JONATHAN WAI

Research Scientist, Duke University
Visiting Researcher, Case Western Reserve University
Faculty Affiliate, Claremont McKenna College
waijon@hotmail.com
April 2017

ACADEMIC APPOINTMENTS AND EDUCATION

2011-	Research Scientist, Talent Identification Program, Duke University
2013-	Visiting Researcher, Dept. of Psychology, Case Western Reserve University
2016-	Faculty Affiliate, Berger Institute, Claremont McKenna College
2009-2011	Postdoctoral Research Fellow, Duke University
2003-2009	Ph.D., M.S., Psychology, Vanderbilt University
2002-2003	M.A., Psychology and Evaluation, Claremont Graduate University
1998-2002	B.A., Psychology and Mathematics, Claremont McKenna College

PUBLICATIONS

Wai, J., Worrell, F. C., & Chabris, C. F. (in press). The consistent influence of general cognitive ability in college, career, and lifetime achievement. In K. McClarty, K. Mattern, & M. Gaertner (Eds.), *National Council on Measurement in Education (NCME) volume on college and career readiness*.

Wai, J., & Kell, H. J. (in press). How important is intelligence in the development of professional expertise?: Combining prospective and retrospective longitudinal data provides an answer. In D. Z. Hambrick, G. Campitelli, & B. Macnamara (Eds.) *The science of expertise: Behavioral, neural, and genetics approaches to complex skill.* Routledge.

Wai, J., & Rindermann, H. R. (2017). What goes into high educational and occupational achievement? Education, brains, hard work, networks, and other factors. *High Ability Studies*. http://dx.doi.org/10.1080/13598139.2017.1302874 (Invited contribution to the special issue from the inaugural Invitational Summit on European/American Talent Development, edited by A. Ziegler).

Makel, M. C., **Wai, J.**, Peairs, K. F., & Putallaz, M. (2016). Sex differences in the right tail of cognitive abilities: An update and cross cultural extension. *Intelligence, 59,* 8-15. http://dx.doi.org/10.1016/j.intell.2016.09.003

Wai, J., & Worrell, F. C. (2016). Helping disadvantaged and spatially talented students fulfill their potential: Related and neglected national resources. *Policy Insights from the Behavioral and Brain Sciences, 3,* 122-128. doi: 10.1177/2372732215621310 (Invited contribution, edited by S. Fiske).

Wai, J., & Lincoln, D. (2016). Investigating the right tail of wealth: Education, cognitive ability, giving, network power, gender, ethnicity, leadership, and other characteristics. *Intelligence, 54,* 1-32. http://dx.doi.org/10.1016/j.intell.2015.11.002

Wai, J., & Kell, H. J. (2016). What innovations have we already lost?: The importance of identifying and developing spatial talent. In M. S. Khine (Ed.) *Visual-spatial ability in STEM education: Transforming research into practice* (pp. 109-124). Dordrecht, The Netherlands: Springer.

Makel, M. C., & **Wai, J.** (2016). Does economic research in education work? For which studies? *Journal of Advanced Academics, 27,* 73-80. doi: https://doi.org/10.1177/1932202X15628013 (Invited contribution to the special issue on *Gifted Education Research in the Field of Economics*, edited by S. Peters and M. S. Matthews).

Wai, J., & Rindermann, H. R. (2015). The path and performance of a company leader: An historical examination of the education and cognitive ability of Fortune 500 CEOs. *Intelligence, 53,* 102-107. http://dx.doi.org/10.1016/j.intell.2015.10.001

Makel, M. C., **Wai, J.**, Putallaz, M., & Malone, P. (2015). The academic gap: An international comparison of the time allocation of academically talented students. *Gifted Child Quarterly, 59,* 177-189. doi: 10.1177/0016986215578746

Miller, D., & **Wai, J.** (2015). The bachelor's to PhD STEM pipeline no longer leaks more women than men: A 30-year analysis. *Frontiers in Psychology: Developmental, 6,* 37. http://dx.doi.org/10.3389/fpsyg.2015.00037 (Invited contribution to the special issue on *Underrepresentation of Women in Science: International and Cross-Disciplinary Evidence and Debate*, edited by S. J. Ceci, W. M. Williams, and S. Kahn.)

