

BROOKE N. MACNAMARA

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ACADEMIC APPOINTMENTS

Purdue University

Associate Professor (with tenure), Psychological Sciences

2024 – present

Case Western Reserve University

Faculty Researcher

2024 – 2025

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: Interpreting Theory & Cognition

2007

Columbia College Chicago

BA, American Sign Language-English Interpretation

2001

EXTERNAL FUNDING

National Science Foundation

\$1,999,999.00

FW-HTF-R: Impact of artificial intelligence aids on clinical skill acquisition, atrophy and adaptation

2021 – 2026

Role: Co-Investigator (PI: Soumya Ray)

Status: NCE

Army Research Institute	\$1,034,940.00
<i>Understanding change in performance: The roles of cognitive abilities, “hot” cognition, and context</i>	2022 – 2025
<u>Role</u> : Principal Investigator	<u>Status</u> : Completed
National Science Foundation	\$150,000.00
<i>FW-HTF-P: Clinical skill acquisition, retention and atrophy with artificial intelligence aids</i>	2020
<u>Role</u> : Co-Investigator (PI: Soumya Ray)	<u>Status</u> : Completed
National Science Foundation	\$14,139.00
<i>Doctoral dissertation research: A novel approach to investigate psychological processes in language: Contrasting bilinguals and interpreters</i>	2013 – 2015
<u>Role</u> : Recipient (Advisor: Andrew R. A. Conway)	<u>Status</u> : Completed

PUBLICATIONS

^u = undergraduate student; ^g = graduate student; ^p = postdoctoral advisee

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

Journal Articles

55. **Macnamara, B. N.** (accepted). Artificial intelligence as a partner in meta-analysis: Research agenda, user recommendations, and speed-accuracy tradeoffs. *Psychological Bulletin*. [n/a]
54. Frank, D. J., Burgoyne, A. P., & **Macnamara, B. N.** (accepted). Consistently mapped, but consistently demanding: Predicting skilled performance. *Psychonomic Bulletin & Review*. [prereg, open]
53. ^gLaFollette, K. J., Frank, D. J., Burgoyne, A. P., & **Macnamara, B. N.** (2026). Task, person, and experiential characteristics drive the transfer of learning. *Communications Psychology*, 4(42), 1–16. <https://doi.org/10.1038/s44271-026-00408-9> [prereg, open]
52. Güllich, A., Barth, M., Hambrick, D. Z., & **Macnamara, B. N.** (2025). Recent discoveries on the acquisition of the highest levels of human performance. *Science*, 390, (6779), 1–11. <https://doi.org/10.1126/science.adt7790> [n/a]

51. **Macnamara, B. N.**, Burgoyne, A. P., & Moreau, D. (2025). Communicating science, not magic. *Communications Psychology*, 3, 119. <https://doi.org/10.1038/s44271-025-00301-x> [n/a]
50. Burgoyne, A. P., Frank, D. J., & **Macnamara, B. N.** (2025). Complex span and the *n*-back lack convergent validity as measures of working memory: Reply to Wilhelm et al. (2025). *Psychonomic Bulletin & Review*, 32, 2424–2429. <https://doi.org/10.3758/s13423-025-02721-6> [n/a]
49. **Macnamara, B. N.**, & Burgoyne, A. P. (2025). Beliefs, behaviors, and the inferences that bind them: Scrutinizing the mechanism of action. *Psychological Inquiry*, 36(1), 40–44. <https://doi.org/10.1080/1047840X.2025.2482351> [n/a]
48. Burgoyne, A. P., Frank, D. J., & **Macnamara, B. N.** (2025). Which “working memory” are we talking about? Complex span tasks versus *N*-back. *Psychonomic Bulletin & Review*, 32, 1337–1351. <https://doi.org/10.3758/s13423-024-02622-0> [open]
47. 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>
46. **Macnamara, B. N.**, [§]Berber, I., Çavuşoğlu, M. C., Krupinski, E., [§]Nallapareddy, N., [§]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]
45. Barth, M., Güllich, A., **Macnamara, B. N.**, & Hambrick, D. Z. (2024). 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. <https://doi.org/10.1007/s40279-023-01906-0> [prereg; open]
44. **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]
43. **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. <https://doi.org/10.1037/bul0000394> [n/a]
42. **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. <https://doi.org/10.1037/bul0000352> [prereg; open]

