

Nicholas Gaspelin

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Citations: 1628 | h-index: 17 | i10-index: 20

Professional Positions

2017 – present Assistant Professor, Department of Psychology, State University of New York at Binghamton

Education

2014 – 2017 Postdoctoral Fellow, Center for Mind and Brain, University of California at Davis, Davis, California
Mentor: Steven J. Luck

2014 Ph.D., with distinction, *Psychology*, University of New Mexico, Albuquerque, New Mexico
Mentor: Eric Ruthruff

2009 M.S., with distinction, *Psychology*, University of New Mexico, Albuquerque, New Mexico
Mentor: Eric Ruthruff

2008 B.A., with honors and distinction, *Psychology* (minor: English), University of Iowa, Iowa City, Iowa
Mentors: Shaun P. Vecera & Cathleen Moore

Peer-Reviewed Publications

*student in my laboratory (grad, postdoc, undergrad)

32. **Gaspelin, N.**, & Luck, S.J. (in press). Progress and remaining issues: A response to the commentaries on Luck et al. (2021). *Visual Cognition*.
31. Blakley, E.C., **Gaspelin, N.**, & Gerhardstein, P. (in press). The development of oculomotor suppression of salient distractors in children. *Journal of Experimental Child Psychology*.

30. Stilwell, B.T.*, & **Gaspelin, N.** (in press). Attentional suppression of highly salient color singletons. *Journal of Experimental Psychology: Human Perception & Performance*.
29. Bansal, S., **Gaspelin N.**, Robinson, B.M., Hahn, B., Luck, S.J., & Gold, J.M. (in press). Oculomotor suppression and location priming in schizophrenia. *Journal of Abnormal Psychology*.
28. Talcott, T.N.*, & **Gaspelin, N.** (2021). Eye movements are not mandatorily preceded by the N2pc component. *Psychophysiology*, 58(6), 1-17.
27. Adams, O.J.*, & **Gaspelin, N.** (2021). Introspective awareness of oculomotor attentional capture. *Journal of Experimental Psychology: Human Perception & Performance*, 47(3), 442–459.
26. Luck, S. J., **Gaspelin, N.**, Folk, C. L., Remington, R. W., & Theeuwes, J. (2021). Progress toward resolving the attentional capture debate. *Visual Cognition*, 29(1), 1-21.
25. Maxwell, J.W., **Gaspelin, N.**, & Ruthruff, E. (2020). No identification of abrupt onsets that capture attention: Evidence against a unified model of spatial attention. *Psychological Research*, 1–17.
24. Ruthruff, E., Faulks, M., Maxwell, J. W., & **Gaspelin, N.** (2020). Attentional dwelling and capture by color singletons. *Attention, Perception, & Psychophysics*, 82, 3048–3064.
23. Talcott, T. N.*, & **Gaspelin, N.** (2020). Prior target locations attract overt attention during search. *Cognition*, 201, 104282.
22. Adams, O. J.*, & **Gaspelin, N.** (2020). Assessing introspective awareness of attention capture. *Attention, Perception, & Psychophysics*, 82(4), 1586–1598. ***Awarded Best Article of the Year***
21. Zhang, Z., **Gaspelin, N.**, & Carlisle, N. B. (2019). Probing early attention following negative and positive templates. *Attention, Perception, & Psychophysics*, 82, 1166–1175.
20. **Gaspelin, N.**, Gaspar, J.M., & Luck, S.J. (2019). Oculomotor inhibition of salient distractors: Voluntary inhibition cannot override selection history. *Visual Cognition*, 27 (3-4), 227-246.
19. Ruthruff, E., Kuit, D., Maxwell, J. W., & **Gaspelin, N.** (2019). Can capture by abrupt onsets be suppressed? *Visual Cognition*, 27 (3-4), 279-290.