Wai, J. (2015). Long-term effects of educational acceleration. In. S.G. Assouline, N. Colangelo, J. VanTassel-Baska, & A.E. Lupkowski-Shoplik (Eds.) *A nation empowered: Evidence trumps the excuses that hold back America's brightest students* (V. II, pp. 73-83). Iowa City, IA: The Belin-Blank Center for Gifted and Talented Education.

Wai, J. (2014). Investigating the world's rich and powerful: Education, cognitive ability, and sex differences. *Intelligence, 46,* 54-72. http://dx.doi.org/10.1016/j.intell.2014.05.002

Wai, J. (2014). What does it mean to be an expert? *Intelligence, 45, 122-123.* doi: http://dx.doi.org/10.1016/j.intell.2014.02.001 (Invited contribution to the special issue on *Acquiring Expertise: Ability, Practice, and Other Influences*, edited by D. K. Detterman).

Wai, J. (2014). Experts are born, then made: Combining prospective and retrospective longitudinal data shows that cognitive ability matters. *Intelligence, 45,* 74-80. doi: http://dx.doi.org/10.1016/j.intell.2014.02.001 (Invited contribution to the special issue on *Acquiring Expertise: Ability, Practice, and Other Influences*, edited by D. K. Detterman).

Wai, J. (2014). Matching potential and passion leads to promise: A model for educating intellectually talented youth. S. Moon & F. Dixon (Eds.), *Handbook of Secondary Gifted Education.* (pp. 237-259). Waco, TX: Prufrock Press Inc.

Wai, J. (2013). Investigating America's elite: Cognitive ability, education, and sex differences. *Intelligence, 41,* 203-211. http://dx.doi.org/10.1016/j.intell.2013.08.009

Wai, J., Putallaz, M., & Makel, M. C. (2012). Studying intellectual outliers: Are there sex differences, and are the smart getting smarter? *Current Directions in Psychological Science, 21,* 382-390. doi: 10.1177/0963721412455052 (Invited contribution, edited by R. W. Engle).

Makel, M. C., Putallaz, M., & **Wai, J.** (2012). Teach students what they don't know but are ready to learn: A commentary on "Rethinking giftedness and gifted education." *Gifted Child Quarterly, 56,* 198-201. doi: https://doi.org/10.1177/0016986212456073 (Invited contribution to the special issue on *A Proposed Direction Forward for Gifted Education Based on Psychological Science*, edited by J. A. Plucker and C. M. Callahan).

Wai, J., & Putallaz, M. (2011). The Flynn effect puzzle: A 30-year examination from the right tail of the ability distribution provides some missing pieces. *Intelligence, 39,* 443-455. doi: 10.1016/j.intell.2011.07.006

Makel, M. C., Li, Y., Putallaz, M., & **Wai, J.** (2011). High ability students' time spent outside the classroom. *Journal of Advanced Academics, 22,* 720-749. doi: 10.1177/1932202X11424880

Wai, J., Cacchio, M., Putallaz, M., & Makel, M. C. (2010). Sex differences in the right tail of cognitive abilities: A 30-year examination. *Intelligence, 38,* 412-423.
doi: 10.1016/j.intell.2010.04.006

Wai, J., Lubinski, D., Benbow, C. P., & Steiger, J. H. (2010). Accomplishment in science technology, engineering, and mathematics (STEM) and its relation to STEM educational dose: A 25-year longitudinal study. *Journal of Educational Psychology, 102,* 860-871.
doi: 10.1037/a0019454

Wai, J., Lubinski, D., & Benbow, C. P. (2009). Spatial ability for STEM domains: Aligning over fifty years of cumulative psychological knowledge solidifies its importance. *Journal of Educational Psychology, 101,* 817-835. doi: 10.1037/a0016127

Wai, J., Lubinski, D., & Benbow, C. P. (2009). Aligning potential and passion for promise: A model for educating intellectually talented youth. In J. S. Renzulli, E. J. Gubbins, K. S. McMillen, R. D. Eckert, & C. A. Little (Eds.) *Systems and models for developing programs for the gifted and talented*. (2nd ed., pp. 693-716). Mansfield Center, CT: Creative Learning Press, Inc.

