

DANIEL C. HYDE

[Updated 7.29.22]

CONTACT INFORMATION

[Address] 621 Psychology Building
603 East Daniel Street
Champaign, IL 61820

[Phone] 217.300.0382

[Email] dchyde@illinois.edu

[Website] psychology.illinois.edu/people/dchyde

[Lab] publish.illinois.edu/danielchyde/

[Other] scholar.google.com/citations?user=ow8hgcQAAAAJ&hl=en

POSITIONS

[2018-] Associate Professor (with tenure), Psychology, University of Illinois at Urbana-Champaign

[2017-] Faculty Affiliate, Neuroscience Program, University of Illinois at Urbana-Champaign

[2014-] Faculty Affiliate, Beckman Institute, University of Illinois at Urbana-Champaign

[2012-18] Assistant Professor, Psychology, University of Illinois at Urbana-Champaign

[2011-12] Postdoctoral Research Fellow, Psychology, Harvard University

[2009-10] Advanced Multimodal Neuroimaging Fellow, Martinos Center for Biomedical Imaging,
Massachusetts General Hospital

EDUCATION

[2011] Ph.D., Psychology, Harvard University

[2007] A.M., Psychology, Harvard University

[2005] B.S., *magna cum laude*, Psychology, Brigham Young University

HONORS & AWARDS

[2018-19] Helen Corley Petit Scholar, LAS, University of Illinois

[2018] International Congress of Infant Studies (ICIS) Distinguished Early Career Award

[2016-18] LEAP Scholar (Lincoln Excellence for Assistant Professors), LAS, University of Illinois

[2017] Hohenboken Teaching Enhancement Award, Psychology Department, University of Illinois

[2012,'13,'14, '15,'16,'17, '18,'20] List of Teachers Ranked as Excellent by Students, University of Illinois

[2012] Latin American School for Education, Cognitive, and Neural Sciences Fellowship

[2010-11] Eliot Dissertation Completion Fellowship, Harvard University

[2009-10] Advanced Multimodal Neuroimaging Fellowship, Martinos Center for Biomedical Imaging,
Massachusetts General Hospital

[2009] Mind, Brain, & Behavior Graduate Student Award, Harvard University

[2009] Bok Center Certificate for Distinction in Teaching, Harvard University

[2008, '09] George W. Goethals Teaching Award, Harvard University

[2007-08] NIH NRSA Institutional Pre-doctoral Training Fellowship

[2007] NSF Graduate Research Fellowship, Honorable Mention

[2005-07] Graduate Research Fellowship, Harvard University

[2005] Alvina Soffel Barrett Academic Scholarship, BYU

[2002-05] Academic Scholarship, BYU

FUNDING

[Current]

- [2022-26] NSF ECR
Title: Collaborative Research: A multi-lab investigation of the conceptual foundations of early number development.
(Total: \$2,497,317; UIUC Subaward: \$40,913), Co-PI with Dave Barner (Psychology, UCSD)
- [2021-23] NIH ECHO Opportunities and Infrastructure Fund (OIF)
Title: Relationship Between Prenatal Chemical Exposure, Maternal Stress, and Child Sleep Outcomes
(\$200,000), Co-investigator with PI Sarah Geiger (Community Health, UIUC)
- [2020-23] NIH R03 HD100958-01A1
Title: Linking functional brain organization and social-cognitive abilities from infancy to childhood
(\$151,077), Sole PI
- [2016-23] NIH ECHO-5 UH3 OD023272-05
Title: Cumulative effects of prenatal stress and chemical exposures on child development
(\$13,064,040), Co-investigator with PI Sue Schantz (Biosciences, UIUC)

[Completed]

- [2013-19] NIH NIEHS/USEPA 1 P01 ES022848-05/RD 835434010-06
Title: Novel methods to assess the effects of chemicals on child development.
(\$7,925,453), Co-investigator with PI Sue Schantz (Biosciences, UIUC)
- [2014-18] Center for Nutrition, Learning, and Memory (CNLM), Abbott Grand Challenge
Title: Investigating the effects of nutrition on the maturation of brain networks associated with memory and language in infants.
(\$768,429), Co-investigator with PI Gabriele Gratton (Psychology, UIUC)
- [2013-17] NSF Research on Education and Learning (REAL)-DRL-1252445
Title: Cognitive and neural mechanisms of numeracy in preschool children.
(\$681,525), Sole PI
- [2013-14] UIUC Campus Research Board ID# 13142
Using steady-state visual evoked potentials to study brain plasticity in deaf children. (\$29,330),
Co-investigator with PI Matthew Dye (Speech and Hearing Sciences, UIUC)
- [2012-14] Center for Nutrition, Learning, and Memory, Abbott Grand Challenge
Title: Development of a methodology for investigating the effects of nutrition on the maturation of brain networks associated with memory and language in infants.
(\$408,229), Co-investigator with PI Gabriele Gratton (Psychology, UIUC)
Role: Co-investigator
- [2011-14] Rockefeller Center of Latin American Studies, Harvard University
Title: The origin and development of mathematical thought in a Brazilian indigenous group
(\$19,850), Co-investigator with PI Elizabeth Spelke (Psychology, Harvard)

