

**CONTACT INFORMATION**

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**EMPLOYMENT HISTORY**

*2016 – present*      **Associate Professor**, Department of Cognitive Sciences  
 University of California, Irvine  
*2015 – present*      **Affiliated Faculty**, Department of Statistics  
 University of California, Irvine  
*2011 – present*      **Affiliated Faculty**, Institute for Mathematical Behavioral Sciences  
 University of California, Irvine  
*2011 – 2016*        **Assistant Professor**, Department of Cognitive Sciences  
 University of California, Irvine  
*2011 – present*      **Research Fellow**, Faculty of Psychology and Educational Sciences  
 University of Leuven, Belgium  
*2010 – 2012*        **Post-Doctoral Fellow**  
 Research Foundation—Flanders (FWO)  
*2009 – 2010*        **Post-Doctoral Research Associate**, Faculty of Medicine  
 University of Leuven, Belgium

**EDUCATION**

*2005 – 2009*        PhD in Quantitative Psychology and Psychometrics  
 University of Leuven, Belgium  
*2002 – 2005*        Master in Psychology (Licentiate)  
 University of Leuven, Belgium  
*2000 – 2002*        Bachelor in Psychology (Candidate)  
 University of Leuven, Belgium

**PROFESSIONAL MEMBERSHIPS (PAST AND PRESENT)**

Fellow of the Psychonomic Society  
 Member of the Society for Mathematical Psychology  
 Member of the Psychometric Society  
 Member of the European Society for Cognitive Psychology  
 Member of the International Society for Research in Emotion  
 Member of the American Statistical Association

# Research

## RESEARCH INTERESTS

Stochastic process models	Computational modeling of cognition
Bayesian statistics	Computational methods
Individual differences	Psychometrics
Integrative modeling	Data fusion
Robust science	Meta-analysis

## EXTRAMURAL GRANTS

<i>September 2019</i>	National Science Foundation grant #1850849: “Critical tests of neurocognitive relationships.” 36 months. Role: <b>Principal Investigator</b> (with R. Srinivasan). \$674,807.00
<i>February 2018</i>	National Science Foundation grant #1754205: “RR: Workshop on Robust Social and Behavioral Sciences.” 12 months. Role: <b>Principal Investigator</b> (with M. D. Lee). \$62,391.00
<i>April 2017</i>	National Science Foundation grant #1658303: “Estimation of unidentified cognitive models with physiological data.” 24 months. Role: <b>Principal Investigator</b> (with R. Srinivasan). \$337,028.00
<i>April 2016</i>	National Science Foundation: Graduate Research Fellowship Award (DGE-1321846; Awarded to advisee Alexander Etz). 36 months. Role: <b>Adviser</b> . \$132,000.00
<i>January 2016</i>	William K. and Katherine W. Estes Fund (Psychonomic Society and Association for Psychological Science): “Summer school for computational cognitive modeling”. Role: <b>Contributor</b> (with S. Lewandowsky and K. Oberauer). \$15,000.00
<i>September 2015</i>	National Science Foundation grant #1534472: “Bayesian methods for meta-analysis in the presence of publication bias.” 36 months. Role: <b>Principal Investigator</b> . \$260,000.00
<i>July 2015</i>	European Society for Cognitive Psychology: “Summer school for computational cognitive modeling”. Role: <b>Contributor</b> (with S. Lewandowsky and K. Oberauer). \$22,000.00
<i>July 2015</i>	National Science Foundation: “Support for the Applications of Mathematical Psychology to Industry meeting”. Role: <b>Organizer</b> (with J. Trueblood). \$5,000.00
<i>June 2014</i>	John Templeton Foundation grant #48192: “A formal modeling framework for the dynamics of subjective well-being.” 36 months. Role: <b>Principal Investigator</b> . \$540,018.00
<i>April 2014</i>	National Science Foundation: Graduate Research Fellowship Award (DGE-1321846; Awarded to advisee Maime Guan). 36 months. Role: <b>Adviser</b> . \$121,500.00
<i>February 2014</i>	Volkswagen Foundation teaching grant: “Summer school for computational cognitive modeling”. Role: <b>Contributor</b> . (with S. Lewandowsky and K. Oberauer). \$70,000.00
<i>September 2012</i>	National Science Foundation grant #1230118: “Cognitive structural equation models.” 36 months. Role: <b>Principal Investigator</b> . \$250,000.00
<i>October 2010</i>	Research Foundation—Flanders postdoctoral research grant: “Dynamic cognitive psychometrics.” 36 months. \$200,000.00
<i>October 2009</i>	University of Leuven Research Council postdoctoral research grant: “A statistical framework for Approximate Bayesian Computation.” 12 months. \$65,000.00

