# **Philip Deming**

Curriculum Vitae 1/16/2025

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### **Academic Appointments**

2021-Present Postdoctoral Fellow, Psychology, Northeastern University Advisors: Karen S. Quigley & Lisa Feldman Barrett

### Education

2017-2021	Ph.D., Psychology, University of Wisconsin-Madison
	Advisor: Michael Koenigs
2015-2017	M.S., Psychology, University of Wisconsin-Madison
	Advisor: Michael Koenigs
2009-2013	B.A., Psychology and German, University of Wisconsin-Madison

### Awards and Honors

2025	Post-doctoral Fellow Award, Cognitive Neuroscience Society
2021	Cheryl Wynn Hare Award Finalist, Society for the Scientific Study of
	Psychopathy
2020-2021	University Fellowship, University of Wisconsin-Madison
2020	Teaching Fellow Award Alternate, University of Wisconsin-Madison College of Letters & Science
2015-2016 2014	University Fellowship, University of Wisconsin-Madison Alternate, Fulbright U.S. Student Program

### **External Grant Support**

2023-2026 National Institute of Mental Health (F32MH133288). *Probing negative affect circuits in humans using 7T fMRI* (\$220,272). Principal Investigator: Deming.

### **Peer-Reviewed Articles**

- 9. Deming, P., Griffiths, S., Jalava, J., Koenigs, M., & Larsen, R.L. (2024). Psychopathy and medial frontal cortex: A systematic review reveals predominantly null relationships. *Neuroscience & Biobehavioral Reviews,* 167, 105904.
- 8. Deming, P., Cook, C.J., Meyerand, M.E., Kiehl, K.A., Kosson, D.S., & Koenigs, M. (2023). Impaired salience network switching in psychopathy. *Behavioural Brain Research*, 452, 114570.

- 7. **Deming, P.**, Heilicher, M., & Koenigs, M. (2022). How reliable are amygdala findings in psychopathy? A systematic literature review of MRI studies. *Neuroscience & Biobehavioral Reviews, 142,* 104875.
- 6. **Deming, P.**, Eisenbarth, H., Rodrik, O., Weaver, S.S., Kiehl, K.A., & Koenigs, M. (2022). An examination of autonomic and facial responses to prototypical facial emotion expressions in psychopathy. *PLoS ONE, 17(7),* e0270713.
- Deming, P., Dargis, M., Haas, B.W., Brook, M., Decety, J., Harenski, C., Kiehl, K., Koenigs, M., & Kosson, D.S. (2020). Psychopathy is associated with fear-specific reductions in neural activity during affective perspective-taking. *NeuroImage*, 223, 117342.
- 4. Deming, P. & Koenigs, M. (2020). Functional neural correlates of psychopathy: A metaanalysis of MRI data. *Translational Psychiatry*, 10(133), 1-8.
- 3. **Deming, P.**, Philippi, C., Wolf, R., Dargis, M., Kiehl, K.A., & Koenigs, M. (2018). Psychopathic traits linked to alterations in neural activity during personality judgments of self and others. *NeuroImage: Clinical*, *18*, 575-581.
- Korponay, C., Pujara, M.S., Deming, P., Philippi, C., Decety, J., Kosson, D.S., Kiehl, K.A., & Koenigs, M. (2017). Impulsive-antisocial psychopathic traits linked to increased volume and functional connectivity within prefrontal cortex. Social Cognitive and Affective Neuroscience, 12(7), 1169-1178.
- 1. Korponay, C., Pujara, M.S., **Deming, P.**, Philippi, C., Decety, J., Kosson, D.S., Kiehl, K.A., & Koenigs, M. (2016). Impulsive-antisocial dimension of psychopathy linked to enlargement and abnormal functional connectivity of the striatum. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2*, 1-9.

# **Book Chapters**

1. **Deming, P.**, & Koenigs, M. (2021). Neuroimaging studies of psychopathy. In Dierckx, R.A., Otte, A., de Vries, E.F.J., van Waarde, A., & Sommer, I.E. (Eds) *PET and SPECT in Psychiatry* (2nd Ed.). Springer, Cham.

