

# BROOKE N. MACNAMARA

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## ACADEMIC APPOINTMENTS

Purdue University

Associate Professor (with tenure), Psychological Sciences

2024 – present

Case Western Reserve University

Associate Professor (with tenure), Psychological Sciences

2019 – 2024

Assistant Professor, Psychological Sciences

2014 – 2019

## EDUCATION

Princeton University

PhD, Psychology

2014

Princeton University

MA, Psychology

2010

Union Institute & University

MA, Interdisciplinary Studies

2007

Columbia College Chicago

BA, American Sign Language-English Interpretation

2001

## EXTERNAL FUNDING

Army Research Institute

2022 – 2025

Understanding change in performance: The roles of cognitive abilities, “hot” cognition, and context

\$1,034,940.00

Role: Principal Investigator

Status: Funded

National Science Foundation

2021 – 2025

FW-HTF-R: Impact of artificial intelligence aids on clinical skill

\$1,999,999.00

|  |                           |
|--|---------------------------|
| acquisition, atrophy and adaptation  |                           |
| <u>Role</u> : Co-Investigator (PI: Soumya Ray)   | <u>Status</u> : Funded    |
| National Science Foundation  | 2020 – 2020               |
| FW-HTF-P: Clinical skill acquisition, retention and atrophy with artificial intelligence aids  | \$150,000.00              |
| <u>Role</u> : Co-Investigator (PI: Soumya Ray)   | <u>Status</u> : Completed |
| National Science Foundation  | 2013 – 2015               |
| Doctoral dissertation research: A novel approach to investigate psychological processes in language: Contrasting bilinguals and interpreters | \$14,139.00               |
| <u>Role</u> : Recipient (Advisor: Andrew R. A. Conway)   | <u>Status</u> : Completed |

## PUBLICATIONS

<sup>u</sup> = undergraduate student; <sup>g</sup> = graduate student; <sup>p</sup> = postdoctoral advisee

[prereg] = preregistered; [open] = open data; [n/a] = no empirical data

56. Burgoyne, A. P., Frank, D. J., & **Macnamara, B. N.** (2024). Which “working memory” are we talking about? Complex span tasks versus *N*-back. *Psychonomic Bulletin & Review*. <https://doi.org/10.3758/s13423-024-02622-0>
55. Müller, S. Morris-Binelli, K., Hambrick, D. Z., & **Macnamara, B. N.** (2024). Accelerating visual anticipation in sport through temporal occlusion training: A meta-analysis. *Sports Medicine*, 54, 2597–2606. <https://doi.org/10.1007/s40279-024-02073-6>
54. **Macnamara, B. N.**, <sup>g</sup>Berber, I., Çavuşoğlu, M. C., Krupinski, E., <sup>g</sup>Nallapareddy, N., <sup>g</sup>Nelson, N. E., Smith, P. J., Wilson-Delfosse, A. L., & Ray, S. (2024). Does using artificial intelligence assistance accelerate skill decay and hinder skill development without performers’ awareness? *Cognitive Research: Principles and Implications*, 9(46). <https://doi.org/10.1186/s41235-024-00572-8> [n/a]
53. **Macnamara, B. N.**, Prather, R. W., & Burgoyne, A. P. (2023). Beliefs about success are prone to cognitive fallacies. *Nature Reviews Psychology*, 2, 716–717. <https://doi.org/10.1038/s44159-023-00255-z> [n/a]
52. **Macnamara, B. N.**, & Burgoyne, A. P. (2023). A spotlight on bias in the growth mindset intervention literature: A reply to commentaries that contextualize the discussion (Oyserman, in press; Yan & Schuetze, in press) and illustrate the conclusion (Tipton et al., in press). *Psychological Bulletin*, 149(3–4), 242–258. [n/a] <https://doi.org/10.1037/bul0000394>