## INTRAMURAL GRANTS

- July 2015* UC Irvine School of Social Sciences Office of the Dean: “Support for the Applications of Mathematical Psychology to Industry meeting”. Role: Organizer. \$3,000.00
- July 2015* UC Irvine School of Social Sciences Office of Graduate Affairs: “Support for the 48th Meeting of the Society for Mathematical Psychology”. Role: Principal organizer (with J. Trueblood). \$3,000.00
- July 2015* UC Irvine Department of Cognitive Sciences: “Support for the 48th Meeting of the Society for Mathematical Psychology”. Role: Principal organizer (with J. Trueblood). \$2,500.00
- November 2012* UC Irvine School of Social Sciences: “Interfacing Models with Brain Signals to Investigate Cognition”. Role: Co- Principal Investigator (with R. Srinivasan, and J. Krichmar). \$4,000.00
- June 2012* UC Irvine Summer Undergraduate Research Program (SURP): “Publication Bias in Three Prominent Psychological Journals”. Role: Adviser (with M. Guan). \$2,000.00

## PROFESSIONAL RECOGNITIONS

- December 2016* I won UC Irvine’s 2016 Social Science Assistant Professor Research Award (\$5,000)
- December 2016* My student Beth Baribault won the *Berkeley Initiative for Transparency in the Social Sciences*’ Leamer-Rosenthal Prize for Open Social Science for her work under my supervision (\$10,000)
- July 2014* I won the *Society for Mathematical Psychology*’s William K. Estes Early Career Award (\$1,250)

## RECENT TALKS

- Vandekerckhove, J.** (2018, September). *Cognitive psychometrics for multimodal data*. Invited presentation at the Second Summer School on Statistical Methods for Linguistics and Psychology, Potsdam, Germany.
- Vandekerckhove, J.** (2018, July). *Robust tests of theory with randomly sampled experiments*. Annual Meeting of the Society for Mathematical Psychology, Madison, WI
- Vandekerckhove, J.** (2017, November). *Publication bias and statistical evidence in the psychological literature*. Annual Meeting of the Psychonomic Society, Vancouver, Canada.
- Vandekerckhove, J.** (2017, September). *Some Bayesian and psychometric thoughts on the reproducibility crisis*. Invited presentation at the Stanford Cognitive Sciences seminar.
- Vandekerckhove, J.** (2017, March). *Statistical power and evidence in the psychological literature*. Invited presentation at the Arthur M. Sackler Colloquium of the National Academy of Sciences. Washington, DC.
- Vandekerckhove, J.** (2017, February). *Mitigation of publication bias with behavioral process models*. Annual Interdisciplinary Conference. Breckenridge, CO.

## PUBLISHED WORK

63. Lucio, P. S., **Vandekerckhove, J.**, Polanczyk, G. V., & Cogo-Moreira, H. (in press). Is it worthwhile to take account of “guessing” in the performance of the Raven test? Calling for the principle of parsimony for test validation. *Journal of Psychoeducational Assessment*. doi:10.1177/0734282920930923.

