

## VITAPRIVATE

Richard K. Olson  
Department of Psychology  
University of Colorado  
Boulder, Colorado 80309

Date and Place of Birth: October 8, 1941, Minneapolis, Minnesota

### Degrees:

B. A. Macalester College 1963  
M. A. University of Oregon 1967  
Ph.D. University of Oregon 1970

### Professional Affiliations:

Assistant Professor, University of Colorado, September 1970 - 1977.  
Associate Professor, University of Colorado, 1977 - 1985.  
Professor, University of Colorado, 1986-present  
Faculty Fellow, Institute for Behavioral Genetics, 1986-present  
Associate Director, Colorado Learning Disabilities Research Center, 1990-2005  
Director, Colorado Learning Disabilities Research Center, 2005-present  
Vice President, Society for the Scientific Study of Reading, 1998-2000, President Elect  
2001-2002, President, 2002-2003, Past President, 2004-2005.

### Organizations

Institute for Behavior Genetics  
Behavioral Genetics Association  
International Dyslexia Association  
Rodin Remediation Society  
American Psychological Society  
Society for the Scientific Study of Reading

### Major Research Interests

Twin and linkage studies of genetic and environmental influences on reading and related skills. Computer-based remediation of reading disabilities.

## I. Publications

### A. Refereed Journal Articles

- Olson, R. K. Generalization to similar and opposite words. Journal of Experimental Psychology, 1965, 70, 328-331. PMID: 14343263.
- Attneave, F., & Olson, R. K. Inferences about visual mechanisms from monocular depth effects. Psychonomic Science, 1966, 4, 133-134.
- Attneave, F., & Olson, R. K. Discriminability of stimuli varying in physical and retinal orientation. Journal of Experimental Psychology, 1967, 74, 149-157.
- Olson, R. K., & Attneave, F. What variables produce similarity-grouping? American Journal of Psychology, 1970, 83, 1-21.
- Attneave, F., & Olson, R. K. Pitch as a medium: A new approach to psychophysical scaling. American Journal of Psychology, 1971, 84, 147-166. PMID: 5566581.
- Olson, R. K. Slant judgments from static and rotating trapezoids correspond to rules of perspective geometry. Perception and Psychophysics, 1974, 15(3), 509-516.
- Olson, R. K. Children's sensitivity to pictorial depth information. Perception and Psychophysics, 1975, 17, 59-64.
- Alpern, H. P., Greer, C. A., Stripling, J. S., Collins, A. C., & Olson, R. K. Methagualone: Tolerance and physical dependence in mice. Psychopharmacologia (Berl.), 1975, 44, 303-305. PMID: 1239784.
- Olson, R. K., Pearl, M., Mayfield, N., & Millar, D. Sensitivity to pictorial shape perspective in 5-year-old children and adults. Perception and Psychophysics, 1976, 20(3), 173-178.
- Olson, R. K., & Boswell, S. L. Pictorial depth sensitivity in two-year-old children. Child Development, 1976, 47, 1175-1178. PMID: 1001091.
- Olson, R. K., & Hanson, V. Interference effects in tone memory. Memory and Cognition, 1977, 5, 32-40.
- Keenan, J. M., & Olson, R. K. Musing about memory. Contemporary Psychology, 1978, 23(9), 627-629.
- Keenan, J. M., & Olson, R. K. The imagery debate: a controversy over terms and cognitive styles. The Behavioral and Brain Sciences, 1979, 2, 558-559.

- Kliegl, R., & Olson, R. K. Reduction and calibration of eye monitor data. Behavior Research Methods and Instrumentation. 1981, 13,(2), 107-111.
- Kliegl, R., Olson, R. K., & Davidson, B. J. Regression analyses as a tool for studying reading processes: Comment of Just and Carpenter's eye fixation theory. Memory and Cognition, 1982, 10, 287-296. PMID: 7121249.
- Olson, R. K., Kliegl, R., & Davidson, B. J. Dyslexic and normal readers' eye movements. Journal of Experimental Psychology: Human Perception and Performance, 1983, 9, 816-825. PMID: 6227691.
- Olson, R. K., Kliegl, R., Davidson, B. J., & Davies, S. E. Development of phonetic memory in disabled and normal readers. Journal of Experimental Child Psychology, 1984, 37, 187-206. PMID: 6707576.
- Olson, R. K. Component processes in reading and spelling. Contemporary Psychology, 1985, 30, 797-798. (Book Review)
- Olson, R. K., and Keenan, J. Segmentation in models of reading. The Behavioral and Brain Sciences, 1985, 8, 719-720.
- Olson, R. K., Foltz, G., & Wise, B. Reading instruction and remediation with the aid of computer speech. Behavior Research Methods, Instruments, and Computers, 1986, 18, 93-99.
- Olson, R. K., Foltz, G., and Wise, B. Reading instruction and remediation using voice synthesis in computer interaction. Proceedings of the Human Factors Society, 1986, 2, 1336-1339.
- Olson, R.K., Wise, B., Conners, F., Rack, J. & Fulker, D. (1989). Specific deficits in component reading and language skills: Genetic and environmental influences. Journal of Learning Disabilities, 22, 339-348.
- Wise, B., Olson, R., Anstett, M., Andrews, L., Terjak, M., Schneider, V., & Kostuch, J. (1989). Implementing a longterm computerized remedial reading program with synthetic speech feedback: Hardware, software, and real-world issues. Behavior Research Methods, Instruments, and Computers, 21, 173-180.
- Olson, R.K., Wise, B.W., & Rack, J.P. (1989). Dyslexia: Deficits, genetic aetiology and computer-based remediation. The Irish Journal of Psychology, 10, 4, 530-544.
- Wise, B.W., Olson, R.K., & Treiman, R. (1990). Sub-syllabic units in children's word learning: Onset-rime vs. post-vowel segmentation. Journal of Experimental Child Psychology, 49, 1-19. PMID: 2303771.
- Olson, R.K. (1990). Synthetic speech strengthens word decoding skills. Their World, p. 53.

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- DeFries, J.C., Olson, R.K., Pennington, B.F., & Smith, S.D. (1991). Colorado reading project: Past, present, and future. Learning Disabilities: Multidisciplinary Journal, 2 (2), pp. 37-46.
- Olson, R.K. (1991). An epidemiological study of dyslexia in Norway. Contemporary Psychology, 36 (9), pp. 765-766. (Book Review)
- Olson, R.K., Gillis, J.J., Rack, J.P., DeFries, J.C., & Fulker, D.W. (1991). Confirmatory factor analysis of word recognition and process measures in the Colorado Reading Project. Reading and Writing: An Interdisciplinary Journal, 3, 235-248. Re-published in B.F. Pennington (Ed.). (1992). Reading Disabilities: Genetic and Neurological Influences (pp. 47-60). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Rack, J.P., Snowling, M.J., & Olson, R.K. (1992). The nonword reading deficit in developmental dyslexia: a review. Reading Research Quarterly, 27(1), 28-53.
- Wise, B.W. & Olson, R.K. (1992). How poor readers and spellers use interactive speech in a computerized spelling program. Reading and Writing: An Interdisciplinary Journal, 4, 145-163.
- Olson, R.K. & Wise, B.W. (1992). Reading on the computer with orthographic and speech feedback: An overview of the Colorado Remedial Reading Project. Reading and Writing: An Interdisciplinary Journal, 4, 107-144.
- Pennington, B.F., Gilger, J.W., Olson, R.K., & DeFries, J.C. (1992). External validity if age versus IQ discrepant definitions of reading disability. Journal of Learning Disabilities, 25, 562-573. PMID: 1431540.
- Rack, J.P., & Olson, R.K. (1993). Phonological deficits, IQ and individual differences in reading disability: Genetic and environmental influences. Developmental Review, 13, 269-278.
- Wise, B.W., & Olson, R.K. (1994). Computer speech and the remediation of reading and spelling problems. Journal of Special Education Technology, 12, 207-220.
- Wadsworth, S.J., DeFries, J.C., Fulker, D.W., Olson, R.K., & Pennington, B.F. (1995). Reading performance and verbal short-term memory: A twin study of reciprocal causation. Intelligence, 20, 145-167.

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(This paper received the Lasker Award from the Editors for the best 1998 paper in Human Biology.)

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- Smith, S.D., Pennington, B.F., Willcutt, E., Deffenbacher, K., Hoover, D., Smolen, A., Moyzis, R., Olson, R.K., & DeFries, J.C. (2000). Linkage of an ADHD phenotype to 6p21.3 in a population with reading disability. American Journal of Human Genetics, *67*, (Supplement 2), 350. (Abstract).
- Willcutt, E.G., Pennington, B.F., Olson, R.K., Boada, R., Ogline, J., Tunick, R., & Chhabildas, N. (2001). A comparison of the cognitive deficits in reading disability and attention-deficit/hyperactivity disorder. Journal of Abnormal Psychology, *110*, 157-172. PMID: 11261391.
- Smith, S.D., Kelley, P.M., Askew, J.W., Hoover, D.M., Deffenbacher, K.E., Gayan, J., Brower, A., & Olson, R.K. (2001). Reading disability and chromosome 6p21.3: Evaluation of MOG as a candidate gene. Journal of Learning Disabilities, *34*, 512-519. PMID: 15503566.
- Davis, C.J., Gayan, J., Knopik, V.S., Smith, S.D., Cardon, L.R., Pennington, B.F., Olson, R.K., & DeFries, J.C. (2001). Etiology of reading difficulties and rapid naming: The

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- Gayán, J., & Olson, R.K. (2001). Genetic and environmental influences on orthographic and phonological skills in children with reading disabilities. Developmental Neuropsychology, 20 (2), 487-511. PMID: 11892949.
- Davis, C.J., Knopik, V.S., Olson, R.K., Wadsworth, S.J., & DeFries, J.C. (2001). Genetic and environmental influences on rapid naming and reading ability: A twin study. Annals of Dyslexia, 51, 241-258.
- Cross, R.J., Gayan, J., DeFries, J.C., and Olson, R.K. (2001). Differential genetic etiology of reading disability as a function of processing speed. Behavioral Genetics, 31, 450 (Abstract)
- Davis, C.J., Gayán, J., Knopic, V.S., Smith, S.D., Cardon, L.R., Pennington, B.F., Olson, R.K., DeFries, J.C. (2001). Reading difficulties and rapid naming: Bivariate twin and genetic linkage analyses. Behavioral Genetics, 31, 451 (Abstract)
- Compton, D.L., DeFries, J.C., & Olson, R.K. (2001). Are RAN and phonological awareness deficits additive in children with reading disabilities? Dyslexia, 7, 125-149. PMID: 11765981.
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- Clyde Francks<sup>1</sup>, Silvia Paracchini<sup>1</sup>, Shelley D. Smith<sup>2</sup>, Alex J. Richardson<sup>3</sup>, Tom S. Scerri<sup>1</sup>, Lon R. Cardon<sup>1</sup>, Angela J. Marlow<sup>1</sup>, I. Laurence MacPhie<sup>1</sup>, Janet Walter<sup>3</sup>, Bruce F. Pennington<sup>4</sup>, Simon E. Fisher<sup>1</sup>, Richard K. Olson<sup>5</sup>, John C. DeFries<sup>5</sup>, John F. Stein<sup>3</sup>, and Anthony P. Monaco<sup>1</sup>. (2004). Association mapping of the 6p23-21.3 QTL for reading disability<sup>6</sup> (Abst.). *Behavioral Genetics*.