41. [§]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).
<https://doi.org/10.3390/jintelligence11060104> [n/a]
40. Frank, D. J., King, M. J., [§]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), 130–163.
https://www.journalofexpertise.org/articles/volume6_issue2/JoE_6_2_Frank_etal.html [open]
39. 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).
<https://doi.org/10.3389/fspor.2023.1175718> [n/a]
38. 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.
<https://doi.org/10.1007/s40279-023-01840-1> [prereg; open]
37. [¶]Daniels, J. S., Moreau, D., & **Macnamara, B. N.** (2022). Learning and transfer in problem solving progressions. *Journal of Intelligence*, *10*(4), 85, 1–13.
<https://doi.org/10.3390/jintelligence10040085> [prereg; open]
36. 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. <https://doi.org/10.1007/s40279-021-01625-4> [open]
35. 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. <https://doi.org/10.4085/1062-6050-1010-21> [n/a]
34. [§]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*, *27*, 1977–1988.
<https://doi.org/10.1080/13548506.2021.1990367> [prereg; open]
33. 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.
<https://doi.org/10.3390/jintelligence9030039> [prereg; open]
32. 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.
<https://doi.org/10.1177/1745691620974772> [open]

31. ^gNavarro, 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.
<https://doi.org/10.1080/0163853X.2020.1829936> [prereg (Experiment 3); open]
30. 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. <https://doi.org/10.3389/fpsyg.2020.01134> [n/a]
29. ^pFrank, 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. <https://doi.org/10.1007/s00426-020-01394-1> [prereg; open]
28. ^gKing, M. J., & **Macnamara, B. N.** (2020). Three visual working memory representations simultaneously control attention. *Scientific Reports*, 10, 10504, 1–9.
<https://doi.org/10.1038/s41598-020-67455-y> [prereg]
27. ^pFrank, 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*, 71, 101633, 1–10. <https://doi.org/10.1016/j.lmot.2020.101633>
26. **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. <https://doi.org/10.1007/s00426-020-01307-2> [n/a]
25. ^gBurgoyne, A. P., Hambrick, D. Z., & **Macnamara, B. N.** (2020). How firm are the foundations of mindset theory? *Psychological Science*, 31(3), 258–267.
<https://doi.org/10.1177/0956797619897588> [prereg; open]
24. **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. <https://doi.org/10.1098/rsos.190327> [prereg; open]
23. McAbee, S. T. & **Macnamara, B. N.** (2019). Introduction to the special issue on open research practices and reproducibility in expertise research. *Journal of Expertise*, 2(4), 197–198.
https://www.journalofexpertise.org/articles/volume2_issue4/JoE_2_4_Intro.html [n/a]
22. 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.
<https://doi.org/10.1080/13598139.2019.1607723> [n/a]
21. ^pFrank, D. J., & **Macnamara, B. N.** (2019). Retrieval shifts in spatial skill acquisition are

- collective rather than item-specific. *Memory & Cognition*, 47, 1344–1358.
<https://doi.org/10.3758/s13421-019-00937-1> [prereg; open]
20. [§]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.
<https://www.jstor.org/stable/10.5406/amerjpsyc.132.1.0027> [n/a]
19. [§]King, M. J., [§]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. <https://doi.org/10.1016/j.intell.2019.01.001> [prereg; open]
18. 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. <https://doi.org/10.1177/0963721418797300> [n/a]
17. **Macnamara, B. N.**, & [¶]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>
16. [¶]Sisk, V. F., [§]Burgoyne, A. P., [¶]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.
<https://doi.org/10.1177/0956797617739704> [open]
15. Hambrick, D. Z., [§]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. <https://doi.org/10.1111/nyas.13586> [n/a]
14. [¶]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.
<https://doi.org/10.1037/xlm0000429>
13. **Macnamara, B. N.**, & [¶]Rupani, N. S. (2017). The relationship between intelligence and mindset. *Intelligence*, 64, 52–59. <https://doi.org/10.1016/j.intell.2017.07.003> [open]
12. [§]Sala, G., [§]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. <https://doi.org/10.1016/j.intell.2017.01.013> [open]
11. Gonthier, C., **Macnamara, B. N.**, [§]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.
<https://doi.org/10.3389/fpsyg.2016.01822> [open]