PUBLICATIONS (*previous or current student/postdoc co-author)

[Articles]

Liu, Y.*, Sanchez Hernandez, F.*, Ting, F.*, & **Hyde, D.C.** (accepted). Comparing fixed-array and functionally-defined channel of interest approaches to analyzing infant functional near-infrared spectroscopy data. *NeuroImage*.

Schuwerk, T. Kamps, D., ...**Hyde, D.C.**, & 50+ co-authors. (accepted, in-principle). Stage 1 Registered Report: Action anticipation based on an agent's epistemic state in toddlers and adults. *Child Development*.

Hyde, D.C., Mou, Y.*, Berteletti, I.*, Spelke, E.S., Dehaene, S., & Piazza, M. (2021). Testing the role of symbols in preschool numeracy: An experimental computer-based intervention study. *PLoS ONE*, 16(11): e0259775.

Hyde, D.C. (2021). The emergence of a brain network for numerical thinking. *Child Development Perspectives*, 15(3), 168-175.

Porter, C.L., Evans, C.A., Reschke, P., Nelson, L.J., & **Hyde, D.C.** (2021). Associations between brain and behavioral processing of facial expressions of emotion and sensory reactivity in young children. *Developmental Science*, 24(6), e13134

Mou, Y.*, Zhang, B.*, Piazza, M., & **Hyde, D.C.** (2021). Comparing set-to-number and number-to-set measures of cardinal number knowledge in preschool children using latent variable modeling. *Early Childhood Research Quarterly*, 54, 125-135.

Flom, R. & **Hyde, D.C.** (2021). Advances in multisensory development. *Journal of Experimental Child Psychology*, 201, 104983.

Jang, S.* & **Hyde, D.C.** (2020). Hemispheric differences in arithmetic verification. *Neuropsychologia*, 146, 107524.

Hyde, D.C., Simon, C.E.*, Ting, F.*, & Nikolaeva, J.I.* (2018). Functional organization for theory of mind in pre-verbal infants: A near-infrared spectroscopy study. *The Journal of Neuroscience*, 38(18), 4264-4274.

Hyde, D.C. & Ansari, D. (2018). Advances in understanding the development of the mathematical brain. *Developmental Cognitive Neuroscience*, 30, 236-238.

Mou, Y.*, & Berteletti, I.*, & **Hyde, D.C.** (2018). What counts in preschool number knowledge: A Bayes factor analytic approach towards theoretical model development. *Journal of Experimental Child Psychology*, 166, 116-133.

Hyde, D.C., Simon, C.E.*, Berteletti, I.*, & Mou, Y.* (2017). The relationship between non-verbal systems of number and counting development: A neural signatures approach. *Developmental Science*, 20 (6), e12464.

Hyde, D.C. & Mou, Y.* (2017). Magnitude rather than number: More evidence needed. *Behavioral and Brain Sciences*, 40, e173.

Edwards, L.A.*, Wagner, J.B., Simon, C.E.*, & **Hyde, D.C.** (2016). Functional brain organization for number in pre-verbal infants. *Developmental Science*, 19, 757-769.

Khanum, S.*, Hanif, R., Berteletti, I.*, Spelke, E.S., & **Hyde, D.C.** (2016). Effects of non-symbolic approximate number practice on symbolic number abilities in Pakistani children. *PLoS ONE*, 11(10): e0164436.

Hyde, D.C., Flom, R., & Porter, C.L. (2016). Behavioral and neural foundations of multisensory face-voice perception in infancy. *Developmental Neuropsychology*, 41, 273-292.