62. van den Bergh, D., Bogaerts, S., Spreen, M., Flohr, R., **Vandekerckhove, J.**, Batchelder, W. H., & Wagenmakers, E. (in press). Cultural consensus theory for the evaluation of patients' mental health scores in forensic psychiatric hospitals. *Journal of Mathematical Psychology*, *98*, 102383. doi:10.1016/j.jmp.2020.102383. Via psyarxiv.com/8rqu3/download.
61. Oravecz, Z., & **Vandekerckhove, J.** (in press). A joint process model of consensus and longitudinal dynamics. *Journal of Mathematical Psychology*. doi:10.1016/j.jmp.2020.102386. Via psyarxiv.com/xyghj/download.
59. Guan, M., Stokes, R., **Vandekerckhove, J.**, & Lee, M. D. (2020). A cognitive modeling analysis of risk in sequential choice tasks. *Judgement & Decision Making*, *15*, 823-850. Via psyarxiv.com/evzp9/download.
58. Aczel, B., Hoekstra, R., Gelman, A., Wagenmakers, E., Klugkist, I. G., Rouder, J. N., **Vandekerckhove, J.**, Lee, M. D., Morey, R. D., Vanpaemel, W., Dienes, Z., & van Ravenzwaaij, D. (2020). Discussion points for Bayesian inference. *Nature Human Behavior*, *4*, 561-563. doi:10.1038/s41562-019-0807-z. Via psyarxiv.com/23m7f/download.
57. Oravecz, Z., Dirsmith, J., Heshmati, S., **Vandekerckhove, J.**, & Brick, T. R. (2020). Psychological well-being and personality traits are associated with experiencing love in everyday life. *Personality and Individual Differences*, *154*, 109620. doi:10.1016/j.paid.2019.109620.
56. **Vandekerckhove, J.**, White, C. N., Trueblood, J. S., Rouder, J. N., Matzke, D., Leite, F. P., Etz, A., Donkin, C., Devezzer, B., Criss, A. H., & Lee, M. D. (2019). Robust diversity in cognitive science. *Computational Brain & Behavior*, *2*, 271-276. doi:10.1007/s42113-019-00066-7. Via psyarxiv.com/6bu7s/download.
55. Nunez, M. D., Gosai, A., **Vandekerckhove, J.**, & Srinivasan, R. (2019). The latency of a visual evoked potential tracks the onset of decision making. *NeuroImage*, *197*, 93-108. doi:10.1016/j.neuroimage.2019.04.052. Via www.cidlab.com/prints/nunez2019latency.pdf.
54. Lee, M. D., Criss, A. H., Devezzer, B., Donkin, C., Etz, A., Leite, F. P., Matzke, D., Rouder, J. N., Trueblood, J. S., White, C. N., & **Vandekerckhove, J.** (2019). Robust modeling in cognitive science. *Computational Brain & Behavior*, *2*, 141-153. doi:10.1007/s42113-019-00029-y. Via psyarxiv.com/dmfhk/download.
53. Schubert, A., Nunez, M. D., Hagemann, D., & **Vandekerckhove, J.** (2019). Individual differences in cortical processing speed predict cognitive abilities: A model-based cognitive neuroscience account. *Computational Brain & Behavior*, *2*, 64-84. doi:10.1007/s42113-018-0021-5. Via www.cidlab.com/prints/schubert2019in
52. Dutilh, G., Annis, J., Brown, S. D., Cassey, P., Evans, N. J., Grasman, R. P. P. P., Hawkins, G. E., Heathcote, A., Holmes, W. R., Kryptos, A., Kupitz, C. N., Leite, F. P., Lerche, V., Lin, Y., Logan, G. D., Palmeri, T. J., Starns, J. J., Trueblood, J. S., van Maanen, L., van Ravenzwaaij, D., **Vandekerckhove, J.**, Visser, I., Voss, A., White, C. N., Wiecki, T. V., Rieskamp, J., & Donkin, C. (2019). The quality of response time data inference: A blinded, collaborative approach to the validity of cognitive models. *Psychonomic Bulletin & Review*, *26*, 1051-1069. doi:10.3758/s13423-017-1417-2. Via psyarxiv.com/s2x32/download.
51. Heshmati, S., Oravecz, Z., Pressman, S., Batchelder, W. H., Muth, C., & **Vandekerckhove, J.** (2019). What does it mean to feel loved? Cultural agreement and individual differences. *Journal of Social and Personal Relationships*, *36*, 214-243. doi:10.1177/0265407517724600.
50. Mistry, P. K., Pothos, E. M., **Vandekerckhove, J.**, & Trueblood, J. S. (2018). A quantum probability account of individual differences in causal reasoning. *Journal of Mathematical Psychology*, *87*, 76-97. doi:10.1016/j.jmp.2018.09.003.
49. Etz, A., Haaf, J. M., Rouder, J. N., & **Vandekerckhove, J.** (2018). Bayesian inference and testing any hypothesis you can specify. *Advances in Methods and Practices in Psychological Science*, *1*, 281-295. doi:10.1177/2515245918773087. Via psyarxiv.com/wmf3r/download.