Halpern, D. F., & **Wai, J.** (2007). The world of competitive Scrabble: Novice and expert differences in visuospatial and verbal abilities. *Journal of Experimental Psychology: Applied, 13,* 79-94. doi: 10.1037/1076-898X.13.2.79

Wai, J., Lubinski, D., & Benbow, C. P. (2005). Creativity and occupational accomplishments among intellectually precocious youths: An age 13 to age 33 longitudinal study. *Journal of Educational Psychology, 97,* 484-492. doi: 10.1037/0022-0663.97.3.484

Halpern, D. F., **Wai, J.**, & Saw, A. (2005). A psychobiosocial model: Why females are sometimes > and sometimes < males in math achievement. In J. Kaufman and A. Gallagher (Eds.), *Gender Differences in Mathematics*. (pp. 48-72). Cambridge, MA: Cambridge University Press.

ENCYCLOPEDIA ENTRIES AND BOOK REVIEWS

Kell, H. J. & **Wai, J.** (in press). Terman Longitudinal Study of Gifted Children. *The SAGE Encyclopedia of Educational Research, Measurement and Evaluation*.

Wai, J., & Kell, H. J. (in press). Giftedness. *The SAGE Encyclopedia of Educational Research, Measurement and Evaluation*.

Wai, J. (2016). Crossing disciplinary boundaries to better understand expertise. A review of Fernand Gobet's book *Understanding expertise: A multi-disciplinary approach*. *Intelligence, 57,* 64-65. doi: 10.1016/j.intell.2016.04.005 (Invited contribution, edited by D. Z. Hambrick)

Wai, J. (2009). A review of Charles Murray's book *Real education: Four simple truths for bringing America's schools back to reality*. *Intelligence, 37,* 321-322. doi: 10.1016/j.intell.2008.10.006 (Invited contribution, edited by I. J. Deary)

Wai, J. (2008). A review of Arthur Jensen's book *Clocking the mind: Mental chronometry and individual differences*. *Gifted Child Quarterly, 52,* 99-104. doi: 10.1177/0016986207310434 (Invited contribution, edited by J. VanTassel-Baska)

Wai, J., & Lubinski, D. (2008). Intelligence. In F. T. L. Leong (Editor-in-Chief), E. M. Altmaier (Senior Editor) & B. D. Johnson's (Associate Editor) *Encyclopedia of Counseling, Volume 1: Changes and Challenges for Counseling in the 21st Century*. (pp. 651-657). Thousand Oaks, CA: Sage Publications.

SELECTED PROJECTS IN PROGRESS OR UNDER REVIEW

Wai, J., & Allen, J. (under review). Examining predictors of academic growth in secondary school among academically advanced youth across 21 years.

Kanaya, T., Miranda, B., & **Wai, J.** (under review). The impact of receiving special education services on adulthood outcomes using one-to-one matching propensity score analysis.

Wai, J., Hsu. S., Perina, K., & Michigan State University Institutional Research Team. "Which colleges and universities have had a lasting impact on society?"

Wai, J., & Worrell, F. C. "Why a good education is an imperative for upward mobility."

Wai, J., & Plucker, J. "What matters in education?"

Wai, J., Miller, D. I., Chabris, C. F., & Simons, D. "Writing for the public: What, when, how, and why." *Perspectives on Psychological Science*.

Wai, J., & Worrell, F. C. "Giving academically advanced students dignity by fully developing their potential: Why helping and understanding these students will help society." American Enterprise Institute invited education policy article.

Miller, D. I., **Wai, J.**, & Uttal, D. H. "How spatial skills relate to movement into and out of STEM."

Miller, D. I., **Wai, J.**, & Uttal, D. H. "Beyond the leaky pipeline: Creating diverse paths into STEM."

Kanaya, T., **Wai, J.**, & Worrell, F. C. **"**Policy implications of the slowing of the Flynn effect for the two tails of the distribution."