51. **Macnamara, B. N.**, & Burgoyne, A. P. (2023). Do growth mindset interventions impact students' academic achievement? A systematic review and meta-analysis with recommendations for best practices. *Psychological Bulletin*, *149*(3–4), 133–173. [prereg; open] <https://doi.org/10.1037/bul0000352>
50. <sup>§</sup>Barnett, M. K., & **Macnamara, B. N.** (2023). Individual responses versus aggregate group-level results: Examining the strength of evidence for growth mindset interventions on academic performance. *Journal of Intelligence*, *11*(104). [n/a] <https://doi.org/10.3390/jintelligence11060104>
49. Barth, M., Güllich, A., **Macnamara, B. N.**, & Hambrick, D. Z. (2023). Quantifying the extent to which junior performance predicts senior performance in Olympic sports: A systematic review and meta-analysis. *Sports Medicine*, *53*(6), 1201–1217. [prereg; open] <https://doi.org/10.1007/s40279-023-01906-0>
48. Frank, D. J., King, M. J., <sup>§</sup>Dennard, C., & **Macnamara, B. N.** (2023). Discriminant function analysis reveals which combination of measures from the NFL Combine predict NFL performance. *Journal of Expertise*, *6*(2). [open] <https://www.journalofexpertise.org>
47. Güllich, A., Barth, M., **Macnamara, B. N.**, & Hambrick, D. Z. (2023). Participation patterns in talent development in youth sports. *Frontiers in Sports and Active Living*, *5*(1175718). [n/a] <https://doi.org/10.3389/fspor.2023.1175718>
46. Güllich, A., Barth, M., **Macnamara, B. N.**, & Hambrick, D. Z. (2023). Quantifying the extent to which successful juniors and successful seniors are two disparate populations: A systematic review and synthesis of findings. *Sports Medicine*, *53*(6), 1201–1217. [prereg; open] <https://doi.org/10.1007/s40279-023-01840-1>
45. Güllich, A., Barth, M., **Macnamara, B. N.**, & Hambrick, D. Z. (2023). What makes champions? Childhood multi-sport practice facilitates long-term performance development. In R. Jeans & M. Toms (Eds.) *Routledge handbook of coaching children*. Routledge. [n/a]
44. <sup>¶</sup>Daniels, J. S., Moreau, D., & **Macnamara, B. N.** (2022). Learning and transfer in problem solving progressions. *Journal of Intelligence*, *10*(4). [prereg; open] <https://doi.org/10.3390/jintelligence10040085>
43. Barth, M., Güllich, A., **Macnamara, B. N.**, & Hambrick, D. Z. (2022). Predictors of junior versus senior elite performance are opposite: A systematic review and meta-analysis of participation patterns. *Sports Medicine*, *52*, 1399–1416. [open] <https://doi.org/10.1007/s40279-021-01625-4>
42. Güllich, A., **Macnamara, B. N.**, Barth, M., & Hambrick, D. Z. (2021). Further muddying the waters? A comment on Bell et al.'s 2021 definition of “youth sport specialization.” *Journal of Athletic Training*, *56*(11), 1252–1254. [n/a] <https://doi.org/10.4085/1062-6050-1010-21>

41. <sup>§</sup>Jiang, H., Yu, W., Lin, D., **Macnamara, B. N.** (2021). Resilience of adolescents, though weakened during pandemic-related lockdown, serves as a protection against depression and sleep problems. *Psychology, Health & Medicine*, 1–12. [prereg; open] <https://doi.org/10.1080/13548506.2021.1990367>
40. Burgoyne, A. P., & **Macnamara, B. N.** (2021). Reconsidering the use of the Mindset Assessment Profile in educational contexts. *Journal of Intelligence*, 9(3), 31, 1–11. [prereg; open] <https://doi.org/10.3390/jintelligence9030039>
39. Güllich, A., **Macnamara, B. N.**, & Hambrick, D. Z. (2021). What makes a champion? Early multi-disciplinary practice, not early specialization, predicts world-class performance. *Perspectives on Psychological Science*, 17(1), 6–29. [open] <https://doi.org/10.1177/1745691620974772>
38. <sup>§</sup>Navarro, E., **Macnamara, B. N.**, Glucksberg, S., & Conway, A. R. A. (2020). What influences successful communication? An examination of cognitive load and individual differences. *Discourse Processes*, 57(10), 880–899. [prereg (Experiment 3); open] <https://doi.org/10.1080/0163853X.2020.1829936>
37. Hambrick, D. Z., **Macnamara, B. N.**, & Oswald, F. L. (2020). Is the deliberate practice view defensible? A review of evidence and discussion of issues. *Frontiers in Psychology*, 11, 1134, 1–21. [n/a] <https://doi.org/10.3389/fpsyg.2020.01134>
36. <sup>¶</sup>Frank, D. J., & **Macnamara, B. N.** (2020). How do task characteristics affect learning and performance? The roles of simultaneous, interactive, and continuous tasks. *Psychological Research*, 85, 2364–2397. [prereg; open] <https://doi.org/10.1007/s00426-020-01394-1>
35. Hambrick, D. Z., & **Macnamara, B. N.** (2020). Toward a science of expertise: Obstacles, implications, and applications. In S. McCauley (Ed.), *Conceptual frameworks for giftedness and talent development* (pp. 55–92). Prufrock Press. [n/a]
34. <sup>§</sup>King, M. J., & **Macnamara, B. N.** (2020). Three visual working memory representations simultaneously control attention. *Nature: Scientific Reports*, 10, 10504, 1–9. [prereg] <https://doi.org/10.1038/s41598-020-67455-y>
33. <sup>¶</sup>Frank, D. J., Demaree, H.A., & **Macnamara, B. N.** (2020). The role of individual differences in risk learning: Who learns to place optimal wagers? *Learning and Motivation: Individual Differences*, 71, 101633, 1–10. <https://doi.org/10.1016/j.lmot.2020.101633>
32. **Macnamara, B. N.**, & Hambrick, D. Z. (2020). Toward a cumulative science of expertise: Commentary on Moxley, Ericsson, and Tuffiash (2017). *Psychological Research*, 85, 1108–1113. [n/a] <https://doi.org/10.1007/s00426-020-01307-2>

