

Christine A. Rabinak (Davie), Ph.D.
Assistant Professor
Wayne State University
Department of Pharmacy Practice
Eugene Applebaum College of Pharmacy & Health Sciences
259 Mack Avenue, Suite 2190
Detroit, MI 48201
Phone: (313) 577-9875
Email: rabinak@wayne.edu

EDUCATION AND TRAINING

UNDERGRADUATE AND GRADUATE

- 08/00-05/04 **B.S. with honors** (degree conferred 05/04), Psychology
University of Iowa, Iowa City, IA
- 08/04-12/06 **M.S.** (degree conferred 12/06), Biopsychology
University of Michigan, Ann Arbor, MI
- 08/04-05/09 **Ph.D.** (degree conferred 05/09), Biopsychology
University of Michigan, Ann Arbor, MI

UNDERGRADUATE AND GRADUATE RESEARCH TRAINING

- 01/02-08/04 **Undergraduate Research Assistant**, Department of Psychology, John H. Freeman, Ph.D., Advisor, Honors Senior Research Thesis: "*Pontine stimulation overcomes developmental limitations in the neural mechanisms of eyeblink conditioning,*" University of Iowa, Iowa City, IA
- 08/04-01/09 **Graduate Research Assistant**, Department of Psychology (Biopsychology), Stephen Maren, Ph.D., Advisor, Dissertation: "*The associative representation of fear memories mediated by the amygdala,*" University of Michigan, Ann Arbor, MI

POSTDOCTORAL RESEARCH TRAINING

- 01/09-05/09 **Junior Research Scientist**, Department of Psychology and Center for Neural Sciences, Elizabeth Phelps, Ph.D., New York University, New York, NY
- 05/09-02/10 **Research Associate**, Department of Psychology, Stephen Maren, Ph.D., Advisor, University of Michigan, Ann Arbor, MI
- 02/10-07/13 **Research Fellow**, Department of Psychiatry, K. Luan Phan, M.D., Israel Liberzon, M.D., James Abelson, M.D., Ph.D., Advisors, University of Michigan and Mental Health Service, VA Ann Arbor Healthcare System, Ann Arbor, MI

ACADEMIC APPOINTMENTS

- 07/13-08/14 **Research Assistant Professor**
Department of Psychiatry and Depression Center (Gregory Dalack, M.D.,
Chair)
University of Michigan, Ann Arbor, MI (07/13-08/14)
- 10/13-08/14 **Research Assistant Professor**
Neuroscience Graduate Program (Ed Stuenkel, Ph.D., Director)
University of Michigan, Ann Arbor, MI (10/13-08/14)
- 08/14-pres **Assistant Professor (tenure-track)**
Department of Pharmacy Practice (Brian Crabtree, PharmD, BCPP,
Chair); Translational Neuroscience Program (Jeff Stanley, Ph.D., Director)
Wayne State University, Detroit, MI (08/14-pres)
- 09/14-pres **Adjunct Assistant Professor (tenure-track)**
Department of Psychiatry & Behavioral Neurosciences (David Rosenberg,
MD, Chair)
Wayne State University, Detroit, MI (09/14-pres)

RESEARCH INTERESTS

1. Behavioral and neurobiological mechanisms of aversive learning and memory, threat perception, and emotion regulation
2. Functional neuroimaging of the effects of the cannabinoid system during fear extinction learning and retention
3. Biomarkers of development, maintenance, and treatment of anxiety disorders

GRANTS

CURRENT GRANTS

- 2014-2018 National Institutes of Mental Health, 1K01MH101123-01A1
“Cannabinoid Control of Fear Extinction Neural Circuits in Post-traumatic
Stress Disorder”
Role: **Principal Investigator**
- 2014 Michigan Institute for Clinical & Health Related Research, MICHR T2
Translational Science Award
“Neural Mechanisms Underlying Attentional Training in Social Anxiety
Disorder”
Role: **Principal Investigator**

PREVIOUS GRANTS

- 2014 University of Michigan Office of Research (UMOR), Small Grants for Major Conferences
“ERP Boot Camp”
Role: **Principal Investigator**
- 2011-2013 Michigan Institute for Clinical & Health Related Research, MICHR
Postdoctoral Translational Scholars Program Award (07/01/11-06/30/13)
“Behavioral and Brain Mechanisms Underlying Recall of Fear Extinction Memory in Anxiety Disorders”
Role: **Primary Investigator**
- 2010-2011 Michigan Institute for Clinical & Health Related Research, Michigan
Clinical Translational Sciences Award (09/01/10-11/30/11)
“Cannabinoid Control of Fear Extinction Neural Circuits in Humans”
K. Luan Phan, M.D. (PI); Role: **Co-Investigator**