- Hyde, D. C.**, Aparicio Betancourt, M.* & Simon, C.E.* (2015). Human temporal-parietal junction automatically tracks other's beliefs: A functional near-infrared spectroscopy study, *Human Brain Mapping*, 36(12), 4831-4846.
- Dillon, M.R.* , Pires, A.C.* , **Hyde, D.C.**, & Spelke, E.S. (2015). Children's expectations about training the approximate number system. *British Journal of Developmental Psychology*, 33(4), 4831-4846.
- Dehlin, J.P.* , Galliher, R.V., Bradshaw, W.S., **Hyde, D.C.**, & Crowell, K.A.* (2015). Sexual orientation change efforts among current or former LDS church members. *Journal of Counseling Psychology*, 62(2), 95-105.
- Hyde, D.C.**, Khanum, S.* , & Spelke, E.S. (2014). Brief non-symbolic, approximate number practice enhances subsequent exact symbolic arithmetic in children. *Cognition*, 131(1), 92-107.
- Hyde, D.C.**, Flom, R., Porter, C.L., & Stone, S.A.* (2013). Relational congruence facilitates neural mapping of spatial and temporal magnitudes in preverbal infants. *Developmental Cognitive Neuroscience*, 6, 102-112.
- Hyde, D.C.** & Spelke, E.S. (2012). Spatio-temporal dynamics of number processing: An ERP source localization study. *Human Brain Mapping*, 33(9), 2189-2203.
- Piffer, L.* , Agrillo, C. & **Hyde, D.C.** (2012). Small and large number discrimination in guppies. *Animal Cognition*, 15(2), 215-221.
- Hyde, D.C.** (2011). Two systems of non-symbolic numerical cognition. *Frontiers in Human Neuroscience*. 5:150. doi: 10.3389/fnhum.2011.00150.
- Hyde, D.C.** & Wood, J.N.* (2011). Spatial attention determines the nature of non-verbal numerical cognition. *Journal of Cognitive Neuroscience*, 23(9), 2336-2351.
- Hyde, D.C.** & Spelke, E.S. (2011). Neural signatures of number processing in human infants: Evidence for two core systems underlying non-verbal numerical cognition. *Developmental Science*, 14(2), 360-371.
- Hyde, D.C.**, Winkler-Rhoades, N.* , Lee, S.* , Izard, V.* , Shapiro, K.* , & Spelke, E.S. (2011). Spatial and numerical abilities without a complete natural language. *Neuropsychologia*, 49(5), 924-936.
- Hyde, D.C.**, Jones, B.L.* , Porter, C.L., Flom, R. (2011). Neural signatures of face-voice synchrony in 5-month-old infants. *Developmental Psychobiology*, 53(4), 359-370.
- Hyde, D.C.**, Boas, D.A., Blair, C., & Carey, S. (2010). Near-infrared spectroscopy shows right parietal specialization for number in pre-verbal infants. *NeuroImage*, 53(2), 647-652.
- Hyde, D.C.**, Jones, B.L.* , Porter, C., & Flom, R. (2010). Visual stimulation enhances auditory processing in 3-month-old infants and adults. *Developmental Psychobiology*, 52(2), 181-189.
- Hyde, D.C.** & Spelke, E.S. (2009). All numbers are not equal: An electrophysiological investigation of small and large number representations. *Journal of Cognitive Neuroscience*, 21(6), 1039-1053.
- Flom, R., Whipple, H.* , & **Hyde, D.C.** (2009) Infants' intermodal perception of canine faces and vocalizations. *Developmental Psychology*, 45(4), 1143-1151.

[Book/Volume Chapters]

- Hyde, D.C.**, Flom, R., & Porter, C.L. (2019). *Behavioral and neural foundations of multisensory face-voice perception in infancy*. In L. Gogate (Ed.) *Brain, Behaviour, Environment Interaction, and Development in the Early Years: Multisensory Perception and Communication*. New York, NY: Routledge.

Hyde, D.C., Berteletti, I.* , & Mou, Y.* (2016). *Approximate numerical abilities and mathematics: Insight from correlational and experimental training studies*. In M. Cappelletti & W. Fias (Eds.), *Progress in Brain Research: The Mathematical Brain Across the Lifespan*, Vol. 227, Oxford, UK. Elsevier, pp. 335-351.

Hyde, D.C. (2016). Childhood. In H. Miller (Ed.), *The SAGE Encyclopedia of Theory in Psychology*. Thousand Oaks, CA: Sage.

Hyde, D.C. & Mou, Y.* (2015). *Neural and behavioral signatures of core numerical abilities and early numerical development*. In D.B. Berch, D.C. Geary, K. Mann Koepke (Eds.) *Mathematical Cognition and Learning*, Vol. 2, San Diego, CA: Elsevier, pp. 51-77.