31. <sup>§</sup>Burgoyne, A. P., Hambrick, D. Z., & **Macnamara, B. N.** (2020). How firm are the foundations of mindset theory? *Psychological Science*, *31*(3), 258–267. [prereg; open] <https://doi.org/10.1177/0956797619897588>
30. **Macnamara, B. N.**, & Maitra, M. (2019). The role of deliberate practice in expert performance: Revisiting Ericsson, Krampe, & Tesch-Römer (1993). *Royal Society Open Science*, *6*, 190327, 1–19. [prereg; open] <https://doi.org/10.1098/rsos.190327>
29. Hambrick, D. Z. & **Macnamara, B. N.** (2019). More confusion about deliberate practice: Commentary on Miller et al. (2018). *High Ability Studies*, *30*(2), 291–294. [n/a] <https://doi.org/10.1080/13598139.2019.1607723>
28. <sup>¶</sup>Frank, D. J., & **Macnamara, B. N.** (2019). Retrieval shifts in spatial skill acquisition are collective rather than item-specific. *Memory & Cognition*, *47*, 1344–1358. [prereg; open] <https://doi.org/10.3758/s13421-019-00937-1>
27. <sup>§</sup>Burgoyne, A. P., Nye, C. D., **Macnamara, B. N.**, Charness, N., & Hambrick, D. Z. (2019). The impact of domain specific experience on chess skill: Re-analysis of a key study. *American Journal of Psychology*, *132*(1), 27–38. [n/a] <https://www.jstor.org/stable/10.5406/amerjpsyc.132.1.0027>
26. <sup>§</sup>King, M. J., <sup>§</sup>Katz, D. P., Thompson, L. A., & **Macnamara, B. N.** (2019). Genetic and environmental influences on spatial reasoning: A meta-analysis of twin studies. *Intelligence*, *73*, 65–77. [prereg; open] <https://doi.org/10.1016/j.intell.2019.01.001>
25. Moreau, D., **Macnamara, B. N.**, & Hambrick, D. Z. (2019). Overstating the role of environmental factors in success: A cautionary note. *Current Directions in Psychological Science*, *28*(1), 28–33. [n/a] <https://doi.org/10.1177/0963721418797300>
24. **Macnamara, B. N.**, & <sup>¶</sup>Frank, D. J. (2018). How do task characteristics affect learning and performance? The roles of variably mapped and dynamic tasks. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *44*(5), 764–778. <https://doi.org/10.1037/xlm0000487>
23. <sup>¶</sup>Sisk, V. F., <sup>§</sup>Burgoyne, A. P., <sup>¶</sup>Sun, J., Butler, J. L., & **Macnamara, B. N.** (2018). To what extent and under which circumstances are growth mindsets important to academic achievement? Two meta-analyses. *Psychological Science*, *29*(4), 549–571. [open] <https://doi.org/10.1177/0956797617739704>
22. Hambrick, D. Z., <sup>§</sup>Burgoyne, A. P., **Macnamara, B. N.**, & Ullén, F. (2018). Toward a multifactorial model of expertise: Beyond born versus made. *Annals of the New York Academy of Sciences*, *1423*(1), 284–295. [n/a] <https://doi.org/10.1111/nyas.13586>
21. <sup>¶</sup>Frank, D. J., & **Macnamara, B. N.** (2017). Does the acquisition of spatial skill involve a shift from algorithm to memory retrieval? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *43*(12), 1845–1856.