## Preprints

- 2. Zhang, J., Chen, D., **Deming, P.,** Srirangarajan, T., Theriault, J., Kragel, P.A., Hartley, L., Lee, K.M., McVeigh, K., Wager, T.D., Wald, L.L., Satpute, A.B., Quigley, K.S., Whitfield-Gabrieli, S., Barrett, L.F., & Bianciardi, M. (2025). Cortical and subcortical mapping of the allostatic-interoceptive system in the human brain using 7 Tesla fMRI. *bioRxiv*.
- 1. **Deming, P.** (2023). Burning neuroscientific questions about etiological models of psychopathy. *PsyArXiv*.

# **Manuscripts in Preparation**

- 5. **Deming, P.**, Satpute, A.B., Quigley, K.S., Kragel, P., Bianciardi, M., Wald, L., Wager, T.D., Choi, J-K., Zhang, J., Barrett, L.F., Katsumi, Y., & Theriault, J. (In Preparation). Personspecific changes in brainstem-cortical functional connectivity from resting-state to task: a 7T fMRI study of humans.
- 4. **Deming, P.**, Shaffer, C., Wagner, N.J., Quigley, K.S., & Barret, L.F. (In Preparation). Deconstructing psychopathy.

- Deming, P., Khan, Z., Hoemann, K., Marino, L., Runyun, Ş.L., Kross, Z., Gao, Y., Cory, L., Nielson, C., Feldman, M.J., Devlin, M., Dy, J., Barrett, L.F., Wormwood, J.B., & Quigley, K.S. (In Preparation). Multimodal patterns of cardiac activity, context, and affect in realworld settings vary between and within people.
- 2. **Deming, P.** (In Preparation). Using principles of neuroscience to refine etiological theories of psychopathy.
- Zhang, J., Chen, D., Deming, P., Srirangarajan, T., Theriault, J., Kragel, P.A., Hartley, L., Lee, K.M., McVeigh, K., Wager, T.D., Wald, L.L., Satpute, A.B., Quigley, K.S., Whitfield-Gabrieli, S., Barrett, L.F., & Bianciardi, M. (Under Review). Cortical and subcortical mapping of the allostatic-interoceptive system in the human brain using 7 Tesla fMRI. *Nature Neuroscience.*

## **Invited Talks**

**Deming, P.** (2022, July). *Psychopathy and Emotion Research*. UW-Madison Badger Precollege (virtual).

**Deming, P.** (2020, Nov). *Functional Neural Correlates of Psychopathy*. University of Alberta Forensic Grand Rounds (virtual).

**Deming, P.** (2019, April). *The Neuroscience of Psychopathy*. UW-Madison Undergraduate Neuroscience Society NeuroNight, Madison, WI.

### **Conference Presentations**

**Deming, P.**, Khan, Z., Hoemann, K., Marino, L., Runyun, Ş.L., Kross, Z., Gao, Y., Cory, L., Nielson, C., Feldman, M.J., Devlin, M., Dy, J., Barrett, L.F., Wormwood, J.B., & Quigley, K.S. (2025, March). *Multimodal patterns of cardiac activity, context, and affect in real-world settings vary between and within people*. To be presented at the Society for Affective Science Conference, Portland, OR.

**Deming, P.**, Griffiths, S., Jalava, J., Koenigs, M., & Larsen, R.R. (2024, May). *The relationship between psychopathy and medial frontal cortex structure and function: A systematic review reveals predominantly null findings.* Society for the Scientific Study of Psychopathy Conference, Paphos, Cyprus.

**Deming, P.** (2023, June). An examination of autonomic and facial responses to prototypical facial emotion expressions in psychopathy. 21<sup>st</sup> World Congress of Psychophysiology, Geneva, Switzerland.

**Deming, P.** (2022, May). *Diminished switching role of the brain's salience network in high psychopathy incarcerated men.* Society for the Scientific Study of Psychopathy Conference (virtual).

**Deming, P.** (2021, May). Reduced sympathetic arousal but not reduced mimicry in response to facial expressions in psychopathic individuals with low negative affect. Society for the Scientific Study of Psychopathy Early Career Event (virtual).

