

**BIOGRAPHICAL SKETCH**

NAME: Courtney Beard (legal last name: Elias)

eRA COMMONS USER NAME (credential, e.g., agency login): CBEARD

POSITION TITLE: Clinical and Research Psychologist, McLean Hospital  
 Assistant Professor, Harvard Medical School  
 Adjunct Instructor, Alpert Medical School of Brown University

**EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Georgia, Athens, GA	B.S.	2003	Psychology
University of Georgia, Athens, GA	M.S.	2005	Clinical Psychology
University of Georgia, Athens, GA	Ph.D.	2008	Clinical Psychology
Brown Medical School, Providence, RI	Internship	2006-2007	Clinical Psychology
Brown Medical School, Providence, RI	Post-doc	2008-2010	Clinical Psychology

**A. Personal Statement**

I am Director of the Cognition and Affect Research and Education (CARE) lab, Assistant Director of Research at the Behavioral Health Partial Hospital of McLean Hospital, Assistant Professor of Psychology in the Department of Psychiatry at Harvard Medical School, and a licensed clinical psychologist with expertise in cognitive behavioral therapy. Consistent with an experimental therapeutics approach, my program of research involves three primary aims: (1) delineating cognitive mechanisms underlying psychopathology, (2) translating these findings into treatments, and (3) implementing these treatments in real world settings. My research suggests that cognitive biases are causally related to the maintenance of psychopathology, and that the experimental modification of these biases, i.e., Cognitive Bias Modification (CBM), alleviates symptoms clinically. To date, my work has generated 54 empirical papers in peer-reviewed journals. Moreover, I chaired an invitational expert meeting on CBM, wrote an invited expert review on CBM, and published a meta-analysis of CBM, demonstrating my expertise in this field. My NIMH-funded F32 study was the first randomized controlled trial of a combined attention and interpretation CBM for social anxiety disorder. It was also the first study to systematically examine the credibility and acceptability of CBM in real world settings with a diverse sample (e.g., ethnicity, native language, disability, age). This F32 led to my current R34 treatment development grant, which aims to create a personalized, transdiagnostic, on-line CBM treatment for anxiety disorders, as well as the implementation methods for linking it to primary care. In my two prior funded treatment development grants, I gained experience with all aspects of grants management. I received specific training at the NIH OBSSR Summer Institute on the Design and Conduct of Randomized Clinical Trials Involving Behavioral Interventions. My work focuses on developing and testing interventions in important points of care (e.g., primary care, partial hospital).

1. Amir, N., **Beard**, C., Taylor, C., Klumpp, H., Elias, J., Burns, M., & Chen, X. (2009). Attention Training in Individuals with Generalized Social Phobia: A Randomized Controlled Trial. *Journal of Consulting and Clinical Psychology*, *77*, 961-973. PMID: PMC2796508
2. **Beard**, C. (2011). Cognitive Bias Modification as a Treatment for Anxiety: Current Evidence and Future Directions. *Expert Review of Neurotherapeutics*. *11*(2), 299-311. PMC3092585
3. **Beard**, C., Weisberg, R.B., & Amir, N. (2011). Combined Cognitive Bias Modification Treatment for Social Anxiety Disorder: A Pilot Trial. *Depression and Anxiety*, *28*, 981-988. PMC3215809
4. **Beard**, C., Sawyer, A.T., & Hofmann, S. (2012). Efficacy of Attention Bias Modification Using Threat and Appetitive Stimuli: A Meta-Analytic Review. *Behavior Therapy*, *43*(4), 724-740. PMC3494088.

## B. Positions and Honors

07/11 to 08/12	Assistant Professor	Brown Medical School, Dept of Psychiatry & Human Behavior
09/12 to 11/15	Instructor	Harvard Medical School
09/12 to current	Psychologist	McLean Hospital
12/15 to current	Assistant Professor	Harvard Medical School

