

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
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NAME: Laura Allen Payne (formerly Laura Beth Allen)

eRA COMMONS USER NAME (credential, e.g., agency login): ALLENL2

POSITION TITLE: Associate Psychologist, Member of the Faculty, McLean Hospital/Harvard Medical School

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
University of California, Los Angeles	B.A., B.A.	06/2000	Psychology, Sociology
Boston University	M.A.	05/2002	Psychology (Clinical)
Boston University	Ph.D.	08/2007	Psychology (Clinical)
David Geffen School of Medicine University of California, Los Angeles	Postdoctoral	06/2013	Pain/Psychology

**A. Personal Statement**

My work as a postdoctoral scholar introduced me to health-related research, specifically mechanisms underlying pain responsivity younger populations. I was awarded an individual postdoctoral NRSA to study relationships of emotion regulation and pain responsivity in samples of healthy children and children with chronic pain and their parents. My training on this project gave me a solid foundation of experience in laboratory pain assessment, collection and analysis of salivary samples for hormonal assay, and the role of central pain mechanisms in chronic pain. This naturally led to an interest in women's health and pain, in particular, understanding how and why pain develops in young girls. For the last six years, I have immersed myself in the area of central pain mechanisms in adolescent girls and young adult women with primary dysmenorrhea (PD), through both a UCLA CTSI K Bridge Award and then through a K23 award funded by NICHD. In 2016 I received a UCLA Children's Discovery and Innovation Institute Seed Grant to explore the feasibility and acceptability of a behavioral intervention for reducing pain catastrophizing in young women with PD. I have worked as a Co-Investigator on an SBIR grant developing and testing a CBT intervention delivered via a mobile application for children with cancer. In 2018 I was awarded an R01 grant from NICHD to investigate behavioral and neural phenotypes of primary dysmenorrhea in adolescents. My work has provided me with a strong foundation in the areas of menstrual and pelvic pain, the assessment of pain, and non-pharmacological clinical trials. Throughout my career, I have been very productive, publishing in the area of menstrual pain, biopsychosocial factors related to chronic and acute laboratory pain, salivary hormones related to pain, and transdiagnostic and cognitive behavioral treatment approaches.

Peer-reviewed publications and research products that specifically highlight my experience and qualifications:

- Payne, L. A.**, Seidman, L. C., Sim, M-S., Rapkin, A. J., Naliboff, B. D., & Zeltzer, L. K. (2019). Experimental evaluation of central pain processes in adolescent girls and young adult women with primary dysmenorrhea. *PAIN*, 160, 1421-1430. PMC6527468
- Payne, L. A.**, Rapkin, A. J., Lung, K. C., Seidman, L. C., Zeltzer, L. K., & Tsao, J. C. I. (2016). Pain catastrophizing predicts menstrual pain ratings in adolescent girls with chronic pain. *Pain Medicine*, 17, 16-24. PMC4791196
- Payne, L. A.**, Rapkin, A. J., Seidman, L. A., Zeltzer, L. K., & Tsao, J. C. I. (2017). Experimental and procedural pain responses in primary dysmenorrhea: a systematic review. *Journal of Pain Research*, 10, 2233-2246. PMC5604431

- d. **Payne, L. A.**, Seidman, L. C., Zeltzer, L. K., Rapkin, A. J. (2016). Initial results from an open trial of a mind-body intervention for young adult women with primary dysmenorrhea. Poster presented at the International Pelvic Pain Society meeting, Chicago, IL.

## **B. Positions and Honors**

### **Positions and Employment**

2001-2006	Doctoral Student in Clinical Psychology, Center for Anxiety and Related Disorders at Boston University
2006-2007	Clinical Psychology Intern, West Los Angeles Veterans' Hospital
2007-2013	Postdoctoral Fellow, Pediatric Pain Program, David Geffen School of Medicine at UCLA
2009-present	Licensed psychologist (CA)
2013-2014	Instructor, Pediatric Pain Program, David Geffen School of Medicine at UCLA
2013-2019	Clinical Instructor of Psychiatry and Biobehavioral Sciences, Cognitive Behavioral Therapy Clinic, Stewart and Lynda Resnick Neuropsychiatric Institute at UCLA
2014-2016	Adjunct Assistant Professor of Psychology, Institute for Interdisciplinary Salivary Bioscience Research, Arizona State University
2014-2019	Assistant Professor, Pediatric Pain and Palliative Care Program, David Geffen School of Medicine at UCLA
2014-present	Adjunct Faculty, Institute for Interdisciplinary Salivary Bioscience Research, University of California, Irvine
2018-present	Licensed psychologist (MA)
2019-present	Associate Psychologist, Division of Women's Mental Health, McLean Hospital
2019-present	Member of the Faculty, Department of Psychiatry, Harvard Medical School