- Javier Gayán<sup>1</sup>, Erik G. Willcutt<sup>2</sup>, Simon E. Fisher<sup>1</sup>, Clyde Francks<sup>1</sup>, Lon R. Cardon<sup>1</sup>, Richard K. Olson<sup>2</sup>, Bruce F. Pennington<sup>3</sup>, Shelley D. Smith<sup>4</sup>, Anthony P. Monaco<sup>1</sup>, and John C. DeFries<sup>2</sup> (2004). Bivariate Linkage Scan for Reading Disability and Attention-Deficit/Hyperactivity Disorder<sup>5</sup> (Abstract). *Behavioral Genetics*.
- Shelley D. Smith<sup>1</sup>, Karen E. Deffenbacher<sup>1</sup>, R. Boada<sup>2</sup>, N. Raitano<sup>2</sup>, R. Tunick<sup>2</sup>, Richard K. Olson<sup>3</sup>, Bruce F. Pennington<sup>2</sup>, John C. DeFries<sup>3</sup> (2004). Linkage, association and candidate-gene analyses for reading disability and speech sound disorder<sup>4</sup> (Abstract). *Behavioral Genetics*
- Erik G. Willcutt<sup>1,2</sup>, Bruce F. Pennington<sup>3</sup>, Richard K. Olson<sup>1,2</sup>, and John C. DeFries<sup>1</sup> (2004). Understanding comorbidity: a twin study of reading disability and attention-deficit/hyperactivity disorder (Abstract). *Behavioral Genetics*.
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N. Mirza-Schreiber<sup>1</sup>, D. Czamara<sup>1</sup>, A. Gialluisi<sup>1,2,11</sup>, B. Putz<sup>1</sup>, R. Malik<sup>17</sup>, T. Kam-Thong<sup>18</sup>, K. Moll<sup>6</sup>, C. Wolf<sup>19</sup>, J. Schumacher<sup>4,5</sup>, P. Hoffmann<sup>4,5</sup>, K. U. Ludwig<sup>4,5</sup>, W. Brandler<sup>26</sup>, J. Arloth<sup>1</sup>, C. Francks<sup>11,12</sup>, G. Huguet<sup>13,14,16</sup>, A. P. Morris<sup>3,7</sup>, E. Willcutt<sup>20</sup>, J. C. DeFries<sup>20</sup>, R. K. Olson<sup>21</sup>, S. D. Smith<sup>21,22</sup>, B. F. Pennington<sup>23</sup>, J. Stein<sup>24</sup>, J. B. Talcott<sup>25</sup>, F. Fauchereau<sup>13,14</sup>, T. Bourgeron<sup>13,14,16</sup>, A. P. Monaco<sup>7,10</sup>, F. Ramus<sup>15</sup>, T. S. Scerri<sup>7,8</sup>, S. Paracchini<sup>9</sup>, S. E. Fisher<sup>11,12</sup>, M. Nöthen<sup>4,5</sup>, G. Schulte-Körne<sup>6</sup>, B. Müller-Myhsok<sup>1,2,3</sup>

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## **B. Books (study guides and multi authored NRC report)**

Hodges, W. F., & Olson, R. K. Student guide. New York: Ronald, 1974.

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#### **D. Book Chapters**

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- Olson, R. K., Keenan, J. M., Byrne, B., & Samuelsson, S. (in press). Etiology of dyslexia ????
- Byrne, B., Olson, R. K., & Samuelsson, S. (in review). Behavior-genetic studies of literacy development: A commentary for professionals in psychology and education.

## II. Talks

## **A. Presented at national professional organizations**

- Olson, R. K. Pictorial depth sensitivity in young children. Presented at the meetings of the Psychonomic Society, November 1975.
- Olson R. K., & Boswell, S. L. Children's difficulty with right-left diagonal discrimination is based on orientation of a retinally independent Cartesian reference system. Presented at the meetings of the Psychonomic Society, November 1975.
- Olson, R. K., & Fieman, R. Eye scan paths and the phenomenal organization of ambiguous figures. Presented at the meetings of the Psychonomic Society, November 1975.
- Olson, R. K. & Hanson, V. Interference effects in tone memory. Presented at the meetings of the Psychonomic Society, November 1975.
- Boswell, S. L., & Olson, R. K. Young children's response to pattern symmetry. Presented at the meetings of the Psychonomic Society, November 1975.
- Olson, R. K., & Holloway, D. Serial and parallel processing in multielement displays. Presented at the meetings of the Psychonomic Society, November 12, 1976.
- Olson, R. K. Eye movements and bistable figures. Presented at the Second Annual Interdisciplinary Conference, Jackson Hole, Wyoming, January 15, 1977.
- Kliegl, R., & Olson, R. K. Reduction and Calibration of eye monitor data. Presented at the National Conference on the use of on-line computers in psychology, November 12, 1980.
- Olson, R. K. Individual differences in normal and poor reading. Presented at the Sixth Annual Interdisciplinary Conference, Park City, Utah, January 20, 1981.
- Davidson, B. J., Kliegl, R., & Olson, R. K. Individual differences in reading disorders. Paper presented at the Meeting of the Midwestern Psychological Association, Detroit, April 1981.
- Olson, R. K., Davidson, B. J., and Kliegl, R. Development of Memory and Reading Ability. Paper presented at the meetings of the Psychonomic Society, Minneapolis, November, 1982.
- Davidson, B.J., Olson, R.K., and Kliegl, R. Orthographic and phonological coding skills in developmental reading disability. Paper presented at the meetings of the Psychonomic Society, Minneapolis, November 11, 1982.
- Kliegl, R., Olson, R.K., and Davidson, B.J. Reading style as an epiphenomenon of cognitive skills. Paper presented at the meetings of the Psychonomic Society, Minneapolis, November 11, 1982.

- Olson, R. K. The relation of language skills to reading disability. Paper presented at the 18th Mid-America Linguistics Conference, Oct. 15, 1983.
- Olson, R. K. Cognitive profiles in dyslexia. Paper presented at the Annual Interdisciplinary conference, Jackson Hole, Jan. 14, 1985.
- Olson, R. K., Davidson, B. J., and Kliegl, R. Disabled and normal readers' process profiles. Paper presented at SRCD, Toronto, Apr. 25, 1985.
- Olson, R. K. Computer Assisted Reading. Paper presented to the Orton Dyslexia Society, Denver, Sept. 21, 1985.
- Olson, R.K., Foltz, G. & Wise, B. Reading Instruction and Remediation with the Aid of Computer Speech. Paper presented at the meetings of the Society for Computers in Psychology, Boston, November 21, 1985.
- Olson, R.K. Genetic contributions to individual differences among disabled readers. Paper presented at the meetings of the International Neuropsychological Society, Denver, February 6, 1986.
- Olson, R.K., Foltz, G., & Wise, B. Reading Instruction and Remediation Using Voice Synthesis in Computer Interaction. Paper presented at the meetings of the Human Factors Society, Dayton, Ohio, October 3, 1986.
- Olson, R.K., & Wise, B. Heritability of Phonetic and Orthographic Word Decoding Skills in Dyslexia. Paper presented at the meetings of the Psychonomics Society, New Orleans, November 14, 1986.
- Olson, R.K. The etiology and remediation of dyslexia. Paper presented at the Annual Interdisciplinary Conference, Jackson, Wyoming, January 5, 1987.
- Olson, R.K., & Wise, B. Heritability of Phonological Coding and Phonological Awareness in Dyslexia. Paper presented at the meetings of Orton Dyslexia Society, San Francisco, November 4-7, 1987.
- Olson, R.K., & Wise, B. Computer-based testing of component reading and language skills. Paper presented at the meetings of the National Reading Conference, St. Petersburg, December 1-5, 1987.
- Wise, B., & Olson, R.K. Computer-based reading instruction with segmented orthographic and speech feedback. Paper presented at the meetings of the National Reading Conference, St. Petersburg, December 1-5, 1987.

- Olson, R.K. Sources of Heritable Variance in Adult Dyslexia: A Twin and Family Study. Paper presented at the meetings of the International Neuropsychological Society, New Orleans, January 27-30, 1988.
- Olson, R.K., Wise, B., Conners, F., & Rack, J. Specific deficits in component reading and language skills: Genetic and environmental influences. Paper presented at the meetings of the American Educational Research Association, New Orleans, April 5-9, 1988.
- Olson, R.K., Wise, B., Conners, F., & Rack, J. Phonological and orthographic coding in reading disability: Etiology and remediation. Invited paper presented at the meetings of the Midwestern Psychological Society, Chicago, April 28-30, 1988.
- Wise, B., & Olson, R.K., Research on Intelligibility and Use with Disabled Readers. Paper presented at the National Educational Computing Conference, Dallas, June 15-17, 1988.
- Olson, R.K. & Wise, B. Uses of the Computer for the Teaching of Phonics. Paper presented to the Colorado Symposium on Learning Disabilities, Denver, Sept. 24, 1988.
- Wise, B., Olson, R., Anstett, M., Andrews, A., Terjak, M., Schneider, V. & Kostuch, J. Implementing a long-term computerized remedial reading program with synthetic speech feedback: Hardware, software, and real world issues. Paper presented at the annual meeting of the Society for Computers in Psychology, Chicago, November 8, 1988.
- Olson, R.K., & Wise, B. Computer-based reading remediation with segmented speech and orthography. Paper presented at the annual meeting of the Psychonomic Society, Chicago, November 10, 1988.
- Olson, R.K. Computer-based Remediation. Paper presented to the Fourteenth Annual Interdisciplinary Conference, Jackson, Wyoming, January 18, 1989.
- Olson, R.K. Dyslexia exists for phonological coding. Paper presented at the meeting of the American Educational Research Association, San Francisco, March 29, 1989.
- Olson, R.K. Genetic and environmental influences on deficits in word recognition and component coding skills. Paper presented at the meeting of the Society For Research in Child Development, Kansas City, April 30, 1989.
- Olson, R.K. Genetic influences on disabled and normal readers' eye movements. Paper presented at the Annual Interdisciplinary Conference, Jackson, January 10, 1990.
- Olson, R.K., & Wise, B.W. Segmentation and Computer-Based Remediation for Disabled Readers. Paper presented at the American Educational Research Association, Boston, April 20, 1990.