## Academic and Professional Honors

Hope Scholarship (GPA-based funding of undergraduate tuition)	1999-2003
William T. James Outstanding Senior in Psychology Award	2003
University-Wide Graduate Research Fellowship (\$28,000)	2003-2005
Nancy B. Forest & L. Michael Honaker Master's Scholarship for Research in Psychology (\$1,000)	2004
Henry E. Adams Memorial Research Award (\$600)	2005
Graduate School Travel Awards (\$1300 total)	2005, 2006, 2007
Brown Medical School Department of Psychiatry and Human Behavior Research Day, 1 <sup>st</sup> prize Poster (\$100)	2007
ABCT Neurocognitive Therapies/Translational Research SIG Honorable Mention Research Poster	2007
University-Wide Dissertation Completion Award (\$16,130)	2007-2008
Society for a Science of Clinical Psychology Dissertation grant (\$500)	2007
Judge, Neurocognitive /Translational SIG Student Poster Contest	2009
Chair, Cognitive Bias Modification Expert Meeting, Boston	2010
NIH OBSSR Summer Institute on the Design and Conduct of Randomized Clinical Trials Involving Behavioral Interventions	2010
Anxiety Disorders Association of America Career Development Travel Award	2011

## Grant review activities

Medical Research Council (UK) Research Grants	2013
National Health and Medical Research Council (Australia) Research Grants	2013
Canadian Institutes of Health Research	2016
Children with Cancer (UK) Research Grants	2017
PCORI Pipeline to Proposal Reviewer/ Health Resources in Action	2017
Charles A. King Trust Research Fellowship Program	2017

## Editorial Board

Journal of Anxiety Disorders

## Ad Hoc Reviewer

Annals of Behavioral Medicine	Journal of Anxiety Disorders
Applied Cognitive Psychology	Journal of Autism and Developmental Disorders
Archives of General Psychiatry	Journal of Behavior Therapy and Experimental Psychiatry
Behavior Therapy	Journal of Clinical Psychiatry
Behaviour Research and Therapy	Journal of Consulting and Clinical Psychology
Biological Psychiatry	Journal of Experimental Psychopathology
Brain and Cognition	Journal of Interpersonal Violence
Clinical Psychology Science and Practice	Journal of Medical Internet Research Serious Games
Clinical Psychological Science	Journal of Men's Health
Cognition and Emotion	Journal of Women's Health
Cognitive Therapy and Research	Journal of Psychiatric Research
Consciousness and Cognition	Psychiatry Research
Criminal Justice and Behavior	Psychological Medicine
Depression and Anxiety	The Spanish Journal of Psychology

### Professional Licenses

2010 Rhode Island Licensed Psychologist 2013 Massachusetts Licensed Psychologist

### Professional Organizations

Anxiety Disorders Association of America Association for Behavioral and Cognitive Therapy