**Deming, P.** (2019, May). *Psychopathy is associated with fear-specific reductions in neural activity during affective perspective-taking*. Society for the Scientific Study of Psychopathy Conference, Las Vegas, NV

#### Posters

\*denotes equal contributions

**Deming, P.**, Satpute, A.B., Quigley, K.S., Kragel, P., Bianciardi, M., Wald, L.L., Wager, T.D., Choi, J-K., Zhang, J., Barrett, L.F., Katsumi, Y., & Theriault, J. (2025, March). Person-specific changes in brainstem-cortical functional connectivity during cognitive and affective tasks: a 7T fMRI study of humans. To be presented at the Cognitive Neuroscience Society Conference, Boston, MA.

Barton-Zuckerman, M., Marino, L., Payne, J., Gao, Y., **Deming, P.**, Barrett, L.F., Wormwood, J., & Quigley, K.S. (2024, October). Cardiovascular patterns associated with threat-challenge ratio: Replications of within-subjects analysis using Bayesian mixed modeling approach. Society for Psychophysiological Research Conference, Prague, Czech Republic.

Gao, Y., **Deming, P.**, Wormwood, J.B., Barrett, L.F., & Quigley, K.S. (2023, September). How does a set of cardiovascular variables explain subjective experience of valence and arousal during emotional scenario immersion? Society for Psychophysiological Research Conference, New Orleans, LA.

**Deming, P.**, Heilicher, M., & Koenigs, M. (2022, May). *The role of the amygdala in psychopathy: A systematic review of MRI studies*. Society for the Scientific Study of Psychopathy Conference (virtual).

**Deming, P.**, Eisenbarth, H., Rodrik, O., Weaver, S.S., & Koenigs, M. (2021, April). *Reduced* sympathetic arousal but not reduced mimicry in response to facial expressions in psychopathic individuals with low negative affect. Wisconsin Symposium on Emotion (virtual).

**Deming, P.** & Koenigs, M. (2019, April). Structural and Functional Neural Correlates of *Psychopathy: A Meta-analysis of MRI Data*. Wisconsin Symposium on Emotion, Madison, WI.

**Deming, P.**, Philippi, C.L., Wolf, R., Dargis, M., Kiehl, K.A., & Koenigs, M. (2017, May). *Psychopathic traits linked to alterations in cortical midline activity during personality judgments of self and others*. Society for the Scientific Study of Psychopathy Conference, Antwerp, Belgium.

**Deming, P.**, Dargis, M., Kiehl, K.A., Koenigs, M., & Kosson, D.S. (2017, April). *Psychopathy is associated with fear-specific reductions in neural activity during affective perspective-taking*. Wisconsin Symposium on Emotion, Madison, WI.

\*Deming, P., \*Philippi, C.L., Gudmundson, C., Glueck, J., Wolf, R., Dargis, M., Kiehl, K.A., & Koenigs, M. (2016, April). *Parsing the Components of Psychopathic Personality Through a* 

*Neuropsychological Study of Self- versus Other-focused Cognition.* Wisconsin Symposium on Emotion, Madison, WI.

## Teaching

Reader/Grader, University of Wisconsin-Madison, The Criminal Mind
Teaching Assistant, University of Wisconsin-Madison, The Criminal Mind
Teaching Assistant, University of Wisconsin-Madison, Child Psychopathology

## Ad Hoc Reviewing

Aggression and Violent Behavior Behavioural Brain Research **Biological Psychology Brain Structure and Function Cerebral Cortex Clinical Psychology Review Communications Biology Experimental Results** Journal of Emotion and Psychopathology Journal of Psychopathology and Clinical Science Nature Mental Health NeuroImage **Neuroscience and Biobehavioral Reviews** Neuroscience Letters PLoS ONE **Psychological Medicine** Psychology, Crime & Law Psychology Research and Behavior Management Scientific Reports Social Cognitive and Affective Neuroscience

## Media Coverage

"Psychopathy linked to fear-specific reductions in brain activity when taking another's perspective" by Eric W. Dolan, PsyPost, February 21, 2021. <u>https://www.psypost.org/2021/02/psychopathy-linked-to-fear-specific-reductions-in-brain-activity-when-taking-anothers-perspective-59729</u>