48. **Vandekerckhove, J.**, Rouder, J. N., & Kruschke, J. (2018). Editorial: Bayesian methods for advancing psychological science. *Psychonomic Bulletin & Review*, *25*, 1–4. doi:10.3758/s13423-018-1443-8. Via psyarxiv.com/8rk4u/download.
47. Baribault, B., Donkin, C., Little, D. R., Trueblood, J. S., Oravecz, Z., van Ravenzwaaij, D., White, C. N., De Boeck, P., & **Vandekerckhove, J.** (2018). Metastudies for robust tests of theory. *Proceedings of the National Academy of Sciences*, *115*, 2607–2612. doi:10.1073/pnas.1708285114. Via osf.io/g84py/download.
46. Rouder, J. N., Haaf, J. M., & **Vandekerckhove, J.** (2018). Bayesian Inference in Psychology, Part IV: Parameter estimation and Bayes factors. *Psychonomic Bulletin & Review*, *25*, 102–113. doi:10.3758/s13423-017-1420-7. Via osf.io/bvjg8/download.
45. Matzke, D., Boehm, U., & **Vandekerckhove, J.** (2018). Bayesian Inference in Psychology, Part III: Bayesian parameter estimation in nonstandard models. *Psychonomic Bulletin & Review*, *25*, 77–101. doi:10.3758/s13423-017-1394-5. Via osf.io/trhsy/download.
44. Etz, A., & **Vandekerckhove, J.** (2018). Introduction to Bayesian inference for psychology. *Psychonomic Bulletin & Review*, *25*, 5–34. doi:10.3758/s13423-017-1262-3. Via psyarxiv.com/q46q3/download.
43. Okada, K., **Vandekerckhove, J.**, & Lee, M. D. (2018). Modeling when people quit: Bayesian censored geometric models with hierarchical and latent-mixture extensions. *Behavior Research Methods*, *50*, 406–415. doi:10.3758/s13428-017-0879-5. Via osf.io/gytqz/download.
42. Dutilh, G., **Vandekerckhove, J.**, Ly, A., Matzke, D., Pedroni, A., Frey, R., Rieskamp, J., & Wagenmakers, E. (2017). A test of the diffusion model explanation for the Worst Performance Rule using pre-registration and blinding. *Attention, Perception, and Performance*, *79*, 713–725. doi:10.3758/s13414-017-1304-y. Via www.cidlab.com/prints/dutilh2017test.pdf.
41. van Ravenzwaaij, D., Donkin, C., & **Vandekerckhove, J.** (2017). The EZ diffusion model provides a powerful test of simple empirical effects. *Psychonomic Bulletin & Review*, *24*, 547–556. doi:10.3758/s13423-016-1081-y. Via www.cidlab.com/prints/vanravenzwaaij2016ez.pdf.
40. Lucio, P. S., Salum, G. A., Rohde, L. A. P., Gadelha, A., Swardfager, W., **Vandekerckhove, J.**, Pan, P. M., Polanczyk, G. V., do Rosario, M. C., Jackowski, A. P., Mari, J. d. J., & Cogo-Moreira, H. (2017). Poor stimulus discriminability as a common neuropsychological deficit between ADHD and reading ability in young children: a moderated mediation model. *Psychological Medicine*, *47*, 255–266. doi:10.1017/S0033291716002531. Via www.cidlab.com/prints/lucio2016poor.pdf.
39. Nunez, M. D., **Vandekerckhove, J.**, & Srinivasan, R. (2017). How attention influences perceptual decision making: Single-trial EEG correlates of drift-diffusion model parameters. *Journal of Mathematical Psychology*, *76*, 117–130. doi:10.1016/j.jmp.2016.03.003. Via www.cidlab.com/prints/nunez2016attention.pdf.
38. **Vandekerckhove, J.**, & Wagenmakers, E. (2016). C. S. Peirce on the Crisis of Confidence and the "No More Bets" Heuristic. *The Winnower*, *4843*. doi:10.15200/winn.146611.14253. Via winnower-production.s3.amazonaws.com/papers/4843/v5/pdf/4843-c-s-peirce-on-the-crisis-of-confidence-and-the-no-more-bets-heuristic.pdf.
37. Oravecz, Z., Muth, C., & **Vandekerckhove, J.** (2016). Do people agree on what makes one feel loved? A cognitive psychometric approach to the consensus on felt love. *PLoS ONE*, *11*, e0152803. doi:10.1371/journal.pone.0152803. Via www.cidlab.com/prints/oravecz2016people.pdf.
36. Etz, A., & **Vandekerckhove, J.** (2016). A Bayesian perspective on the Reproducibility Project: Psychology. *PLoS ONE*, *11*, e0149794. doi:10.1371/journal.pone.0149794. Via www.cidlab.com/prints/etz2016bayesian.pdf.
35. Oravecz, Z., Tuerlinckx, F., & **Vandekerckhove, J.** (2016). Bayesian data analysis with the bivariate hierarchical Ornstein-Uhlenbeck process model. *Multivariate Behavioral Research*, *51*, 106–119. doi:10.1080/00273171.2015.1110512. Via www.cidlab.com/prints/oravecz2015bayesian.pdf.