### C. Contribution to Science

1. My work delineating cognitive vulnerabilities has primarily focused on the role of interpretation bias in anxiety disorders. Most notably, I developed a novel computerized cognitive task to examine individuals' on-line interpretation of ambiguous situations. Using this word-sentence association paradigm (WSAP), I demonstrated that social anxiety is characterized by both a lack of a benign bias and the presence of a threat bias. The WSAP has been adopted by other researchers in the US and internationally. Specifically, 19 published papers have utilized the paradigm to examine or modify interpretation in social anxiety, depression, alcohol use, anxiety sensitivity, obsessive compulsive disorder, generalized anxiety, height phobia, and body image problems. Well over 10 additional labs are currently testing the paradigm both in its assessment and treatment version. I was PI or Co-PI on all the studies below.
  - a. Amir, N., **Beard**, C., & Przeworski, A. (2005). Resolving ambiguity: The Effect of Experience on Interpretation of Ambiguous Events in Social Phobia. *Journal of Abnormal Psychology, 114*, 402-408.
  - b. **Beard**, C., Rifkin, L.S., & Björgvinsson, T. (in press). Characteristics of interpretation bias and relationship with suicidality in a psychiatric sample. *Journal of Affective Disorders*.
  - c. **Beard**, C. & Amir, N. (2009). Interpretation in Social Anxiety: When Meaning Precedes Ambiguity. *Cognitive Therapy and Research, 33*, 406-415. PMID: PMC2792932
  - d. **Beard**, C. & Amir, N. (2010). Negative Interpretation Bias Mediates the Effect of Social Anxiety on State Anxiety. *Cognitive Therapy and Research, 34*, 292-296. NIHMSID: 153532.
2. Translating these findings into an innovative computerized intervention targeting interpretation bias, I conducted the first randomized controlled trials of Cognitive Bias Modification (CBM) treatment for SAD. Consistent with an experimental therapeutics approach, my first trial demonstrated that the intervention effectively modified interpretation bias and that changes in interpretation mediated changes in social anxiety compared to a placebo condition. My second trial demonstrated that CBM effectively reduced social anxiety symptoms and improved behavioral outcomes compared to a placebo condition in a clinical sample. This work led to my current R34 grant funded by NIMH, which is the first to develop a transdiagnostic, personalized, self-administered CBM treatment and to implement methods for linking this new treatment to primary care. Together, these projects have the potential to improve the available treatment options for individuals with anxiety and depression, who are among the highest utilizers of health care. I was PI or Co-PI on all the studies below. In addition to the four publications listed in section A, the following reflect my contribution to CBM.
  - a. **Beard**, C. & Amir, N. (2008). A Multi-session Interpretation Modification Program: Change in Interpretation and Social Anxiety. *Behaviour Research and Therapy, 46*, 1135-1141.
  - b. Amir, N., **Beard**, C., Burns, M., & Bomyea, J. (2009). Attention Modification Program in individuals with Generalized Anxiety Disorder. *Journal of Abnormal Psychology, 118*, 28-33. PMID: PMC2645540
  - c. **Beard**, C. Weisberg, R.B. & Primack, K. (2011). Attitudes toward cognitive bias modification in anxious primary care patients: A qualitative study. *Behavioural and Cognitive Psychotherapy, 40*, 618-633. PMID: PMC3816754.
  - d. **Beard**, C., Fuchs, C., Asnaani, A., Schulson, M., Schofield, C.A., Clerkin, E.M., & Weisberg, R.B. (in press). A Pilot Open Trial of Cognitive Bias Modification for Panic Disorder. *Cognitive Therapy and Research*.

3. I have also published several papers examining the naturalistic course and treatment of anxiety disorders in the primary care setting and in minority populations. These data came from longitudinal studies funded by NIMH (Harvard/Brown Anxiety Research Project (HARP)) and industry (Primary Care Anxiety Project). The findings highlighted the debilitating and chronic nature of anxiety disorders, as well as unmet treatment needs. Together, this body of work underscores the need to continue to improve treatment options. This is especially true for individuals from minority backgrounds, who demonstrated a particularly poor course, with few recoveries. I was a post-doctoral fellow or project director on these studies.
  - a. **Beard C**, Weisberg RB, Keller MB. (2010). Health-related quality of life across the anxiety disorders: Findings from a sample of primary care patients. *J Anxiety Disord.* 24, 559-564. PMC2876232.
  - b. **Beard C**, Moitra E, Weisberg RB, Keller MB. (2010). Characteristics and predictors of social phobia course in a longitudinal study of primary-care patients. *Depress Anxiety.* 27, 839-845.
  - c. Sibrava NJ, **Beard C**, Bjornsson AS, Moitra E, Weisberg RB, Keller MB. (2013). Two-year course of generalized anxiety disorder, social anxiety disorder, and panic disorder in a longitudinal sample of African American adults. *J Consult Clin Psychol.* 81(6), 1052-1062. PMC3951438.
  - d. Weisberg RB, **Beard C**, Moitra E, Dyck I, Keller MB. (2014). Adequacy of treatment received by primary care patients with anxiety disorders. *Depress Anxiety.* 31(5), 443-50. PMC4157338.
4. Most recently in my position at the Behavioral Health Partial Hospital at McLean Hospital, I have expanded my research to examine mechanisms underlying psychopathology and predictors of treatment response in a naturalistic, acute psychiatric setting. The partial hospital setting is a crucial node of care, as its role is to either prevent the need for an inpatient hospitalization or to transition recently hospitalized patients back to outpatient care. My work in this area has contributed to the knowledge of risk factors and therapy mechanisms in transdiagnostic, SMI samples. I was PI/Co-I on all these.
  - a. **Beard, C.**, Stein, A.T., Hearon, B., Lee, J., Hsu, K., & Björgvinsson, T. (2016). Predictors of treatment response in an Intensive CBT Partial Hospital. *J of Clinical Psychology.* 72(4):297-310. doi: 10.1002/jclp.22269.
  - b. **Beard, C.**, Hearon, B., Lee, J., Kopeski, L., Busch, A.B., & Björgvinsson, T. (in press). When partial hospitalization fails: Risk factors for inpatient hospitalization. *Journal of Nervous and Mental Disease.*
  - c. **Beard C**, Donahue RJ, Dillon DG, Van't Veer A, Webber C, Lee J, Barrick E, Hsu KJ, Foti D, Carroll FY, Carlezon WA, Björgvinsson T, Pizzagalli DA (in press). Abnormal error processing in depressive states: A translational examination in humans and rats. *Translational Psychiatry.*
  - d. **Beard, C.**, Millner, A., Forgeard, M., Hsu, K., Treadway, M., Leonard, C.W., Kertz, S., & Björgvinsson, T. (in press). Network analysis of depression and anxiety symptoms in a heterogeneous psychiatric sample. *Psychological Medicine.* \*C. Beard and A. Millner contributed equally to this work.
5. I have published a number of papers validating self-report questionnaires for clinical use and for research. This work has focused on extending the testing of existing measures to new and diverse populations, such as ethnoracial minorities or transdiagnostic samples. This work is crucial for clinical settings, which depend heavily on self-report methodology. I was PI or Co-PI on all these.
  - a. **Beard C**, Rodriguez BF, Moitra E, Sibrava NJ, Bjornsson A, Weisberg RB, Keller MB. (2011). Psychometric properties of the Liebowitz Social Anxiety Scale (LSAS) in a longitudinal study of African Americans with anxiety disorders. *J Anxiety Disord.* 25, 722-726. PMC3089666
  - b. **Beard C**, Björgvinsson T. (2014). Beyond generalized anxiety disorder: Psychometric properties of the GAD-7 in a heterogeneous psychiatric sample. *J Anxiety Disord.* 28(6), 547-552. PMID: 24983795.