Hyde, D.C. (2015). *Numerosity*. In A.W. Toga & R. Poldrack (Eds.), *Brain Mapping: An Encyclopedic Reference*. Oxford, UK: Elsevier.

Schmutz, J.* , **Hyde, D.C.**, Gunderson, S.* , Gordon, K.* , & Flom, R. (2005) *The effects of bimodal and unimodal familiarization on infants' memory for unimodal events*. In H. Heft & K.L. Marsh (Eds.) *Studies in Perception and Action XIII*. Lawrence Erlbaum, Inc.

[Selected Manuscripts]

Mou, Y.* , Zhang, B.* , & **Hyde, D.C.** (under review). Directionality in the relation between approximate and symbolic numeracy in preschool-aged children.

Aran, O.* , Garcia, S.* , Hankin, B.L., **Hyde, D.C.**, & Poggi Davis, E. (under review). Signatures of emotional face processing measured by event-related potentials in 7-month-old infants.

Chen, C.* , Jang,S.* , Piazza, M., & **Hyde, D.C.** (in preparation). Characterizing exact arithmetic abilities before formal schooling.

Hyde, D.C., Berteletti, I.* , & Mou, Y.* (in preparation). Fronto-parietal functional re-organization with conceptual change in numerical cognition.

Hyde, D.C., Pica, P., Spelke, E.S., Dehaene, S., & Piazza, M. (in preparation). The emergence of numeracy without a counting system: A case study of Mundurukú children.

INVITED TALKS

[2019]

University of Iowa, Dept. of Psychology, Cognitive Brownbag Series

[2018]

University of Trento, Italy, Center for Mind/Brain Sciences (CIMEC)

University of Tuebingen, Germany, Dept. of Psychology; Integrating Educational and Cognitive Perspectives on Mathematics Workshop (declined due to conflict)

International Congress on Infant Studies (ICIS) Conference; 2018 Early Distinguished Career Contribution Award Talk

[2017]

Washington University in St. Louis, Dept. of Psychology, Aging and Development Brownbag Series

[2016]

Harvard University, Graduate School of Education

University of Texas at San Antonio, Neurobiology Speaker Series

University of Chicago, Dept. of Psychology, Developmental Brownbag

[2015]

University of Wisconsin-Madison, School of Education, Ideas in Education Series
CDS Preconference, Early Development, Conceptual Change, and Continuity: Insights from
Cognitive Neuroscience

University of Latvia, Symposium of Cognition, Logic, and Communication
University of Latvia, 7th International School of Cognitive Sciences and Semantics

[2014]

NIH Math Cognition Conference, Washington, D.C.

International Congress on Infant Studies, Invited fNIRS symposium, Berlin, Germany

[2013]

University of Texas at Austin, Donald D. Harrington Symposium

University of Western Ontario, Dept. of Psychology, Numerical Cognition Laboratory

[2011]

University of Southern California, Department of Psychology

University of Illinois at Urbana-Champaign, Department of Psychology

Stanford University, Department of Psychology

University of Delaware, Department of Psychology

[2010]

Harvard University, Department of Psychology, Cognition, Brain, and Behavior Seminar

MIT, Department of Brain and Cognitive Science

UMass-Amherst, Department of Psychology, Developmental Science Group

Brigham Young University, Department of Psychology

[2009]

Harvard Medical School, Dept. of Dev. Medicine, Lab for Cognitive Neuroscience Brownbag

OTHER PROFESSIONAL PRESENTATIONS

Liu, Y., Ting, F., Sanchez-Hernandez, F., & **Hyde, D.C.** (2022, September). Comparing analytic approaches to infant functional near-infrared spectroscopy data. Poster to be presented at the FLUX Congress: The International Congress for Integrative Developmental Cognitive Neuroscience. Paris, France.

Hyde, D.C. (2022, July). Using computer-based interventions to test the role of symbols in preschool numeracy. Talk presented as part of an accepted symposium at the International Mind Brain and Education Society (IMBES) Meeting, Montreal, Canada.

Chen, C., Jang, S., & **Hyde, D.C.** (2022, April). Characterizing exact arithmetic abilities before formal schooling. Poster presented at the Biennial Meeting of the Cognitive Development Society, Madison, WI, USA.

Liu, Y. & **Hyde, D.C.** (2022, April). Comparing fixed array and functional defined channel of interest approaches to the analysis of infant NIRS data. Poster presented at the Biennial Meeting of the Cognitive Development Society, Madison, WI, USA.