- Olson, R.K., & Rack, J. Genetic and Environmental Influences on Component Reading and Language Skills. Paper presented at the XIV International Rodin Remediation Scientific Conference, Boulder, Sept. 19, 1990.
- Wise, B.W., & Olson, R.K. Accurate Computer-Speech Feedback Improves Word Recognition and Decoding Among Disabled Readers. Poster presented at the XIV International Rodin Remediation Scientific Conference, Boulder, Sept. 20-21, 1990.
- Rack, J., Forsberg, H., & Olson, R.K. Profiles of Component Reading Skills in Dyslexic and Reading-Level-Matched Normal Readers. Poster presented at the XIV International Rodin Remediation Scientific Conference, Boulder, Sept. 20-21, 1990.
- Olson, R.K. Genetic and environmental influences on reading disability. Paper presented at the Third Annual Winter Text Conference, Jackson, Wyoming, January 20, 1992.
- Olson, R.K., & Forsberg, H. Genetic and shared-environment influences on deficits in word recognition and component coding skills. Paper presented at the Behavior Genetics Association meeting, Boulder, CO, July 4, 1992.
- Forsberg, H., & Olson, R.K. Heritable deficits in phonological awareness, rapid naming, and short-term memory skills are linked to disabled readers' heritable deficits in phonological decoding. Paper presented at the Behavior Genetics Association Meeting, Boulder, CO, July 4, 1992.
- Olson, R.K., Shared-environment and genetic influences in deficits in phonological and orthographic processes. Paper presented to the Society for Research in Child Development. New Orleans, March 25, 1993.
- Olson, R.K., & Forsberg, H. Disabled and Normal Readers Eye Movements: A Reading-Level-Match Comparison. Paper presented to the Society for Research in Child Development. New Orleans, March 28, 1993.
- Wise, B.W., Olson, R.K., & Lindamood, P. Training Phonemic Awareness: Evidence Relating to Why and How It Could Be Done. Paper presented to the American Educational Research Association. Atlanta, April 12, 1993.
- Olson, R.K. Research Perspectives. Paper presented to the University of Colorado at Boulder Second Conference on Learning Disabilities at the College Level: Assessment and Accommodation. Boulder, June 10, 1993.
- Olson, R.K. Genetic and environmental influences on component reading and language skills - revised. Presentation to the Institute for Behavioral Genetics, Boulder CO, December 10, 1993.

- Wise, B., & Olson, R.K. Computer-assisted instruction in reading and phonemic awareness. Paper presented to the American Educational Research Association, New Orleans, April 6, 1994
- Gayan, J., Forsberg, H., & Olson, R. Genetic influences on subtypes of dyslexia. Paper presented at the meeting of the Behavior Genetics Association, Barcelona, Spain, July 9, 1994.
- Johnson, M.C., Wise, B.W., & Olson, R.K. Text comprehension in reading disabled 2nd thru 5th graders. Poster presented at the meetings of the Psychonomic Society, St. Louis, MO, November 10, 1994.
- Hyona, J., & Olson, R.K. Word frequency and word length effects among dyslexic and normal readers. Paper presented at the Eighth European Conference on Eye Movements, Derby (UK), September 6-9, 1995.
- Olson, R.K. Genetic and environmental factors in reading disabilities. Paper presented at the Seventh Annual Winter Text Conference, Teton Village, Wyoming, January 23, 1996.
- Olson, R.K., & Gayan, J. Independent and shared genetic influences on orthographic and phonological skills. Paper presented at meeting of the Psychonomic Society, Chicago, Nov. 3, 1996.
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- Rebecca Cross (Rebecca.Cross@Colorado.edu; University of Colorado) and Richard K. Olson. Processing speed and the genetic etiology of reading disability. *Poster presented at the meeting of the Society for the Scientific Study of Reading, Boulder, CO, June 2, 2001.*
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- Jacqui Hulslander (jacqui@psych.colorado.edu; University of Colorado, Boulder), and Richard Olson. *The identification and utilization of nonword repetition items which maximally discriminate good and poor readers*. Presented at the meeting of the Society for the Scientific Study of Reading, Boulder Colorado, June 14, 2003.
- Brian Byrne (bbyrne@metz.une.edu.au; University of New England), Stefan Samuelsson, Sally Wadsworth, and Richard Olson. *Longitudinal twin study of reading and language: Preschool and kindergarten data*. Presented at the meeting of the Society for the Scientific Study of Reading, Boulder Colorado, June 14, 2003.
- Rebecca S. Betjemann (rbetjema@nova.psy.du.edu; University of Denver), Janice M. Keenan, and Richard K. Olson. *Listening comprehension in children with reading*

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- Olson, R. (2003) *SSSR Presidential Address*. Presented at the meeting of the Society for the Scientific Study of Reading, Boulder Colorado, June 14, 2003.
- Javier Gayán<sup>1</sup>, Erik G. Willcutt<sup>2</sup>, Simon E. Fisher<sup>1</sup>, Clyde Francks<sup>1</sup>, Lon R. Cardon<sup>1</sup>, Richard K. Olson<sup>2</sup>, Bruce F. Pennington<sup>3</sup>, Shelley D. Smith<sup>4</sup>, Anthony P. Monaco<sup>1</sup>, and John C. DeFries<sup>2</sup>. *Bivariate Linkage Scan for Reading Disability and Attention-Deficit/Hyperactivity Disorder*. Presented at the meeting of the Behavior Genetics Association, June, 2004.
- Shelley D. Smith<sup>1</sup>, Karen E. Deffenbacher<sup>1</sup>, R. Boada<sup>2</sup>, N. Raitano<sup>2</sup>, R. Tunick<sup>2</sup>, Richard K. Olson<sup>3</sup>, Bruce F. Pennington<sup>2</sup>, John C. DeFries. *Linkage, association and candidate-gene analyses for reading disability and speech sound disorder*<sup>4</sup>. Presented at the meeting of the Behavior Genetics Association, June, 2004.
- Erik G. Willcutt<sup>1,2</sup>, Bruce F. Pennington<sup>3</sup>, Richard K. Olson<sup>1,2</sup>, and John C. DeFries<sup>1</sup>. *Understanding comorbidity: a twin study of reading disability and attention-deficit/hyperactivity disorder*. Presented at the meeting of the Behavior Genetics Association, June, 2004.
- Clyde Francks<sup>1</sup>, Silvia Paracchini<sup>1</sup>, Shelley D. Smith<sup>2</sup>, Alex J. Richardson<sup>3</sup>, Tom S. Scerri<sup>1</sup>, Lon R. Cardon<sup>1</sup>, Angela J. Marlow<sup>1</sup>, I. Laurence MacPhie<sup>1</sup>, Janet Walter<sup>3</sup>, Bruce F. Pennington<sup>4</sup>, Simon E. Fisher<sup>1</sup>, Richard K. Olson<sup>5</sup>, John C. DeFries<sup>5</sup>, John F. Stein<sup>3</sup>, and Anthony P. Monaco. *Association mapping of the 6p23-21.3 QTL for reading disability*. Presented at the meeting of the Behavior Genetics Association, June, 2004.
- Stefan Samuelsson ([Stefan.samuelsson@slf.his.no](mailto:Stefan.samuelsson@slf.his.no); Stavanger University College), Brian Byrne, Richard K. Olson. *Genetic and environmental influences on reading related cognitive skills in preschool children: A comparison between three twin samples*. Presented at the meeting of the Society for the Scientific Study of Reading, Amsterdam, June 2004.
- Richard Olson ([rolson@psych.colorado.edu](mailto:rolson@psych.colorado.edu); University of Colorado), Brian Byrne, Stefan Samuelsson, Robin Corley, John DeFries, Sally Wadsworth, Erik Willcutt, Peter Quain. *Longitudinal phenotypic and genetic analyses of pre-reading and early reading skills from preschool through second grade*. Presented at the meeting of the Society for the Scientific Study of Reading, Amsterdam, June 2004.
- Jacqueline Hulslander ([jacqui@psych.colorado.edu](mailto:jacqui@psych.colorado.edu); University of Colorado), Richard Olson. *The influence of orthographic skills on phoneme awareness task performance*. Presented at the meeting of the Society for the Scientific Study of Reading, Amsterdam, June 2004.

- Nicole Davis and Richard Olson. *Preschoolers' phonological awareness: An investigation of the nonword repetition task*. Presented at the meeting of the American Speech-Language-Hearing Association, San Diego, November 19, 2005.
- Richard Olson and Janice Keenan, *A behavior-genetic analysis of reading comprehension's relation to listening comprehension, IQ, and word reading*. Paper presented at the meeting of the Society for the Scientific Study of Reading, Toronto, June 24, 2005.
- Brian Byrne (U. of New England) Richard Olson, Sally Wadsworth, Robin Corley, Stefan Samuelsson, Peter Quain - *Longitudinal twin study of literacy and language: The first three years*. Paper presented at the meeting of the Society for the Scientific Study of Reading, Toronto, June 24, 2005.
- Jacqueline Hulslander (U. of Colorado, Boulder) Richard Olson, Chelsea Trinkka, Sophia Zavrou - *A reading-level match comparison of fluency and comprehension for continuous text*. Paper presented at the meeting of the Society for the Scientific Study of Reading, Toronto, June 24, 2005.
- Stefan Samuelsson (Linköping U. ) Richard K Olson, Brian Byrne - *Genetic and environmental influences on pre-reading skills at 5 years of age- A comparison between United States, Australia, and Scandinavia*. Paper presented at the meeting of the Society for the Scientific Study of Reading, Toronto, June 24, 2005.
- Peterson, R.L., Phinney, E., Olson, R.K., & Pennington, B.F. Cognitive overlap of speech sound disorder and reading disability. Poster presented at the 34<sup>th</sup> annual meeting of the International Neuropsychological Society, Boston, MA, February 2, 2006.
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- Olson, R.K., & Wise, B.W. The Colorado Learning Disabilities Research Center. Paper presented at the Pacific Coast Research Conference, Coronado Bay, California, February 1, 2007.
- Peterson, R.L., Pennington, B.F., & Olson, R.K. Validity of phonological and surface subtypes of developmental dyslexia. Poster presented at the 2007 biennial meeting of the Society for Research in Child Development, Boston, MA, April 1, 2007.
- Olson, R.K. Colorado Learning Disabilities Research Center. Presentation at the meeting of the learning disabilities research centers, Tallahassee FL, May 21, 2007
- Friend, A., DeFries, J.C., & Olson, R.K. Parental education mediates heritability in a sample of twins selected for reading disability. Presentation at the meeting of the Behavior Genetics Association, Amsterdam, June 2007.
- Friend, A., & Olson, R.K. Phonological spelling and reading deficits in children with spelling disabilities. Poster presented at the meeting of the Society for the Scientific Study of Reading, Prague, July 14, 2007.
- Betjemann, R., Keenan, J.M., DeFries, J.C., Wadsworth, S.J., Willcutt, E.G., & Olson, R.K. Processing speed and the simple view of reading: A genetic analysis. Paper presented at the meeting of the Society for the Scientific Study of Reading, Prague, July 13, 2007.
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- Olson, R.K. (2008, Feb. 7). Environmental and genetic influences on learning disabilities and differences. Presentation at the 16<sup>th</sup> Annual Pacific Coast Research Conference, Coronado, California.
- Olson, R.K., Pennington, B., Willcutt, E., DeFries, J.C. Genetic etiology of co-morbidity between reading disability and ADHD. Presentation at the meeting of the British Dyslexia Association, Harrogate England, March 30, 2008
- Olson, R.K. (2008, June). Colorado Learning Disabilities Research Center. Presentation at the meeting of the NIH funded Learning Disabilities Research Centers, Boulder, Colorado.
- Coventry, W.L., Byrne, B., Olson, R.K., Samuelsson, S., Corley, R., Wadsworth, S., & DeFries, J.C. (2008, June). Presentation at the meeting of the Behavior Genetics Association, Louisville Kentucky.
- Friend, A., & Olson, R.K. (2008, July). Parental education predicts early reading development in preschool that is maintained through grade 2. Paper presented at the meeting of the Society for the Scientific Study of Reading, Ashcroft NC.
- Betjemann, R.S., Willcutt, E.G., Olson, R.K., Wadsworth, S.J., Keenan, J.M., DeFries, J.C., & Pennington, B.F. (2008, July). Accounting for the cognitive overlap between reading and attention: A genetic investigation of processing speed. Paper presented at the meeting of the Society for the Scientific Study of Reading, Ashcroft NC.
- Byrne, B., Olson, R.K., Keenan, J., & Coventry, W. (2009, February 7). Reading comprehension @ grade 4: Data from a twin study. Presented at the meeting of the Pacific Coast Research Conference, Coronado CA.
- Keenan, J., & Olson, R.K. (2009, February 7). Paper presented at the meeting of the Society for Research in Child Development, Denver, CO.
- Rosenberg, J.L., Willcutt, E.G., Olson, R.K., McGrath, L.M., & Pennington, B.F. (2009, April 2). Opposite Gene by Environment Interactions in Reading Disability (RD) and Attention Deficit/Hyperactivity Disorder (ADHD). Paper presented at the meeting of the Society for Research in Child Development, Denver, CO.