- c. Weiss RB, Aderka IM, Lee J, **Beard C**, Björgvinsson T. A comparison of three brief depression measures in an acute psychiatric population: The CES-D-10, QIDS, and DASS. *J Psychopath Behav Assess*. 2014 Sept 30 [Epub ahead of print].
- d. **Beard, C.**, Hsu, K. J., Rifkin, L. S., Busch, A., & Björgvinsson, T. (in press). Validation of the PHQ-9 in a psychiatric sample. *Journal of Affective Disorders*.

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

<https://www.ncbi.nlm.nih.gov/sites/myncbi/courtney.elias.1/bibliography/41141580/public/?sort=date&direction=ascending>

**D. Research Support**

**Ongoing Research Support**

R34 MH097820      Beard and Weisberg (MPIs)      1/01/13-12/31/17 (in Year 1 NCE)  
 Developing a Low-Intensity Primary Care Intervention for Anxiety Disorders  
 Develop and evaluate a personalized, cognitive bias modification treatment for anxiety linked to primary care that can be delivered in primary care or at home. Develop and pilot primary care implementation methods.  
 Role: MPI

Canadian Institutes of Health Research/258525 Dugas (PI) 2012-2017  
 Improving Outcomes for Adults with Generalized Anxiety Disorder: Combining Cognitive Behavioural Treatment and Interpretation Modification Training  
 Compare the efficacy of CBT alone versus CBT + interpretation modification for GAD.  
 Role: Co-Investigator

**Completed (in past 3 years)**

R34 MH101272      Yen (PI)      2013-2016  
 Skills to Enhance Positivity in Suicidal Adolescents  
 Develop and evaluate the efficacy of a skills training program to enhance positive affect in suicidal adolescents. My role is to select and program behavioral measures of attention to positive and negative affect.  
 Role: Consultant

R21 AS02115      Magee (PI)      2013-2015  
 Cognitive Bias Modification: A Novel Intervention for AUDs and Social Anxiety  
 Evaluate the efficacy of attention modification, interpretation modification, or combination treatment compared to a placebo control in the treatment of comorbid alcohol dependence and social anxiety.  
 Role: Consultant