Volden, C., **Wai, J.**, & Wiseman, A. E. "Elite education, liberalism, and effective lawmaking in the U.S. Congress."

HONORS AND AWARDS

Mensa Awards for Research Excellence, 2006, 2010, 2011, 2012, 2013, 2016
Research and writing profiled by Rotman Management Magazine, University of Toronto, 2015
Susan Gray Award for Excellence in Scholarly Writing, Vanderbilt University, 2010
New Voice Scholar in Creativity and Intelligence (Chosen by Field Leaders), University of Kansas, 2009
Society of Multivariate Experimental Psychology (SMEP) Dissertation Award, 2007
Peabody Honor Scholar, 2003-2007
Vanderbilt University Graduate Fellow, 2003-2007
Uhlmann Scholar, Merit Scholarship, Claremont McKenna College, 1998-2002
Washington Scholar, Waived Tuition, Western Washington University Summer Courses, 1998-2002

GRANT WRITING AND REVIEWING

"A Pre-Maker Course for Developing 3-D Spatial Skills": PI Sheryl Sorby. (Under review, 2016-2017). SBIR Phase I Program grant application submitted to the National Science Foundation and the Department of Education. Assisted in developing and writing grant proposal.

"The Importance of Talent Development in Gifted Students from Disadvantaged Backgrounds": Jonathan Wai. (2012-2013). American Psychological Foundation Esther Katz Rosen Early Career Research Grant. Unfunded ($50,000).

"Enhancing Talent Development in Intellectually Talented Students from Financially Disadvantaged Backgrounds": Jonathan Wai. (2012-2013). American Psychological Association (APA) Early Career Educational Psychology Research Award. Unfunded ($7,500).

Society for Multivariate Experimental Psychology (SMEP) Dissertation Research Award: Jonathan Wai. (2007). Funded ($1000).

Grant reviewer, National Science Foundation, 2013, 2015

Grant reviewer, Jacob K. Javits Gifted and Talented Program, 2014-present

ACADEMIC PRESENTATIONS

Wai, J., Kanaya, T., & Worrell, F. C. (forthcoming, November, 2017). *An historical test score trend may be reversing which could negatively impact already underrepresented gifted kids*. Presentation at the 64th annual convention of the National Association for Gifted Children, Charlotte, NC.

Wai, J., Makel, M. C., & Gambrell, J. (forthcoming, November, 2017). *Higher education, academic giftedness, and the development of creative achievement: An analysis of the TIME 100*. Poster presented at the 64th annual convention of the National Association for Gifted Children, Charlotte, NC.

Lakin, J. M., **Wai, J.**, & Coxon, S. (forthcoming, November, 2017). *Spatial talents and STEM programs: Identification and curricular innovations*. Presentation at the 64th annual convention of the National Association for Gifted Children, Charlotte, NC.

Courtright, R., & **Wai, J.** (November, 2016). *Conceptions of intelligence and policy implications: Remembering that gifted begins with g*. Presentation at the 63rd annual convention of the National Association for Gifted Children, Orlando, FL.

Wai, J. (November, 2016). *How often do academically talented students attend elite colleges and graduate schools and attain positions of innovation and global leadership?* Poster presented at the 63rd annual convention of the National Association for Gifted Children, Orlando, FL.

Wai, J. (November, 2016). *Shifting the lens globally to rethink "gifted" locally: External perspectives can help us think outside the box about gifted and gifted advocacy*. Poster presented at the 63rd annual convention of the National Association for Gifted Children, Orlando, FL.

Wai, **J.**, & Makel, M. C. (November, 2016*). Do "brain training" programs work? The research behind the games and how to evaluate them*. Presentation at the 63rd annual convention of the National Association for Gifted Children, Orlando, FL.

Wai, J. & Worrell, F. C. (November, 2016). *Helping financially disadvantaged and spatially talented students: An empirically based strategy to help level the playing field*. Presentation at the 63rd annual convention of the National Association for Gifted Children, Orlando, FL.