SUBMITTED GRANTS

- 2014-2016 National Institutes of Mental Health, (Heide Klumpp, PI)
“Fluoxetine Effects on Neurosteroidal Control of Fear Extinction in PTSD”
Role: **Consultant**

HONORS AND AWARDS

- 2000-2004 National Scholars Award, University of Iowa
2000-2004 Dean’s List, University of Iowa
2001-2004 Psi Chi, University of Iowa
2004 Graduated with Honors in Psychology, University of Iowa
2005-2008 Rackham Travel Grant, University of Michigan
2006 Outstanding Graduate Student Instructor Honor Roll, University of Michigan
2007 Barbara Perry Roberson Summer Research Scholarship, University of Michigan
2010 Michigan Institute for Clinical and Health Research High-Tech Award
2011 MICHR Postdoctoral Translational Scholars Program Award, University of Michigan
2011 “Voice Poster” Presentation, ACNP Annual Meeting 2011
2012 Anxiety Disorders Association of America Career Development Travel Award
2012 MICHR Research Education Symposium Outstanding Postdoctoral Research Award, University of Michigan
2012 American College of Neuropsychopharmacology—ADAA Travel Award
2012 “Data Blitz” Presentation, ACNP Annual Meeting 2012
2012 “Voice Poster” Presentation, ACNP Annual Meeting 2012

2014 Society of Biological Psychiatry Travel Award

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

2004-2005 American Association of University Women
2004- Society for Neuroscience (SFN)
2006-2008 American Psychological Association (APA)
2008-2009 Pavlovian Society
2011- Anxiety Disorders Association of America (ADAA)
2012- International Cannabinoid Research Society (ICRS)
2013- Society of Biological Psychiatry (SOBP)
2013- Brain Research and Integrative Neuroscience Network (BRAINnet)
2014- American Association of Colleges of Pharmacy (AAP)

PEER-REVIEW SERVICE

JOURNAL REVIEWER

2011- *Neuropsychology*
2011- *Behavioral Neuroscience**
2011- *Behavioural Brain Research**
2012- *Behavioral and Brain Functions**
2012- *Neuropsychopharmacology**
2013- *Journal of Psychopharmacology**
2013- *Psychiatry Research: Neuroimaging**
2013- *Letters in Drug Design & Discovery**
2014- *Biological Psychology**
2014- *PLoS ONE**
2014- *Journal of Traumatic Stress Disorders & Treatment**
2014- *Biological Psychiatry**
2014- *Psychopharmacology**

*Reviewed for in the past 12 months

GRANT REVIEWER

2011, 2013 **Ad Hoc Reviewer**, Practice Oriented Research Training (PORT) Program Study Section, Michigan Institute for Clinical and Health Research, University of Michigan (11/2011; 11/2013)

2014 **Ad Hoc Reviewer**, Medical Research Council, Swindon, United Kingdom (08/2014)

TEACHING

TEACHING EXPERIENCE/LECTURES

- 2006 **Guest Lecturer**, “*Neuroanatomy*,” Psychology 230: Introduction to Biopsychology, Department of Psychology, University of Michigan
- 2006 **Graduate Student Instructor**, Psychology 231: Learning & Memory Lab, Department of Psychology, University of Michigan
- 2006-2007 **Graduate Student Instructor**, Psychology 230: Introduction to Biopsychology, Department of Psychology, University of Michigan
- 2007 **Graduate Student Instructor**, Psychology 331: Laboratories in Biopsychology & Cognitive Science, Department of Psychology, University of Michigan
- 2014 **Guest Lecturer**, “*Understanding Fear & Anxiety: A Translational Approach*,” Psychology 437-003: Current Topics in Biopsychology—The Biopsychology of Stress, Department of Psychology, University of Michigan
- 2014 **Guest Lecturer**, “*Learning & Memory in PTSD*,” Psychology 743: Human Learning and Memory, Department of Psychology, University of Michigan
- 2014 **Guest Lecturer**, “*Understanding Fear & Anxiety: A Translational Approach*,” Psychology 531/731: Neurobiology of Learned Fear, Department of Psychology, University of Michigan