10. [§]Burgoyne, A. P., [§]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. <https://doi.org/10.1016/j.intell.2016.08.002> [open]
9. **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>
8. **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. <https://doi.org/10.1177/17456916166635614> [n/a]
7. **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. <https://doi.org/10.1177/17456916166635591> [open]
6. [§]Chow, M. A., **Macnamara, B. N.**, & Conway, A. R. A. (2016). Phonological similarity in working memory span tasks. *Memory & Cognition*, *44*, 937–949. <https://doi.org/10.3758/s13421-016-0609-8> [open]
5. [§]**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. <https://doi.org/10.1177/0956797614535810> [open]
4. [§]**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>
3. [§]**Macnamara, B. N.**, [§]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>
2. [§]**Macnamara, B. N.**, [§]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. [§]**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>

Book Chapters

9. 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* (pp. 225–237). Routledge.
8. 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.
7. **Macnamara, B.N.**, Hambrick, D. Z., ^pFrank, D. J., ^sKing, M. J., ^sBurgoyne, 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.
6. 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.
5. Hambrick, D. Z., ^sBurgoyne, 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.
4. 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* (pp. 1–55). Elsevier.
3. 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.
2. Conway, A. R. A., ^s**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.
1. Conway, A. R. A., ^sGetz, S. J, ^s**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.

Conference Proceedings

2. ^sNelson, N., ^sKas, I., ^sSepuri, T., Smith, P., Wilson-Delfosse, A. L., Krupinski, E., **Macnamara, B. N.**, Ray, S., Çavuşoğlu, M. C. (2025). The effects of artificial intelligence assistants on the acquisition of laparoscopic surgical spatial navigation skills.

International Symposium on Medical Robotics (ISMR) (pp. 136–142).
<https://doi.org/10.1109/ISMR67322.2025.11025979>

1. ^g Barnett, M., ^g LaFollette, K., & **Macnamara, B. N.** (2024). Distraction in math anxious individuals during math effort-based problem solving. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 46).
<https://escholarship.org/uc/item/9dk948kt>

E-Letters

2. Güllich*, A., Barth, M., Hambrick, D. Z., **Macnamara, B. N.** (submitted) Target population, sampling, and relevant conclusions. *Science*, e-letter.
<https://www.science.org/doi/10.1126/science.adt7790#elettersSection>
1. Güllich, A., Barth, M., Hambrick, D. Z., **Macnamara, B. N.** (2026) Associations and populations. *Science*, e-letter.
<https://www.science.org/doi/10.1126/science.adt7790#elettersSection>

INVITED SPOKEN PRESENTATIONS

- Macnamara, B. N. (2026, March). *Acquiring world-class performance and social media reactions*. [Invited presentation]. Liye Zou Research Group, Shenzhen University, virtual.
- Macnamara, B. N. (2025, September). *Who succeeds? Theory claims are stronger than the evidence*. [Invited colloquium]. Cognitive Science Department, The University of Arizona, Tuscon, AZ.
- Macnamara, B. N. (2024, October). *Theories of achievement and cognitive fallacies*. [Invited colloquium]. Psychology Department, 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 fallaces*. [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 colloquium]. Clinical Psychology Area, 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.
- 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.
- 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.
- 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. (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

Association for Psychological Science

Fellow 2025

Psychonomic Society

Early Career Award Recipient 2024

Case Western Reserve University

John S. Diekhoff Award for Distinguished Graduate Student Mentoring Nominee 2022

Case Western Reserve University

J. Bruce Jackson, M.D., Award for Excellence in Undergraduate Mentoring Recipient 2019

Case Western Reserve University

John S. Diekhoff Award for Distinguished Graduate Student Teaching Recipient 2018

Psychonomic Society <i>Fellow</i>	2017
Association for Psychological Science <i>Rising Star</i>	2017
Women in Cognitive Science <i>Travel and Networking Award Runner-up</i>	2016
Carnegie Mellon University <i>Travel Fellowship to the 36th Carnegie Symposium on Cognition Recipient</i>	2009