Volden, C., Wiseman, A. E., & **Wai, J.** (November, 2016). *Elite education, liberalism, and effective lawmaking in the U.S. Congress*. Conference paper, Association for Public Policy Analysis & Management, Washington, D. C.

Volden, C., Wiseman, A. E., & **Wai, J.** (September, 2016). *Elite education, liberalism, and effective lawmaking in the U.S. Congress*. Conference paper, American Political Science Association, Philadelphia, PA.

Makel, M. C., **Wai, J.**, Peairs, K., & Putallaz, M. (April, 2016). *Sex differences in the right tail of cognitive abilities: An update and cross cultural extension*. Presented at the annual meeting of the American Educational Research Association, Washington, D. C.

Miller, D. I., **Wai, J.**, & Uttal, D. H. (September, 2014). *How spatial skills relate to movement into and out of STEM*. Poster presentation at the 2014 Spatial Cognition conference in Bremen, Germany.

Miller, D. I., **Wai, J.**, & Uttal, D. H. (February, 2014). *Replacing the leaky pipeline metaphor*. Oral presentation at the 2014 Inter-Science of Learning Center conference in Pittsburgh, PA.

Wai, J., Putallaz, M., & Gambrell, J. (December, 2012). *The Flynn effect in the right tail of the U.S. as a function of sex, race/ethnicity, and SES*. Paper presented at the thirteenth annual meeting of the International Society for Intelligence Research, San Antonio, TX.

Wai, J., & Putallaz, M. (November, 2012). *Why are so many more gifted students being identified?* Paper presented at the 59th annual convention of the National Association for Gifted Children, Denver, CO.

Makel, M. C., **Wai, J.**, & Putallaz, M. (April, 2012). *Time allocation of academically talented students: an international comparison*. Paper presented at the annual meeting of the American Educational Research Association, Vancouver B.C., Canada.

Wai, J., Cacchio, M., Putallaz., M., & Makel, M. C. (November, 2011). *Sex differences in cognitive abilities among the intellectually talented for the last 30 years*. Poster presented at the 58th annual convention of the National Association for Gifted Children, New Orleans, LA.

Makel, M. C., Li, Y., Putallaz, M., & **Wai, J.** (April, 2011). *High ability students' time spent outside the classroom*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Wai, J., Cacchio, M., Putallaz, M., & Makel, M. C. (December, 2010). *An examination of sex differences in the top 5% of cognitive abilities: 1981-2010.* Paper presented at the eleventh annual meeting of the International Society for Intelligence Research, Alexandria, VA.

Wai, J., Makel, M. C., Putallaz, M., & Cacchio, M. (November, 2010). *Summer academic programs and longitudinal educational and occupational outcomes among the exceptionally talented*. Paper presented at the 57th annual convention of the National Association for Gifted Students, Atlanta, GA.

Makel, M. C., Li, Y., Putallaz, M., & **Wai, J.** (November, 2010). *Gifted kids' time spent outside the classroom*. Poster session presented at the 57th annual convention of the National Association for Gifted Students, Atlanta, GA.

Wai, J., Lubinski, D., Benbow, C. P., & Steiger, J. H. (May, 2010). *Accomplishment in science, technology, engineering, and mathematics (STEM) and its relation to STEM educational dose: A 25-year longitudinal study*. Paper presented at the tenth biennial Wallace National Research Symposium on Talent Development, Iowa City, IA.

Makel, M. C., Li, Y., Putallaz, M., & **Wai, J.** (May, 2010). *Gifted students' time spent outside the classroom*. Paper presented at the tenth biennial Wallace National Research Symposium on Talent Development, Iowa City, IA.

Wai, J., Lubinski, D., & Benbow, C. P. (December, 2008). *Achievement in science, technology, engineering, and mathematics (STEM) and its relationship to STEM educational dose: A 25-year longitudinal study*. Paper presented at the ninth annual meeting of the International Society for Intelligence Research, Decatur, GA.

Wai, J., Lubinski, D., & Benbow, C. P. (May, 2008). *Spatial ability for STEM domains: Aligning over fifty years of cumulative psychological knowledge solidifies its importance*. Paper presented at the ninth biennial Wallace National Research Symposium on Talent Development, Iowa City, IA.