STUDENTS AND TRAINEES

Undergraduate Research Mentorship

- 2004-2006 Elizabeth Dixon (Neuroscience), University of Michigan
- 2004-2007 Stephanie Jimenez (Neuroscience), University of Michigan
- 2004-2008 Ian McLachlan (Neuroscience), University of Michigan
- 2005-2006 Chelsea Klemens (Neuroscience), University of Michigan
- 2007 Kim Remski (Neuroscience), University of Michigan
- 2007-2008 Megan Ring (Neuroscience), University of Michigan
- 2007-2008 Destiny Carrillo (Neuroscience), University of Michigan
- 2011 Daanish Chawala (NYU Neuroscience Student), BP-ENDURE Summer Program, University of Michigan
- 2011-2013 Maryssa Lyons (Biopsychology & Cognitive Science), Undergraduate Research Opportunity Program (UROP), University of Michigan; Won “Best Undergraduate Research Poster” at the UROP Spring Symposium: “*Cannabinoid modulation of emotion regulation and its neural substrates*”

- 2011-2014 Shoko Mori (Neuroscience), Undergraduate Research Opportunity Program (UROP), University of Michigan; Won “Excellent Undergraduate Research Poster” at the UROP Spring Symposium: *“Behavioral mechanisms of fear extinction recall in social anxiety disorder”*
- 2013-2014 Angela Miller (Neuroscience), University of Michigan
- 2013-2014 Ralph (RJ) Walls, III (Neuroscience), University of Michigan

Undergraduate Honor’s Thesis Mentorship:

- 2010-2011 Alexis Holman (Biopsychology & Cognitive Science), University of Michigan; Honors Thesis: *“Fear and disgust: brain responses to two signals of motivational salience”*
- 2013-2014 Shoko Mori (Neuroscience), University of Michigan; Honors Thesis: *“Regulating negative affect: neurophysiological investigation of self-generated vs. externally-provided reappraisal”*; Applied for and was awarded an Honors Grant for her thesis (\$350)

COMMITTEE, ORGANIZATIONAL, AND VOLUNTEER SERVICE

NATIONAL

ROLE

- | | | |
|-------|--|---|
| 2012 | 33 rd Annual Conference of ADAA | Reviewer, individual oral and new research posters |
| 2013 | 34 th Annual Conference of ADAA | Reviewer, symposium, individual oral and new research posters |
| 2013- | Society of Biological Psychiatry | Membership Committee |

INSTITUTIONAL

ROLE

University of Iowa

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|-----------|--------------------------------|--------|
| 2001-2004 | Women in Science & Engineering | Mentor |
| 2001-2004 | Department of Psychology | Tutor |

University of Michigan

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|-----------|------------------------------|-------------------------------|
| 2004-2005 | Department of Psychology | Graduate Student Council |
| 2006-2007 | Biopsychology | Graduate Student Mentor |
| 2006-2008 | Department of Psychology | Undergraduate Committee |
| 2006-2008 | Biopsychology & Neuroscience | Concentration Advisor |
| 2007-2008 | Biopsychology | Departmental Associate |
| 2008 | Biopsychology | Graduate Admissions Committee |
| 2011- | Undergraduate Research | Research Advisor |

	Opportunities Program (UROP)	
2012, 2013	UROP Biomedical & Life Sciences	Journal Club Facilitator
2012	MICHR Virtual Research Project	Advisor
2012-	Association for Women in Science	Advisor
2013, 2014	UROP Biomedical & Life Sciences	Fellowship Selection Committee
2013	UROP Research Symposium	Poster Judge
2013	MICHR Mock Study Section	Chair
2014	UM ERP 3-Day Boot Camp	Organizer & Chair