### **Honors**

1998-2000	Psi Chi Honor Society
2000	UCLA Department of Psychology Honors, <i>Highest Honors</i>
2000	Graduated Cum Laude
2000	Golden Key Honor Society
2001-2006	Boston University Research Fellowship
2006	John and Geraldine Weil Dissertation Award
2007	Association of Behavioral and Cognitive Therapies (ABCT) Virginia A. Roswell Student Dissertation Award
2008	American Pain Society (APS) Essentials of Pain Management: Principles and Practice Resident's Program
2010	UCLA Chancellor's Award for Postdoctoral Research
2011	American Pain Society Young Investigator Travel Award
2015	International Pelvic Pain Society Poster Award

### **Professional Societies**

#### **PROFESSIONAL POSITIONS**

Association for Behavioral and Cognitive Therapies (ABCT)

*Ambassador*

*Program Committee Member*

*Web Editor*

Editorial Board, *Cognitive and Behavioral Practice*

Editorial Board, *Pain Medicine*

International Pelvic Pain Society (IPPS)

*Membership Committee Member*

*Research Committee Member*

#### **PROFESSIONAL AFFILIATIONS**

American Psychological Association, full member, Division 12 affiliate

Association for Behavioral and Cognitive Therapies (ABCT)

*Member, Child and Adolescent Anxiety Special Interest Group*

*Member, Anxiety Disorders Special Interest Group*

American Pain Society, member  
International Pelvic Pain Society, member

### C. Contribution to Science

1. **Primary Dysmenorrhea:** Primary dysmenorrhea (PD) is the most common gynecological complaint, yet there has been a paucity of research in this area. My research now focuses on menstrual pain in adolescent girls, specifically examining factors that contribute to and are associated with pain. One study I conducted using an existing data set found that pain catastrophizing predicted menstrual pain ratings in girls who had a chronic pain condition and not in healthy girls. This finding highlights the importance of exploring other mechanisms that may be contributing to the development of menstrual pain and its relationship to central pain processing. I was a Co-Investigator on this study and took the lead in data analysis and writing up the results. As part of my research on my K23 award, I found that adolescent and young adult girls (ages 16-25) with PD demonstrated increased pain sensitivity (i.e., lower pain threshold) to thermal pain across all phases of the menstrual cycle compared to girls without PD. These findings are the first to suggest that central changes in PD exist in younger populations.
  - a. **Payne, L. A.**, Seidman, L. C., Sim, M-S., Rapkin, A. J., Naliboff, B. D., & Zeltzer, L. K. (2019). Experimental evaluation of central pain processes in adolescent girls and young adult women with primary dysmenorrhea. *PAIN*, 160, 1421-1430. PMC6527468
  - b. Seidman, L. C., Brennan, K. M., Rapkin, A. J., & **Payne, L. A.** (2018). Rates of anovulation in adolescents and young adults with moderate to severe primary dysmenorrhea and those without primary dysmenorrhea. *Journal of Pediatric and Adolescent Gynecology*, 31, 94-101. PMC5866740
  - c. **Payne, L. A.**, Rapkin, A. J., Seidman, L. A., Zeltzer, L. K., & Tsao, J. C. I. (2017). Experimental and procedural pain responses in primary dysmenorrhea: a systematic review. *Journal of Pain Research*, 10, 2233-2246. PMC5604431
  - d. **Payne, L. A.**, Rapkin, A. J., Lung, K. C., Seidman, L. C., Zeltzer, L. K., & Tsao, J. C. I. (2016). Pain catastrophizing predicts menstrual pain ratings in adolescent girls with chronic pain. *Pain Medicine*, 17, 16-24. PMC4791196
2. **Non-pharmacological clinical trials:** There has been little research on effective interventions for girls and young women with primary dysmenorrhea, and even less research on non-pharmacological interventions. I recently developed a manualized group mind-body intervention for reducing pain catastrophizing in young women with PD. Results showed that the intervention was feasible and acceptable, and participants reported significantly lower menstrual pain over time compared to baseline. Results of this study have been presented as posters at several national and international conferences (see a and b below), and the manuscript describing these results has been revised and re-submitted to a peer-reviewed medical journal. I have also been a co-Investigator on several studies involving the development and pilot testing of behavioral interventions delivered via mobile applications, one for mindfulness and social support in adolescents and young adults with cancer, and another for psychosocial support for parents of children and adolescents with chronic pain. Both of these mobile apps were feasible and acceptable in their respective populations. All together, these results represent promising new approaches to pain reduction and psychosocial support in these distressing and disabling conditions.
  - a. **Payne, L. A.**, Seidman, L. C., Zeltzer, L. K., Rapkin, A. J. (2016). Initial results from an open trial of a mind-body intervention for young adult women with primary dysmenorrhea. Poster presented at the International Pelvic Pain Society meeting, Chicago, IL.
  - b. Seidman, L. C., Zeltzer, L. K., Rapkin, A. J., **Payne, L. A.** (2017). Sustained use of learned skills and reduction of menstrual pain one year following an open trial of a mind-body intervention for young adult women with primary dysmenorrhea. Poster presented at the 3rd World Congress of Abdominal and Pelvic Pain hosted by the International Pelvic Pain Society, Washington, DC.
  - c. Donovan, E., Martin, S. R., Seidman, L. C., Zeltzer, L. K., Cousineau, T. M., **Payne, L. A.**, Trant, M., Weiman, M., Knoll, M., Federman, N. C. (2019). A mobile-based mindfulness and social support program for adolescents and young adults with sarcoma: Development and pilot testing. *JMIR mHealth and uHealth*, 7, e10921. PMC6441858
  - d. Seidman, L. C., Martin, S. R., Trant, M. W., **Payne, L. A.**, Zeltzer, L. K., Cousineau, T. M., Donovan, E. Feasibility and acceptance testing of a mobile application providing psychosocial