Wai, J., Lubinski, D., & Benbow, C. P. (December, 2007). *Spatial ability for STEM domains: Over fifty years of cumulative psychological knowledge highlights its longstanding neglect.* Paper presented at the

eighth annual meeting of the International Society for Intelligence Research, Amsterdam, The Netherlands.

Wai, J., & Halpern, D. F. (May, 2007). *The world of competitive Scrabble: Expert and novice differences in verbal and visuospatial abilities.* Poster session presented at the 19th annual convention of the Association for Psychological Science, Washington, DC.

Lubinski, D., Benbow, C. P., Webb, R. M., Bleske-Rechek, A., & **Wai, J.** (August, 2006). *Tracking exceptional human capital over two decades*. American Psychological Association, New Orleans, LA.

Wai, J., Lubinski, D., & Benbow, C. P. (May, 2006). *Creativity: Individual differences within the top 1% of ability make a difference*. Poster presented at the eighth biennial Wallace National Research Symposium on Talent Development, Iowa City, IA.

Wai, J., Lubinski, D., & Benbow, C. P. (December, 2005). *Creative accomplishments covary with ability even among the top 1%*. Paper presented at the sixth annual meeting of the International Society for Intelligence Research, Albuquerque, NM.

Lubinski, D., Benbow, C. P., Webb, R. M., Bleske-Rechek, A., & **Wai, J.** (October, 2005). *Tracking exceptional human capital over two decades*. Paper presented at the annual meeting of the Society for Multivariate Experimental Psychology. Lake Tahoe, NV.

Wai, J., Lubinski, D., & Benbow, C. P. (December, 2004). *Vocational achievement and creativity among intellectually precocious youth: An age 13 to age 33 longitudinal study*. Paper presented at the fifth annual meeting of the International Society for Intelligence Research, New Orleans, LA.

Wai, J., Lubinski, D., & Benbow, C. P. (May, 2004). *Ability intensity and ability/preference configuration both contribute to the prediction of educational and vocational outcomes over 20 years*. Paper presented at the seventh biennial Wallace National Research Symposium on Talent Development, Iowa City, IA.

Wai, J., & Halpern, D. F. (May, 2003). *The competitive world of Scrabble: Cognitive processes of expert players*. Poster session presented at the 83rd annual meeting of the Western Psychological Association, Vancouver, BC.

INVITED PRESENTATIONS AND LECTURES

Wai, J. (October, 2016). *Learning from the science and science communication interface. How can that improve psychological science?* Invited presentation at the Case Western Reserve University department of psychology, Cleveland, OH.

Wai, J. (April, 2016). *What goes into high achievement of academically talented students?: Education, brains, hard work, networks, and other factors.* Invited presentation at the inaugural Invitational Summit on European/American Talent Development, Washington, D.C.

Wai, J. (September, 2015). *Spatial reasoning and STEM: Identification, learning, and achievement.* Invited presentation at the Integrating Cognitive Science with Innovative Teaching in STEM Disciplines: Modeling and Spatial Learning in STEM conference at Northwestern University, Evanston, IL.

Wai, J. (April, 2015). *Developing educational and occupational expertise: Brains, education, and other factors.* Invited presentation at the Case Western Reserve University department of psychology, Cleveland, OH.

Wai, J. (March, 2014). *Experts are born, then made: Combining prospective and retrospective longitudinal data shows that cognitive ability matters in the U.S. and the world.* Invited presentation at the Wallace Research & Policy Symposium on Talent Development, Arlington, VA.

Makel, M. C., **Wai, J.,** & Putallaz, M. (March, 2014). *The time allocation of academically talented students: An international comparison.* Invited presentation at the Wallace Research & Policy Symposium on Talent Development, Arlington, VA.

Wai, J. (July, 2013). *The importance of STEM educational dose and spatial ability for female STEM achievement.* Invited presentation at the STEM Think Tank and Conference, Nashville, TN.

Wai, J. (July, 2012). *If you are creative, are you also intelligent?* Invited presentation at the 12th Asia-Pacific Conference on Giftedness, Dubai, United Arab Emirates.