BIBLIOGRAPHY

PEER-REVIEWED PUBLICATIONS

1. Freeman, J. H., Jr., Nicholson, D. A., Muckler, A. S., **Rabinak, C. A.**, & DiPietro, N. T. (2003). Ontogeny of eyeblink conditioned response timing in rats. *Behavioral Neuroscience*, 117(2), 283-291.
2. Freeman, J. H., Jr., & **Rabinak, C. A.** (2004). Eyeblink conditioning in rats using pontine stimulation as a conditioned stimulus. *Integrative Physiological & Behavioral Science*, 39(3), 180-191.
3. Freeman, J. H., Jr., **Rabinak, C. A.**, & Campolattaro, M. M. (2005). Pontine stimulation overcomes developmental limitations in the neural mechanisms of eyeblink conditioning. *Learning & Memory*, 12(3), 255-259.
4. Zimmerman, J. M., **Rabinak, C. A.**, McLachlan, I. G., & Maren, S. (2007). The central nucleus of the amygdala is essential for acquiring and expressing conditional fear after overtraining. *Learning & Memory*, 14(9), 634-644.
5. **Rabinak, C. A.**, & Maren, S. (2008). Associative structure of fear memory after basolateral amygdala lesions in rats. *Behavioral Neuroscience*, 122(6), 1284-1294.
6. **Rabinak, C. A.**, Zimmerman, J. M., Chang, C. H., & Orsini, C. A. (2008). Bidirectional changes in the intrinsic excitability of infralimbic neurons reflect a possible regulatory role in the acquisition and extinction of pavlovian conditioned fear. *Journal of Neuroscience*, 28(29), 7245-7247. *(Journal Club Review)
7. Chang, C. H., Knapska, E., Orsini, C. A., **Rabinak, C. A.**, Zimmerman, J. M., & Maren, S. (2009). Fear extinction in rodents. *Current Protocols in Neuroscience*, Chapter 8, Unit8 23. *(Experimental Protocol & Review)
8. **Rabinak, C. A.**, Orsini, C. A., Zimmerman, J. M., & Maren, S. (2009). The amygdala is not necessary for unconditioned stimulus inflation after Pavlovian fear conditioning in rats. *Learning & Memory*, 16(10), 645-654.

9. **Rabinak, C. A.** & Maren, S. (2010). Amygdala. *Corsini Encyclopedia of Psychology*, 4th Ed. John Wiley & Sons, DOI: 10.1002/9780470479216.corpsy0051.*(Review)
10. **Rabinak, C. A.**, Angstadt, M., Welsh, R. C., Kennedy, A. E., Lyubkin, M., Martis, B., & Phan, K.L. (2011). Altered amygdala resting-state functional connectivity in post-traumatic stress disorder. *Frontiers in Psychiatry*, 2, 62.
11. Knox, D., George, S. A., Fitzpatrick, C. J., **Rabinak, C. A.**, Maren, S., & Liberzon, I. (2012). Single prolonged stress disrupts retention of extinguished fear in rats. *Learning & Memory*, 19(2), 43-49.
12. **Rabinak, C. A.**, Sripada, C. S., Angstadt, M., de Wit, H., & Phan, K. L. (2012). Cannabinoid modulation of subgenual anterior cingulate cortex activation during experience of negative affect. *Journal of Neural Transmission*, 119(6), 701-707.
13. **Rabinak, C. A.**, Angstadt, M., Sripada, C. S., Abelson, J. L., Liberzon, I., Milad, M. R., & Phan, K. L. (2013). Cannabinoid facilitation of fear extinction memory recall in humans. *Neuropharmacology*, 64, 396-402.
14. **Rabinak, C. A.**, Holman, A., Angstadt, M., Kennedy, A.E., Hajcak, G., & Phan, K. L. (2013). Neural response to errors in combat-exposed returning veterans with and without posttraumatic stress disorder. *Psychiatry Research: Neuroimaging*, 213, 71-78.
15. Wheaton, M.G., Holman, A., **Rabinak, C.A.**, MacNamara, A., Proudfit, G., & Phan, K.L. (2013). Danger and disease: electrocortical responses to threat- and disgust-eliciting images. *International Journal of Psychophysiology*, 90, 235-239.
16. MacNamara, A., Post, D., Kennedy, A., **Rabinak, C.A.**, & Phan, K.L. (2013). Electrocortical processing of social signals of threat in combat-related post-traumatic stress disorder. *Biological Psychology*, 94(2), 441-9.
17. **Rabinak, C.A.**, Angstadt, M., Lyons, M., Mori, S., Milad, M.R., Liberzon, I., & Phan, K.L. (2014). Cannabinoid modulation of prefrontal-limbic activation during fear extinction learning and recall in humans. *Neurobiology of Learning and Memory*, 113, 125-134.
18. **Rabinak, C.A.**, & Phan, K.L. (2014). Cannabinoid modulation of fear extinction brain circuitry: A novel target to advance anxiety treatment. *Current Pharmaceutical Design*, 20(13), 2212-2217.*(Review)
19. **Rabinak, C.A.**, MacNamara, A., Kennedy, A.E., Angstadt, M., Stein, M.B., Liberzon, I., & Phan, K.L. (2014). Focal and aberrant prefrontal engagement during emotion regulation in veterans with posttraumatic stress disorder. *Depression & Anxiety*, doi: 10.1002/da.22243.