Enright, E.A., Spowles, J.L.N., Dzwilewski, K.L.C., Merced-Nieves, F.M, Schantz, S.L., & **Hyde, D.C.** (2020, June). Electroencephalography (EEG) in human infants as a measure for environmental epidemiology and developmental neurotoxicology. Poster accepted to the Developmental Neurotoxicology Society Conference, Charleston, SC, USA (CANCELED DUE TO COVID-19)

Yuile, A.R., Baillargeon, R., **Hyde, D.C.**, & Fisher, C. (2020, July). ToMcat: a videotaped, open-access violation of expectation task for measuring false-belief understanding in infants and toddlers. Poster presented (virtually) at the International Congress of Infant Studies virtual meeting.

Sanchez-Hernandez, F. & **Hyde, D.C.** (2019, October). Disadvantageous inequity aversion in 24-month-olds. Poster presented at the Biennial Meeting of the Cognitive Development Society, Louisville, KY, USA.

Yuile, A.R., Baillargeon, R., **Hyde, D.C.**, & Fisher, C. (2019, October). Introducing ToMcat, a videotaped, open-access violation of expectation task for measuring false-belief understanding in infants and toddlers. Poster presented at the Biennial Meeting of the Cognitive Development Society, Louisville, KY, USA.

Hyde, D.C. (2019, October). Neural sensitivity to number words before and after learning to count. Talk presented as part of a symposium at the Biennial Meeting of the Cognitive Development Society, Louisville, KY, USA.

Hyde, D.C., Ting, F., & Sanchez-Hernandez, F. (2018, October). A comparison of fixed array and functionally defined channel of interest approaches to analysis of infant NIRS data. Poster presented at the biennial meeting of the Society for Functional Near-infrared Spectroscopy, Tokyo, Japan.

Jay, V., Binzack, J.V., Mou, Y., Matthews, P.G., Hubbard, E.M., & **Hyde, D.C.** (2018, September). An ERP investigation of the time course of symbolic and non-symbolic fraction processing. Poster presented at the International Mind, Brain and Education Society (IMBES) Conference, Los Angeles, CA, USA.

Lin, Y., Baillargeon, R., & **Hyde, D.C.** (2018, July). 21-month olds rapidly learn the meaning of the word "four". Poster presented at the International Congress on Infant Studies, Philadelphia, PA, USA.

Jang, S. & **Hyde, D.C.** (2018, May). A right hemisphere bias for arithmetic. Poster presented at the International Meeting of the Psychonomic Society, Amsterdam, The Netherlands.

Hyde D.C., Simon, C.E., Ting, F., & Nikolaeva, J. (2018, January). Functional organization for theory of mind in preverbal infants: A near-infrared spectroscopy study. Talk presented at the Budapest CEU Conference on Cognitive Development, Budapest, Hungary.

Lin, Y., Baillargeon, R., & **Hyde, D.C.** (2017, April). 21-month-olds rapidly learn the meaning of "four" when provided with appropriate contrastive evidence. Talk presented at the biennial meeting of the Society for Research in Child Development, Austin, TX, USA.

Porter, C.L., Ahlander Stone, S., Nelson, L., Evans, C., & **Hyde, D.C.** (2017, April). Sensory reactivity and perceptual awareness: Neurophysiological links to preschoolers' face emotion processing. Poster presented at the biennial meeting of the Society for Research in Child Development, Austin, TX, USA.

Hyde, D.C. (2016, October). Functional brain organization for theory of mind in pre-verbal infants. Poster presented at the biennial meeting of the Society for Functional Near-infrared Spectroscopy, Paris, France.

Hyde, D.C. & Simon, C.E. (2016, September). Functional brain organization for theory of mind in 7-month old infants. Poster presented at the FLUX Congress: The International Congress for Integrative Developmental Cognitive Neuroscience, St. Louis, MO, USA.

Berteletti, I., Mou, Y., Simon, C.E., & **Hyde, D.C.** (2015, October). Qualitative change in number processing upon learning to count. Poster presented at the Ninth Biennial Meeting of the Cognitive Development Society, Columbus, Ohio, USA.

Berteletti, I., Mou, Y., Simon, C.E., & **Hyde, D.C.** (2015, September). Qualitative change in number processing upon learning to count. Poster presented at the FLUX Congress: The International Congress for Integrative Developmental Cognitive Neuroscience, Leiden, The Netherlands.