20. **Macnamara, B.N.**, Hambrick, D. Z., <sup>p</sup>Frank, D. J., <sup>§</sup>King, M. J., <sup>§</sup>Burgoyne, A. P., & Meinz, E. J. (2017). The deliberate practice view: An evaluation of definitions, claims, and empirical evidence. In D. Z. Hambrick, G. Campitelli, & B. N. Macnamara (Eds.), *The science of expertise: Behavioral, neural, and genetic approaches to complex skill* (pp. 151–168). Routledge. [n/a]
19. Hambrick, D. Z., Campitelli, G., & **Macnamara, B. N.** (2017). Introduction: A brief history on the science of expertise and overview of the book. In D. Z. Hambrick, G. Campitelli, & B. N. Macnamara (Eds.), *The science of expertise: Behavioral, neural, and genetic approaches to complex skill* (pp. 1–10). Routledge. [n/a]
18. **Macnamara, B. N.**, & <sup>u</sup>Rupani, N. S. (2017). The relationship between intelligence and mindset. *Intelligence*, *64*, 52–59. [open] <https://doi.org/10.1016/j.intell.2017.07.003>
17. Hambrick, D. Z., <sup>§</sup>Burgoyne, A., Campitelli, G., & **Macnamara, B. N.** (2017). Working memory, thinking, and expertise. In L. J. Ball & V. A. Thompson (Eds.), *International handbook of thinking and reasoning* (pp. 268–288). Routledge. [n/a]
16. <sup>§</sup>Sala, G., <sup>§</sup>Burgoyne, A., Campitelli, G., **Macnamara, B. N.**, Hambrick, D. Z., & Gobet, F. (2017). Checking the “academic selection” argument. Chess players outperform non-chess players in cognitive skills related to intelligence: A meta-analysis. *Intelligence*, *60*, 130–139. [open] <https://doi.org/10.1016/j.intell.2017.01.013>
15. Gonthier, C., **Macnamara, B. N.**, <sup>§</sup>Chow, M., Conway, A. R. A., & Braver, T. S. (2016). Inducing proactive control shifts in the AX-CPT. *Frontiers in Psychology*, *7*, 1822, 1–14. [open] <https://doi.org/10.3389/fpsyg.2016.01822>
14. Hambrick, D. Z., **Macnamara, B. N.**, Campitelli, G., Ullén, F., & Mosing, M. (2016). A new look at expertise: Beyond the experts are born vs. made debate. In B. Ross (Ed.), *Psychology of learning and motivation, Volume 64* (pp. 1–55). Elsevier. [n/a]
13. Hambrick, D. Z. & **Macnamara, B. N.** (2016). Expertise. In S. K. Whitbourne (Ed.), *The encyclopedia of adulthood and aging* (pp. 1–6). John Wiley and Sons. [n/a]
12. <sup>§</sup>Burgoyne, A. P., <sup>§</sup>Sala, G., Gobet, F., **Macnamara, B. N.**, Campitelli, G., & Hambrick, D. Z. (2016). The relationship between cognitive ability and chess skill: A comprehensive meta-analysis. *Intelligence*, *59*, 72–83. [open] <https://doi.org/10.1016/j.intell.2016.08.002>
11. **Macnamara, B. N.**, & Conway, A. R. A. (2016). Working memory capacity as a predictor of simultaneous language interpreting performance. *Journal of Applied Research in Memory and Cognition*, *5*(4), 434–444. <https://doi.org/10.1016/j.jarmac.2015.12.001>

10. **Macnamara, B. N.**, Hambrick, D. Z., & Moreau, D. (2016). How important is deliberate practice? Reply to Ericsson (2016). *Perspectives on Psychological Science*, *11*(3), 355–358. [n/a] <https://doi.org/10.1177/17456916166635614>
9. **Macnamara, B. N.**, Moreau, D., Hambrick, D. Z. (2016). The relationship between deliberate practice and performance in sports: A meta-analysis. *Perspectives on Psychological Science*, *11*(3), 333–350. [open] <https://doi.org/10.1177/17456916166635591>
8. <sup>§</sup>Chow, M. A., **Macnamara, B. N.**, & Conway, A. R. A. (2016). Phonological similarity in working memory span tasks. *Memory & Cognition*, *44*, 937–949. [open] <https://doi.org/10.3758/s13421-016-0609-8>
7. <sup>§</sup>**Macnamara, B. N.**, Hambrick, D. Z., & Oswald, F. L. (2014). Deliberate practice and performance in music, games, sports, professions, and education: A meta-analysis. *Psychological Science*, *25*(8), 1608–1618. [open] <https://doi.org/10.1177/0956797614535810>
6. <sup>§</sup>**Macnamara, B. N.** & Conway, A. R. A. (2014). Novel evidence in support of the bilingual advantage: Influence of task demands and experience on cognitive control and working memory. *Psychonomic Bulletin & Review*, *21*, 520–525. <https://doi.org/10.3758/s13423-013-0524-y>
5. Conway, A. R. A., <sup>§</sup>**Macnamara, B. N.**, & Engel de Abreu, P. M. J. (2013). Working memory and intelligence: An overview. In T. P. Alloway & R. G. Alloway (Eds.) *Working memory: The connected intelligence* (pp. 13–36). Psychology Press. [n/a]
4. <sup>§</sup>**Macnamara, B. N.**, <sup>§</sup>Moore, A. B., & Conway, A. R. A. (2011). Phonological similarity effects in simple and complex span tasks. *Memory & Cognition*, *39*, 1174–1186. <https://doi.org/10.3758/s13421-011-0100-5>
3. Conway, A. R. A., <sup>§</sup>Getz, S. J., <sup>§</sup>**Macnamara, B. N.**, & Engel de Abreu, P. M. J. (2011). Working memory and intelligence. In R. J. Sternberg & S. B. Kaufman (Eds.), *The Cambridge handbook of intelligence* (pp. 394–418). Cambridge University Press. [n/a]
2. <sup>§</sup>**Macnamara, B. N.**, <sup>§</sup>Moore, A. B., Kegl, J. A., & Conway, A. R. A. (2011). Domain-general cognitive abilities and simultaneous interpreting skill. *Interpreting*, *13*, 121–142. <https://doi.org/10.1075/intp.13.1.08mac>
1. <sup>§</sup>**Macnamara, B. N.** (2009). Interpreter cognitive aptitudes. *Journal of Interpretation*, *2008-2009*, 9-32. Reprint in *Journal of Interpretation* (2012), v. 19. <http://digitalcommons.unf.edu/joi/vol19/iss1/1>

