Stanford



Jennifer Keller

Clinical Professor, Psychiatry and Behavioral Sciences

CLINICAL OFFICE (PRIMARY)

- **Psychiatry and Behavioral Sciences**

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Bio

BIO

Dr. Jennifer Keller is a clinical psychologist who specializes in the assessment of psychiatric conditions. She conducts evaluations for adults on a wide-variety of conditions, including attention deficits (ADHD), cognitive and memory changes or impairments, mood and anxiety disorders, thought disorders, and effects of trauma. She has practiced as a psychologist for more than 15 years. Dr. Keller has a special interest in working with women with interpersonal trauma.

CLINICAL FOCUS

- Clinical Psychology

ACADEMIC APPOINTMENTS

- Clinical Professor, Psychiatry and Behavioral Sciences

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Research Professor, Palo Alto University (2009 - present)
- Board Member, No Means No Worldwide (2013 - 2022)
- Advisor, WOMEN SV (2012 - 2018)

PROFESSIONAL EDUCATION

- Internship: VA Medical Center Palo Alto (2000) CA
- Fellowship: Stanford University School of Medicine (2001) CA
- PhD Training: University of Illinois Department of Psychology (1999) IL
- Ph.D., U of Illinois Urbana-Champaign , Clinical Psychology (1999)

COMMUNITY AND INTERNATIONAL WORK

- Linguistic and Cultural Adaptation of the Building Empowerment and Resilience Program for Adolescent Girls in Gujarat, India, India

- Empowerment of Adolescent girls
- Building Empowerment and Resilience Program in Women with a history of Interpersonal Trauma, Stanford
- Expression of Mental Health Symptoms in Pakistan, Pakistan

LINKS

- KGC: http://kgc.stanford.edu/people.html#scholars

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My current work focuses on the prevention and intervention of interpersonal violence and abuse in women. Recent research from the CDC (2011) finds that 1 in 5 women in the U.S. experience rape in their lifetime and more than 1 in 3 women experience violence from a partner. Recent estimates put the cost of childhood violence on par with medical conditions such as diabetes and stroke (Fang, 2012). Much of this abuse is preventable. The toll of interpersonal violence on women includes reduced psychological, interpersonal, physical, occupational, and economic functioning; all of which reduce her quality of life. We are researching an adjunctive therapeutic class which provides psychoeducation, psychological skill development, and physical empowerment training to women who have a history of interpersonal trauma. In addition, we are piloting a program to promote positive health behaviors, personal safety, and empowerment for adolescent girls, partnering with a local high school.

The plight of women is even more severe in other parts of the world. Over the last few years, I have been developing several collaborations with researchers and Non-Governmental Organizations (NGOs) in South Asia, including India and Pakistan. I have begun working with a non-profit in Kenya to examined the efficacy of their girls empowerment program as well. Collectively, our vision is to improve the status of women in these countries, focusing on women's mental health and the prevention of violence.

I am also very interested in the biological links between interpersonal trauma and depression. Several studies have suggested relationships between dysfunctional hypothalamic-pituitary adrenal (HPA) activity and trauma, as well as distinct links between HPA dysfunction and depression. Previous research suggests that early life stress makes the HPA axis more stress reactive and therefore leads to dysfunction in cognition, cortisol, and even brain volume. We are examining these relationships between trauma, depression, cognition, and biological factors, including HPA activity, genetic expression, and brain structure and function.

CLINICAL TRIALS

- The BEAR Therapeutic Program for Women, Recruiting
- Clinical and Biological Characteristics of Psychotic Depression, Not Recruiting
- Imaging the Nucleus Accumbens in Major Depressed Patients 'Treated With Pramipexole, Not Recruiting
- Self-Defense Training in Women With Trauma, Not Recruiting
- Treatment of Schizoaffective Disorder Using Mifepristone, Not Recruiting
- BEAR for Women Who Have Experienced Sexual Assault and Have Suicidal Thoughts, Not Specified

Publications

PUBLICATIONS

- **Proteomic profiles of cytokines and chemokines in moderate to severe depression: Implications for comorbidities and biomarker discovery.** *Brain, behavior, & immunity - health*
  Watson, K. T., Keller, J., Spiro, C. M., Satz, I. B., Goncalves, S. V., Pankow, H., Kosti, I., Lehallier, B., Sequeira, A., Bunney, W. E., Rasgon, N. L., Schatzberg, A. F.

