### BIOGRAPHICAL SKETCH

NAME: Gary Elkins, Ph.D., ABPP, ABPH

eRA COMMONS USER NAME: GARY ELKINS

#### POSITION TITLE:

Professor, Department of Psychology and Neuroscience, Baylor University

Director, Mind-Body Medicine Research Laboratory

Adjunct Professor, Department of Psychiatry and Behavioral Science, Texas A&M Health Science Center

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Henderson State University, Arkadelphia, AR	B.A.	05/75	Psychology
Texas A&M University, College Station, TX	Ph.D.	08/80	Counseling Psychology
Wilford Hall USAF Medical Center, San Antonio, TX	Pre-doc.	08/80	Clinical Psychology

I am a Professor of Psychology and Neuroscience at Baylor University, and Director of the Mind-Body Medicine Research Laboratory, where I lead a team of doctoral and post-doctoral researchers focusing on mind-body interventions and clinical and translational science. I have been PI on two NCI grants (R21-CA100594, R21-CA13175), an NCCIH grant in which I conducted a large randomized clinical trial (U01-AT004634) and PI on an NCCIH funded study of an innovative use of hypnosis to improve sleep disturbances (R34-AT008246, Hypnosis to Improve Sleep in Menopause: Determination of Optimal Dose and Method). The publication of these results have been accepted for publication (Journal of Women's Health; International Journal of Clinical and Experimental Hypnosis) and show the potential of a self-administered hypnosis intervention to improve sleep in post-menopause women. I am also currently PI on a multi-site R01 (Grant Number: 5R01AT009384 - 03) Self-Administered Hypnosis for Management of Hot Flashes in Women: A Randomized Clinical Trial. I have over 100 publications and presentations, which include books: Handbook of Medical and Psychological Hypnosis: Foundations, Applications, and Professional Issues; and Alternative Medicine for Psychologists: An Essential Resource; and Relief from Hot Flashes. My research has been published in the leading journals related to hypnosis—including International Journal of Clinical and Experimental Hypnosis, Journal of Clinical Oncology, Menopause, and Integrative Medicine Insights—and cited in leading international news sources including the National Public Radio, NIH Radio, Web MD, and US News and World Report. Due to my expertise regarding complementary and alternative medicine and hypnosis, I have been recruited to serve on over 14 NIH scientific review groups. In recognition of my research, I have received major awards from two societies: the Society of Behavioral Medicine (2012, Complementary and Integrative Medicine Investigator Research Award), and the American Board of Psychological Hypnosis (2008 Morton Prince Award for Professional Achievement), each of these awards is given to only a single individual annually. Currently I serve as Editor-in-Chief of the International Journal of Clinical and Experimental Hypnosis; Associate Editor of BMC: Complementary and Alternative Medicine; and Consulting Editor, Psychology of Consciousness: Theory, Research, and Practice. In addition to being a tenured Professor of Psychology and Neuroscience at Baylor University, I am an Adjunct Professor, Texas A&M University College of Medicine and a Medical Associate with Baylor Scott and White Hillcrest Medical Center. My major contributions to science, have established innovative mind-body interventions for symptoms associated with aging and women's health care (sleep; hot flashes; hypnosis). In addition, my current research (5R01AT009384 – 04) is further testing the efficacy of a fully self-administered hypnosis intervention to improve sleep and reduce hot flashes. The intervention involves providing participants with a "tool kit" with five audio recordings, instructions and includes weekly phone calls (but no in-person hypnosis or therapy visits). My research has focused on hypnosis interventions for sleep problems, women's health and aging, pain management and stress (including mindful hypnotherapy). In addition, I have an on-going program of research in the area of posttraumatic growth and coping with trauma including into the use of therapeutic music listening to help patients with a history of trauma to cope with stress, reduce pain, and achieve well-being.

# .Positions and Employment

1982-2005	Clinical Health Psychologist, Scott and White Clinic and Hospital, Temple, TX
1985-1990	Assistant to Associate Professor of Psychiatry and Behavioral Science, Texas A&M University College of Medicine, College Station, TX
1990-2000	Associate Professor, Department of Psychiatry and Behavioral Science, Texas A&M University College of Medicine, Texas A&M Health Sciences Center, College Station, TX
2000-2006	Professor, Department of Psychiatry and Behavioral Science, Texas A&M University College of Medicine, Texas A&M Health Sciences Center, College Station, TX
2007-2015	Director, Doctoral Program in Clinical Psychology, Department of Psychology and Neuroscience, Baylor University, Waco, TX
2007-	Adjunct Professor, Department of Psychiatry and Behavioral Science, Texas A&M University Health Science Center, College Station, TX
2009-	Medical Associate, Baylor Scott and White Hillcrest Medical Center, Waco, TX
2006-	Professor, Department of Psychology and Neuroscience, Baylor University, Waco, TX
2006-	Director, Mind-Body Medicine Research Laboratory, Baylor University, Waco, TX