## INVITED SPOKEN PRESENTATIONS

- Macnamara, B. N. (2024, October). *Theories of achievement and cognitive fallacies*. [Invited presentation]. Psychology Department Colloquium, Youngstown State University, Youngstown, OH.
- Macnamara, B. N. (2024, September). *Factors associated with Olympic greatness*. [Invited presentation]. CSR 309 Leadership Strategies, Purdue University, West Lafayette, IN.
- Macnamara, B. N. (2024, September). *How sports champions develop may not be how you think*. [Invited presentation]. Department of Kinesiology, Purdue University, West Lafayette, IN.
- Macnamara, B. N. (2024, September). *Theories of achievement and cognitive fallacies*. [Invited presentation]. Attention and Perception Brown Bag, University of Illinois, Champaign–Urbana, IL.
- Macnamara, B. N. (2024, August). *Popular theories of achievement: The claims are stronger than the evidence*. [Invited presentation]. Clinical Psychology Area Colloquium, Purdue University, West Lafayette, IN.
- Macnamara, B. N. (2024, July). *Popular theories of skill acquisition, expertise, and achievement: Their empirical status*. [Welcoming lecture]. International Society of Intelligence Research Conference, Zurich, Switzerland.
- Macnamara, B. N. (2024, June). [Keynote address]. 28th International Symposium on Translation and Interpreting Teaching, Taipei City, Taiwan. *Note*. I needed to decline this invitation for logistical reasons.
- Macnamara, B. N. (2024, April). *How sports champions develop may not be how you think*. [Invited presentation]. German Research Centre of Elite Sport Congress. Cologne, Germany [virtual presentation].
- Macnamara, B. N. (2024, February). *Theories and predictors of skill acquisition, expertise, and achievement*. [Invited presentation]. Department of Psychological Sciences, Purdue University, West Lafayette, IN.
- Macnamara, B. N. (2024, February). *Theories and predictors of skill acquisition, expertise, and achievement*. [Invited presentation]. Department of Psychology, University of Central Florida, Orlando, FL.
- Macnamara, B. N. (2023, December). *Growth mindset interventions: A meta-analysis and best practices recommendations*. [Invited presentation and meta-analysis workshop]. Advanced Analytical Methods for Generalizable Research course, School of Management, Case Western Reserve University, Cleveland, OH.