2024; 36: 100731

- **Corticotropin-releasing factor 1 receptor haplotype and cognitive features of major depression.** *Translational psychiatry*
  Davis, E. G., Keller, J. n., Hallmayer, J. n., Pankow, H. R., Murphy, G. M., Gotlib, I. H., Schatzberg, A. F.
  2018; 8 (1): 5

- **A 6-Week School Curriculum Improves Boys' Attitudes and Behaviors Related to Gender-Based Violence in Kenya** *JOURNAL OF INTERPERSONAL VIOLENCE*
  Keller, J., Mboya, B. O., Sinclair, J., Githua, O. W., Mulinge, M., Bergholz, L., Paiva, L., Golden, N. H., Kapphahn, C.
  2017; 32 (4): 535-557

- **Trait anhedonia is associated with reduced reactivity and connectivity of mesolimbic and paralimbic reward pathways.** *Journal of psychiatric research*
  Keller, J., Young, C. B., Kelley, E., Prater, K., Levitin, D. J., Menon, V.
  2013; 47 (10): 1319-1328

- **Hippocampal and amygdalar volumes in psychotic and nonpsychotic unipolar depression** *AMERICAN JOURNAL OF PSYCHIATRY*
  Keller, J., Shen, L., Gomez, R. G., Garrett, A., Solvason, H. B., Reiss, A., Schatzberg, A. F.
  2008; 165 (7): 872-880

- **Cortisol circadian rhythm alterations in psychotic major depression** *BIOLOGICAL PSYCHIATRY*
  Keller, J., Flores, B., Gomez, R. G., Solvason, H. B., Kenna, H., Williams, G. H., Schatzberg, A. F.
  2006; 60 (3): 275-281

- **Is ibogaine treatment durable? 12-month follow-up of magnesium-ibogaine therapy (MISTIC) in special operations veterans with traumatic brain injuries.** *Translational psychiatry*
  Faerman, A., Lissemore, J. I., Geoly, A. D., Cherian, K. N., Sridhar, M., Kim, B., Coetzee, J. P., Anker, L., Shamma, A., Keynan, J. N., Brown, R. E., Phillips, A., Jester, et al
  2026; 16 (1)

- **Low-Dose Buprenorphine Following Ketamine Treatment for Suicidal Ideation in Major Depressive Disorder: A Randomized, Double-Blind, Placebo-Controlled Trial.** *The American journal of psychiatry*
  Tucciarone, J. M., Bandeira, I. D., Blasey, C., Kratter, I. H., Ehrie, J., Keller, J., Pankow, H., Chang, M., Hawkins, J., Evers, A. G., Bernert, R., DeBattista, C., Truong, et al
  2026: appiajp20250840

- **LOW DOSE BUPRENORPHINE ENHANCES THE ANTISUICIDAL EFFECTS OF KETAMINE IN MAJOR DEPRESSIVE DISORDER: A RANDOMIZED CONTROLLED TRIAL**
  Bandeira, I. D., Tucciarone, J. M., Blasey, C., Kratter, I. H., Ehrie, J., Keller, J., Pankow, H., Chang, M., Hawkins, J., Evers, A. G., Bernert, R., Debattista, C., Truong, et al
  SPRINGERNATURE.2026

- **Evaluation of Interventions for Cognitive Symptoms in Long COVID: A Randomized Clinical Trial.** *JAMA neurology*
  Knopman, D. S., Koltai, D., Laskowitz, D., Becker, J., Charvet, L., Wisnivesky, J., Federman, A., Silverstein, A., Lokhnygina, Y., Pilloni, G., Haddad, M., Mahncke, H., Van Vleet, et al
  2025