Hyde, D.C., Berteletti, I., Mou, Y., & Simon, C.E. (2015, September). Individual differences in spontaneous attentional processing of objects are related to conceptual development of number in preschoolers. Poster presented at the FLUX Congress: The International Congress for Integrative Developmental Cognitive Neuroscience, Leiden, The Netherlands.

Hyde, D.C. (2015, March). Neural signatures reveal distinct contributions of two core systems to early numerical development in young children. Talk presented at the biennial meeting of the Society for Research in Child Development, Philadelphia, PA, USA.

Aparacio Betancourt, M., Simon, C.E., & **Hyde, D.C.** (2014, August). Navigating others' minds automatically: Evidence from the temporal-parietal junction. Poster presented at Society for the Neurobiology of Language. Amsterdam, The Netherlands.

Dillon, M., **Hyde, D.C.**, & Spelke, E.S. (2014, April). Functional and spatial dissociation in the brain systems encoding object shape and direction. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Boston, MA, USA.

Hyde, D.C., Piazza, M., Pica, P., Dehaene, S., & Spelke, E.S. (2014, April). Origins of numerical thinking: Relating brain signatures to behavioral development using an individual differences approach with preschoolers. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Boston, MA, USA.

Hyde, D.C., Khanum, S., & Spelke, E.S. (2013, October). Brief non-symbolic numerical training enhances symbolic arithmetic in children. Talk presented as part of a symposium at the Eighth Biennial Meeting of the Cognitive Development Society, Memphis, TN, USA.

Hyde, D.C., & Spelke, E.S. (2013, April). Common brain signatures of arithmetic in educated adults and preverbal infants. Talk presented at the biennial meeting of the Society for Research in Child Development, Seattle, WA, USA.

Edwards, L.A., Wagner, J.B., **Hyde, D.C.**, Nelson, C.A. (2012, October). Hemodynamic correlates of ratio-based numerical discrimination in infancy: An fNIRS study. Poster presented at Functional Near-infrared Spectroscopy: 2012, London, UK.

Porter, C.L., **Hyde, D.C.**, Flom, R., & Ahlander Stone, S. (2012, June). Neural basis of intersensory space-time mapping in preverbal infants. Poster presented at the International Conference on Infant Studies, Minneapolis, MN, USA.

Hyde, D.C., Parreno, K., & Spelke, E.S. (2012, April). Common cognitive mechanisms for abstract arithmetic in educated adults and preverbal infants. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL, USA.

Hyde, D.C. & Spelke, E.S. (2011, October). Sources of mathematical thinking. Poster presented at the National Science Foundation-Research and Evaluation on Education in Science and Engineering Meeting, Washington, D.C., USA.

Hyde, D.C., Spelke, E.S., & Xu, Y. (2011, May). Parietal representation of small and large numbers. Poster presented at the annual meeting of the Vision Science Society, Naples, FL, USA.

Parreno, K., **Hyde, D.C.**, & Spelke, E.S. (2011, April). Neurophysiological correlates of non-symbolic approximate addition. Poster presented at the 18th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, USA.

Hyde, D.C. (2010, October). Using NIRS to assess domain specificity in infancy: number as a test case. Poster presented at Functional Near-infrared Spectroscopy: 2010, Cambridge, MA, USA.

Hyde, D.C. (2010, July). Neural basis and signatures of number in infants and adults. Poster presented at the Attention & Performance Symposium: Cerebral basis of space, time, and number, Abbaye des Vaux de Cernay, France.

Jones, B.L., **Hyde, D.C.**, Porter, C.L., & Flom, R. (2010, March). 5-month olds electrophysiological response to face-voice synchrony. Poster presented at the International Conference on Infant Studies, Baltimore, MD, USA.

Hyde, D.C. & Spelke, E.S. (2009, October). Neural evidence of representational differences between small and large numbers in infants. Talk presented as part of a symposium at the annual meeting of the Cognitive Development Society, San Antonio, TX, USA.

Hyde, D.C., Winkler-Rhoades, N., Lee, S., Izard, V., Spelke, E.S., & Shapiro, K. (2009, August). Numerical and spatial abilities in a language-deprived adolescent. Poster presented at the annual meeting of the Cognitive Science Society, Amsterdam, The Netherlands.

Hyde, D.C. & Spelke, E.S. (2009, April). Event-related potentials reveal ratio-dependent number representations in infants. Poster presented at the biennial meeting of the Society for Research in Child Development, Denver, CO, USA.