**Robin L. Peterson**, Bruce Franklin Pennington, Stefan Samuelsson, Brian Byrne, Richard K. Olson. Evidence for Shared Genetic Influence on Deficits in Phonological Memory and Vocabulary at Age 5. Presented at the meeting of the Society for Research in Child Development, Denver CO, April 2, 2009

**Angela Friend**, Richard K. Olson. Parental Education Moderates Heritability Among Children Selected on High or Low Reading Performance. Presented at the meeting of the Society for Research in Child Development, Denver CO, April 2, 2009.

**L. Cinnamon Bidwell**, Erik G. Willcutt, Matthew B. McQueen, John C. Defries Phd, Shelley D. Smith, Richard K. Olson, Bruce Franklin Pennington. Association Between DRD4 and Quantitative Neuropsychological and Behavioral Phenotypes of Attention-Deficit Hyperactivity Disorder. Presented at the meeting of the Society for Research in Child Development, Denver CO, April 4, 2009.

Olson, R.K. (2009, May). Update on progress in the Colorado Learning Disabilities Research Center. Presented at the Learning Disabilities Research Consortium Meeting, Austin TX, May 11, 2009.

Olson, R.K., and Keenan, J.M. (2009, June). Genes and the transition from learning to read to reading to learn. Presented at the meeting of the Society for the Scientific Study of Reading, Boston, June 26, 2009.

Betjemann, R., Willcutt, E., Olson, R.K., Keenan, J., DeFries, J.C., Pennington, B., Petrill, S., & Hart, S. (2009, June). Etiology of the comorbidity between reading disability, math disability, and attention deficit/hyperactivity disorder. Presented at the meeting of the Society for the Scientific Study of Reading, Boston, June 25, 2009.

Christopher, M., Wise, B., & Olson, R.K. (2009, June). Helping struggling readers set goals to increase reading time, motivation, and ability. Presented at the meeting of the Society for the Scientific Study of Reading, Boston, June 25, 2009.

Willcutt, E., Schatschneider, C., Fletcher, J., Denkla, M., Wagner, R., & Olson, R.K. (2009, June). Facilitating collaboration for the next generation of studies of reading disability. Presented at the meeting of the Society for the Scientific Study of Reading, Boston, June 25, 2009.

Olson, R.K. & Keenan, J.M. (2009). Genetic and environmental influences on early reading development. Presented at the conference on "Explorations in Literacy and Language", Armidale, NSW, Australia, December 2, 2009.

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- Olson, R.K. & Keenan, J.M. (2010). LD Center meeting presentation, Johns Hopkins Medical Center
- Kessler, B., Curry Pollo, C., Treiman, R., Byrne, B., & Olson, R.K. (2010). Predicting spelling accuracy to Grade 2 by computer analysis of erroneous spellings in kindergarten. Paper presented at the meeting of the Society for the Scientific Study of Reading, Berlin, July, 2010
- Speaking up for listening comprehension; **Janice M. Keenan (University of Denver - [jkeenana@du.edu](mailto:jkeenana@du.edu)); Sarah J. Priebe; Amanda C. Miller; Chelsea Meenan; Anh Hua; Richard K. Olson.** Paper presented at the meeting of the Society for the Scientific Study of Reading, Berlin, July, 2010
- Genetic and environmental etiology of vocabulary and reading development from preschool through 4th grade; **Richard Olson (University of Colorado - [Richard.Olson@Colorado.EDU](mailto:Richard.Olson@Colorado.EDU)); Janice Keenan.** Paper presented at the meeting of the Society for the Scientific Study of Reading, Berlin, July, 2010
- A longitudinal investigation of GPA, ACT, and SAT scores as outcome measures related to reading ability. **Rebecca S., Betjemann, (Regis University- [rbetjema@regis.edu](mailto:rbetjema@regis.edu)); Sally J. Wadsworth; Richard K. Olson; Erik G. Willcutt.** Paper presented at the meeting of the Society for the Scientific Study of Reading, Berlin, July, 2010
- Etiology and neuropsychology of comorbidity between reading disorder, math disorder, and ADHD; Rebecca Betjemann (Department of Psychology, Regis University - [rbetjema@regis.edu](mailto:rbetjema@regis.edu)); Erik Willcutt; Richard Olson; Jan Keenan; Sally Wadsworth; John DeFries; Bruce Pennington. Paper presented at the meeting of the Society for the Scientific Study of Reading, Saint Petersburg, Florida, July 14, 2011.
- Preschool predictors of listening comprehension and reading comprehension; Janice Keenan (University of Denver - [jkeenana@psy.du.edu](mailto:jkeenana@psy.du.edu)); Richard Olson, Brian Byrne & Stefan Samuelsson. Paper presented at the meeting of the Society for the Scientific Study of Reading, Saint Petersburg, Florida, July 15, 2011.
- Tugging at the gruff of the bearded lady: Is the orthographic choice task a measure of orthographic processing or just a cleverly disguised reading measure?; Donald Compton (Vanderbilt University - [donald.l.compton@vanderbilt.edu](mailto:donald.l.compton@vanderbilt.edu)); Jennifer K. Gilbert; Richard K. Olson. Poster presented at the meeting of the Society for the Scientific Study of Reading, Saint Petersburg, Florida, July 15, 2011.
- Dynamic and static assessment of phonological awareness in preschool: a behavior-genetic study; Richard Olson (University of Colorado at Boulder - [Richard.Olson@Colorado.EDU](mailto:Richard.Olson@Colorado.EDU)); William Coventry; Brian Byrne; Stefan Samuelsson. Paper presented at the meeting of the Society for the Scientific Study of Reading, Saint Petersburg, Florida, July 16, 2011.

- Christopher, M., Miyake, A., Keenan, J. M., & Olson, R. (2011, July 16). Predicting reading and listening abilities with executive function and speed measures: A latent variable analysis. Poster presented at the 2011 Society for the Scientific Study of Reading Conference, St. Pete's Beach, FL.
- Olson, R.K. (2012). Update on results from the Colorado Learning Disabilities Research Center. Paper presented at the meeting of the NICHD Learning Disabilities Research Centers. Bethesda, March 1, 2012.
- Meenan, C., Keenan, J.M., Anh, H., Olson, R.K., Pennington, B.F., & Willcutt, E.G. (2012). Selection criteria for poor comprehenders affects comorbidity with ADHD. Paper presented at the meeting of the Society for the Scientific Study of Reading, Montreal, July 14, 2012.
- Christopher, M., Hulslander, J., Byrne, B., Samuelsson, S., Wadsworth, S., & Olson, R.K. (2012). Growth modeling of literacy measures in the Colorado longitudinal twin sample: evidence for strong genetic influence. Paper presented at the meeting of the Society for the Scientific Study of Reading, Montreal, July 12, 2012.
- Olson, R.K. (2012). Comments on biometric growth modeling of reading development. Paper presented at the meeting of the Society for the Scientific Study of Reading, Montreal, July 12, 2012.
- Olson, R.K. (2012). Integrating basic and intervention-based science to help learners with reading disabilities: Update from the Colorado Learning Disabilities Research Center. Paper presented at the meeting of the International Dyslexia Association, Baltimore, October 27, 2012.
- Arnett, A.B., Peterson, R.L., Pennington, B.F., Byrne, B., Samuelsson, S., & Olson, R.K. (2013). Learning to read influences children's phonological awareness and rapid automatized naming. Poster presented at the meeting of the Society for Research in Child Development, Seattle Washington, April 20, 2013.
- Peterson, R.L., Pennington, B.F., Olson, R.K., & Wadsworth, S. (2013). Longitudinal stability of phonological and surface subtypes of developmental dyslexia. Paper presented at the meeting of the Society for Research in Child Development, Seattle WA, April 20, 2013.
- Byrne, B., Christopher, M., Coventry, W., Elwér, Å., Olson, R.K., & Samuelsson, S. (2013). Subsample standardization in twin studies of academic achievement. Paper presented at the meeting of the Behavior Genetics Association, Marse, France, June 29, 2013.
- Christopher, M., Hulslander, J., Byrne, B., Samuelsson, S., & Olson, R.K. (2013). Biometric growth modeling of early literacy measures in the U.S., Australia, and Scandinavia. Paper presented at the meeting of the Society for the Scientific Study of Reading and the Chinese University of Hong Kong, July 10, 2013.