- **Magnesium-ibogaine therapy in veterans with traumatic brain injuries.** *Nature medicine*
  Cherian, K. N., Keynan, J. N., Anker, L., Faerman, A., Brown, R. E., Shamma, A., Keynan, O., Coetzee, J. P., Batail, J., Phillips, A., Bassano, N. J., Sahlem, G. L., Inzunza, et al
  2024

- **In Their Own Words: Sexual Assault Resistance Strategies Among Kenyan Adolescent Girls Following Participation in an Empowerment Self-Defense Program.** *Violence against women*
  Edwards, K. M., Omondi, B., Wambui, R. A., Darragh-Ford, E., Apollo, R., Devisheim, H. H., Langat, N., Kaede, B., Ntinyari, W., Keller, J.
  2023: 10778012231153360

- **Stanford Neuromodulation Therapy (SNT): A Double-Blind Randomized Controlled Trial.** *The American journal of psychiatry*
  Cole, E. J., Phillips, A. L., Bentzley, B. S., Stimpson, K. H., Nejad, R., Barmak, F., Veerapal, C., Khan, N., Cherian, K., Felber, E., Brown, R., Choi, E., King, et al
  2021: appiajp202120101429

- **Stanford Accelerated Intelligent Neuromodulation Therapy for Treatment-Resistant Depression.** *The American journal of psychiatry*
  Cole, E. J., Stimpson, K. H., Bentzley, B. S., Gulser, M. n., Cherian, K. n., Tischler, C. n., Nejad, R. n., Pankow, H. n., Choi, E. n., Aaron, H. n., Espil, F. M., Pannu, J. n., Xiao, et al
  2020: appiajp201919070720

- **HPA axis in psychotic major depression and schizophrenia spectrum disorders: Cortisol, clinical symptomatology, and cognition.** *Schizophrenia research*
  Cherian, K., Schatzberg, A. F., Keller, J.
  2019

- **Diagnostic differences in verbal learning strategies and verbal memory in patients with mood disorders and psychotic disorders.** *Psychiatry research*
  Gill, S. K., Gomez, R. G., Keller, J., Schatzberg, A. F.
  2018; 269: 733–39

- **High-dose spaced theta-burst TMS as a rapid-acting antidepressant in highly refractory depression.** *Brain : a journal of neurology*
  Williams, N. R., Sudheimer, K. D., Bentzley, B. S., Pannu, J. n., Stimpson, K. H., Duvio, D. n., Cherian, K. n., Hawkins, J. n., Scherrer, K. H., Vyssoki, B. n., DeSouza, D. n., Raj, K. S., Keller, et al
  2018

- **Increased Intra-Limbic Functional Connectivity to Insula, Thalamus, Caudate, Putamen, and Cingulate Cortex in Patients With Major Depression**
  Sudheimer, K., Keller, J., Tennakoon, L., Gomez, R., Garrett, A., Schatzberg, A.
  NATURE PUBLISHING GROUP.2017: S172–S173

- **Resting-state connectivity biomarkers define neurophysiological subtypes of depression** *NATURE MEDICINE*
  Drysdale, A. T., Grosenick, L., Downar, J., Dunlop, K., Mansouri, F., Meng, Y., Fetcho, R. N., Zebley, B., Oathes, D. J., Etkin, A., Schatzberg, A. F., Sudheimer, K., Keller, et al
  2017; 23 (1): 28-38

- **Decreased hypothalamic functional connectivity with subgenual cortex in psychotic major depression.** *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*
  Sudheimer, K., Keller, J., Gomez, R., Tennakoon, L., Reiss, A., Garrett, A., Kenna, H., O'Hara, R., Schatzberg, A. F.
  2015; 40 (4): 849-860