MEMBERSHIPS

Society for Industrial-Organizational Psychology	since 2024
SPARK Society	since 2020
Association for Psychological Science	since 2014
Women in Cognitive Science	since 2008
Psychonomic Society	since 2008
Society for Personality and Social Psychology	2016 – 2018, 2023 – present
Society for the Improvement of Psychological Science	2018 – 2022
Midwestern Psychological Association	2014 – 2019

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 – 2024
Consulting Editor, <i>Journal of Intelligence</i>	2022 – 2024
Consulting Editor, <i>Psychonomic Bulletin & Review</i>	2020 – 2022
Associate Editor, <i>Journal of Expertise</i>	2018 – 2022
Consulting Editor, <i>Journal of Experimental Psychology: LMC</i>	2016 – 2022

Special Issue Co-Editor, <i>Journal of Expertise</i> (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>Nature Reviews Psychology</i>
<i>Sports Medicine</i>	<i>Behavior Research Methods</i>
<i>Psychological Science</i>	<i>Perspectives on Psychological Science</i>
<i>Psychological Bulletin</i>	<i>Journal of Personality and Social Psychology</i>
<i>Psychological Inquiry</i>	<i>Cognitive Research: Principles & Implications</i>
<i>Nature Human Behavior</i>	<i>Proceedings of the National Academy of Sciences</i>

Book Editorial Position

Book Co-Editor*, <i>The science of expertise: Behavioral, neural, and genetic approaches to complex skill</i> . Routledge.	2016 – 2018
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*Royalties refused/directly donated to Berkeley Initiative for Transparency in the Social Sciences

Funding Reviewer

Fonds de recherche du Québec (Québec Research Fund) Ad hoc reviewer	2025
National Science Foundation Panelist (×3)	2019 – 2020
Narodowe Centrum Nauki (National Science Centre [Poland]) Ad Hoc Funding Reviewer	2017
National Science Foundation Ad Hoc Funding Reviewer (×2)	2015
Université de Toulouse: Initiative d'Excellence (Toulouse University: Excellence Initiative) Ad Hoc Funding Reviewer	2015
National Center of Science and Technology Evaluation (Kazakhstan) Ad Hoc Funding Reviewer	2014

TEACHING EXPERIENCE

§ = graduate course, ^u = undergraduate course

Purdue University

<u>Course</u>	<u>Terms Taught</u>
^u Human Expertise and Achievement	Spring 2026
§ Meta-analysis	Fall 2025
§ Skill Acquisition, Expertise, and Achievement	Spring 2025

Case Western Reserve University

§ Science Writing	Spring 2021, Fall 2023
§ Statistics and Research Design	Springs 2015 – 2024
§ Everything You Need to Know But Are Never Taught in Grad School	Falls 2019, 2022
^u Senior Capstone Course (Current Problems)	Spring 2022
§ Idea Generation & Post-PhD Career Options	Fall 2021
§ Learning Theory	Springs 2016, 2020
^u Research Methods	Falls 2014 – 2018, Springs 2015, 2017 – 2019

Princeton University

* = preceptor, ⁱ = lab instructor)

ⁱ Statistics	Fall 2012, Spring 2013
* Health Psychology	Spring 2012
ⁱ Introduction to Psychology	Fall 2010
* Memory and Cognition	Spring 2010
* Abnormal Psychology	Fall 2009

ADVISING AND SUPERVISING

Postdoctoral Scholar Advisees

Ashley L. Miller, PhD 2025 – 2026
Current position: Assistant Professor, University of Texas at Arlington

David J. Frank, PhD 2015 – 2017
Current position: Associate Professor, Youngstown State University

Primary PhD Advisee: Purdue University

Mariel Barnett 2024 – present
Current position: 4th-year PhD student, Purdue University

Primary PhD Advisees: Case Western Reserve University

Mariel Barnett 2022 – 2024
Current position: 4th-year PhD student, Purdue University

Huangqi Jiang, PhD 2017 – 2022
Current position: Data Engineer, Bloomberg

Michael J. King, PhD 2015 – 2020
Current position: Human Factors Engineer, Quantum Improvements Consulting

Secondary Graduate Advisees: Case Western Reserve University

Kyle LaFollette, PhD 2020 – 2025
Current position: Principal Researcher, The University of Chicago

Doroteja Rubez 2020 – 2025
Current position: Lecturer, University of Michigan at Dearborn