- Gialluisi, A., Newbury, D., Willcutt, E.G., Olson, R.K., Brandler, W.M., Pennington, B.F., Smith, S.D., The SLI Consortium, Paracchini, S., Monaco, A.P., Francks, C., & Fisher, S.E. (2013). Poster presented at the meeting of the Cognomics Society, September 10-11, 2013.
- Peterson, R. Does Unequal Variance Cause Uneven Gender Ratios in Both High and Low Reading Ability? Paper presented at the meeting of the International Neuropsychological Society in Seattle, Washington, February 12-15, 2014.
- Olson, R.K. (2014). Colorado Learning Disabilities Research Center. Presentation to the meeting of the Learning Disabilities Research Centers/Hubbs, Bethesda, Maryland, May 5, 2014
- Byrne, B., Grasby, K., Coventry, W., & Olson, R.K. (2014). Genetic and environmental influences on nation-wide high-stakes testing in reading, writing, and numeracy from grades 3 to 9 in Australia. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Grasby, K., Byrne, B., Coventry, W., & Olson, R.K. (2014). Specific environmental influences on performance in nation-wide reading, writing and numeracy tests in Australia. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Hulslander, J., Christopher, M., & Olson, R.K. (2014). Genetic and environmental influences on extended writing and writing sub-skills and their relation to oral language. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Christopher, M., Hulslander, J., Byrne, B., & Olson, R.K. (2014). Genetic and environmental influences on the longitudinal relations between pre-reading and reading and spelling abilities. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Keenan, J., Hua, A., Hulslander, J., Christopher, M., & Olson, R.K. (2014). How do sources of individual differences in reading comprehension vary with age and assessment. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Soden, B., Hulslander, J., Christopher, M.E., Olson, R.K., & Petrill, S.A. (2014). No genetic specificity for timed over untimed measures of word and nonword reading. Paper presented at the meeting of the Society for the Scientific Study of Reading, Santa Fe, New Mexico, July 18, 2014.
- Peterson, R.L., Boada, R., Pennington, B.F., Willcutt, E.G., & Olson, R.K. (2015). Cognitive Prediction of Reading, Math, and Attention: Shared and Unique Influences. Paper

- presented at the meeting of the Society for Research in Child Development, Philadelphia, March 19-21.
- Coventry, W., Vogel, A., Corley, R., Olson, R.K., Samuelsson, S., & Byrne, B. (2015). The parameter space of a nuclear-twin-family model of early childhood reading. Paper presented at the meeting of the Behavior Genetics Association, San Diego CA, June 17-20.
- Ziegler, J., Perry, C., Peterson, R. L., Olson, R. K., Pennington, P. F., and Zorzi, M. (2015). Large-scale computational modeling predicts heterogeneity and reading outcomes of children with and without dyslexia. Paper presented at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 17, 2015.
- Olson, R. K. (2015). Genes matter – So what? Presentation at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 16, 2015.
- Hulslander, J., & Olson, R. K. (2015). Does parental history and reading performance predict child outcomes and etiologies? Paper presented at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 17, 2015.
- Olson, R. K. (2015). Discussion of Computer-Based Literacy Training. Paper presented at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 17, 2015.
- Christopher, M., Hulslander, J., DeFries, J., Wadsworth, S., Pennington, B., Keenan, J., Willcutt, E., & Olson, R.K. (2015). Paper presented at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 18, 2015.
- Leopold, D., Willcutt, E., Christopher, M., & Olson, R. K. (2015). Paper presented at the meeting of the Society for the Scientific Study of Reading, Kona Hawaii, July 18, 2015.
- Does The Environment Have An Enduring Effect On ADHD  
? A Longitudinal Study Of Monozygotic Twin Differences  
In Children**  
Luisa Livingstone, William Coventry, Robin Corley, Erik Willcutt, Stefan Samuelsson, Richard Olson, Brian Byrne
- Olson, R.K., Keenan, J.M., & Christopher, M. (2016). Etiology of group deficits in reading comprehension, word recognition, and their correlation. Paper presented at the meeting of the Society for the Scientific Study of Reading, Porto, Portugal, July 14, 2016.
- Leopold, D.R., Willcutt, E., DeFries, J.C., Wadsworth, S.J., Pennington, B., Keenan, J.M., & Olson, R.K. (2016). Twin studies of comorbidity between reading disability and

ADHD. Paper presented at the meeting of the Society for the Scientific Study of Reading, Porto, Portugal, July 15, 2016.

Adams, A.K., Truong, D.T., DeMille, M.M.C., Pennington, B.F., Smith, S.D., Olson, R.K., & Gruen, J.R. (2016). Targeted Deep Sequencing Reveals Significant Enrichment of Putatively Damaging Rare Variants in Reading and Language Genes. Poster presented at the meeting of the American Society for Human Genetics, Vancouver BC, October 18, 2016.

## **B. Invited Colloquia**

Olson, R. K. The development of pictorial depth perception. Invited presentation at the conference on Picture Perception, sponsored by the Learning Center, University of Minnesota, August 1975.

Olson, R. K. Perspective in picture perception: Development, adaptation and memory. Invited presentation to the Conference on Pictorial Perception, at the Center for Research in Human Learning, July 26-30, 1976.

Olson, R. K. Differential Diagnosis in reading disability. Invited presentation at the University of Oregon, Eugene, October 10, 1978.

Olson, R. K. Individual differences in reading behavior. Invited presentation at the University of Florida, Tallahassee, February 23, 1979.

Olson, R. K., Davidson, B. J., & Kliegl, R. Phonological skill and word coding. Invited presentation at the University of Oregon, Eugene, March 1981.

Olson, R. K., Kliegl, R., and Davidson, B. J. Individual differences in reading processes and eye movements. Invited presentation at the Sloan Conference on Reading and Eye Movements at the University of Massachusetts, Amherst, June 1981.

Kliegl, R., Olson, R. K., and Davidson, B. J. Eye movements in reading: Perceptual and cognitive factors. Invited presentation at the Sloan Conference on Reading and Eye Movements at the University of Massachusetts, Amherst, June 1981.

Olson, R. K. Dyslexia. Invited presentation at Florida Atlantic University, March 3, 1984.

Olson, R. K. Dyslexic reading styles and cognitive profiles. Invited presentation to the National Institute of Child Health and Human Development Conference on Bio-Behavioral Measures of Dyslexia, Bethesda, Sept. 11, 1984.

Kliegl, R., & Olson, R.K. Individual Differences in Disabled and Normal Readers' Eye Movements. Invited presentation at the meetings of the International Conference in Cognitive Approaches to Reading, Leicester, U.K., April 8, 1986.

- Olson, R.K. The genetics and treatment of dyslexia. Invited presentation at the Max Planck Institute for Human Development, Berlin, West Germany, April 11, 1986.
- Olson, R.K. The Etiology and Remediation of Reading Disability. Invited presentation to the Department of Psychology, University of Denver, October 6, 1986.
- Olson, R.K. A Proposal for a Reading Assessment and Training Package. Invited presentation to the IBM Education Group, Atlanta, Georgia, October 10, 1986.
- Olson, R.K. Measures of Reading and Language Processes. Invited presentation at the Bowman Gray Consensus Conference, Winston-Salem, North Carolina, October 28, 1986.
- Olson, R.K. The Etiology and Remediation of Dyslexia. Invited talk to the Psychology Department at Dalhousie University, Halifax, March 25, 1988.
- Olson, R.K., Diagnostic Measures in Reading Disability. Invited presentation at the NICHD "Workshop on Diagnosis and Measurement of Learning Disabilities" Washington, D.C., May 2, 1988.
- Olson, R.K. Heritability of component reading and language deficits in dyslexia. Invited presentation at the First Annual Conference on Research and Theory in Learning Disabilities, Penn State, May 31, 1988.
- Olson, R.K., & Wise, B. Subtype-by-Treatment Interactions in Reading and Language Disorders. Invited presentation and symposium organized at the First Annual Conference on Research and Theory in Learning Disabilities, Penn State, June 1, 1988.
- Olson, R.K., Specific deficits in component reading and language skills: Genetic and environmental influences. Invited presentation at the Academia Rodinensis Pro Remediatione, Seventh International Symposium, Wenner-Gren Center, Stockholm, June 20, 1988.
- Olson, R.K., Word recognition and comprehension failures in dyslexic readers. Invited presentation at the Conference on Comprehension Processes at the Netherlands Institute for Advanced Study, Wassenaar, June 27, 1988.
- Olson, R.K., and Wise, B. Computer-Assisted Learning. Invited presentation to the International Academy for Research in Learning Disabilities, Ann Arbor, June 2, 1989.
- Olson, R.K. Research findings. Invited address to the National Educational Computing Conference, Boston, June 21, 1989.

- Olson, R.K. The Heritability of Eye Movement Patterns in Dyslexic and Normal Readers. Invited address to the European Conference on Eye Movements (5), Pavia Italy, September 11, 1989.
- Olson, R.K. Genetic influences on component reading and language skills in dyslexia. Invited address to the Rodin Remediation Academy, Dublin Ireland, September 12, 1989.
- Olson, R.K. Computer-based remediation of dyslexia. Invited address to the Rodin Remediation Academy, University College of North Wales, September 16, 1989.
- Olson, R.K. Dyslexia: Causes and cures. Invited address to the Department of Psychology, University of Oregon, September 25, 1989.
- Wise, B.W., & Olson, R.K. Relative benefits of different sub word units for early readers. Invited address at the IRA Thirteenth World Congress on Reading, Stockholm, July 6, 1990.
- Olson, R.K., & Wise, B.W. Segmentation and computer-based remediation for disabled readers. Invited address and session chaired at the IRA Thirteenth World Congress on Reading, Stockholm, July 6, 1990.
- Olson, R. K. Etiology and Remediation of Dyslexia. Invited address to the Department of General and Applied Linguistics, University of Copenhagen, Copenhagen, Denmark, October 22, 1990.
- Olson, R. K. Dyslexia, Current Research Perspectives. Invited address to the conference on Literacy in a World of Change, Stavanger, Norway, Oct. 24,
- Olson, R. K., Wise, B. W., & Rack, J. The Genetic Etiology of Phonological Coding and Segmental Language Deficits in Dyslexia. Invited address to the Orton Dyslexia Society 41st Annual Conference, Washington, D.C., November 2, 1990.
- Olson, R. K., & Wise, B. W. Reading Stories on the Computer with Orthographic and Speech Feedback. Invited address to the Orton Dyslexia Society 41st Annual Conference, Washington, D.C., November 2, 1990.
- Olson, R. K. The remediation of dyslexia with talking computers. Invited Presentation to the Edmonton School District, Edmonton Alberta, March 7, 1991.
- Olson, R. K. Genetic and environmental influences on reading and language deficits. Invited presentation to the Department of Psychology, University of Edmonton, Edmonton Alberta, March 8, 1991.