- **Plasma oxytocin concentrations are lower in depressed vs. healthy control women and are independent of cortisol.** *Journal of psychiatric research*
  Yuen, K. W., Garner, J. P., Carson, D. S., Keller, J., Lembke, A., Hyde, S. A., Kenna, H. A., Tennakoon, L., Schatzberg, A. F., Parker, K. J.
  2014; 51: 30-36

- **Insular cortex abnormalities in psychotic major depression: relationship to gender and psychotic symptoms.** *Neuroscience research*
  Cohen, J. D., Nichols, T., Keller, J., Gomez, R. G., Schatzberg, A. F., Reiss, A. L.
  2013; 75 (4): 331-339

- **Altered brain function underlying verbal memory encoding and retrieval in psychotic major depression.** *Psychiatry research*
  Kelley, R., Garrett, A., Cohen, J., Gomez, R., Lembke, A., Keller, J., Reiss, A. L., Schatzberg, A.
  2013; 211 (2): 119-126

- **Altered brain function underlying verbal memory encoding and retrieval in psychotic major depression** *PSYCHIATRY RESEARCH-NEUROIMAGING*
  Kelley, R., Garrett, A., Cohen, J., Gomez, R., Lembke, A., Keller, J., Reiss, A. L., Schatzberg, A.
  2013; 211 (2): 119-126

- **The mineralocorticoid receptor agonist, fludrocortisone, differentially inhibits pituitary-adrenal activity in humans with psychotic major depression** *PSYCHONEUROENDOCRINOLOGY*
  Lembke, A., Gomez, R., Tenakoon, L., Keller, J., Cohen, G., Williams, G. H., Kraemer, F. B., Schatzberg, A. F.
  2013; 38 (1): 115-121

- **The relationships of positive and negative symptoms with neuropsychological functioning and their ability to predict verbal memory in psychotic major depression** *PSYCHIATRY RESEARCH*
  Che, A. M., Gomez, R. G., Keller, J., Lembke, A., Tennakoon, L., Cohen, G. H., Schatzberg, A. F.