20. Wardle, M.C., Fitzgerald, D.A., Angstadt, M., **Rabinak, C.A.**, de Wit, H. & Phan, K.L. (2014 May 7). Effects of oxycodone on brain responses to emotional images. *Psychopharmacology*, doi: 10.1007/s00213-014-3592-4.
21. †Mori, S. & **Rabinak, C.A.** (in press). Extinction. *Phobias: The Psychology of Irrational Fear, An Encyclopedia*, ABC-CLIO. *([Review](#))
22. †Greco, J.A. & **Rabinak, C.A.** (in press). Fear, Neural pathways of. *Phobias: The Psychology of Irrational Fear, An Encyclopedia*, ABC-CLIO. *([Review](#))
23. †Mori, S. & **Rabinak, C.A.** (in press). Amygdala. *Phobias: The Psychology of Irrational Fear, An Encyclopedia*, ABC-CLIO. *([Review](#))
24. **Rabinak, C.A.** (in press). Classical Conditioning. *Phobias: The Psychology of Irrational Fear, An Encyclopedia*, ABC-CLIO. *([Review](#))

†Student author

ABSTRACTS

1. **Rabinak, C.A.**, & Freeman, J.H. (2004). Eyeblink conditioning in rats using pontine stimulation as a conditioned stimulus. *Integrative Physiological & Behavioral Science*, 39(1), 68.
2. Lichtenwalner, R.J., Velander, A.J., **Rabinak, C.A.**, Zhang, H., Fuller, C.L., Burant, C.F., Maren, S., & Parent, J.M. (2006). Genetic ablation of neurogenesis in adult mouse forebrain. *Annals of Neurology*, 60(10), S49.
3. Phan, K.L., Angstadt, M., **Rabinak, C.A.**, Prater, K., Klumpp, H., Hosanagar, A., Meyers, K., & Langenecker, S. (2011). Amygdala-frontal circuit function during threat perception, negative affect regulation, and rest across anxiety disorders and major depression. *Neuropsychopharmacology*, 36, S109.
4. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., & Phan, K.L. (2012). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. *Biological Psychiatry*, 71, 177S.
5. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., Liberzon, I., & Phan, K.L. (2012). Cannabinoid facilitation of extinction recall via increased recruitment of prefrontal-hippocampal circuitry in healthy humans. *Neuropsychopharmacology*, 38, S287.
6. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., Liberzon, I., & Phan, K.L. (2013, May). Cannabinoid facilitation of extinction recall via increased

recruitment of prefrontal-hippocampal circuitry in healthy humans. *Biological Psychiatry*, 73, 34S.

7. **Rabinak, C.A.** (2014, May). Cannabinoid modulation of fear extinction brain circuits: a novel target to advance anxiety treatments. *Biological Psychiatry*, 75, 14S.
8. **Rabinak, C.A.**, Mori, S., Lyons, M., Angstadt, M., & Phan, K.L. (2014, May). Cannabinoid effects on prefrontal activation during regulation of negative affect. *Biological Psychiatry*, 75, 227S.
9. Fitzgerald, D.A., Chau, P.K., **Rabinak, C.A.**, Kennedy, A.E., Klumpp, H. & Phan, K.L. (2014, May). Depression severity predicts striatal reactivity to positive social cues in anxiety disorders. *Biological Psychiatry*, 75, 192S.
10. MacNamara, A., Fitzgerald, D.A., **Rabinak, C.A.**, Kennedy, A.E., & Phan, K.L. (2014, May). BOLD-fMRI and ERP measures of socio-emotional brain function in combat-related PTSD. *Biological Psychiatry*, 75, 226S.