# Other Experience and Professional Memberships

4005	Manchan Carleto of Dahadanal Madistra
1995-	Member, Society of Behavioral Medicine
1996-	Fellow, American Academy of Clinical Health Psychology
1995-	Fellow, American Psychological Association
1995-	Fellow, American Society of Clinical Hypnosis (President, 1996-1997)
2005-	Member, North American Menopause Society
2005-	Member, American Psychosocial Oncology Society
2001-2011	Board of Directors; Vice-Chair & Chair of the Oral Examination Committee, Chair Witten Examination Committee (appointed 2003), Texas State Board of Examiners of Psychologists
2004-2006	President, Specialty Certification: American Board of Psychological Hypnosis (ABPH)
2009	NIH Individual Project Review Group: "Treatments for Menopause Related Sleep Disorders and their Mechanisms" (P01)
2010	NIH Scientific Review: SEP ZATIRB-05, "Mind-Body Interventions "(R01)
2010	CDC Scientific Review: RFA-DP-10-1010, "Mind-Body Research Program" (R01)
2010	NIH Scientific Review: ZAG1 ZIJ-9 J3 (2), "Menopause and Sleep Disorders " (R01)
2010	NIH Scientific Review: ZAT1 SM 22 P "Centers of Excellence for Research on CAM (CERC) for Pain" (P01)
2012-	Associate Editor Board, BCM Complementary and Alternative Medicine
2013-	Associate Editor Board, International Journal of Clinical and Experimental Hypnosis
2014	NIH Scientific Review, ZAT1 HS-15, "Non-Pharmacological Management of Pain in Military Personnel".
2014	Reviewer NIH Study Section. "Study of Women's Health Across the Nation" (in Response to RFA AG-94-002)
2014	Reviewer, NIH Special Emphasis/Scientific Review 2015/01 ZAG1 AIJ-3 (J3) "MsFlash: Living a Health Menopause" (R01)
2016	Reviewer, NCCIH ZAT1 VS (01) Fellowship, Career Development, and Research Grant Programs 2016/11
2016	Reviewer, ZAT1 HS-25 Study Section, National Center for Complementary and Integrative Health, NIH 2016/3
2016	Reviewer, NIH Grant -participation on Special Emphasis Panel/Scientific Review Group 2016/05 ZAT1 SM (40) S 2016/3
2019	Reviewer, NIH Study of Women's Health Across the Nation (SWAN): The Impact of Midlife and the Menopause Transition on Health and Functioning in Early Old Age (1 U19 AG063720-01A1)

2019	Reviewer, ZAT1 JM(05) NIH/NCCIH Training, Fellowship, and Career Development Review Panel
<u>Honors</u>	
1996	International Society of Hypnosis Award of Merit, 14th International Congress of Hypnosis
1996	Presidential Award for Outstanding Service, American Society of Clinical Hypnosis
1998	Specialty Certification in Clinical Health Psychology, American Board of Professional Psychology (ABPP)
2000	Robert R. Rynearson Award for Excellence in Teaching, Department of Psychiatry and Behavioral Sciences, College of Medicine, Texas A&M University Health Science Center
2003	Thomas P. Wall, D.M.D. Award for Excellence in Teaching, American Society of Clinical Hypnosis
2007	Presidential Citation Award for Outstanding Service, Texas Psychological Association
2008	Morton Prince Award for Professional Achievement, American Board of Psychological Hypnosis
2008	Presidential Award, American Board of Psychological Hypnosis
2012	21st Annual Robert E. Myers, M.D. Leadership Award, Scott & White Clinic and Hospital
2012	Complementary and Integrative Medicine Investigator Research Award, Society of Behavioral Medicine
2013	NIH Radio Interview (NIH Podcast #0190) Postmenopausal Women and Sleep (this podcast highlighted my research and provided national and international exposure).
2014	Elected President of the Society for Clinical and Experimental Hypnosis
2016	Appointed to the Scientific Advisory Board, XXI ISH World Congress of Medical and Clinical Hypnosis
2016	Bernard B. Raginski Award for Leadership and Achievement, Society for Clinical and Experimental Hypnosis
2017	Arthur Shapiro Award for the Best Book in Hypnosis, Society for Clinical and Experimental Hypnosis, given in recognition of the Handbook of Medical and Psychological Hypnosis: Foundations, Applications, and Professional Issues, New York, NY, Springer Publishing.
2017	Presidential Award, Society for Clinical and Experimental Hypnosis