- Macnamara, B. N. (2023, November). *Theories and predictors of personal achievement*. [Invited presentation]. Department of Psychology, University of Waterloo, Waterloo, ON, Canada.
- Macnamara, B. N. (2023, July). *How sports champions develop may not be how you think*. [Invited presentation]. European College of Sports Science Congress, Paris, France.
- Macnamara, B. N. (2021, April). *Interpreting as complex human performance: The role of cognitive abilities, experience, and task demands*. [Keynote address]. 2nd International Conference on Interpreting, Hong Kong [virtual presentation].
- Macnamara, B. N. (2020, December). *The '10,000-hour rule' and other misconceptions about the role practice plays in expertise*. [Invited presentation]. Southern Society for Philosophy and Psychology Annual Conference, virtual.
- Macnamara, B. N. (2019, October). *How well does deliberate practice explain performance variance?* [Invited presentation]. Psychology Department Colloquium, St. John's University, New York, NY.
- Macnamara, B. N. (2019, February). *Examining predictors and theories of skilled performance variance*. [Invited presentation]. Psychology Department Viking Series, Cleveland State University, Cleveland, OH.
- Macnamara, B. N. (2018, September). *Examining popular theories for why some people are more successful than others: Similarities in trends from cognitive and social psychology*. [Invited presentation]. Psychology Department Colloquium, Claremont Graduate University, Claremont, CA.
- Macnamara, B. N. (2018, September). *How important are growth mindsets to achievement?* [Invited presentation]. Psychology Department, University of British Columbia, Vancouver, BC, Canada.
- Macnamara, B. N. & Hambrick, D. Z. (2016, May). *Skill acquisition and expertise*. [Invited symposium]. Midwestern Psychological Association Annual Conference, Chicago, IL.
- Macnamara, B. N. & Frank, D. J. (2016, May). *The role of task demands in predicting performance*. [Presentation in invited symposium]. Midwestern Psychological Association Annual Conference, Chicago, IL.
- Macnamara, B. N. (2014, October). *Predictors of performance across domains and within bilingualism*. [Invited presentation]. Psychology Department, University of Illinois-Chicago, Chicago, IL.
- §Macnamara, B. N. (2014, January). *Skill acquisition and expertise across domains and within bilingualism*. [Invited presentation]. Department of Psychological Sciences, Case Western Reserve University, Cleveland, OH.

‡Macnamara, B. N. (2013, October). *Skill acquisition and expertise across domains and within bilingualism*. [Invited presentation]. Psychology Department, University of Chicago, Chicago, IL.

## HONORS, AWARDS, AND NOMINATIONS

|   |      |
|---|------|
| Recipient, Early Career Award<br>Psychonomic Society  | 2024 |
| Nominee, John S. Diekhoff Award for Distinguished Graduate Student Mentoring<br>Case Western Reserve University       | 2022 |
| Recipient, J. Bruce Jackson, M.D., Award for Excellence in Undergraduate Mentoring<br>Case Western Reserve University | 2019 |
| Nominee, John S. Diekhoff Award for Distinguished Graduate Student Teaching<br>Case Western Reserve University        | 2018 |
| Fellow<br>Psychonomic Society   | 2017 |
| Rising Star<br>Association for Psychological Science  | 2017 |
| Runner-up, Travel and Networking Award<br>Women in Cognitive Science  | 2016 |
| Recipient, Travel Fellowship to the 36 <sup>th</sup> Carnegie Symposium on Cognition<br>Carnegie Mellon University    | 2009 |

## MEMBERSHIPS

|   |                       |
|---|-----------------------|
| Society for Personality and Social Psychology | 2016–2018, since 2023 |
| SPARK Society                                 | since 2020            |
| Association for Psychological Science         | since 2014            |
| Midwestern Psychological Association          | since 2014            |
| Women in Cognitive Science                    | since 2008            |
| Psychonomic Society                           | since 2008            |

Society for the Improvement of Psychological Science

2018–2022

## **EDITORIAL AND REVIEWER POSITIONS**

### **Journal Editorial Positions**

|   |                           |
|---|---------------------------|
| Consulting Editor, <i>Journal of Expertise</i>  | 2022 – present            |
| Consulting Editor, <i>Interpreting</i>  | 2020 – present            |
| Consulting Editor, <i>Journal of Experimental Psychology: General</i>                                       | 2016–2018, 2019 – present |
| Consulting Editor, <i>Journal of Intelligence</i>   | 2022 – 2024               |
| Consulting Editor, <i>Psychonomic Bulletin &amp; Review</i>   | 2020 – 2022               |
| Associate Editor, <i>Journal of Expertise</i>   | 2018 – 2022               |
| Consulting Editor, <i>Journal of Experimental Psychology: LMC</i>   | 2016 – 2022               |
| Panelist (×3), National Science Foundation  | 2019 – 2020               |
| Special Issue Co-Editor, <i>Journal of Expertise</i><br>(special issue on open science and reproducibility) | 2019                      |
| Guest Academic Editor, <i>PLOS One</i>  | 2018                      |

### **Journal Ad Hoc Reviewer (selective list)**

|                               |  |
|-------------------------------|--|
| <i>Nature</i>                 | <i>Memory &amp; Cognition</i>                          |
| <i>PLOS One</i>               | <i>Learning and Motivation</i>                         |
| <i>Psychological Science</i>  | <i>Behavior Research Methods</i>                       |
| <i>Psychological Bulletin</i> | <i>Perspectives on Psychological Science</i>           |
| <i>Nature Human Behavior</i>  | <i>Proceedings of the National Academy of Sciences</i> |