- Rack, J. R., & Olson, R. K. The use of twin data for understanding causal relationships in reading ability. Invited presentation to the British Dyslexia Association, 4 April 1991 at Oxford Polytechnic.
- Olson, R. K., & Rack, J. P. Genetic and environmental influences on component reading skills. Invited presentation to the British Dyslexia Association, 4 April 1991 at Oxford Polytechnic.
- Olson, R.K. Heritability of segmental language skills. Invited presentation at the University of Washington Symposium on Literacy, April 20, 1991.
- Olson, R.K. Genetic and environmental influences on disabled readers' deficits in component reading and language skills. Invited presentation at the Sylvia Beach Language Comprehension Conference, Newport Oregon, August 3, 1991.
- Olson, R.K. Genetic etiologies of reading disability. Invited tutorial at the NATO ASI conference on Differential Diagnosis and Treatments of Reading and Writing Disorders, Bonas, France, October 7, 1991.
- Olson, R.K. Computer-based remediation of reading disability. Invited tutorial at the NATO ASI conference on Differential Diagnosis and Treatments of Reading and Writing Disorders, Chateau de Bonas, France, October 7, 1991.
- Olson, R.K. The etiology and remediation of reading disabilities. Invited address to the Norwegian Institute of Special Education, Oslo, October 11, 1991.
- Olson, R.K. The nature of specific reading disability. Invited address to the Orton Dyslexia Society, Portland Oregon, November 8, 1991.
- Olson, R.K. Measurement of phonological, orthographic, and word recognition skills. Invited presentation at the Measurement of Learning Disabilities Conference, NIH, Bethesda, Maryland, April 7-9, 1992.
- Olson, R.K., Genetic and environmental influences on reading and language deficits. Invited presentation to the Psychology Department, McQuarie University, Sydney, Australia, July 20, 1992.
- Olson, R.K. Genetic and environmental influences on reading and language deficits. Invited presentation to the Psychology Department, University of Wollongong, Wollongong, Australia, July 22, 1992.
- Olson, R.K. Genetic and environmental influences on reading and language deficits. Invited presentation to the Psychology Department, University of Brisbane, Brisbane, Australia, July 28, 1992.

- Olson, R.K. Genetic and environmental influences of reading and language deficits. Invited presentation to the Psychology Department, James Cook University, Townsville, Australia, July 30, 1992.
- Olson, R.K. Genetic and environmental influences on reading and language deficits. Invited presentation to the Psychology Department, University of New Mexico, Las Cruces, Sept. 28, 1992.
- Olson, R.K. Twin and family studies of immune disorders, dyslexia, and left handedness. Invited presentation at the 2nd Stavanger International Conference on Dyslexia, Stavanger, Norway, Oct. 19-20, 1992.
- Olson, R.K. Methodological problems in research on reading and language disabilities. Invited presentation at the Norwegian Institute for Special Education, Oslo, Norway, Oct. 21, 1992.
- Olson, R.K., Failure in early reading development: Genetic and environmental influences. Invited presentation to the MacArthur Foundation Transitions Network conference on "The 5-7 Year Shift: Transition to the School Years. Marco, Florida, Nov. 19-22.
- Olson, R.K. Genetic and Environmental Influences in Developmental Dyslexia. Keynote address presented at The Third Annual Conference: MGH Institute of Health Professions and Landmark School. Boston, May 1, 1993.
- Olson, R.K. Twin analyses of genetic and environmental influences on deficits and individual differences in reading and language skills. Invited presentation to the Conference on Methodological Issues in Dyslexia Research, Gothenborg, Sweden, Aug. 28, 1993.
- Olson, R.K. Diagnostic procedures: Measurement of component skills in reading and language. Invited presentation to the Conference on Methodological Issues in Dyslexia Research. Gothenborg, Sweden, Aug. 29, 1993.
- Olson, R.K. Computer-based methods for remediation. Invited presentation to the Conference on Methodological Issues in Dyslexia Research. Gothenborg, Sweden, Aug. 30, 1993.
- Olson, R.K. Genetic and environmental influences on deficits in phonological reading and language processes. Invited address to the British Dyslexia Society, Manchester England, April 6, 1994.
- Olson, R.K. Component skills in reading: implications of differential heritability for remediation strategies. Invited address to the conference on Converging Methods for Understanding Reading and Dyslexia,

- Halifax, Nova Scotia, Aug. 5, 1994.
- Olson, R.K. The genetic factor in learning deficiency. Invited address to the International Academy for Research in Learning Disabilities, On the cruise ship Richard With, Norway, Aug. 24, 1994
- Olson, R.K. Computer-based remediation of reading disabilities. Invited address to the International Academy for Research in Learning Disabilities, Tromso, Norway, Aug. 27, 1994
- Olson, R.K. Genetic and environmental influences in dyslexia. Invited address to the Rodin Remediation Society, Malta, Sept. 24, 1994.
- Olson, R.K. Phonological deficits in the etiology and remediation of word-recognition and spelling disabilities: But is that the whole story? Invited address to the National Dyslexia Research Foundation, Kauai, Hawaii, May 29, 1995.
- Olson, R.K. How can we find out about the heritable component of dyslexia? Invited address to the Nordic Conference on Reading, Turku, Finland, June 10, 1995.
- Olson, R.K. Genetic and Environmental Influences on Reading and Spelling Disabilities. Invited paper presented at the Symposium on Learning Disabilities, Aalborg, Denmark, May 21, 1996.
- Wise, B.W., & Olson, R.K. Interactive computer support for improving phonological skills. Invited paper presented at Metsala and Ehri conf., June 5, 1996.
- Olson, R.K. Human genetic studies in twins. Invited paper presented to a symposium on Studies of Dyslexia with Techniques of Molecular Genetics, Gothenburg, Sweden, June 3, 1996.
- Olson, R.K. The genetics of LD -Twin Studies. Invited presentation to the Learning Disabilities Association, Washington DC, May 12, 1997.
- Olson, R.K. Training of phonological awareness - what is actually learnt. Invited presentation to the Consensus Conference on Definitions in the Field of Dyslexia, Stockholm, Sweden, October 24, 1997.
- Olson, R.K., & Wise, B.W. Problems in transfer from improved phonological skills to reading growth. Invited presentation to the Orton Dyslexia Society, Minneapolis, November 14, 1997.

- Olson, R.K. The computer as a remedial and compensatory tool. Invited presentation at the conference on Dyslexia: Advances in Theory and Practice, Stavanger, Norway, November 23, 1997.
- Olson, R.K. Problems in transfer from trained phonological skills to fluent reading. Invited address to the COST 8 A Workshop, Vienna, Austria, March 12, 1998.
- Olson, R.K. Prevention of reading difficulties in young children. Invited Keynote address to the Southern California Literacy Summit, University of Southern California, April 29, 1998.
- Olson, R.K., & Wise, B.W. Progress and promise in reading intervention research. Invited presentation at A Conference Retreat for Scientists of the NICHD Reading Research Network. Rockville, MD, September 22, 1998.
- Olson, R.K., Skilled reading. Invited address to the National Academy of Education, Stanford University, Oct. 15, 1998.
- Olson, R.K., The NRC report on the prevention of reading difficulties in young children. Invited address to the Improving America's Schools Conference, Denver, November 19, 1998.
- Olson, R.K., & Datta, H. Visual-temporal processing in reading-disabled and normal twins. Invited address at the University of Haifa, June 13, 1999.
- Olson, R.K. Genetic and environmental influences on reading disability. Invited address at the University of Haifa, June 13, 1999.
- Olson, R.K. Effects of computerized speech and reading remediation. Invited address at Svenska Dyslexistiftelsens andra nordiska kongress om dyslexipedagogik, September 11, 1999.
- Olson, R.K. Reading Disability. Invited address to the International Minisymposium on Reading Disability, Stockholm, September 10, 1999.
- Olson, R.K. Current Development in Research on Reading Disabilities. Invited address to the State-Wide Conference on Reading, Brighton CO, September 18, 1999.
- Olson, R.K. Genetic and environmental influences on reading. Invited address to the International Dyslexia Association, Albuquerque NM, February 11, 2000
- Olson, R.K. Individual characteristics and computer training methods for learning disabilities. Invited address to the 12<sup>th</sup> Annual Courage to Risk conference, Colorado Springs, CO, February 12, 2000.

- Olson, R.K. Genes and environment in reading and learning disabilities. Invited address to the 12<sup>th</sup> Annual Courage to Risk conference, Colorado Springs, CO, February 12, 2000.
- Olson, R.K., & Compton, D. Genetic and environmental influences on reading speed and RAN: An overview of results from the Colorado Twin Study. Invited address to the National Dyslexia Research Foundation Extraordinary Brain Series: Time, fluency and developmental dyslexia. Crete, Greece, June 25, 2000.
- Compton, D.L. & Olson, R.K. A critical examination of the double deficit hypothesis. Paper presented to the meeting of the Society for the Scientific Study of Reading, Stockholm, July 22, 2000.
- Olson, R.K. Genetic and environmental etiology of dyslexic phenotypes. Paper presented at the meeting of the International Congress of Psychology, Stockholm, July 24, 2000.
- Olson, R.K. IQ is related to the genetic and environmental etiology of dyslexia. Paper presented at the meeting of the International Congress of Psychology, Stockholm, July 27, 2000.
- Olson, R.K. Genetic and environmental links between different measures of language, reading, and visual processing. Paper presented at the meeting of the International Congress of Psychology, Stockholm, July 28, 2000.
- Olson, R.K. The genetic etiology of phoneme awareness and results from remedial training. Invited address at Literacy in the New Millennium: A symposium in honor of Ingvar Lundberg at the occasion of his 65<sup>th</sup> birthday. Stockholm, July 30, 2000.
- Wise, B.W., Ring, J., Sessions, L., & Olson, R.K. Training self-correction in book-reading for children receiving computer-assisted phonological instruction. Poster presented at the Pacific Coast Research Conference, San Diego, CA, February 2000.
- Olson, R.K. (2001). Genes and environment in reading disabilities. *Invited presentation to the Center for Reading Research*, Stavanger College, Stavanger, Norway, January 22, 2001.
- Olson, R.K. (2001). Reading disabilities: Etiology and remediation. *Invited presentation at the University of New England*, Armidale, Australia, March 28, 2001

- Olson, R.K. (2001). Research on Learning Disabilities (Challenges) Since 1973. *Invited presentation at the University of Colorado at Boulder Graduate School Symposium: Thinking Alternatives: Research and Cognitive Disabilities*, Boulder, Aug. 30, 2001
- Olson, R.K. (2001). Longitudinal studies of reading-related learning disabilities: Age-to-age relationships among neurocognitive, familial, and academic variables. *Invited presentation at the meeting of the International Dyslexia Association*, Albuquerque NM, October 26, 2001.
- Olson, R.K. (2001). Genetic and environmental influences on the development of reading and language skills. *Invited presentation at the NATO Advanced Study Institute, Il Ciocco Tuscany, Italy*, Nov. 12, 2001.
- Olson, R.K. (2002). Recent findings from the Colorado Learning Disability Research Center. *Invited presentation at the meeting of the Learning Disabilities Association*, Denver, Colorado, February 15, 2002
- Olson, R.K. (2002). Genes and environment in reading development. *Invited presentation to the Neuroscience Seminar Series*, CU, February 19, 2002.
- Olson, R.K. (2002). Dyslexia: Nature and nurture. *Invited address for the T.R. Miles Lecture*, Bangor, Wales, May 16, 2002.
- Olson, R.K., Byrne, B., & Samuelsson, S. (2002). Preschool results from a cross-linguistic (American, Australian, Norwegian) longitudinal twin study of early reading development. *Invited presentation at the meeting for the European initiative on cross-linguistic research*, Bangor, Wales, May 17, 2002.
- Olson, R.K. (2002). Genetic and environmental influences in reading disability. *Plenary Address to the 2002 OSEP Research Project Directors' Conference*, Washington D.C., July 12, 2002.
- Olson, R.K. (2002). Genetic and environmental influences on reading and related cognitive skills. *Invited address to the Third Nordic Congress on Dyslexia*, Stockholm, Sweden, August 8, 2002.
- Olson, R.K. (2002). The genetics of reading. *Invited address to the University of New England International Twin Methodology Symposium*. Armidale, Australia, July 22, 2002.
- Olson, R.K. (2002). Genes matter in reading development, and so does teaching. *Invited address to the 24<sup>th</sup> International Conference on Learning Disabilities*, Denver CO, October 10, 2002.