#### C. Contributions to Science

- 1. <u>Hypnosis Intervention for Sleep and Hot Flashes Post-Menopause.</u> My research has included hypnotic relaxation therapy for reduction of clinical symptoms associated with menopause and coping with breast cancer (vasomotor symptoms, sleep disturbance, anxiety, depression, **1a-1b**). I have pioneered the development of a hypnosis definition toward advancing research and practice (**1c**).
  - 1a. Elkins, G, Fisher, W, Johnson, A, Carpenter, J, Keith T. (2013) Clinical hypnosis in the treatment of post-menopausal hot flashes: A randomized controlled trial. *Menopause*, 20(3), 291-298. doi: 10.1097/GME.0b013e31826ce3ed. PubMed PMID: 23435026; PubMed Central PMCID: PMC3556367.
  - **1b. Elkins, G**, Marcus, J, Sterns, V., Perfect, M, Rajab, H, Ruud, C, Palamara, L, Keith, T. (2008) Randomized trial of a hypnosis intervention for treatment of hot flashes among breast cancer survivors. *Journal of Clinical Oncology.* 26(31):5022-5026. doi: 10.1200/JCO.2008.16.6389. Epub 2008 Sep 22. PubMed PMID: 18809612; PubMed Central PMCID: PMC2652097
  - **1c.** Barton, D., **Elkins, G.** et. al, (2017) Efficacy of a biobehavioral intervention for hot flashes: A randomized controlled pilot study, *Menopause*, 24(7), 774-782.
- <u>2. Symptom Risk Factors and Management.</u> My publications have contributed to relevant research regarding risk factors and prevalence of breast cancer symptoms (**2a**). I have also have contributed to the development of materials for symptom management (**2b-c**).
  - 2a. Fisher, W., Johnson, A, Elkins, G., Otte, J., Burns, D., Yu, M., & Carpenter, J. (2013). Risk factors, pathophysiology, and treatment of hot flashes in cancer, CA: A Cancer Journal for Clinicians, 63(3), 167-192.

- **2b.** Johnson, A., Marcus, J., Hickman, K., Barton, D., & **Elkins, G**. (2016) Anxiety reduction among breast cancer survivors receiving hypnotic relaxation therapy for hot flashes. *International Journal of Clinical and Experimental Hypnosis*, 64(4), 377-390. doi: 10.1080/00207144.2016.1209042.
- **2c. Elkins, G.** Roberts, L., Na, H., & Yek, M. (2017). Hypnosis for hot flashes and associated symptoms in women with breast cancer. American Journal of Clinical Hypnosis, 60(4), 123-136.
- 3. <u>Psychometric Scale Development</u> I have developed psychometric scales to measure psychological distress (3a) and hypnotizability (3b; 3c). This track record of conducting research into measurement scales based on theoretical models is relevant and will be valuable to the current proposal.
  - 3a. Elkins, G. & Johnson, A. (2015) Psychological Distress Profile. Menlo Park, CA, Mind Garden, Inc.
  - **3b. Elkins, G.,** Johnson, A., Johnson, A.J., Sliwinski. (2015). Factor analysis of the Elkins Hypnotizability Scale. *International Journal of Clinical and Experimental Hypnosis*, 63(3), 335-345. doi: 10.1080/00207144.2015.1031550.
  - **3c.** Kekecs, Z, Bowers, J., Johnson, A, Kendrick C. **Elkins G.** (2016) The Elkins Hynotizability Scale: Assessment of Reliability and Validity, *International Journal of Clinical and Experimental Hypnosis*, 64(3), 285-304. Doi: 10.1080/00207144.2016.1171089
  - 4. Standards of Training in Hypnosis. I have also made contributions to science by advancing standards of training in clinical hypnosis. I developed with Dr. Hammond, the core curriculum (4a-4b) for training in clinical hypnosis that is now the standard for professional organizations (i.e., American Society of Clinical Hypnosis; Society for Clinical and Experimental Hypnosis; International Society of Hypnosis). In addition to furthering training standards, In addition, I have published a training manual that includes assessment of hypnotizability (Elkins Hypnotizability Scale EHS) for clinical research and training (4c). My background and contributions in this area assure research staff will be well trained in hypnosis interventions which is needed for hypnosis research.
  - 4a. Hammond, C, Elkins, G. (1994) Standards of Training in Clinical Hypnosis, ASCH Press, Chicago, IL.
  - **4b. Elkins, G,** Hammond, C. (1998). Standards of training in clinical hypnosis: Preparing professionals for the 21<sup>st</sup> century, *American Journal of Clinical Hypnosis*, 41(1), 55-64.
  - **4c. Elkins, G.** (2013) *Hypnotic Relaxation Therapy: Principles and Applications.* Springer Publishing, New York, NY.