18. **Gaspelin, N., & Luck, S.J.** (2019). Inhibition as a potential resolution to the attentional capture debate. *Current Opinions in Psychology*, 29, 12–18.
17. **Gaspelin, N., & Luck, S.J.** (2018). Combined electrophysiological and behavioral evidence for the suppression of salient distractors. *Journal of Cognitive Neuroscience*. 30(9), 1265-1280.
16. **Gaspelin, N. & Luck, S.J.** (2018). “Top-down” does not mean “voluntary.” [Commentary on "Visual selection: usually fast and automatic; seldom slow and volitional," by J. Theeuwes]. *Journal of Cognition*. 1(25), 1-4.
15. Ruthruff, E., & **Gaspelin, N.** (2018). Immunity to attentional capture at ignored locations. *Attention, Perception, & Psychophysics*. 80(2). 325-336.
14. **Gaspelin, N., & Luck, S. J.** (2018). The role of inhibition in avoiding distraction by salient stimuli. *Trends in Cognitive Sciences*, 22(1), 79–92.
13. **Gaspelin, N., & Luck, S.J.** (2018). Distinguishing among potential mechanisms of suppression. *Journal of Experimental Psychology: Human Perception and Performance*, 44(4), 626-644.
12. **Gaspelin, N., Leonard, C.J., & Luck, S.J.** (2017). Suppression of overt attentional capture by salient-but-irrelevant color singletons. *Attention, Perception, & Psychophysics*, 79(1), 45-62.
11. Luck, S.J., & **Gaspelin, N.** (2017). How to get statistically significant effects in any ERP experiment (and why you shouldn't). *Psychophysiology*, 54(1), 146-157.
10. Arexis, M., Maquestiaux, F., Didierjean, A., **Gaspelin, N., & Ruthruff, E.** (2017). Attention capture in driving displays. *British Journal of Psychology*, 108(2), 259-275.
9. **Gaspelin, N., Ruthruff, E., & Lien, M.C.** (2016). The problem of latent attentional capture: Easy search conceals capture by task-irrelevant abrupt onsets. *Journal of Experimental Psychology: Human Perception and Performance*, 42(8), 1104-1120.
8. **Gaspelin, N., Leonard, C. J., & Luck, S. J.** (2015). Direct evidence for active suppression of salient-but-irrelevant sensory inputs. *Psychological Science*, 22(11), 1740-1750.
7. **Gaspelin, N., Margett-Jordan, T., & Ruthruff, E.** (2015). Susceptible to distraction: Children lack top-down control over spatial attention capture. *Psychonomic Bulletin & Review*, 22(2), 461-468.

6. **Gaspelin, N.**, Ruthruff, E., & Jung, K. (2014). Slippage theory and the flanker paradigm: An early-selection account of selective attention failures. *Journal of Experimental Psychology: Human Perception & Performance*, 40(3), 1257–1273.
5. **Gaspelin, N.**, Ruthruff, E., & Pashler, H. (2013). Divided attention: An undesirable difficulty in memory retention. *Memory & Cognition*, 41(7), 978–988.
4. Jung, K., Ruthruff, E., & **Gaspelin, N.** (2013). Automatic identification of familiar faces. *Attention, Perception, & Psychophysics*, 75(7), 1438–1450.
3. **Gaspelin, N.**, Ruthruff, E., Lien, M.C., & Jung, K. (2012). Breaking through the attentional window: Capture by abrupt onsets versus color singletons. *Attention, Perception, & Psychophysics*, 74 (7), 1461-1474.
2. **Gaspelin, N.**, Ruthruff, E., Jung, K., Cosman, J., & Vecera, S. (2012). Does low perceptual load enable capture by colour singletons? *Journal of Cognitive Psychology*, 24(6), 735–750.
1. Jung, K., Ruthruff, E., Tybur, J. M., **Gaspelin, N.**, & Miller, G. (2012). Perception of facial attractiveness requires some attentional resources: Implications for the “automaticity” of psychological adaptations. *Evolution and Human Behavior*, 33(3), 241–250.

Grants and Fellowships

Faculty Early Career Development Program (CAREER)

2045624 (PI: Nicholas Gaspelin)

National Science Foundation

Integrating Neural and Oculomotor Indices of Visual Attention

Direct Costs: \$453,631

Indirect Costs: \$708,000

8/01/2021- 7/31/2026

Role: Principal Investigator

National Research Service Award (F32)

F32EY024834 (PI: Nicholas Gaspelin)

National Eye Institute

Direct Costs: \$108,594

9/01/2015 – 8/31/2017

Top-down and Bottom-up Control of Visual Attention: Evidence from ERPs and Eye-Tracking

Role: Principal Investigator

National Research Service Award (T32)

T32EY015387 (PI: John S. Werner)