PRESENTATIONS

1. **Rabinak, C.A.**, & Freeman, J.H. (2003, September). Eyeblink conditioning in rats using pontine stimulation as a conditioned stimulus. Poster session presented at the annual meeting of the Pavlovian Society, Bloomington, IN.
2. Freeman, J.H. & **Rabinak, C.A.** (2004, October). Pontine stimulation overcomes developmental limitations in the neural mechanisms of eyeblink conditioning. Poster session presented at the annual meeting of Society for Neuroscience, San Diego, CA.
3. Zimmerman, J.M., **Rabinak, C.A.**, & Maren, S. (2005, November). The central nucleus of the amygdala is essential for expressing conditional fear after basolateral complex lesions. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.
4. **Rabinak, C.A.** & Maren, S. (2005, November). Associative structure of fear memory after basolateral amygdala lesions in rats. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.
5. Lichtenwalner, R.J., Velander, A.J., **Rabinak, C.A.**, Zhang, H., Fuller, C.L., Burant, C.F., Maren, S., & Parent, J.M. (2006, October). Genetic ablation of neurogenesis in adult mouse forebrain. Poster session presented at the 131st Annual Meeting of the American Neurological Association, Chicago, IL.
6. Fuller, C.L, **Rabinak, C.A.**, Lichtenwalner, R.J., Velander, A.J., Burant, C.F., Maren, S., & Parent, J.M. (2006, October). Targeted genetic ablation of neural

- progenitors in the adult mouse hippocampus. Poster session presented at the annual meeting of Society for Neuroscience, Atlanta, GA.
7. **Rabinak, C.A.** & Maren, S. (2007, November). Protein synthesis within the central nucleus of the amygdala is necessary for reconsolidation of Pavlovian fear memories. Poster session presented at the annual meeting of Society for Neuroscience, San Diego, CA.
 8. **Rabinak, C.A.** & Maren, S. (2008, September). Protein synthesis within the central nucleus of the amygdala is necessary for consolidation Pavlovian fear memories in rats with basolateral amygdala lesions. Poster session presented at the annual meeting of the Pavlovian Society, Weehawkin, NJ.
 9. **Rabinak, C.A.** & Maren, S. (2008, November). The basolateral amygdala is not necessary for US inflation after Pavlovian fear conditioning in rats. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.
 10. **Rabinak, C.A.** (2009, December). The associative representation associative representation of fear memories mediated by the amygdala. Biopsychology Colloquium, University of Michigan, Ann Arbor, MI
 11. **Rabinak, C.A.** & Phan, K.L. (2010, November). Aberrant threat-sensitive amygdala-frontal interactions in returning combat veterans with PTSD before & after treatment. Invited Nanosymposium Session: *Prefrontal-Subcortical Interactions in Health and Disease*, presented at the annual meeting of Society for Neuroscience, San Diego, CA.
 12. **Rabinak, C.A.**, Angstadt, M., Milad, M.R., & Phan, K.L. (2011, November). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. Poster session presented at the University of Michigan Medical School Postdoctoral Poster Symposium, Ann Arbor, MI.
 13. †Chawala, D., **Rabinak, C.A.**, & Phan, K.L. (2011, November). Behavioral study of fear and its implications on skin conductance recordings. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.
 14. †Zakariaeiz, Y., Prater, K., **Rabinak, C.A.**, de Witt, H., & Phan, K.L. (2011, November). Δ 9-THC reduces connectivity between default mode network regions during non-task periods within an emotion task. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.
 15. **Rabinak, C.A.**, Angstadt, M., Milad, M.R., & Phan, K.L. (2011, November). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. Poster session presented at the annual meeting of Society for Neuroscience, Washington, DC.