34. Guan, M., & **Vandekerckhove, J.** (2016). A Bayesian approach to mitigation of publication bias. *Psychonomic Bulletin & Review*, *23*, 74–86. doi:10.3758/s13423-015-0868-6. Via [www.cidlab.com/prints/guan2016bayes](http://www.cidlab.com/prints/guan2016bayes)
33. Oravecz, Z., Huentelman, M., & **Vandekerckhove, J.** (2016). Sequential Bayesian updating for Big Data. *Big Data in Cognitive Science: From Methods to Insights*, pp. 13–33. Via [www.cidlab.com/prints/oravecz2016sequ](http://www.cidlab.com/prints/oravecz2016sequ)
32. Van Elk, M., Matzke, D., Gronau, Q., Guan, M., **Vandekerckhove, J.**, & Wagenmakers, E. (2015). Meta-analyses are no substitute for registered replications: a skeptical perspective on religious priming. *Frontiers in Psychology*, *6*, 1365. doi:10.3389/fpsyg.2015.01365. Via [www.cidlab.com/prints/vanelk2015metaanalyses.p](http://www.cidlab.com/prints/vanelk2015metaanalyses.p)
31. Kupitz, C. N., Buschkuehl, M., Jaeggi, S. M., Jonides, J., Shah, P., & **Vandekerckhove, J.** (2015). A diffusion model account of the transfer-of-training effect. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Via [www.cidlab.com/prints/kupitz2015diffusion.pdf](http://www.cidlab.com/prints/kupitz2015diffusion.pdf).
30. Guan, M., Lee, M. D., & **Vandekerckhove, J.** (2015). A hierarchical cognitive threshold model of human decision making on different length optimal stopping problems. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*, pp. 824–829. Via [www.cidlab.com/prints/guan2015hierarchical.pdf](http://www.cidlab.com/prints/guan2015hierarchical.pdf).
29. Mistry, P. K., Trueblood, J. S., **Vandekerckhove, J.**, & Pothos, E. M. (2015). A latent-mixture quantum probability model of causal reasoning within a Bayesian inference framework. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Via [www.cidlab.com/prints/mistry2015latent.pdf](http://www.cidlab.com/prints/mistry2015latent.pdf).
28. Nunez, M. D., Srinivasan, R., & **Vandekerckhove, J.** (2015). Individual differences in attention influence perceptual decision making. *Frontiers in Psychology*, *6*, 18. doi:10.3389/fpsyg.2015.00018. Via [www.cidlab.com/prints/nunez2015individual.pdf](http://www.cidlab.com/prints/nunez2015individual.pdf).
27. **Vandekerckhove, J.**, Matzke, D., & Wagenmakers, E. (2015). Model comparison and the principle of parsimony. *Oxford Handbook of Computational and Mathematical Psychology*, pp. 300–317. Via [www.cidlab.com/prints/vandekerckhove2014model.pdf](http://www.cidlab.com/prints/vandekerckhove2014model.pdf).
26. Zhang, S., Lee, M. D., **Vandekerckhove, J.**, Maris, G., & Wagenmakers, E. (2014). Time-varying boundaries for diffusion models of decision making and response time. *Frontiers in Psychology*, *5*, 1364. doi:10.3389/fpsyg.2014.01364. Via [www.cidlab.com/prints/zhang2014time.pdf](http://www.cidlab.com/prints/zhang2014time.pdf).
25. Lee, M. D., Newell, B., & **Vandekerckhove, J.** (2014). Modeling the adaptation of search termination in human decision making. *Decision*, *1*, 223–251. doi:10.1037/dec0000019. Via [webfiles.uci.edu/mdlee/LeeNewellVandekerckhove2013.pdf](http://webfiles.uci.edu/mdlee/LeeNewellVandekerckhove2013.pdf).
24. Murphy, P. R., **Vandekerckhove, J.**, & Nieuwenhuis, S. (2014). Pupil-linked arousal determines variability in perceptual decision making. *PLOS Computational Biology*, *10*, e1003854. doi:10.1371/journal.pcbi.1003854. Via [www.cidlab.com/prints/murphy2014pupil.pdf](http://www.cidlab.com/prints/murphy2014pupil.pdf).
23. **Vandekerckhove, J.** (2014). A cognitive latent variable model for the simultaneous analysis of behavioral and personality data. *Journal of Mathematical Psychology*, *60*, 58–71. doi:10.1016/j.jmp.2014.06.004. Via [www.cidlab.com/prints/vandekerckhove2014cognitive-doc.pdf](http://www.cidlab.com/prints/vandekerckhove2014cognitive-doc.pdf).
22. Wiech, K., **Vandekerckhove, J.**, Zaman, J., Tuerlinckx, F., Vlaeyen, J. W. S., & Tracey, I. (2014). Influence of prior information on pain involves biased perceptual decision-making. *Current Biology*, *24*, R679–R681. doi:10.1016/j.cub.2014.06.022. Via [www.cidlab.com/prints/wiech2014influence.pdf](http://www.cidlab.com/prints/wiech2014influence.pdf).
21. Wabersich, D., & **Vandekerckhove, J.** (2014). The RWiener package: an R package providing distribution functions for the Wiener diffusion model. *The R Journal*, *6*, 49–56. Via [www.cidlab.com/prints/wabersich2014rwi](http://www.cidlab.com/prints/wabersich2014rwi)
20. Oravecz, Z., **Vandekerckhove, J.**, & Batchelder, W. H. (2014). Bayesian Cultural Consensus Theory. *Field Methods*, *26*, 207–222. doi:10.1177/1525822X13520280. Via [www.cidlab.com/prints/oravecz2013bayesian.pdf](http://www.cidlab.com/prints/oravecz2013bayesian.pdf).
19. Salum, G. A., Sergeant, J. A., Sonuga-Barke, E., **Vandekerckhove, J.**, Gadelha, A., Pan, P. M., Moriyama, T. S., Graeff-Martins, A. S., Gomes de Alvarenga, P., do Rosario, M. C., Manfro, G. G., Polanczyk, G. V., & Rohde, L. A. P. (2014). Mechanisms underpinning inattention and hyperactivity: neurocognitive support for ADHD dimensionality. *Psychological Medicine*, *44*, 3189–3201. doi:10.1017/S0033291714000919. Via [www.cidlab.com/prints/salum2014mechanisms.pdf](http://www.cidlab.com/prints/salum2014mechanisms.pdf).