support for parents of children and adolescents with chronic pain: Results of a nonrandomized trial. (2019). *Journal of Pediatric Psychology*, 44, 645-655. PMC6573472

3. **Transdiagnostic treatments for pain and anxiety/depression:** Many of my publications have focused on the development, evaluation, and testing of transdiagnostic treatments for pain and emotional disorders. This area of research stemmed from my undergraduate and graduate training where I was directly involved in the development of the Unified Protocol – a transdiagnostic cognitive-behavioral treatment for emotional disorders (including anxiety and depression). The Unified Protocol was published as a treatment manual in 2011, and since starting my postdoctoral fellowship at UCLA in 2007, I have extended these concepts to pain in adolescents. The primary findings from these studies suggest that transdiagnostic approaches are efficacious for treating anxiety, depression, pain, and any disorder with an emotional component, and highlight the importance of looking at central mechanisms for both pain and emotional concerns.
  - a. **Allen, L. B.**, Ehrenreich, J. T., & Barlow, D. H. (2005). A unified treatment for emotional disorders: Applications with adults and adolescents. *Japanese Journal of Behavior Therapy*, 31, 3-31.
  - b. **Allen, L. B.**, Tsao, J. C. I., Seidman, L., Ehrenreich-May, J., & Zeltzer, L. K. (2012). A unified, transdiagnostic treatment for adolescents with chronic pain and comorbid anxiety and depression. *Cognitive and Behavioral Practice*, 19, 56-67. PMC5560774
  - c. Barlow, D. H., **Allen, L. B.**, & Choate, M. L. (2004). Towards a unified treatment for emotional disorders. *Behavior Therapy*, 35, 205-230.
  - d. **Payne, L. A.**, Tsao, J. C. I., & Zeltzer, L. K. (2013). Unified protocol for youth with chronic pain in pediatric medical settings. In J. Ehrenreich-May & B. C. Chu (Eds.), *Transdiagnostic Treatments for Children and Adolescents* (1st ed., pp. 385-404). New York, NY: The Guilford Press.
4. **Cognitive-behavioral treatments:** Cognitive-behavioral therapy (CBT) is the gold standard treatment for anxiety and depression. Components of CBT include psychoeducation, cognitive restructuring, and exposure to fear cues. I received extensive training in the application of CBT strategies to anxiety and depression in my graduate training on a multi-site, randomized, clinical trial for panic disorder. Results from these studies suggest that, while an aggressive, exposure-based treatment for panic disorder can result in high attrition, most people who complete treatment do very well. Comorbid diagnoses of anxiety and depression do not impact treatment outcome, while increased self-efficacy and decreased anxiety sensitivity do predict change. For those who respond to treatment, monthly “booster” CBT sessions are helpful in reducing relapse. I worked directly on this study as an independent evaluator and was responsible for data analysis and write up of all study results.
  - a. **Allen, L. B.**, White, K. S., Barlow, D. H., Gorman, J. M., Shear, M. K., & Woods, S. W. (2010). Cognitive-behavior therapy (CBT) for panic disorder: Relationship of anxiety and depression comorbidity with treatment outcome. *Journal of Psychopathology and Behavioral Assessment*, 32, 185-192. PMC2855025
  - b. Gallagher, M. W., **Payne, L. A.**, White, K. S., Shear, K. M., Woods, S. W., Gorman, J. M., & Barlow, D. H. (2013). Mechanisms of change in cognitive behavioral therapy for panic disorder: The unique effects of self-efficacy and anxiety sensitivity. *Behaviour Research and Therapy*, 51, 767-777. PMC3866809
  - c. White, K. S., **Payne, L. A.**, Gorman, J. M., Shear, M. K., Woods, S. W., Saksa, J. R., & Barlow, D. H. (2013). Does maintenance CBT contribute to long-term treatment response of panic disorder with or without agoraphobia? A randomized controlled clinical trial. *Journal of Consulting and Clinical Psychology*, 81, 47-57. PMC3565038
  - d. **Payne, L. A.**, White, K. S., Gallagher, M. W., Woods, S. W., Shear, K. M., Gorman, J. M., Farchione, T. J., & Barlow, D. H. (2016). Second-stage treatments for relative non-responders to cognitive-behavioral therapy (CBT) for panic disorder with or without agoraphobia – Continued CBT versus paroxetine: A randomized controlled trial. *Depression and Anxiety*, 33, 392-399. PMC ID – PMC In Progress
5. **Laboratory pain assessment:** Anxiety, depression, and difficulties with emotion recognition are strongly correlated with somatic complaints, as well as laboratory pain responses. Yet, the nature of these relationships is poorly understood. In this domain, my research has demonstrated the important roles that depression, anxiety sensitivity, and pain catastrophizing play in mediating emotion regulation