### **Book Editorial Position**

Book Co-Editor\*, *The science of expertise: Behavioral, neural, and genetic approaches to complex skill*. Routledge. 2016 – 2018

\*Royalties refused/directly donated to Berkeley Initiative for Transparency in the Social Sciences

### **Funding Reviewer**

Panelist (×3), National Science Foundation 2019 – 2020

|  |      |
|--|------|
| Ad Hoc Funding Reviewer, Narodowe Centrum Nauki<br>(National Science Centre [Poland])  | 2017 |
| Ad Hoc Funding Reviewer, National Science Foundation<br>(Perception, Action, and Cognition Program)                              | 2015 |
| Ad Hoc Funding Reviewer, National Science Foundation<br>(Linguistics Program)  | 2015 |
| Ad Hoc Funding Reviewer, Université de Toulouse: Initiative d'Excellence<br>(Toulouse University: Excellence Initiative, France) | 2015 |
| Ad Hoc Funding Reviewer, National Center of Science and Technology Evaluation<br>(Kazakhstan)                                    | 2014 |

## **TEACHING EXPERIENCE**

\* = graduate course

### **Case Western Reserve University**

| <u>Course</u>  | <u>Terms Taught</u>                        |
|--|--|
| * Science Writing  | Spring: 2021, Fall: 2023                   |
| * Statistics and Research Design                                     | Spring: 2015–2023                          |
| * Everything You Need to Know<br>But Are Never Taught in Grad School | Fall: 2019, 2022                           |
| Senior Capstone Course (Current Problems)                            | Spring: 2022                               |
| * Idea Generation & Post-PhD Career Options                          | Fall: 2021                                 |
| * Learning Theory  | Spring: 2016, 2020                         |
| Research Methods   | Fall: 2014–2018<br>Spring: 2015, 2017–2019 |

### **Princeton University**

(preceptor or lab instructor)

| <u>Course</u>              | <u>Terms Taught</u>      |
|----------------------------|--------------------------|
| Statistics                 | Fall: 2012, Spring: 2013 |
| Health Psychology          | Spring: 2012             |
| Introduction to Psychology | Fall: 2010               |

Memory and Cognition  
Abnormal Psychology

Spring: 2010  
Fall: 2009

## ADVISING AND SUPERVISING

### PhD Students

#### Primary advisee: Purdue University

|   |                |
|---|----------------|
| Mariel Barnett  | 2024 – present |
| <i>Current position:</i> 3 <sup>rd</sup> -year PhD student<br>Purdue University |                |

#### Primary advisee: Case Western Reserve University

|  |             |
|--|-------------|
| Mariel Barnett   | 2022 – 2024 |
| <i>Current position:</i> 3 <sup>rd</sup> -year PhD student<br>Purdue University    |             |
| Huangqi Jiang, PhD   | 2017 – 2022 |
| <i>Current position:</i> Software Engineer<br>Bloomberg                            |             |
| Michael J. King, PhD   | 2015 – 2020 |
| <i>Current position:</i> Human Factors Engineer<br>Quantum Improvements Consulting |             |

#### Secondary advisee: Case Western Reserve University

|   |             |
|---|-------------|
| Kyle LaFollette   | 2020 – 2025 |
| <i>Current position:</i> 5 <sup>th</sup> -year PhD student<br>Case Western Reserve University |             |
| Doroteja Rubez  | 2020 – 2025 |
| <i>Current position:</i> 5 <sup>th</sup> -year PhD student<br>Case Western Reserve University |             |
| Charlotte Lubowe  | 2023 – 2025 |
| <i>Current position:</i> 3 <sup>rd</sup> -year PhD student<br>Case Western Reserve University |             |
| Amanda Merner, PhD  | 2017 – 2022 |
| <i>Current position:</i> Postdoctoral Research Fellow<br>Harvard Medical School               |             |
| Anne Kotynski-Gooding, PhD  | 2015 – 2020 |
| <i>Current position:</i> Statistician<br>National Institutes of Health                        |             |

Master's thesis committee member: Case Western Reserve University

(Psychology: 15; Computer Science: 2; Biomedical Engineering: 3;  
Electrical Engineering: 1)

2014 – 2024

Master's thesis committee member: Purdue University

(Psychology: 1)

2024

Dissertation committee member: Case Western Reserve University

(Psychology: 12; Nursing: 1; Biomedical Engineering: 2; Accounting: 1)

2014 – 2025

Dissertation committee member: Purdue University

(Psychology: 1)

2024 – present

Graduate independent study advisor: Case Western Reserve University

(Psychology: 4)