18. Wabersich, D., & **Vandekerckhove, J.** (2014). Extending JAGS: A tutorial on adding custom distributions to JAGS (with a diffusion model example). *Behavior Research Methods*, *46*, 15-28. doi:10.3758/s13428-013-0369-3. Via [www.cidlab.com/prints/wabersich2014extending.pdf](http://www.cidlab.com/prints/wabersich2014extending.pdf).
17. Salum, G. A., Sergeant, J. A., Sonuga-Barke, E., **Vandekerckhove, J.**, Gadelha, A., Pan, P. M., Moriyama, T. S., Graeff-Martins, A. S., Gomes de Alvarenga, P., do Rosario, M. C., Manfro, G. G., Polanczyk, G. V., & Rohde, L. A. P. (2014). Specificity of basic information processing and inhibitory control in attention deficit/hyperactivity disorder. *Psychological Medicine*, *44*, 617-631. doi:10.1017/S0033291713000639. Via [www.cidlab.com/prints/salum2014specificity.pdf](http://www.cidlab.com/prints/salum2014specificity.pdf).
16. **Vandekerckhove, J.**, Guan, M., & Styracula, S. (2013). The consistency test may be too weak to be useful: Its systematic application would not improve effect size estimation in meta-analyses. *Journal of Mathematical Psychology*, *57*, 170-173. doi:10.1016/j.jmp.2013.03.007. Via [www.cidlab.com/prints/vandekerckhove2013](http://www.cidlab.com/prints/vandekerckhove2013).
15. Pe, M., **Vandekerckhove, J.**, & Kuppens, P. (2013). A diffusion model account of the relationship between the emotional flanker task and depression and rumination. *Emotion*, *13*, 739-747. doi:10.1037/a0031628. Via [ppw.kuleuven.be/okp/\\_pdf/Pe2013ADMAO.pdf](http://ppw.kuleuven.be/okp/_pdf/Pe2013ADMAO.pdf).
14. Dutilh, G., Forstmann, B. U., **Vandekerckhove, J.**, & Wagenmakers, E. (2013). A diffusion model account of age differences in posterror slowing. *Psychology and Aging*, *28*, 64-76. doi:10.1037/a0029875. Via [www.cidlab.com/prints/dutilh2013diffusion.pdf](http://www.cidlab.com/prints/dutilh2013diffusion.pdf).
13. Dutilh, G., **Vandekerckhove, J.**, Forstmann, B. U., Keuleers, E., Brysbaert, M., & Wagenmakers, E. (2012). Testing theories of post-error slowing. *Attention, Perception, & Psychophysics*, *74*, 454-465. doi:10.3758/s13414-011-0243-2. Via [www.cidlab.com/prints/dutilh2012testing.pdf](http://www.cidlab.com/prints/dutilh2012testing.pdf).
12. Oravecz, Z., Tuerlinckx, F., & **Vandekerckhove, J.** (2011). A hierarchical latent stochastic differential equation model for affective dynamics. *Psychological Methods*, *16*, 468-490. doi:10.1037/a0024375. Via [ppw.kuleuven.be/okp/\\_pdf/Oravecz2011AHLSD.pdf](http://ppw.kuleuven.be/okp/_pdf/Oravecz2011AHLSD.pdf).
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6. Panis, S., De Winter, J., **Vandekerckhove, J.**, & Wagemans, J. (2008). Identification of everyday objects on the basis of fragmented versions of outlines. *Perception*, *37*, 271-289. doi:10.1068/p5516. Via [www.cidlab.com/prints/panis2008identification.pdf](http://www.cidlab.com/prints/panis2008identification.pdf).
5. **Vandekerckhove, J.**, & Tuerlinckx, F. (2008). Diffusion Model Analysis with MATLAB: A DMAT Primer. *Behavior Research Methods*, *40*, 61-72. doi:10.3758/BRM.40.1.61. Via [www.cidlab.com/prints/vandekerckhove2008DMAT.pdf](http://www.cidlab.com/prints/vandekerckhove2008DMAT.pdf).
4. **Vandekerckhove, J.**, Tuerlinckx, F., & Lee, M. D. (2008). A Bayesian approach to diffusion process models of decision-making. *Proceedings of the 30th Annual Conference of the Cognitive Science Society*, pp. 1429-1434. Via [www.cidlab.com/prints/vandekerckhove2008bayesian.pdf](http://www.cidlab.com/prints/vandekerckhove2008bayesian.pdf).

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## SOFTWARE

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- Vandekerckhove, J.** (2015). Trinity [Software and manual]. Available via [sw.cidlab.com](http://sw.cidlab.com)
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- Oravec, Z., Tuerlinckx, F., & **Vandekerckhove, J.** (2012). BHOUM: Bayesian Hierarchical Ornstein-Uhlenbeck Modeling [Software and manual]. Available via [bayesian.zitaoravec.net](http://bayesian.zitaoravec.net)
- Oravec, Z., **Vandekerckhove, J.**, & Batchelder, W. H. (2012). Bayesian Cultural Consensus Toolbox [Software and manual]. Available via [bayesian.zitaoravec.net](http://bayesian.zitaoravec.net)
- Vandekerckhove, J.**, & Tuerlinckx, F. (2009). wiener.odc and wienereta.odc [Software and manual]. Available via [sw.cidlab.com](http://sw.cidlab.com)
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## DISSERTATION

- Vandekerckhove, J.** (2009). Extensions and applications of the diffusion model for two-choice response times. Unpublished doctoral dissertation.