- Olson, R.K. (2003). *Genes and Reading Disability*. Presented at the Joint Meeting of the Literacy and Numeracy Networks of the Learning Sciences and Brain Research Project, Boston, January 28, 2003
- Olson, R.K. (2003). *Genetic and environmental influences in reading disabilities*. Invited address to the John F. Kennedy Center for Research on Human Development, Interdisciplinary Lectures in the Science of Reading. Vanderbilt University, Nashville TN, January 30, 2003.
- Olson, R.K. (2003). *Genetic and environmental influences in reading ability and disability*. Invited presentation to the Merrill Center conference on The Connections between Language and Reading Disabilities: Current Findings and Future Directions. Tempe, Arizona, March 27, 2003.
- Olson, R.K. (2003). *The etiology and remediation of reading disabilities*. Invited presentation to Stavanger College, Stavanger, Norway, September 15, 2003.
- Olson, R.K. & Wise, B.A.(2003). *Computer based remediation of reading disability*. Invited presentation to the Netherlands Organization for Scientific Research, Amsterdam, The Netherlands, November 20, 2003.
- Olson, R.K. (2004). *Genetic and environmental influences in dyslexia*. Invited address to the workshop: Dyslexia: from neuroscience to practice, Warsaw, September 5, 2004.
- Olson, R.K. (2004).
- Richard Olson and Janice Keenan. *Genetic and environmental influences on reading and language disabilities*. Presentation at the symposium on Genetic Findings in Reading Disabilities and Related Cognitive Processes, University of Toronto, June 23, 2005.
- Richard Olson, *Genetic and environmental influences on reading and related skills*. Paper presented at the meeting of the Canadian Language and Literacy Research Network, June 27, 2005.
- Richard Olson, *Genetic and environmental influences on reading and language development*. Paper presented at the Speech, Language, and Literacy Mini-Conference, University of Denver, July 27, 2005.
- Richard Olson, *What twin and training studies tell us about early genetic and environmental influences on reading difficulties*. Paper presented at the meeting of the International Dyslexia Association: Research to practice, July 21, 2005.
- Brian Byrne, Richard Olson, Stefan Samuelsson, Sally Wadsworth, Robin Corley, John C. DeFries, & Erik Willcutt. *Longitudinal twin study of early literacy and language*. Presented at the meeting of the International Dyslexia Association, Denver, November 9, 2005.

- Richard Olson, *Genes, environment, and dyslexia*. Norman Geschwind memorial lecture award presented at the meeting of the International Dyslexia Association, Denver, November 11, 2005.
- Richard Olson, *The Colorado Learning Disabilities Research Center*. Presentation to the NeuroDys Meeting, Frankfurt Germany, January 17, 2006.
- Richard Olson & Jan Keenan, *Genetic and environmental influences on word reading, reading comprehension, and listening comprehension*. Paper presented at the FCRR Reading Research Conference on Reading Comprehension, St. Petersburg, FL, March 24, 2006
- Richard Olson, Nature and Nurture of Reading and Language Skills. Invited address at the Learning and the Brain conference, Boston, March 30, 2006.
- Richard Olson, Genes, Environment, and the Language-Reading Connection. Invited address to the Colorado Summer Institute, Breckenridge CO, June 30, 2006.
- Richard Olson, Genetic and environmental influences on reading development. Invited address to the IARLD conference, Boulder CO, July 14, 2006.
- Richard Olson, Genes, Environment, and Learning Disabilities. Invited address at the University of Linkoping, Linkoping Sweden, October 4, 2006.
- Richard Olson, Genes, Environment, and Learning Disabilities. Invited address at the University of Stavanger, Stavanger Norway, October 10, 2006.
- Richard Olson, Genes, Environment, and Learning Disabilities. Invited address at the University of Oslo, Oslo Norway, October 12, 2006.
- Richard Olson, Genetic and Environmental Influences on Reading and Language Disabilities. Invited address to the Psychology Department at Washington University, St. Louis MO, October 23, 2006.
- Richard Olson, Genes, Environment, and Reading. Invited address to the Higher Education Research Forum, Denver CO, November 30, 2006.
- Richard Olson, Genetic and environmental influences on learning difficulties: Implications for differentiated instruction in the classroom. Invited address to the 22<sup>nd</sup> Annual Learning Differences Conference, Harvard Graduate School of Education, March 23, 2007.
- Richard Olson, Genetic and environmental influences on reading ability and disability. Invited address, University of South Florida, March 26, 2007.
- Richard Olson, Behavioral genetics and learning disabilities. Invited presentation to The Dyslexia Foundation 10<sup>th</sup> Extraordinary Brain Symposium, Campos do Jordano, Brazil, June 26, 2007.
- Richard Olson, Behavioral genetics of reading disorder. Keynote address, Stavanger Reading and Writing Conference, Stavanger, Norway, August 31, 2007.
- Richard Olson, Presentation from the Colorado Learning Disabilities Research Center, International Dyslexia Association, November 2, 2007.



- Brian Byrne, Megan Gilliver, Will Coventry, Richard Olson, Stefan Samuelsson. (2008).  
Some sources of variation in vocabulary growth
- Olson, R.K. (2008, February). Genetic and environmental influences on reading ability and disability. Invited address to the Oregon Dyslexia Association, Corvallis, Oregon, February 22, 2008.
- Olson, R.K. (2008, March). Genetic and environmental influences on reading disability: Evidence from the Colorado Learning Disabilities Research Center, Keio University, Tokyo, Japan, March 24, 2008.
- Olson, R.K. (2008, March). Genes and environments. Invited address at the meeting of the British Dyslexia Association, Harrogate, England, March 29, 2008.
- Olson, R.K. (2008, July). Genes, environment, and reading (with a little help from my friends). Distinguished Scientific Contribution Award Address, Society for the Scientific Study of Reading, Ashville NC., July 11, 2008.
- Olson, R.K. (2008, July). Genetic and environmental influences on phonological abilities and reading achievement. Invited address at the SSSR preconference symposium honouring the career of Donald Shankweiler, Ashville NC, July 9, 2008.
- Friend, A., & Olson, R.K. (2008, July). Parental education predicts early reading development from preschool through grade 2. Poster presented at the meeting of the Society for the Scientific Study of Reading, Ashville NC, July 11, 2008.
- Olson, R.K. & Keenan, J.M. (2008, October). *Genetic and environmental influences on word reading and spelling*. Invited address to the German Dyslexia Association, Berlin, Germany, Oct. 4, 2008.
- Olson, R.K. (2011, January). Genetic and environmental influences on ability and disability in reading. Invited address to the Behavioral Genetics & Education Mini-Conference, Tallahassee FL, January 22.
- Olson, R.K. (2011, March). Genetic and environmental influences on reading and related skills: Implications for instruction and practice. Invited address at the meeting of the Lindamood-Bell International Conference, Anaheim, CA. March 11.
- Olson, R.K. (2011, May). Genetic and environmental influences on dyslexia. Invited address to the Swedish Dyslexia Foundation, Stockholm, Sweden, May 24.
- Olson, R.K. (2011, May). Genetic and environmental influences on reading ability and disability. Invited address to the Mini-symposium of genes, environment and brain functions in dyslexia. Karolinska Institute, Stockholm, May 25.
- Olson, R.K. (2011, May). Genetic and environmental influences on reading disability. Invited address at the University of Linköping, Linköping Sweden, May 23.
- Olson, R.K. (2011, November). Remediating the gene x environment correlation in learning disabilities. Presented at the meeting of the National Center for Special Education Research Technical Work Group, Washington DC, November 14, 2011.
- Olson, R.K. (2011, November). Genes and Interventions for Dyslexia. Invited Keynote Presentation at the meeting of the National Reference Center Dyslexia, Papendal, The Netherlands, November 30.

- Olson, R.K. (2012). Country differences in the etiology of early reading development. Invited paper presented at the meeting of the Swedish Dyslexia Association, Stockholm Sweden, May 15, 2012
- Olson, R.K. (2012). The etiology of individual differences in reading, and implications for education policy. Invited presentation to the Department of Education, University of Gothenburg, Gothenburg Sweden, June 21, 2012
- Olson, R.K. (2012). Genes and environment in reading ability and disability. Invited presentation to the Department of Psychology, Macquarie University, Sydney Australia, November 27, 2012
- Olson, R.K. (2013). Recent results from the Colorado Learning Disabilities Research Center. Presentation at the Learning Disabilities Research Consortium Meeting, Florida State University, Tallahassee FL, March 5, 2013.
- Olson, R.K. (2013). Implications of genetic research for education. Presentation at the 28<sup>th</sup> Annual Learning Differences Conference, Harvard Graduate School of Education, Cambridge MA, March 23, 2013.
- Olson, R.K. & Keenan, J.M. (2014). Genetic account of dyslexia. Invited presentation to the workshop on Dyslexia across Languages and Writing Systems at the Netherlands Institute for Advanced Studies, Wassenaar, Netherlands, September 26, 2014.
- Olson, R.K. (2014). Why children differ in their reading and related skills. Presentation to the Neuroscience Seminar, Department of Psychology, University of Colorado, November 4, 2014.
- Olson, R. K. (2015). Perspectives from behavioural and molecular genetics. Presentation to the MORCOM Meeting on Reading Disabilities, Florida State University, Tallahassee Florida, May 4, 2015.
- Olson, R. K. (2015). Center meeting, August 27.
- Olson, R. K. (2015). Durham meeting, September 23.
- Olson, R. K. (2016). Center meeting,

### III. Grant support

#### A. Multi-component program-projects or centers, PI on following components:

Word Decoding Operations. Funded by NICHD, \$166,889 direct costs (\$233,644 total costs). 7/1/79 - 6/8/82.

Word Decoding Operations, Funded by NICHD, \$207,000 direct costs (\$289,800 total costs). 7/1/82 - 6/30/85.