difficulties (i.e., neuroticism, alexithymia) and physical pain (i.e., laboratory pain, somatization). I served as Co-Investigator on all of the projects.

- a. **Payne, L. A.**, Seidman, L. C., Lung, K., Zeltzer, L. K., & Tsao, J. C. I. (2013). Relationship of neuroticism and laboratory pain in healthy children: Does anxiety sensitivity play a role? *Pain*, 154, 103-109. PMC3533515
- b. Tsao, J. C. I., **Allen, L. B.**, Evans, S., Lu, Q., Myers, C. D., & Zeltzer, L. K. (2009). Anxiety sensitivity and catastrophizing: Associations with pain and somatization in non-clinical children. *Journal of Health Psychology*, 14, 1085-1094. PMC2770141
- c. **Allen, L. B.**, Lu, Q., Tsao, J. C. I., Hayes, L., & Zeltzer, L. K. (2011). Depression partially mediates the relationship between alexithymia and somatization in a sample of healthy children. *Journal of Health Psychology*, 16, 1177-1186. PMC3132307
- d. Evans, S., **Payne, L. A.**, Seidman, L., Lung, K., Zeltzer, L., Tsao, J. C. (2016). Maternal anxiety and children's laboratory pain: The mediating role of solicitousness. *Children*, 3, E10. PMC4934565

Dr. Laura A. Payne's MyBibliography URL:

<http://www.ncbi.nlm.nih.gov/myncbi/browse/collection/46440692/?sort=date&direction=descending>

#### **D. Additional Information: Research Support and/or Scholastic Performance**

##### **Ongoing Research Support**

R01HD093680 (NIH/NICHD) Payne (PI) 08/20/2018 – 04/30/2023

Behavioral and Neural Phenotypes of Primary Dysmenorrhea in Adolescents

This study aims to prospectively examine behavioral and neural mechanisms of primary dysmenorrhea over two years in a sample of adolescent girls with varying levels of menstrual pain.

Role: Principal Investigator

##### **Completed Research Support (completed within the past 3 years)**

K23HD077042 (NIH/NICHD) Payne (PI) 08/01/2014 – 07/31/2019 (NCE)

Central Pain Mechanisms in Primary Dysmenorrhea

This project will examine both excitatory and inhibitory pain mechanisms in adolescent girls and young adult women with and without primary dysmenorrhea.

Role: Principal Investigator

UCLA Children's Discovery and Innovation Institute Seed Grant Award

CDI-SGA-01/01/2016 Payne (PI) 01/01/2016 – 05/31/2017 (NCE)

A Behavioral Intervention for Pain Catastrophizing in Primary Dysmenorrhea

This pilot project will examine the acceptability and feasibility of a group cognitive-behavioral treatment for pain catastrophizing in adolescent girls and young adult women with primary dysmenorrhea.

Role: Principal Investigator

Collaborative Pediatric Cancer Research Awards Program Zeltzer (PI) 07/01/2018 – 06/30/2019

Rally Foundation for Childhood Cancer Research/Bear Necessities Pediatric Cancer Foundation

Telemedicine Pain Control Program for Teens Undergoing Treatment for Cancer

This study developed and tested a pain management telemedicine intervention for adolescents undergoing treatment for cancer.

Role: Co-Investigator

Charles Drew-UCLA Cancer Partnership/NCI Payne (PI) 10/01/18 (awarded only)

Telehealth Cognitive-Behavior Therapy for Adolescents with Cancer Pain

This grant proposed to address health disparities in cancer research by providing care for adolescents with cancer pain. Study aims included developing and evaluating the effects of a cognitive-behavioral treatment compared to waitlist control on measures of pain coping, pain self-efficacy, and pain impairment.

Role: Principal Investigator