2012; 198 (1): 34-38

- **Aberrant Brain Activation During a Working Memory Task in Psychotic Major Depression** *AMERICAN JOURNAL OF PSYCHIATRY*
  Garrett, A., Kelly, R., Gomez, R., Keller, J., Schatzberg, A. F., Reiss, A. L.
  2011; 168 (2): 173-182
- **Preliminary evidence that plasma oxytocin levels are elevated in major depression** *PSYCHIATRY RESEARCH*
  Parker, K. J., Kenna, H. A., Zeitzer, J. M., Keller, J., Blasey, C. M., Amico, J. A., Schatzberg, A. F.
  2010; 178 (2): 359-362
- **Semantic processing of emotional words in depression and schizophrenia** *INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY*
  Klumpp, H., Keller, J., Miller, G. A., Casas, B. R., Best, J. L., Deldin, P. J.
  2010; 75 (2): 211-215
- **CURRENT ISSUES IN THE CLASSIFICATION OF PSYCHOTIC MAJOR DEPRESSION** *Conference on Deconstructing Psychosis*
  Keller, J., Schatzberg, A. F., Maj, M.
  AMER PSYCHIATRIC PRESS, INC.2010: 29–44
- **Effects of major depression diagnosis and cortisol levels on indices of neurocognitive function** *PSYCHONEUROENDOCRINOLOGY*
  Gomez, R. G., Posener, J. A., Keller, J., DeBattista, C., Solvason, B., Schatzberg, A. F.
  2009; 34 (7): 1012-1018
- **Impact of clinician gender on examination anxiety among female veterans with sexual trauma: A pilot study** *JOURNAL OF WOMENS HEALTH*
  Lee, T. T., Westrup, D. A., Ruzek, J. I., Keller, J., Weitlauf, J. C.
  2007; 16 (9): 1291-1299
- **Current issues in the classification of psychotic major depression** *Conference on Deconstructing Psychosis*
  Keller, J., Schatzberg, A. F., Maj, M.
  OXFORD UNIV PRESS.2007: 877–85
- **Empirically assessing participant perceptions of the research experience in a randomized clinical trial: The Women's Self-Defense Project as a case example** *JOURNAL OF EMPIRICAL RESEARCH ON HUMAN RESEARCH ETHICS*
  Weitlauf, J. C., Ruzek, J. I., Westrup, D. A., Lee, T., Keller, J.
  2007; 2 (2): 11-23
- **Dissociable intrinsic connectivity networks for salience processing and executive control** *JOURNAL OF NEUROSCIENCE*
  Seeley, W. W., Menon, V., Schatzberg, A. F., Keller, J., Glover, G. H., Kenna, H., Reiss, A. L., Greicius, M. D.
  2007; 27 (9): 2349-2356
- **Reply: Clinical and biological effects of mifepristone treatment for psychotic treatment - Reply to Carroll and Rubin** *NEUROPSYCHOPHARMACOLOGY*
  Keller, J., Schatzberg, A. F.
  2006; 31 (12): 2795-2797
- **The neuropsychological profile of psychotic major depression and its relation to cortisol** *BIOLOGICAL PSYCHIATRY*
  Gomez, R. G., Fleming, S. H., Keller, J., Flores, B., Kenna, H., DeBattista, C., Solvason, B., Schatzberg, A. F.
  2006; 60 (5): 472-478
- **Mood and neuropsychological changes in women with midlife depression treated with escitalopram** *JOURNAL OF CLINICAL PSYCHOPHARMACOLOGY*
  Wroolie, T. E., Williams, K. E., Keller, J., Zappert, L. N., Shelton, S. D., Kenna, H. A., Reynolds, M. F., Rasgon, N. L.
  2006; 26 (4): 361-366
- **Clinical and biological effects of mifepristone treatment for psychotic depression** *NEUROPSYCHOPHARMACOLOGY*
  Flores, B. H., Kenna, H., Keller, J., Solvason, H. B., Schatzberg, A. F.
  2006; 31 (3): 628-636
- **Detecting psychotic major depression using psychiatric rating scales** *JOURNAL OF PSYCHIATRIC RESEARCH*
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  2006; 40 (1): 22-29

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  2006; 71 (1): 74-79
- **I Got My Life Back! Making a Case for Self Defense Training for Older Women with PTSD.** *Clinical Gerontologist*
  Westrup D, Weitlauf J, Keller J
  2005; 28 (3): 113-118
- **Cognitive bias and emotion in neuropsychological models of depression** *COGNITION & EMOTION*
  Deldin, P. J., Keller, J., Gergen, J. A., MILLER, G. A.
  2001; 15 (6): 787-802
- **Cognitive bias and emotion in neuropsychological models of depression** *Cognition & Emotion*
  Deldin, P., Keller, J., Gergen, J.A., Miller, G.A.
  2001; 15 (6): 787-802
- **Right-posterior face processing anomaly in depression** *JOURNAL OF ABNORMAL PSYCHOLOGY*
  Deldin, P. J., Keller, J., Gergen, J. A., MILLER, G. A.
  2000; 109 (1): 116-121
- **Neuropsychological differentiation of depression and anxiety** *JOURNAL OF ABNORMAL PSYCHOLOGY*
  Keller, J., Nitschke, J. B., Bhargava, T., Deldin, P. J., Gergen, J. A., Miller, G. A., Heller, W.
  2000; 109 (1): 3-10
- **Psychology and neuroscience: Making peace** *Current Directions in Psychological Science*
  Miller, G., Keller, Jennifer
  2000; 9 (6): 212-215
- **Converging evidence for a cognitive anomaly in early psychopathology** *PSYCHOPHYSIOLOGY*
  Fernandes, L. O., Keller, J., Giese-Davis, J. E., Hicks, B. D., Klein, D. N., MILLER, G. A.
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PRESENTATIONS

- Empowerment of Women and Girls though Life Skills and Self-defense Training - Western Psychological Association (4/29/2012)