National Eye Institute

Direct Costs: \$302,597

9/01/2014 – 8/31/2015

Training Grant in Vision Science

Role: Postdoctoral Trainee

Professional Service

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|----------------|--|
| 2019 - present | Consulting editor at <i>Attention, Perception, and Psychophysics</i> |
| 2018 - present | Consulting editor at <i>Journal of Experimental Psychology: Human Perception & Performance</i> . |
| 2019 | Guest action editor at <i>Visual Cognition</i> on special issue: "Dealing with distractors: The role of inhibition in visual search" |
| 2018 | Chair of the spoken session on "Attention Capture" at the Annual Meeting of Psychonomic Society. |

Honors & Awards

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| 2021 | Honorable mention for the Harter Undergraduate Mentoring Prize at Binghamton University. |
| 2020 | "Best Article of the Year" in <i>Attention, Perception, & Psychophysics</i> . Awarded \$1000. |
| 2019 | Nominated by Binghamton University (SUNY) for the <i>Pew Biomedical Scholars Program</i> . |
| 2019 | Invited special speaker at Rovereto Attention Workshop (RAW) on "Attention and Distraction" at the University of Trento. Awarded €1000. |
| 2018 | "Early Career Scientist Travel Award" from the National Eye Institute at the Annual Meeting of Vision Sciences Society. Awarded \$765. |

- 2016 Select Speaker Award. Annual Meeting of the Psychonomic Society. Awarded \$1,500.
- 2014 ERP Boot Camp Scholarship (PI: Steven J. Luck). National Institutes of Mental Health. Awarded \$1,500.
- 2013 Best Published Graduate Paper (1st place). Cognition, Brain & Behavior, University of Mexico. Awarded \$500.

Conference Presentations

- Talcott, T.N., & **Gaspelin, N.** (2021, May). *The N2pc component does not always precede eye movements*. Poster presented at the Annual Meeting of Vision Science Society, virtual conference.
- Stilwell, B.T., & **Gaspelin, N.** (2021, May). *Even highly salient distractors are proactively suppressed*. Poster presented at the Annual Meeting of Vision Science Society, virtual conference.
- Talcott, T.N., & **Gaspelin, N.** (2020, November). *Covert attention does not always precede eye movements during search*. Poster presented at the Annual Meeting of the Psychonomic Society, virtual conference.
- Adams, O.J., & **Gaspelin, N.** (2020, November). *Introspective awareness of oculomotor attentional capture*. Poster presented at the Annual Meeting of the Psychonomic Society, virtual conference.
- Adams, O.J., & **Gaspelin, N.** (2020, June). *Assessing introspective awareness of overt attentional capture*. Poster presented at the Annual Meeting of the Vision Science Society, virtual conference.
- Talcott, T.N., & **Gaspelin, N.** (2019, November). *Past is prologue: The prior target location attracts overt eye movements*. Poster presented at the Annual Meeting of the Psychonomic Society, Montreal, Canada.
- Adams, O.J., & **Gaspelin, N.** (2019, November). *Assessing introspective awareness of attention capture*. Poster presented at the Annual Meeting of the Psychonomic Society, Montreal, Canada.
- Gaspelin, N.** (2019, July). *Selection history overpowers explicit goals during visual search*. Talk presented at the Mid-Atlantic Meeting on Attention, Villanova, PA.