16. Phan, K.L., Angstadt, M., **Rabinak, C.A.**, Prater, K., Klumpp, H., Hosanagar, A., Meyers, K., & Langenecker, S. (2011, December). Amygdala-frontal circuit function during threat perception, negative affect regulation, and rest across anxiety disorders and major depression. Poster session presented at the annual meeting of the American College of Neuropsychopharmacology, Waikoloa, HI.
17. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Abelson, J.L., Liberzon, I. & Phan, K.L. (2012, March). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. Poster session presented at the Research Education Symposium of the Michigan Institute for Clinical & Health Research, Ann Arbor, MI.
18. **Rabinak, C.A.**, Angstadt, M., Milad, M.R., & Phan, K.L. (2012, April). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. Poster session presented at the 23rd annual Albert J. Silverman Research Conference, Ann Arbor, MI.
19. †Holman, A.A., **Rabinak, C.A.**, & Phan, K.L. (2012, April). Fear and disgust: brain responses to two signals of motivational salience. Poster session presented at the annual University of Michigan Psychology Research Forum, Ann Arbor, MI.
20. †Mori, S., **Rabinak, C.A.**, & Phan, K.L. (2012, April). Behavioral mechanisms of fear extinction recall in social anxiety disorder. Poster session presented at the annual meeting of the University of Michigan Undergraduate Research Opportunity Program, Ann Arbor, MI.
21. †Lyons, M.E., **Rabinak, C.A.**, & Phan, K.L. (2012, April). Cannabinoid modulation of emotional regulation and its neural substrates. Poster session presented at the annual meeting of the University of Michigan Undergraduate Research Opportunity Program, Ann Arbor, MI.
22. **Rabinak, C.A.**, Angstadt, M., Kennedy, A.E., Abelson, J.L., Liberzon, I., & Phan, K.L. (2012, April). Prefrontal deficits during regulation of negative affect in posttraumatic stress disorder. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Arlington, VA.
23. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., & Phan, K.L. (2012, May). Cannabinoid modulation of fear extinction learning and underlying brain circuitry in healthy humans. Poster session presented at the 67th Annual Scientific Convention and Program of the Society of Biological Psychiatry, Philadelphia, PA.
24. Post, D., Kennedy, A.E., **Rabinak, C.A.**, & Phan, K.L. (2012, September). Neurophysiological markers of post-traumatic stress disorder (PTSD) in OEF/OIF veterans and SSRI treatment response: an event-related potential study. Poster

session presented at the 3rd Annual Research Forum of the Department of Psychiatry at the University of Illinois at Chicago, Chicago, IL.

25. Perkins, S., Chen, A., **Rabinak, C.A.**, Sripada, C., Taylor, S., & Swain, J. (2012, October). Face processing in pediatric PTSD. Poster session presented at the annual meeting of the American Academy of Child & Adolescent Psychiatry, San Francisco, CA.
26. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., Liberzon, I., & Phan, K.L. (2012, December). Cannabinoid facilitation of extinction recall via increased recruitment of prefrontal-hippocampal circuitry in healthy humans. Data blitz presentation at the annual meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
27. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., Liberzon, I., & Phan, K.L. (2012, December). Cannabinoid facilitation of extinction recall via increased recruitment of prefrontal-hippocampal circuitry in healthy humans. Poster session presented at the annual meeting of the American College of Neuropsychopharmacology, Hollywood, FL.
28. †Lyons, M.E., & **Rabinak, C.A.** (2013, April). The effect of motivational contingencies on neural activation during response control. Poster session presented at the annual meeting of the University of Michigan Undergraduate Research Opportunity Program, Ann Arbor, MI.
26. **Rabinak, C.A.**, Angstadt, M., Sripada, C.S., Milad, M.R., Liberzon, I., & Phan, K.L. (2013, May). Cannabinoid facilitation of extinction recall via increased recruitment of prefrontal-hippocampal circuitry in healthy humans. Oral presentation presented at the 68th Annual Scientific Convention and Program of the Society of Biological Psychiatry, San Francisco, CA.
27. Javanbakht, A., **Rabinak, C.A.**, & Liberzon, I. (2013, May). Cognitive context in fear conditioning and extinction learning. Poster session presented at the 166th Annual Meeting of the American Psychiatric Association, San Francisco, CA.
28. **Rabinak, C.A.**, Milad, M.R., Liberzon, I., & Phan, K.L. (2013, June). Cannabinoid facilitation of extinction recall via increased recruitment of prefrontal-hippocampal circuitry in healthy humans. Oral presentation presented at the 23rd Annual Symposium of the International Cannabinoid Research Society, Vancouver, British Columbia, Canada.
29. Kennedy, A., Fitzgerald, D., **Rabinak, C.A.**, MacNamara, A., & Phan, K.L. (2013, September). Prefrontal reactivity during negative affect regulation before and after SSRI treatment for PTSD in returning veterans. Poster session presented at the 4th Annual Research Forum of the Department of Psychiatry at the University of Illinois at Chicago, Chicago, IL.