Jones, B., **Hyde, D.C.**, Porter, C., & Flom (2009, April). An ERP study of intersensory processing in infants and adults. Poster presented at the biennial meeting of the Society for Research in Child Development, Denver, CO, USA.

Flom, R., **Hyde, D.C.**, & Whipple, H. (2008, March). Infants' intermodal perception of canine (*Canis familiaris*) faces and vocalizations. Talk given at the International Conference on Infant Studies, Vancouver, BC, Canada.

Jones, B., **Hyde, D.C.**, Porter, C. & Flom (2008, March) An ERP study of intersensory processing in 5-month-olds. Poster presented at the International Conference on Infant Studies, Vancouver, BC, Canada.

Hyde, D.C. & Spelke, E.S. (2007, May). Are all numbers created equal? An electrophysiological investigation of small and large number representations. Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York City, NY, USA.

Schmutz, J., **Hyde, D.**, Gunderson, S., Gordon, K., & Flom, R. (2005, April). The Effects of Bimodal and Unimodal Familiarization on Infants' Memory for Unimodal Events. Poster presented at the national convention for the Society for Research in Child Development, New Orleans, LA, USA.

Fong-Ichimura, A.K., Owens, T., Hall, A., **Hyde, D.C.**, Robison, T., Olsen, J., & Allen, M.D. (2004, August). Cortical Sources of the N400 and "The N400 Effect". Paper presented at the national convention of the American Psychological Association, Honolulu, HA, USA.

Robison, T., Fong-Ichimura, A., Hall, A., **Hyde, D.C.**, Serafini, S., & Allen, M.D. (2004, April). A source localization study of the neural processes involved in recognizing familiar objects. Poster presented at the national convention of the Cognitive Neuroscience Society, San Francisco, CA, USA.

Danovitch, J., **Hyde, D.C.**, & Keil, F.C. (2003, October). Children's understanding of morality as a domain of knowledge. Poster presented at the national convention of the Cognitive Development Society, Park City, UT, USA.

EDITORIAL POSITIONS

- [2018-19] Guest Editor, *Journal of Experimental Child Psychology*,
Special Issue: Multisensory Development in Infants and Children
- [2018] Special Guest Editor, *Journal of Experimental Psychology: Learning, Memory, & Cognition*
- [2016-17] Guest Editor, *Developmental Cognitive Neuroscience*,

[2013-18] Special Issue: The Development of the Mathematical Brain
Review Editor, *Frontiers in Human Neuroscience*

REVIEW PANELS

[2016, '20] Ad-hoc Reviewer, National Science Foundation, EHR Core Research Program
[2015] Panelist, National Science Foundation, Division of Research on Learning (DRL)

RESEARCH CONSULTING

[2020-] **European Research Council Grant**, SPANUMBRA: Number-space associations in the brain,
PI Manuela Piazza, University of Trento
Research Ethics Advisor regarding developmental neuroimaging methodology

[2019-] **Cognitive FX**, Provo, UT, Neuroimaging diagnosis and treatment of concussion.
Consultant on optical imaging methods.

[2019-] **NSF EHR 1916524**, Impact of language experience on early numerical cognition,
PI Ilaria Berteletti, Gallaudet University
Member of advisory board.

[2019] **Development, Experience, and Neurocognition Lab**, PI Ece Demir-Lira, University of Iowa
Consultant on child optical imaging methods.

[2018] **Reducing fetal exposure to maternal depression to improve infant risk mechanisms.**
PI Elysia Davis, University of Denver
Consultant on infant ERP measures.

AD-HOC REVIEWER

Attention, Perception, & Psychophysics; Brain Research; Cerebral Cortex; Cognition; Child Development; Cognitive Neuroscience; Current Biology; Developmental Cognitive Neuroscience; Developmental Neuropsychology; Developmental Science; Frontiers in Neuroscience; Frontiers in Psychology; Human Brain Mapping; Journal of Cognitive Neuroscience; Journal of Experimental Child Psychology; Journal of Experimental Psychology: General; Journal of Experiential Psychology: HPP; Mind, Brain, & Education; NeuroImage; Neurophotonics; Neuropsychologia; PLOS One; PNAS; Psychological Science; Psychonomic Bulletin & Review; Science, The Journal of Neuroscience