Charlotte Lubowe 2023 – 2025
Recent position: MA student, Case Western Reserve University

Amanda Merner, PhD 2017 – 2022
Current position: Instructor, Harvard Medical School

Anne Kotynski-Gooding, PhD 2014 – 2020
Current position: Chief of Workforce Planning and Analytics, NIH

Master's Thesis Committee: Purdue University

Psychology: 2 students 2024 – present
Industrial Engineering: 1 student 2025 – present

Master's Thesis Committees: Case Western Reserve University

Psychology: 15 students 2014 – present
Electrical Engineering: 1 student 2022 – 2023
Computer Science: 2 students 2015 – 2016, 2022 – 2023
Biomedical Engineering: 3 students 2018 – 2023

Dissertation Committees: Purdue University

Psychology: 1 student 2024 – present

Dissertation Committees: Case Western Reserve University

Psychology: 12 students 2014 – present
Biomedical Engineering: 2 students 2022 – 2025
Accounting: 1 student 2022 – 2024
Nursing: 1 student 2015 – 2016

Graduate Independent Study Advisees: Case Western Reserve University

Psychology: 4 students 2015 – 2024

Post-bac Research Assistants/Lab Managers

Full-time: 2 lab managers (non-overlapping) 2022 – present
Part-time: 5 post-bac research assistants (non-overlapping) 2014 – 2025

Undergraduate Research Assistants: Purdue University

4 students 2024 – present

Undergraduate Research Assistants: Case Western Reserve University

63 students (2–9 students per semester) 2015 – 2025

Notable Undergraduate Research Advisees:

Essence Leslie 2019 – 2022

Current position: Post-bac Research Assistant, University of Pittsburgh

Bao Ho 2019 – 2021
Current position: PhD Student, I-O Psychology, Bowling Green State University

Jonathan S. Daniels 2017 – 2019
Current position: PhD Student, Cognitive Psychology, Princeton University

Victoria F. Sisk, PhD 2015 – 2017
Current position: Senior Data Analyst, Goodwill Industries International

Honors Capstone Advisees: Case Western Reserve University

Psychology: 12 students 2015 – 2024

Independent Study Advisees: Case Western Reserve University

Psychology: 17 students 2015 – 2024

Psychology Major Academic Advisees: Case Western Reserve University

131 total major advisees (~30 students per semester) 2014 – 2024

SERVICE

Professional

American Psychological Association
Future of Work Advisory Group

2026

Psychonomic Society
Communications Committee Member

2024 – present

Psychonomic Society
Cognitive Research: Principles & Implications Editorial Search Committee Member

2025

Women in Cognitive Science
Speed Mentoring Session Mentor

2024

Purdue University

Department of Psychological Sciences
Graduate Student Committee Member

2025 – present

Department of Psychological Sciences
Assistant Professor of I-O, Social, or Neuroscience Search Committee Member 2025 – 2026

Department of Psychological Sciences
Lecturer of I-O Psychology Search Committee Member 2025 – 2026

Case Western Reserve University

Office of Research
Institutional Review Board Member 2022 – 2024

Department of Psychological Sciences
Developmental, Cognitive, and Affective Sciences PhD Program Director 2019 – 2024

Department of Psychological Sciences
Student Awards Committee Member 2017 – 2024

Department of Psychological Sciences
Instructor Search Committee Chair 2023

Office of Faculty Development
Faculty Development Council Member 2022 – 2023

Undergraduate Admission
Psychology Club Faculty Advisor 2019 – 2022

Office of the Provost
Think Big Initiative Funding Reviewer 2020

Office of the Provost
Think Big Initiative for Equity and Safety Faculty Advisor 2020

College of Arts & Sciences
W.P. Jones Junior Faculty Fellowship Selection Committee Member 2019 – 2020

Department of Psychological Sciences
Speaker Series Committee Co-chair 2015 – 2020

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) × 4

Select Media Outlets

(where research was reported, discussed, or featured)

The New York Times

The Washington Post

The Boston Globe

Huffington Post

ESPN

Psychology Today

Houston Chronicle

San Francisco Chronicle

New York Magazine

Business Insider

Sydney Morning Herald

Bloomberg Business Week

Parsing Science

Scientific American

Smithsonian Magazine

The Conversation

The Wall Street Journal

The Range Report/Range Widely