- Talcott, T.N., & **Gaspelin, N.** (2019, July). *Past is prologue: The prior target location attracts overt eye movements*. Poster submitted at the Mid-Atlantic Meeting on Attention, Villanova, PA.
- Adams, O.J., & **Gaspelin, N.** (2019, July). *Assessing introspective awareness of attention capture*. Poster presented at the Mid-Atlantic Meeting on Attention, Villanova, PA.
- Gaspelin, N.**, Talcott, T., & Luck, S.J. (2019, May). *Assessing the competition between location-based selection history and explicit goals*. Talk presented at the Annual Meeting of the Vision Science Society, St. Pete's Beach, FL.
- Zhang, Z., **Gaspelin, N.**, & Carlisle, N. (2019, May). *Probing Early Attention Following Negative and Positive Templates*. Poster presented at the Annual Meeting of the Vision Science Society, St. Pete's Beach, FL.
- Gaspelin, N.**, & Luck, S.J. (2018, March). *Combined Electrophysiological and Behavioral Evidence for the Suppression of Salient Distractors*. Talk presented at the Annual Meeting of Cognitive Neuroscience Society, San Francisco, CA.
- Gaspelin, N.**, Gaspar, J.M., & Luck, S.J. (2018, November). *Selection History Overpowers Explicit Goals in Visual Search*. Talk presented at the Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Luck, S.J. & **Gaspelin, N.** (2018, November). *Combined Electrophysiological and Behavioral Evidence for the Suppression of Salient Distractors*. Talk presented at the Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Maxwell, J., Ruthruff, E., & **Gaspelin, N.** (2018, November). *Voluntary vs. involuntary attention: How capture modulates depth of processing*. Poster presented at the Annual Meeting of the Psychonomic Society, New Orleans, LA.
- Gaspelin, N.**, Gaspar, J.M., & Luck, S.J. (2018, November). *Selection history overpowers explicit goals in visual search*. Poster presented at the Vision Science Society, St. Pete's Beach, FL.
- Gaspelin, N.**, Ruthruff, E., and Lien, M.C. (2017, November). *Latent attention capture: How to shrink a capture effect without altering the probability of capture*. Talk presented at the Annual Meeting of the Psychonomic Society, Vancouver, Canada.

- Gaspelin, N., & Luck, S.J.** (2017, May). *Mechanisms underlying suppression of attentional capture by salient items*. Talk presented at the Annual Meeting of the Vision Science Society in special symposium on *Cutting Across Bottom-Up vs. Top-Down Theories of Attention Capture*, St. Pete's Beach, FL.
- Gaspelin, N., & Luck, S.J.** (2016, November). *Converging evidence for suppression of attentional capture by salient-but-irrelevant stimuli*. Talk presented at the Annual Meeting of the Psychonomic Society, Boston, MA. (*Select Speaker Award*)
- Gaspelin, N., & Luck, S.J.** (2016, July). *Suppression of covert and overt attentional capture*. Talk presented at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning, Hood River, OR.
- Gaspelin, N., Leonard, C.J., & Luck, S.J.** (2016, May). *Evidence of active suppression of covert and overt attentional capture*. Talk presented at the annual meeting of the Vision Sciences Society, St. Pete's Beach, FL.
- Gaspelin, N., Leonard, C.J., & Luck, S.J.** (2015, November). *Evidence of active suppression of covert and overt attentional capture*. Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.
- Gaspelin, N., & Luck, S.J.** (2015, May). *Behavioral evidence of top-down suppression of attention capture with the capture-probe task*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete's Beach, FL.
- Gaspelin, N., Margett-Jordan, T. & Ruthruff, E.** (2014, November). *Susceptible to distraction: Children lack top-down control over spatial attention*. Poster presented at the annual meeting of the Psychonomic Society, Long Beach, CA.
- Gaspelin, N., Ruthruff, E., and Lien, M.-C.** (2013, November). *Capture by abrupt onsets: Now you see it, now you don't*. Poster presented at the annual meeting of the Psychonomic Society, Toronto, Canada.
- Gaspelin, N., Ruthruff, E., Jung, K., & Crane, E.** (2012, November). *On the identification of irrelevant flankers: Dilution vs. load vs. slippage*. Poster presented at the annual meeting of the Psychonomic Society, Minneapolis, MN.
- Lien, M.-C., Ruthruff, E., & **Gaspelin, N.** (2012, November). *Do salience and relevance have multiplicative effects on the capture of spatial attention?*

Paper presented at annual meeting of the Psychonomic Society, Minneapolis, MN.

Jung, K., **Gaspelin, N.**, Keller, J., & Ruthruff, E. (2011, November). *Automaticity of the identification of familiar and unfamiliar faces*. Poster presented at the annual meeting of the Psychonomic Society, Seattle, WA.

Risom, S., Lien, M.-C., Ruthruff, E., & **Gaspelin, N.** (2011, October). *Capturing spatial attention: do salience and relevance have multiplicative effects?* Poster presented at the annual meeting of the European Society for Cognitive Psychology, San Sebastian, Spain

Gaspelin, N., Ruthruff, E., & Pashler, H. (2010, October). *Dual-tasking: An undesirable difficulty?* Poster presented at the annual meeting of the A.R.M.A.D.I.L.L.O., Texas A&M, College Station, TX.