## OTHER PUBLICATIONS

- Vandekerckhove, J.** (2018, February). From classical to new to real: A brief history of #BayesInPsych. Via [featuredcontent.psychonomic.org/from-classical-to-new-to-real-a-brief-history-of-bayesinpsych](http://featuredcontent.psychonomic.org/from-classical-to-new-to-real-a-brief-history-of-bayesinpsych)
- Vandekerckhove, J.** (2019, December). Freedom of choice vs. undisclosed flexibility: Researcher degrees of freedom in model-based inference. Via [featuredcontent.psychonomic.org/freedom-of-choice-vs-undisclosed-flexibility-researcher-degrees-of-freedom-in-model-based-inference](http://featuredcontent.psychonomic.org/freedom-of-choice-vs-undisclosed-flexibility-researcher-degrees-of-freedom-in-model-based-inference)



**Vandekerckhove, J.** (2019, February). Weighting or besting? Speeded multi-attribute choice [Original title: The weighting is the hardest part]. Via [featuredcontent.psychonomic.org/weighting-or-besting-speeded-multi-attribute-choice](https://featuredcontent.psychonomic.org/weighting-or-besting-speeded-multi-attribute-choice)

**Vandekerckhove, J.** (2019, May). You can obscure a lot by just plotting: Cognitive science of data presentation. Via [featuredcontent.psychonomic.org/you-can-obscure-a-lot-by-just-plotting-cognitive-science-of-data-presentation](https://featuredcontent.psychonomic.org/you-can-obscure-a-lot-by-just-plotting-cognitive-science-of-data-presentation)

**Vandekerckhove, J.** (2019, August). Detecting Bigfoot vs. brain waves: New approaches to multivariate data analysis. Via [featuredcontent.psychonomic.org/detecting-bigfoot-vs-brain-waves-new-approaches-to-multivariate-data-analysis](https://featuredcontent.psychonomic.org/detecting-bigfoot-vs-brain-waves-new-approaches-to-multivariate-data-analysis)

**Vandekerckhove, J.** (2019, September). On being SMARTer than Vincent. Via [featuredcontent.psychonomic.org/on-being-smarter-than-vincent](https://featuredcontent.psychonomic.org/on-being-smarter-than-vincent)

## MEDIA

- I maintain **cidlab.com** to distribute research results and publications; and various other websites to announce events and workshops.
- My lab provides support for **The Bayes Factor**, a podcast on Bayesian inference and the people behind it.
- My research has featured in numerous media outlets, including the *New York Times*, *National Public Radio*, the *Chronicle of Higher Education*, *WIRED Magazine*, *Science News*, and *Nature News*.

# Service

## GRADUATE ADVISING

<i>2016 – present</i>	Alexander Etz
<i>2014 – present</i>	Colin Kupitz — now at Air Force Research Labs
<i>2014 – 2019</i>	Beth Baribault — now at UC Berkeley
<i>2013 – 2019</i>	Maime Guan (with M. D. Lee) — now at Apple, Inc.
<i>2013 – 2018</i>	Irina Danileiko (with M. D. Lee) — now at Niantic, Inc.
<i>2012 – 2017</i>	Michael D. Nunez (with R. Srinivasan) — now at UC Los Angeles

## OTHER MENTORING ACTIVITIES

<i>2017 – 2019</i>	Associate project scientist Michael D. Nunez (with R. Srinivasan)
<i>2018</i>	Assistant project scientist Ravi Selker (with M. D. Lee)

## DEPARTMENTAL SERVICE

<i>2017 – present</i>	Graduate Director of Cognitive Sciences
<i>2017 – present</i>	Chair of the Graduate Admissions Committee of Cognitive Sciences
<i>2013 – 2017</i>	Undergraduate Director of B.S. Cognitive Sciences
<i>2012 – present</i>	Academic personnel committee member (5) and chair (2)
<i>2012 – present</i>	Search committee member (4) and chair (2)
<i>2011 – present</i>	Doctoral committees (5), advancement committees (10), concentration exams (8)

## OTHER SERVICE

<i>2019 – present</i>	Conference Chair of the Society for Mathematical Psychology
<i>2019 – present</i>	Executive Board Member ( <i>ex officio</i> ) of the Society for Mathematical Psychology
<i>2017 – present</i>	School of Social Sciences Representative to the Senate Assembly
<i>2017 – present</i>	Member of the Faculty Advisory Committee for Research Cyberinfrastructure

## UCI TEACHING

<i>Undergraduate</i>	Probability and Statistics in Psychology; Advanced experimental methods in psychology (lecture and lab); Honors advanced experimental methods in psychology (lecture and lab); Individual study
<i>Graduate</i>	Algorithmic statistics; Bayesian inference; Computational statistics; Social data science; Software development; Transparent and reproducible science

## EXTERNAL TEACHING

<i>September 2018</i>	<b>Invited lecturer</b> , Workshop at University of Potsdam, “Cognitive psychometrics for multimodal data”
<i>September 2016</i>	<b>Invited lecturer</b> , Workshop at University of Toronto, “A practical course in Bayesian graphical modeling” (with M. D. Lee)
<i>2010 – 2016</i>	<b>Lecturer and co-organizer</b> , biennial Computational Cognitive Modeling summer school