Wai, J., & Putallaz, M. (July, 2012). *Why are so many more gifted students being identified?* Invited presentation at the 12th Asia-Pacific Conference on Giftedness, Dubai, United Arab Emirates.

Wai, J. (April, 2012). *Science Outreach*. Invited panel presentation at the 15th annual NIEHS Biomedical Career Fair, EPA Campus, Research Triangle Park, NC.

Wai, J. (November, 2011). *If you are creative, are you also intelligent? The importance of measurement for psychological and educational science*. Invited presentation at the Purdue University College of Education, West Lafayette, IN.

Wai, J. (November, 2011). *The concept of "educational dose" and program evaluation for the intellectually talented*. Invited presentation at the Purdue University College of Education, West Lafayette, IN.

Wai, J. (July, 2011). *What kinds of adults do gifted students like you become?* Invited address at the Duke University Talent Identification Program 30th Anniversary Alumni Reunion, Durham, NC.

Wai, J., Lubinski, D., & Benbow, C. P. (November, 2009). *Spatial ability for STEM arenas: Combining over a half-century of cumulative psychological knowledge solidifies its importance.* Keynote address at the New Voices in Creativity and Intelligence Symposium, Lawrence, KS.

TEACHING AND MENTORING

Instructor

Psychometric Methods (undergraduate), Vanderbilt University, Spring and Fall, 2008; Spring, 2009
Introduction to Statistical Analysis (undergraduate), Vanderbilt University, Spring and Fall, 2007

Guest Lecturer

Understanding Genius (undergraduate), measurement of intelligence, Duke University
Psychological Measurement (graduate), factor analysis, Vanderbilt University
Psychometric Methods (undergraduate), regression, Vanderbilt University

Teaching Assistant

Statistical Inference (graduate), Vanderbilt University
Quantitative Methods and Experimental Design (graduate), Vanderbilt University
Introduction to Statistical Analysis (undergraduate), Vanderbilt University

Psychometric Methods (undergraduate), Vanderbilt University

Mentoring

I have mentored and written multiple letters of recommendation for students at Vanderbilt University and Duke University who have gone on to attend graduate programs at institutions such as Columbia University, UNC-Chapel Hill, Vanderbilt University, and Washington University in St. Louis.

PROFESSIONAL MEMBERSHIP AND NATIONAL BOARD SERVICE

American Psychological Association (Division 15: Educational Psychology)
International Society for Intelligence Research
National Association for Gifted Children (NAGC; Research and Evaluation and STEM Networks)
Board of Directors, Chair, Evaluation/Nomination Committees, MATHCOUNTS Foundation, 2011-2014

SERVICE TO PROFESSION

Editorial Board
- *Intelligence* (2016-present)
- *Journal of Expertise* (2017-present)

Referee
- *AERA Open*
- *Annals of the New York Academy of Sciences*
- *Applied Developmental Science*
- *Cambridge University Press*
- *Current Directions in Psychological Science*
- *Developmental Psychology*
- *Developmental Review*
- *Educational Psychology Review*
- *Elsevier*
- *Equity & Excellence in Education*
- *Frontiers in Cognition*
- *Frontiers: Developmental Psychology*
- *Gifted Child Quarterly*
- *High Ability Studies*
- *Intelligence*
- *International Journal of Behavioral Development*
- *International Journal of Education in Mathematics*
- *International Journal of STEM Education*
- *Science and Technology*
- *Journal of Advanced Academics*
- *Journal of Educational Psychology*
- *Journal of Engineering Education*
- *Journal of Experimental Psychology: General*
- *Journal of Experimental Psychology: Learning, Memory, and Cognition*
- *Journal of Intelligence*
- *Journal of Research in Personality*
- *Journal of Women and Minorities in Science and Engineering*
- *Learning and Individual Differences*
- *Learning and Instruction*
- *Oxford University Press*
- *PeerJ*
- *PLOS One*

Psychological Reports
Psychological Science
Review of General Psychology
Roeper Review
Science Education
South African Journal of Education
Spatial Cognition and Computation: An Interdisciplinary Journal