30. MacNamara, A., Post, D., Kennedy, A., **Rabinak, C.A.**, & Phan, K.L. (2013, September). Reduced electrocortical processing of social signals of threat in combat-related post-traumatic stress disorder. Poster session presented at the 4th Annual Research Forum of the Department of Psychiatry at the University of Illinois at Chicago, Chicago, IL.
31. MacNamara, A., Post, D., Kennedy, A., **Rabinak, C.A.**, & Phan, K.L. (2013, October). Reduced electrocortical processing of social signals of threat in combat-related post-traumatic stress disorder. Poster session presented at the 53rd Annual Meeting of the Society for Psychophysiological Research, Florence, Italy.
32. **Rabinak, C.A.** (2013, October). Session1: The effects of cannabinoids on fear extinction recall and the underlying brain circuitry in humans; Session 2: Cannabinoid facilitation of exposure-based learning: A novel target to advance anxiety treatment. Invited oral presentations at the Research and Practice Colloquia for the Center for Applied Behavioral Health Policy at Arizona State University, Phoenix, AZ.
33. MacNamara, A., Post, D., Kennedy, A., **Rabinak, C.A.**, & Phan, K.L. (2013, November). Reduced electrocortical processing of social signals of threat in combat-related post-traumatic stress disorder. Poster session presented at the 2013 College of Medicine Research Forum at the University of Illinois at Chicago, Chicago, IL.
34. Fitzgerald, J.M., MacNamara, A., **Rabinak, C.A.**, Kennedy, A.E. & Phan, K.L. (2014, March). Relationship between pre-deployment and combat stress exposure and neural response of cognitive reappraisal in OEF/OIF veterans. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Chicago, IL.
35. MacNamara, A., Fitzgerald, D.A., **Rabinak, C.A.**, Kennedy, A.E., & Phan, K.L. (2014, March). BOLD-fMRI and ERP measures of socio-emotional brain function in combat-related PTSD. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Chicago, IL.
36. †Mori, S.M., Gehring, W. & **Rabinak, C.A.** (2014, April). Regulating negative affect: a neurophysiological investigation of self-generated vs. externally-provided reappraisal. Poster session presented at the 25th annual Albert J. Silverman Research Conference, Ann Arbor, MI.
37. †Miller, A., Walls, R., Mori, S.M., Gehring, W. & **Rabinak, C.A.** (2014, April). Sustained effects of different cognitive regulation strategies on negative affect. Poster session presented at the annual meeting of the University of Michigan Undergraduate Research Opportunity Program, Ann Arbor, MI.

38. †Walls, R., Miller, A., Mori, S.M., Gehring, W. & **Rabinak, C.A.** (2014, April). Comparison of the effectiveness of different cognitive reappraisal strategies in regulating negative affect. Poster session presented at the annual meeting of the University of Michigan Undergraduate Research Opportunity Program, Ann Arbor, MI.
39. †Mori, S.M., Gehring, W. & **Rabinak, C.A.** (2014, April). Regulating negative affect: a neurophysiological investigation of self-generated vs. externally-provided reappraisal. Poster session presented at the annual University of Michigan Psychology Research Forum, Ann Arbor, MI.
40. **Rabinak, C.A.** (2014, May). Cannabinoid modulation of fear extinction brain circuits: a novel target to advance anxiety treatments. Symposium Session: *Associative fear learning: a model for translational therapeutics in PTSD*, presented at the 69th annual meeting of the Society of Biological Psychiatry, New York, NY.
41. **Rabinak, C.A.**, Mori, S., Lyons, M., Angstadt, M., & Phan, K.L. (2014, May). Cannabinoid effects on prefrontal activation during regulation of negative affect. Poster session presented at the 69th annual meeting of the Society of Biological Psychiatry, New York, NY.
42. Fitzgerald, D.A., Chau, P.K., **Rabinak, C.A.**, Kennedy, A.E., Klumpp, H. & Phan, K.L. (2014, May). Depression severity predicts striatal reactivity to positive social cues in anxiety disorders. Poster session presented at the 69th annual meeting of the Society of Biological Psychiatry, New York, NY.
43. MacNamara, A., Fitzgerald, D.A., **Rabinak, C.A.**, Kennedy, A.E., & Phan, K.L. (2014, May). BOLD-fMRI and ERP measures of socio-emotional brain function in combat-related PTSD. Poster session presented at the 69th annual meeting of the Society of Biological Psychiatry, New York, NY.
44. **Rabinak, C.A.**, Mori, S., Lyons, M., Angstadt, M., & Phan, K.L. (2014, June). Cannabinoid effects on prefrontal activation during regulation of negative affect. Poster session presented at the 24th annual International Cannabinoid Research Society Symposium on the Cannabinoids, Baveno, Italy.

†*Student presenter*