UNIVERSITY SERVICE & LEADERSHIP

[2021-22] Developmental Area Job Search Committee Member, Psychology, UIUC
[2021-] Brain and Cognitive Science Major Implementation Committee, Psychology, UIUC
[2021] Developmental Area Job Search Committee Chair, Psychology, UIUC
[2020-21] GRE Diversity Task Force Member, Psychology, UIUC
[2020] COVID-19 Psychology Communications Liaison, College of Liberal Arts and Sciences, UIUC
[2020-21] Developmental Area Representative, Psychology Advisory Committee, UIUC
[2019-21] Awards Committee, College of Liberal Arts and Sciences, UIUC
[2019-20] Developmental Area Representative, Psychology Advisory Committee, UIUC
[2018-19] Department of Comparative Biosciences Job Search Committee
[2017-18] Brain and Cognitive Science Major Formation Committee, Psychology, UIUC
[2017-18] Brain and Cognitive Science Job Search Committee, Psychology, UIUC
[2016-18] Graduate Education Committee, Psychology, UIUC
[2014-17] Graduate Admissions Committee, Psychology, UIUC

TEACHING & MENTORSHIP

Courses Taught

- [2012-13, 16-22] *Intro to Child Development* (Psyc 216), University of Illinois
 [2014-18, 20-22] *Research Methods in Child Development* (Psyc 363), University of Illinois
 [2013,'17] *Developmental Cognitive Neuroscience* (Psyc 593), University of Illinois
 [2008,'09] *Sophomore Tutorial: Contemporary Issues in Psychology*, Instructor, Harvard University
 [2007] *Origins of Knowledge*, Teaching Fellow, Harvard University
 [2007] *Developmental Psychology*, Teaching Fellow, Harvard University

Online Course Taught

- [2021-22] *Child Development* (Psyc 216), Summer Session 1, 4-week
 [2021-22] *Child Development* (Psyc 216), Summer Session 2, 8-week
 [2021-22] *Child Development* (Psyc 216), Winter Session, 4-week

Postdoctoral Researcher Supervision

- [2019-21] Elizabeth Enright-Ake (now tenure track faculty at St. Mary's College of Maryland)
 [2013-17] Yi Mou (now tenure track faculty at Sun Yat-Sen University, China)
 [2013-16] Ilaria Berteletti (now tenure track faculty at Gallaudet University)

University of Illinois Graduate Student Supervision

- [2021-] Chi-Chuan Chen, Psychology, University of Illinois
 [2019-21] Christine Salva, Psychology, University of Illinois (MS student, now PhD Student at Colorado St.)
 [2019-] Yiyu Liu, Psychology, University of Illinois
 [2017-] Fernando Sanchez-Hernandez, Psychology, University of Illinois
 [2017-19] Victoria (Tori) Jay, Psychology, University of Illinois
 [2018] Dan Sangiamo, Neuroscience Program, University of Illinois (software engineer at *Whova*)
 [2016] Amanda Rose Yuile, Psychology, University of Illinois
 [2015- 2021] Selim Jang, Psychology, University of Illinois (data scientist at *BetterHelp*)

University of Illinois doctoral dissertation committee member

- [2021] Selim Jang, Developmental Area-Psychology
 [2021] Diana Oh, Developmental Area-Psychology
 [2020] Melody Buyukozer Dawkins, Developmental Area-Psychology
 [2020] Fransisca Tranggono Ting, Developmental Area-Psychology
 [2019] Zhiyuan (Marshall) Wang, VCHP-Psychology
 [2019] Kelsey Dzwilewski, Comparative Biosciences/Neuroscience Program
 [2018] Michael Perino, Developmental Area-Psychology
 [2018] Michael Braverman, Cognitive Area-Psychology
 [2017] Pamela Clevenger, Cognitive Area-Psychology
 [2017] Zach Horne, Developmental Area-Psychology
 [2017] Christina Tworekl, Developmental Area-Psychology
 [2016] Danielle Dickson, Cognitive Neuroscience Area-Psychology
 [2014] Peipei Setoh, Developmental Area-Psychology
 [2014] Stephanie Sloane, Developmental Area-Psychology

External doctoral dissertation committee member

- [2015] Laura Zimmermann, Psychology, Georgetown University
 [2013] Stephan Vogel, Psychology, University of Western Ontario

Faculty Mentor, Undergraduate Supervised Research (volunteer/Psych 290/494), University of Illinois

- [2013-] ~1-10 undergraduate students per semester

Undergraduate Thesis Advisor

[2022-] Ayla Makris, University of Illinois
[2016-17] Katherine Nameth, University of Illinois
[2011] Kenneth Parreno, Harvard University