Gaspelin, N., Ruthruff, E., Vecera, S.P., & Cosman, J.D. (2009, November). *Why don't color singletons capture attention? The role of perceptual load*. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.

Invited Talks

Stilwell, B.T., & **Gaspelin, N.** (2021, January). *Attentional suppression of highly salient color singletons*. Talk presented at the University of Iowa.

Gaspelin, N. (2020, December). *Assessing overt and covert awareness of attentional capture*. Talk presented at the University of Iowa.

Gaspelin, N. (2020, July). *The role of inhibition in the avoidance of attentional capture*. Talk presented at Ludwigs-Maximilians-Universität.

Gaspelin, N. (2020, June). *The role of inhibition in the avoidance of attentional capture*. Talk presented at Vrije Universiteit Amsterdam.

Gaspelin, N. (2019, October). *The role of inhibition in avoiding attention capture by salient stimuli*. Talk presented at the Rovereto Attention Workshop, Verona, Italy.

Gaspelin, N. (2018, March). *Converging electrophysiological and behavioral evidence of inhibition*. Invited talk at the University of California at Davis.

Gaspelin, N. (2018, January). *The role of inhibition in the avoidance of attentional capture*. Ebbinghaus Empire Lecture at University of Toronto.

Gaspelin, N. (2018, October). *Proactive inhibition as a resolution to the attentional capture debate*. Invited talk at Pennsylvania State University.

Gaspelin, N. (2018, March). *Suppressing visual distraction by salient stimuli*. Invited talk at Le High University.

Gaspelin, N. (2017, October). *The role of inhibition in avoiding distraction by salient stimuli*. Cognitive Brown Bag at Villanova University.

Gaspelin, N. & Luck, S.J. (2016, October). *Suppression of overt and covert attentional capture*. Invited talk at Reed College, Portland, OR.

Gaspelin, N. & Ruthruff, E. (2014, June). *Do onsets capture attention? Searching for a unified theory of attention capture*. Invited talk at Université de Franche – Comté, Besançon, France.

Gaspelin, N. & Ruthruff, E. (2014, May). *Contingent capture or contingent costs? Resolving the attention capture debate*. Invited talk to the Maquestiaux laboratory at Université Paris-Sud, Paris, France.

Gaspelin, N. (2013, July). *Wanted: A unified theory of attention capture*. Invited talk at Johns Hopkins University, Baltimore, MD.

Ruthruff, E., **Gaspelin, N.**, & Pashler, H. (2011, December). *Undesirable difficulties in memory retrieval*. Invited talk at the Université Paris-Sud, Paris, France.

Professional Memberships

Fellow of the Psychonomic Society
 Member of Cognitive Neuroscience Society
 Member of the Vision Sciences Society
 Member of Society for Neuroscience

Ad Hoc Journal Reviews

Attention, Perception, & Psychophysics
 Brain Research
 Journal of Cognitive Psychology
 Journal of Cognition
 Journal of Cognitive Neuroscience
 Journal of Experimental Psychology: General

Journal of Experimental Psychology: Human, Perception, & Performance
 Journal of Experimental Psychology: Learning, Memory, and Cognition
 Journal of Neuroscience
 Memory & Cognition
 Neuroimage
 Nature Communications
 Nature Communications Biology
 Scientific Reports
 Plos One
 Proceedings of the National Academy of Sciences
 Psychophysiology
 Psychological Research
 Psychological Science
 Psychonomic Bulletin & Review
 Quarterly Journal of Experimental Psychology
 Visual Cognition
 Vision Research

Courses Taught

Perception (UG)
 Cognitive Psychology (UG)
 Visual Perception Seminar (UG)
 Introduction to Vision Science (G)
 Attention & Performance Seminar (G)
 Introduction to Matlab Programming (UG)

Ad Hoc Grant Review

National Science Foundation

Departmental Service

2020 - <i>present</i>	Resource Allocation Committee (member)
2018 - <i>present</i>	Center for Cognitive Applications (member)
2017 - 2020	fMRI Initiative Committee (member)
2018 - 2020	Colloquium Speaker Committee (member)
2017 - 2018	Departmental Awards Committee (member)