosciences Institute: https://neuroscience.stanford.edu/people/affiliated-faculty/grid
- Stanford Health Care: https://stanfordhealthcare.org/doctors/b/mahendra-bhati.html

Publications

PUBLICATIONS

- **Responsive deep brain stimulation guided by ventral striatal electrophysiology of obsession durably ameliorates compulsion.** *Neuron*
  Nho, Y. H., Rolle, C. E., Topalovic, U., Shivacharan, R. S., Cunningham, T. N., Hiller, S., Batista, D., Feng, A., Espil, F. M., Kratter, I. H., Bhati, M. T., Kellogg, M., Raslan, et al
  2023

- **Pilot study of responsive nucleus accumbens deep brain stimulation for loss-of-control eating.** *Nature medicine*
  Shivacharan, R. S., Rolle, C. E., Barbosa, D. A., Cunningham, T. N., Feng, A., Johnson, N. D., Safer, D. L., Bohon, C., Keller, C., Buch, V. P., Parker, J. J., Azagury, D. E., Tass, et al
  2022

- **Aberrant impulse control circuitry in obesity.** *Molecular psychiatry*
  Barbosa, D. A., Kuijper, F. M., Duda, J., Wang, A. R., Cartmell, S. C., Saluja, S., Cunningham, T., Shivacharan, R. S., Bhati, M. T., Safer, D. L., Lock, J. D., Malenka, R. C., de Oliveira-Souza, et al
  2022

- **National Network of Depression Centers' Recommendations on Harmonizing Clinical Documentation of Electroconvulsive Therapy.** *The journal of ECT*
  Zandi, P. P., Morreale, M., Reti, I. M., Maixner, D. F., McDonald, W. M., Patel, P. D., Achtyes, E., Bhati, M. T., Carr, B. R., Conroy, S. K., Cristancho, M., Dubin, M. J., Francis, et al
  2022

- **Interventional Neuropsychiatry** *Concise Guide to Neuropsychiatry and Behavioral Neurology*
  Coetzee, J. P., Kratter, I. H., Bhati, M. T., Williams, N. R.
  American Psychiatric Association Publishing.2022; 3: 439-449

- **Natural language processing methods are sensitive to sub-clinical linguistic differences in schizophrenia spectrum disorders.** *NPJ schizophrenia*
  Tang, S. X., Kriz, R., Cho, S., Park, S. J., Harowitz, J., Gur, R. E., Bhati, M. T., Wolf, D. H., Sedoc, J., Liberman, M. Y.
  2021; 7 (1): 25

- **Deep Brain Stimulation of the Ventral Capsule/Ventral Striatum for Treatment-Resistant Depression: A Decade of Clinical Follow-Up.** *The Journal of clinical psychiatry*
  Hitti, F. L., Cristancho, M. A., Yang, A. I., O'Reardon, J. P., Bhati, M. T., Baltuch, G. H.
  2021; 82 (6)

- **Deep Transcranial Magnetic Stimulation Combined With Brief Exposure for Posttraumatic Stress Disorder: A Prospective Multisite Randomized Trial.** *Biological psychiatry*
  Isserles, M., Tendler, A., Roth, Y., Bystritsky, A., Blumberger, D. M., Ward, H., Feifel, D., Viner, L., Duffy, W., Zohar, J., Keller, C. J., Bhati, M. T., Etkin, et al
  2021

- **Decreased Speech Coherence Captured by Novel Natural Language Processing Methods in Two Cohorts of Individuals With Schizophrenia**
  Tang, S., Kriz, R., Cho, S., Sedoc, J., Park, S., Harowitz, J., Bhati, M., Gur, R., Wolf, D., Liberman, M.
  ELSEVIER SCIENCE INC.2020: S379–S380

- **Brain-Responsive Neurostimulation for Loss of Control Eating: Early Feasibility Study.** *Neurosurgery*
  Wu, H. n., Adler, S. n., Azagury, D. E., Bohon, C. n., Safer, D. L., Barbosa, D. A., Bhati, M. T., Williams, N. R., Dunn, L. B., Tass, P. A., Knutson, B. D., Yutsis, M. n., Fraser, et al
  2020

- **Comparison of head pose tracking methods for mixed-reality neuronavigation for transcranial magnetic stimulation** *SPIE Medical Imaging*
  Sathyanarayana, S., Leuze, C., Hargreaves, B., Daniel, B. L., Wetzstein, G., Etkin, A., Bhati, M. T., McNab, J. A.
  2020

- **Comparative effectiveness of neuroablation and deep brain stimulation for treatment-resistant obsessive-compulsive disorder: a meta-analytic study** *JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY*
  Kumar, K. K., Appelboom, G., Lamsam, L., Caplan, A. L., Williams, N. R., Bhati, M. T., Stein, S. C., Halpern, C. H.
  2019; 90 (4): 469–73

- **MR-Guided Focused Ultrasound Versus Radiofrequency Capsulotomy for Treatment-Refractory Obsessive-Compulsive Disorder: A Cost-Effectiveness Threshold Analysis** *FRONTIERS IN NEUROSCIENCE*
  Kumar, K. K., Bhati, M. T., Ravikumar, V. K., Ghanouni, P., Stein, S. C., Halpern, C. H.
  2019; 13