Legislative and Advocacy Committee, National Association for Gifted Children, 2016-present
Holden Speaker And Media Committee, International Society for Intelligence Research, 2012-present
Website Committee, International Society for Intelligence Research, 2012-2013
Proposal Reviewer, International Society for Intelligence Research, 2010-present
Proposal Reviewer, National Association for Gifted Children, 2015-present
Consultant, Duke Talent Identification Program, Admissions, Educational Programs, International Programs, Marketing, the Next Generation Venture Fund, and Talent Search, 2009-present
Duke Talent Identification Program Staff Advisory Committee, Alternate, 2009-2010
Graduate Student Council for Psychology and Human Development, 2003-2004
Visual Historian, International Society for Intelligence Research, 2003-2008

SELECTED PUBLIC SCHOLARSHIP

Wai, J. (January 30, 2017). What a century of research reveals about gifted kids. *Psychology Today, Thrive Global* (discussed by Arianna Huffington)

Wai, J., Shoplik, A. L., Assouline, S. (October 12, 2016). Should I grade-skip my gifted child? *The Conversation, The Huffington Post, Salon* (cited by *NEA Today*)

Wai, J., Hsu, S., & Clynes, T. (October 7, 2016). Where Nobel winners get their start. *Nature News & Comment* (covered by *Quartz, LeMonde, Le Figaro, Sciences et Avenir*)

Wai, J., Nisen, M., Goudreau, J., Stanger, M., Jackson, A., & Morrell, A. (2013, 2014, 2015, 2016). U.S. colleges ranked by student brainpower. *Business Insider* (over 8.7 million reads)

Wai, J. (April 19, 2016). What the world's wealthiest self-made females have in common. *Quartz, Yahoo! Finance*

Wai, J., & Worrell, F. C. (March 21, 2016). A nation at risk – how gifted, low-income kids are left behind. *The Conversation, The Huffington Post, National Review, Business Insider, Quartz, AlterNet*

Wai, J. (December 8, 2015). Having smart neighbors could mean a higher income for you. *Quartz, World Economic Forum* (named "best of the year" by The World Economic Forum)

Wai, J., & Miller, D. I. (December 1, 2015). Here's why academics should write for the public. *US Conversation, The Huffington Post, Quartz, Northwestern University* (cited by the American Sociological Association)

Wai, J., & Worrell, F. C. (October 20, 2015). Why are we supporting everyone except our most talented students? *Medium: Bright, National Review, Quartz*

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SELECTED DISCUSSION AND IMPACT OF WORK

Academic impact: 1,293 Google scholar citations as of 4/01/2017

Columnist for *Psychology Today*: "Finding the Next Einstein: Why Smart is Relative."
Contributor to *Psychology Today* (print magazine), *Quartz, Business Insider,* and others.

My research and writing has reached millions of people, has been discussed by thought leaders ranging from Fareed Zakaria to Andrew Sullivan, and has started discussions in countries ranging from Australia to Vietnam. Recognition from The Aspen Institute and The American Enterprise Institute for "best ideas."

Selected media coverage: *Science, Nature, The New York Times, The Economist, The Wall Street Journal, Scientific American, CNBC, Financial Times, Bloomberg, Le Monde, Le Figaro, Inc. Magazine, MIT Technology Review, Discover, Fast Company, American Scientist, Education Week, Wired, Forbes, Psychology Today, Quartz, Business Insider, The Chicago Tribune, The Daily Beast, Christian Science Monitor, Reuters, Inside Higher Ed, The Chronicle of Higher Education, Times Education Supplement, The New Republic, Reason, The Week, National Review, The Daily Mail, The Guardian, The Huffington Post, Yahoo!* and newspapers worldwide.

My work has also been discussed by the *National Academy of Sciences, National Academy of Engineering, Institute of Medicine*, *National Science Board,* and multiple academic textbooks and mainstream books, including Fareed Zakaria's *In defense of a liberal education* (2015), Tyler Cowen's *Average is over* (2013), and Tom Clynes's (2015) *The boy who played with fusion*.

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