March 2015	<b>Invited lecturer</b> , seminar for Interdisciplinary Data Sciences Consortium, University of South Florida, Tampa, “Cognitive psychometrics and cognitive latent variable models”
July 2015	<b>Invited lecturer</b> , Workshop at University of Zurich, “Cognitive psychometrics and cognitive latent variable modeling”
December 2010	<b>Invited lecturer</b> , University of Zurich doctoral program, “A practical course in Bayesian graphical modeling” (with M. D. Lee)
September 2010	<b>Invited lecturer</b> , University of Zurich doctoral program, “Programming models in MATLAB”
2006 – 2011	<b>Teaching assistant</b> (2006 – 2008, 2010 – 2011), substitute local coordinator (2007), and co-lecturer (2008) “Socrates-Erasmus Intensive Program on Mathematical and Computational Models in the Psychological Sciences”
2005 – 2008	<b>Teaching assistant</b> and tutor for various undergraduate courses on statistics. Co-lecturer for undergraduate courses on mathematical modeling

## EDITORIAL AND AD-HOC REVIEWER SERVICE

2020 – present	<b>Associate editor</b> , <i>Psychonomic Bulletin &amp; Review</i>
2018 – 2019	<b>Associate editor</b> , <i>Psychonomic Society Digital Content</i>
2017 – present	<b>Editorial board member</b> , <i>Advances in Methods and Practices in Psychological Science</i>
2015 – 2018	<b>Guest lead editor</b> , <i>Psychonomic Bulletin &amp; Review</i> , Special issue on statistical recommendations (with J. N. Rouder and J. K. Kruschke)
2016 – 2018	<b>Panelist</b> , <i>National Science Foundation</i> , Advisory Panel for the Methodology, Measurement, and Statistics (MMS) Program
2016 – 2019	<b>Consulting editor</b> , <i>Behavior Research Methods</i>
2016 – 2018	<b>Tutorial editor</b> , <i>Journal of Mathematical Psychology</i>
2014 – 2016	<b>Consulting editor</b> , <i>Journal of Mathematical Psychology</i>

**Ad hoc reviewer** for *Acta Psychologica*; *Advances in Methods and Practices in Psychological Science*; *the Annual Meeting of the Society for Cognitive Science (conference)*; *Behavior Research Methods*; *Clinical Epidemiology*; *Cognition*; *Cognition, Brain, and Behavior*; *Cognitive Psychology*; *Cognitive Science*; *Collabra*; *Decision*; *Entropy*; *Experimental Psychology*; *iPerception*; *Journal of Cognitive Neuroscience*; *Journal of Experimental Psychology: General*; *Journal of Mathematical Psychology*; *Journal of Memory and Language*; *Memory & Cognition*; *Methodology*; *Perspectives in Psychological Science*; *PLOS ONE*; *Proceedings of the National Academy of Science*; *Psychological Science*; *Psychological Methods*; *Psychological Research*; *Psychological Review*; *Psychometrika*; *Psychonomic Bulletin & Review*; *Quarterly Journal of Experimental Psychology*; and others.

**Ad hoc reviewer** for the *European Research Council*; the *Interuniversity Graduate School of Psychometrics and Sociometrics*; the *National Endowment for the Humanities*; the *National Science Foundation*; and others.

## EVENTS ORGANIZED

July 2021	<b>Organizer</b> , “54th Annual Meeting of the Society for Mathematical Psychology,” TBD location
July 2020	<b>Organizer</b> , “53rd Annual Meeting of the Society for Mathematical Psychology,” Toronto, Ontario
July 2019	<b>Organizer</b> , “52nd Annual Meeting of the Society for Mathematical Psychology,” Montreal, Quebec
July 2018	<b>Organizer</b> (with R. Shiffrin), “On the relationship between scientific practice and statistical practice,” Madison, WI

- July 2018* **Organizer**, “Workshop on robust social science,” Orlando, FL
- May 2017* **Organizer** (with Z. Oravecz), “Models and methods of well-being,” Boston, MA
- November 2016* **Organizer** (with A. H. Criss and E.-J. Wagenmakers), “Computational approaches to cognition,” Boston, MA
- May 2016* **Organizer**, “Cognitive psychometrics in action,” Chicago, IL
- November 2015* **Organizer** (with A. H. Criss and E.-J. Wagenmakers), “Mathematical Psychology at Psychonomics,” Chicago, IL
- July 2015* **Organizer**, “Applications of mathematical psychology to industry meeting,” Newport Beach, CA
- July 2015* **Organizer** (with J. S. Trueblood), “48th Annual Meeting of the Society for Mathematical Psychology,” Newport Beach, CA
- July 2015* **Organizer**, “Teaching Bayesian statistics with JASP,” Newport Beach, CA
- November 2014* **Organizer**, “Using BayesFactor for practical Bayesian analysis.” Irvine, CA
- March 2014* **Organizer**, “Workshop on recent advances in Bayesian inference.” Irvine, CA
- November 2013* **Organizer** (with J. Krichmar and R. Srinivasan), “Workshop on interfacing models with brain signals to investigate cognition.” Irvine, CA
- August 2010* **Organizer**, “Practical applications of models for response time.” Portland, OR

#### OTHER SERVICE TO THE FIELD

- 2014* **Developer**, “Minimal frustration” automated scheduler for the 47th Annual Meeting of the Society for Mathematical Psychology.