- **Adjunctive repetitive transcranial magnetic stimulation delivers superior quality of life for focal epilepsy compared to anti-epileptic drugs: A meta-analytic utility prediction study.** *Brain stimulation*
  Mahajan, U. V., Parker, J. J., Williams, N. R., Bhati, M. T., Ku, S. n., Grant, G. n., Fisher, R. S., Stein, S. C., Halpern, C. H.
  2019

- **Brain Stimulation Therapies** *AMERICAN PSYCHIATRIC ASSOCIATION PUBLISHING TEXTBOOK OF PSYCHIATRY, 7TH EDITION*
  Keller, C., Bhati, M. T., Downar, J., Etkin, A., Roberts, L. W.
  2019: 861–98

- **Naturalistic Clinical Monitoring of rTMS-Induced Plasticity With TMS-EEG**
  Keller, C., Wu, W., Sarhadi, K., Zhang, Y., Kerwin, L., Bhati, M., Etkin, A.
  ELSEVIER SCIENCE INC.2018: S195

- **Deep Brain Stimulation for Alzheimer's Disease: Ethical Challenges for Clinical Research.** *Journal of Alzheimer's disease : JAD*
  Siegel, A. M., Barrett, M. S., Bhati, M. T.
  2017; 56 (2): 429-439

- **Deciphering deep brain stimulation for depression.** *The lancet. Psychiatry*
  Bhati, M. T., Halpern, C. H.
  2017

- **A naturalistic, multi-site study of repetitive transcranial magnetic stimulation therapy for depression.** *Journal of affective disorders*
  Taylor, S. F., Bhati, M. T., Dubin, M. J., Hawkins, J. M., Lisanby, S. H., Morales, O., Reti, I. M., Sampson, S., Short, E. B., Spino, C., Watcharotone, K., Wright, J.
  2016; 208: 284-290

- **Cognitive outcome after ventral capsule/ventral striatum stimulation for treatment-resistant major depression.** *Journal of neurology, neurosurgery, and psychiatry*
  Kubu, C. S., Brelje, T., Butters, M. A., Deckersbach, T., Malloy, P., Moberg, P., Tröster, A. I., Williamson, E., Baltuch, G. H., Bhati, M. T., Carpenter, L. L., Dougherty, D. D., Howland, et al
  2016

- **A Commentary on Attitudes Towards Deep Brain Stimulation for Addiction.** *Journal of neurology & neuromedicine*
  Lee, K. E., Bhati, M. T., Halpern, C. H.
  2016; 1 (8): 1–3

- **A Randomized Sham-Controlled Trial of Deep Brain Stimulation of the Ventral Capsule/Ventral Striatum for Chronic Treatment-Resistant Depression** *BIOLOGICAL PSYCHIATRY*
  Dougherty, D. D., Rezai, A. R., Carpenter, L. L., Howland, R. H., Bhati, M. T., O'Reardon, J. P., Eskandar, E. N., Baltuch, G. H., Machado, A. D., Kondziolka, D., Cusin, C., Evans, K. C., Price, et al
  2015; 78 (4): 240-248

- **Efficacy and Safety of Low-field Synchronized Transcranial Magnetic Stimulation (sTMS) for Treatment of Major Depression** *BRAIN STIMULATION*
  Leuchter, A. F., Cook, I. A., Feifel, D., Goethe, J. W., Husain, M., Carpenter, L. L., Thase, M. E., Krystal, A. D., Philip, N. S., Bhati, M. T., Burke, W. J., Howland, R. H., Sheline, et al
  2015; 8 (4): 787-794

- **Defining Psychosis: The Evolution of DSM-5 Schizophrenia Spectrum Disorders** *CURRENT PSYCHIATRY REPORTS*
  Bhati, M. T.
  2013; 15 (11)

- **Effect of retrieval effort and switching demand on fMRI activation during semantic word generation in schizophrenia** *SCHIZOPHRENIA RESEARCH*
  Ragland, J. D., Moelter, S. T., Bhati, M. T., Valdez, J. N., Kohlerc, C. G., Siegel, S. J., Gur, R. C., Gur, R. E.
  2008; 99 (1-3): 312-323

- **Facial emotion recognition in schizophrenia: When and why does it go awry?** *SCHIZOPHRENIA RESEARCH*
  Turetsky, B. I., Kohler, C. G., Indersmitten, T., Bhati, M. T., Charbonnier, D., Gur, R. C.
  2007; 94 (1-3): 253-263

- **Clinical manifestations, diagnosis, and empirical treatments for catatonia.** *Psychiatry (Edgmont (Pa. : Township))*
  Bhati, M. T., Datto, C. J., O'Reardon, J. P.
  2007; 4 (3): 46-52

- **Catatonia and prediction of response to ECT** *Psychiatric Annals*
  Caroff, S. N., Ungvari, G. S., Bhati, M. T., Datto, C. J., O'Reardon, J. P.
  2007; 32 (1): 57-64

- **The brain, language, and schizophrenia.** *Current psychiatry reports*
  Bhati, M. T.
  2005; 7 (4): 297-303
- **What makes aripiprazole the 'different' antipsychotic.** *Current Psychiatry*
  Bhati, M. T.
  2005; 4 (7): 51-60