### **Complete List of Published Work in MyBibliography:**

https://www.ncbi.nlm.nih.gov/myncbi/14WSnlzWFvkAv/bibliography/public/

## Research Support\_

## **Ongoing Research Support**

R01AT009384-01A1 Elkins (PI) 9/22/2017-8/31/2022

Self-Administered Hypnosis Treatment for the Management of Hot Flashes in Women: A Randomized Clinical Trial

The purpose of this multi-site randomized clinical trial (Baylor University, University of Michigan, and University of Nebraska) research is to determine the efficacy of self-administered hypnosis to improve menopausal symptoms. This project uses daily diaries, heart rate variability, cortisol numerical rating scale, stress response measures, and examines hypnotizability as moderator's primary outcome. The analyses original data collection to inform clinical practice.

Role: Principal Investigator

NEA 1863320-38-20 Elkins (PI) 8/1/2020 – 7/31/2022

Effect of Music and Suggestion for Chronic Pain in Aging Adults: A Randomized Controlled Study
The purpose of this research is to support a randomized controlled study examining the effect of music on pain
management in older adults.

Role: Principal Investigator

NIH 3R01AT009384-04S1

Elkins (PI)

9/01/2020 - 8/31/2021

Feasibility of Self-Administered Hypnosis for Sleep Quality in Caregivers of Individuals with Alzheimer's Disease The purpose of this research is to support a pilot study to determine the feasibility of a self-administered hypnosis intervention with caregivers of individuals with ADRD as an efficacious and practical intervention to improve sleep quality and duration.

Role: Principal Investigator

NIH 4R01AT009384-04S1

Elkins (PI)

9/01/2021 - 8/31/2022

Feasibility of Self-Administered Hypnosis for Sleep Quality in Individuals with Mild Cognitive Impairment The purpose of this research is to support a pilot study to determine the feasibility of a self-administered hypnosis intervention with mild cognitive impairment as an efficacious and practical intervention to improve sleep. Role: Principal Investigator

# **Completed Research Support (Selected)**

R34-AT008246 Elkins (PI) 6/1/2014-5/31/2017

Hypnosis to Improve Sleep in Menopause: Determination of Optimal Dose and Method

The purpose of the research is to determine the optimal number of sessions and method of delivery of hypnotic relaxation therapy to improve sleep. This project uses daily sleep diaries, wrist actigraphy, bothersomeness numerical rating scale, stress response measures, and examines moderators and mediators of the primary outcome. The analyses original data collection to inform future interventions. Role: Principal Investigator

R01-AT004634 Elkins (PI) 9/30/2007-5/31/2015

Hypnosis for Hot Flashes: A Randomized Clinical Trial

The purpose of the research is to determine the efficacy of hypnotic relaxation therapy versus structured attention on reduction of vasomotor symptoms and improving sleep and quality of life among post-menopausal women. The outcomes included self-report diaries and ambulatory skin conductance recording of vasomotor events. Psychological factors and cortisol were examined as potential mediators.

Role: Principal Investigator

R21 CA13175 Elkins (MPI with Barton) 2/1/2009-1/31/2012

Evaluation of a Biobehavioral Intervention for Hot Flashes

The purpose of this research is to compare hypnotic relaxation therapy alone and in combination with venlafaxine to reduce vasomotor symptoms among breast cancer survivors.

Role: Principal Investigator

R03 HD058464 Beaujean (PI) 8/01/2009-7/31/2012

Individual Differences and Health Outcomes: A Secondary Data Analysis in Cognitive Epidemiology The goal of this project was to examine the effect of cognitive factors in health behaviors and outcomes.

Role: Co-Investigator

R21 CA100594 Elkins (PI) 4/02/2004-4/01/2006

Hypnosis for Hot Flashes in Breast Cancer Survivors

The purpose of this exploratory research is to determine the feasibility and potential effectiveness of therapist delivered hypnosis for reduction of hot flashes among breast cancer survivors.

Role: Principal Investigator