2015 – 2024

**Postdoctoral Scholar**

Primary advisee: Case Western Reserve University

David J. Frank, PhD

2015 – 2017

*Current position:* Assistant Professor  
Youngstown State University

**Post-bac Research Assistants**

Supervisor: Purdue University

(Total: 1, Current: 1)

2024 – present

Supervisor: Case Western Reserve University

(Total: 5)

2014 – 2024

**Undergraduate Students**

Research assistant advisor: Case Western Reserve University

(2–9 per semester)

2015 – 2025

Notable undergraduate research advisees:

Essence Leslie

2019 – 2022

*Current position:* Post-bac Research Assistant  
Vanderbilt University

|   |   |             |
|---|---|-------------|
| Bao Ho  |   | 2019 – 2021 |
| <i>Current position:</i>  | PhD Student, I-O Psychology<br>Bowling Green State University |             |
| Jonathan S. Daniels   |   | 2017 – 2019 |
| <i>Current position:</i>  | PhD Student, Cognitive Psychology<br>Princeton University     |             |
| Victoria F. Sisk  |   | 2015 – 2017 |
| <i>Current position:</i>  | PhD Student, Sociology<br>University of Arizona               |             |
| <u>Honors capstone advisor: Case Western Reserve University</u>   |   |             |
| (Psychology total: 12)  |   | 2015 – 2024 |
| <u>Independent study advisor: Case Western Reserve University</u> |   |             |
| (Psychology total: 17)  |   | 2015 – 2024 |
| <u>Psychology major academic advisor</u>                          |   |             |
| (~30 students per semester)                                       |   | 2014 – 2024 |

## **SERVICE**

### **Professional**

|  |  |                |
|--|--|----------------|
| Member, Communications Committee<br>Psychonomic Society  |  | 2024 – present |
| Mentor, Speed Mentoring Session, New York<br>Women in Cognitive Science                                |  | 2024           |
| Member, Cognitive Research: Principles and Implications Editor Search Committee<br>Psychonomic Society |  | 2025           |

### **Institutional**

|   |  |             |
|---|--|-------------|
| Member, Institutional Review Board<br>Office of Research, Case Western Reserve University   |  | 2022 – 2024 |
| Director, Developmental, Cognitive, and Affective Sciences PhD Program<br>Department of Psychological Sciences, Case Western Reserve University |  | 2019 – 2024 |
| Member, Student Awards Committee  |  | 2017 – 2024 |

|   |             |
|---|-------------|
| Department of Psychological Sciences, Case Western Reserve University |             |
| Chair, Faculty Search Committee                                       | 2023        |
| Department of Psychological Sciences, Case Western Reserve University |             |
| Member, Faculty Development Council                                   | 2022 – 2023 |
| Office of Faculty Development, Case Western Reserve University        |             |
| Faculty Advisor, Psychology Club                                      | 2019 – 2022 |
| Undergraduate Admission, Case Western Reserve University              |             |
| Chair, Speaker Series Committee                                       | 2015 – 2020 |
| Department of Psychological Sciences, Case Western Reserve University |             |
| Funding Reviewer, Think Big Initiative                                | 2020        |
| Office of the Provost, Case Western Reserve University                |             |
| Faculty Advisor, Think Big Initiative for Equity and Safety           | 2020        |
| Office of the Provost, Case Western Reserve University                |             |
| Member, W.P. Jones Junior Faculty Fellowship Selection Committee      | 2019 – 2020 |
| College of Arts & Sciences, Case Western Reserve University           |             |
| Founder and Director, Graduate Writing Days Program                   | 2011 – 2014 |
| Graduate College, Princeton University                                |             |

## **PUBLIC ENGAGEMENT**

### **Press Releases**

|                                       |                                 |
|---------------------------------------|---------------------------------|
| Association for Psychological Science | Royal Society                   |
| Princeton University                  | Case Western Reserve University |

### **Select On-Air Interviews**

|                             |  |
|-----------------------------|--|
| National Public Radio (NPR) | British Broadcasting Corporation (BBC) |
|-----------------------------|--|

### **Select Media Outlets**

(where research was reported, discussed, or featured)

|                    |                     |                  |
|--------------------|---------------------|------------------|
| The New York Times | The Washington Post | The Boston Globe |
|--------------------|---------------------|------------------|



Huffington Post  
Houston Chronicle  
Business Insider  
Parsing Science  
The Conversation

ESPN  
San Francisco Chronicle  
Sydney Morning Herald  
Scientific American  
The Wall Street Journal

Psychology Today  
New York Magazine  
Bloomberg Business Week  
Smithsonian Magazine  
The Range Report/Range Widely