Reading and Language Processes. Funded by NICHD, \$245,695 direct costs (\$343,973 total costs). 7/1/85 - 6/30/88.

Reading and Language Processes. Funded by NICHD. Direct Costs \$343,819. (\$481,346 total costs). 7/1/88 - 6/30/92.

Reading and Language Processes. NIH 3P50HD027802. \$493,915 direct costs (\$705,806 total costs). 10/1/90 - 9/30/95.

Computer-based remediation of reading disabilities. NIH 3P50HD027802-1-5 , \$305,848 direct costs (\$424,186 total costs). 10/1/90 - 9/30/95.

Reading and Language Processes. NIH 3P50HD027802-6-10, \$549,583 direct costs. 10/1/95 - 9/30/00.

Computer-based remediation of reading disabilities. NIH 3P50HD027802-6-10, \$484,339 direct costs. 10/1/95 - 9/30/00.

Reading and Language Processes. NIH, 3P50HD027802-11-15. \$1,213,635 direct costs. 10/01/00-9/30/2005.

Early Reading, Language, and Attention Development. NIH 3P50HD027802-11-15. \$1,214,395 direct costs. 12/01/00-11/30/2005.

Differential Diagnosis in Learning Disabilities, NIH 3P50HD027802-16-20, \$7,730,650 total costs. 10/01/2005 – 11/30/2010 (Olson PI of center)

PI of Core component, \$1,002,335 Direct costs, \$1,493,480 total costs

PI of Project II, Reading and Language processes. \$568,025 Direct costs, \$846,355 total costs.

Differential Diagnosis in Learning Disabilities. NIH 3P50HD027802-19S1, \$235,369 total costs, 9/30/2009-9/29/2011. (Olson PI of Center). Funding under ARRA supplement award.

Differential Diagnosis in Learning Disabilities, NIH 3P50HD027802-20S1, \$845,233 direct costs, \$1,078,118 total costs 9/01/2010-11/30/2011 (Olson PI of Center). Bridge funding under ARRA supplement award.

PI of Core component \$236,293 total costs.

PI of Project II, Reading and Language Processes \$221,231 total costs.

Differential Diagnosis in Learning Disabilities, NIH 3P50HD027802-21-25, \$8,909,601 total costs. 12/01/11-11/30/16 (Olson PI of Center).

PI of Core A. \$1,227,545 total costs.

PI of Project II, Reading, writing, and language processes, \$1,213,635 total costs. (all based on initial award notice, but depending on possible budget sequester)

## **B. Single-component grants as PI (University, Private Foundation, and R01)**

Development of Pictorial Perception. Council on Research and creative Work, April 30, 1971. Funded for \$3,000.

A joint proposal for the purchase of a multipurpose eye fixation monitor. Biomedical Sciences, funded for \$16,900, November 1975.

A joint proposal for the purchase of a data gathering and visual display system. Biomedical Sciences, funded for \$6,885, July 1978.

Word Decoding Operations. Council on Research and Creative Work. Funded for \$3,000, 6/1/78 to 6/1/79.

Biomedical Sciences Grant for speech synthesizers. \$7,740. Funded 7/19/85.

DEC Corporate Contributions Grant. \$9,600. Funded 10/25/85.

Biomedical Sciences Grant for Computer Support. \$2,440. Funded July, 1986.

DEC Corporate Contributions Grant for Computer Equipment. \$12,000. Funded December, 1986.

Computer Speech Feedback in Text for Dyslexic Children. \$400,866 direct costs. (\$561,212 total costs). 1/1/87 - 12/30/89.

Biomedical Sciences Grant for Computer-Based Reading Study. \$3,805. Funded July, 1987.

DEC Corporate Contributions Grant. \$12,000. Funded December, 1987.

Biomedical Sciences Grants for Computer-Based Reading Study. \$4,500. Funded June, 1989.

Computer Speech Feedback in Text for Dyslexic Children. NIH, \$494,718 direct costs (\$701,403 total costs). 1/1/90 - 12/31/92.

Computer Speech Feedback in Text for Dyslexic Children. NIH, \$525,751 direct costs. 1/1/93 - 12/31/95.

Computer Speech Feedback in Text for Dyslexic Children. NIH, \$730,922 direct costs. 1/1/95 - 12/31/98.

Genetic and environmental influences on early reading and language development. CRCW, \$7,000. 4/15/98 – 4/30/99.

Longitudinal twin study of early reading development. NIH 5 R01 HD038526. \$1,630,636 direct costs, \$2,372,576 total costs. 3/1/00-2/28/05. (Byrne, DeFries, Pennington, Wilcutt, Wadsworth Co-PIs).

Longitudinal twin study of early reading development. NIH 2 R01 HD038526-06A1 \$792,020 direct costs, \$1,180,110 total costs. 6/1/06-5/31/2013.

Longitudinal twin study of early reading development. NIH 3 R01 HD038526-07S1 \$444,271 direct costs, \$673,071 total costs. 9/18/07-5/31/2013.

### **C. Co-PI**

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With John DeFries (PI), Administrative Core Unit. NIH, \$750,877 direct costs, 1/1/95-12/31/98. (I serve as Associate Director and Co-PI.) This unit is responsible for coordinating five research projects and maintaining communication among them, ascertaining and scheduling of subjects, obtaining questionnaire data, managing a master file of combined data sets, and administering the center budget and other fiscal matters.

With Brian Byrne (PI), Genetics of Reading Ability. Australian Research Council, \$215,000. 1/1/99 – 12/31/01. (I am the PI on a companion application, with Byrne as Co-PI, submitted Feb. 1, 1999, to study a similar twin population in Colorado.)

With Brian Byrne (PI), Genetics of Reading Ability. Australian Research Council, \$244,000. 1/1/99 – 12/31/01. (I am the PI on a companion application, with Byrne as Co-PI.)

With John DeFries (PI), Administrative Core Unit. NIH, \$750,877 direct costs, 1/1/95-12/ - 11/30/00. (I serve as Associate Director and Co-PI.) This unit is responsible for coordinating five research projects and maintaining communication among them, ascertaining and scheduling of subjects, obtaining questionnaire data, managing a master file of combined data sets, and administering the center budget and other fiscal matters.

With Walter Kintsch (PI), Scalable and sustainable technologies for reading instruction and assessment. NSF, \$67, 832 direct costs 8/1/00-1/31/01. My role as Co-PI is to advise on the development of a large IERI application (submitted 1/31/01).

With Walter Kintsch (PI), Scalable and sustainable technologies for reading instruction and assessment. NSF, \$5,997,403 direct costs 10/1/01-9/3/06. My role as Co-PI is to advise on the development of and implementation of the research program. Support is for 1 month summer.

<b>3. Administrative Core Unit</b> (DeFries)	\$202,361 (first year)
5% academic (no sal)	

summer  
(Olson Co-PI)

The Administrative Core Unit is responsible for coordinating the activities of the five research projects that make up the Center; maintaining communication among the participating investigators; ascertaining, scheduling and paying subjects; obtaining questionnaire data from families of twins; obtaining blood samples from twin pairs with reading disability and/or ADHD and from their biological parents and siblings for the genetic association and sibling-pair linkage analyses described in Research Project IV; preparing subcontracts and consortium agreements; managing the Center budget; and administering Center expenditures and other fiscal matters.

5 R01 DC 005190-04 (Wadsworth PI) 02/15/02-01/31/07 NIH/NIDCD

**Longitudinal Twin Study of Reading Disability**

This project will initiate the first longitudinal twin study of reading disability and its relation with ADHD and other psychopathology. Role: Co-I

1 R01 HD047264-01A1 (Willcutt PI) 07/15/05-05/31/12 NIH/NICHD

**Etiology of Reading Disabilities and Comorbid ADHD**

A genome-wide screen for quantitative trait loci that increase risk for reading disability and ADHD. Role: Co-I

**Longitudinal twin studies of math, reading, and ADHD**

Principal Investigator:	Erik G. Willcutt	Agency:	NICHD
Type / Number:	R01 HD 68728	Period:	4/1/11 - 1/31/16
Role:	Co-I		

**Differential Diagnosis in Learning Disabilities**

Director:	Richard K. Olson	Agency:	NICHD
Type / Number:	P50 HD 27802	Period:	12/1/11 - 11/30/16

Role: I am Co-I on the following:

**Service Core** (PI: E. Willcutt). Coordinates training and service in the CLDRC.

**Research Project VI: Longitudinal twin study of reading difficulties and ADHD** (PI: Sally J. Wadsworth). Five year longitudinal study of twins with reading difficulties, ADHD, and related disorders.

**A Behavioral Genetic Investigation of the NAPLAN Results.** Australian Research Council. 10/1/2012-9/30/2015. (William Coventry, PI). My role is “partner investigator”

**Reading Development in Chinese and English: Genetic and Neuroscience Correlates.** Chinese University of Hong Kong, CUHK8/CRF/13G, 12/1/2013-11/30/2018. (Catherine McBride, PI.) My role is Co-PI. \$7,511,385 HK total costs.

**A Behavioral Genetic Investigation of the NAPLAN Results.** Australian Research Council. 10/1/2015-9/30/2018. (William Coventry, PI). My role is “partner investigator”

## **IV. Professional Service**

### **B. Current Editorial Boards**

Journal of Learning Disabilities

Reading and Writing: An Interdisciplinary Journal

Scientific Studies of Reading

### **D. Officer in National Organization**

Vice President, 1998-2000, President, 2001-03. Past President, 2003-2005, Society for the Scientific Study of Reading

### **E. Committee Service in National Organizations**

Advisory Board of the Rodin Remediation Society

National Research Council Committee for the Prevention of Reading Difficulties in Young Children.

Scientific Advisory Board, International Dyslexia Association

### **G. Other Professional Service**

Frequent ad hoc reviewer for a variety of journals and funding agencies

## **V. Awards and Honors**

### **B. Research**

Faculty Fellowship, 1993/94 AY

Psychology Department Research Award, 1996

Faculty Fellowship, 2000/01 AY

Psychology Department Research Award, 2004

Norman Geschwind Memorial Lecture Award from the International Dyslexia Association, November, 2005

Distinguished Scientific Contribution Award from the Society for the Scientific Study of Reading, July 6<sup>th</sup>, 2006.

University College Scholar Award, 2013, used for teaching relief in the Fall semester, 2014.

A&S Professor of Distinction Award, 2015

## **VI. Ph.D. Committees Chaired**

Boswell, Sally (1974). The development of verbal and spatial organization for materials presented tachistoscopically. Last known position: Institute for Research on Social Problems, Boulder, CO.

Kliegl, Reinhold (1982). On relations between cognition and reading style: Individual differences and developmental trends. Current position: Department of Psychology, University of Potsdam, Potsdam, Germany. Served as Department Chair, and received the

Wise, Barbara (1987). Word segmentation in computerized reading instruction. Current position: Research Associate, Institute for Cognitive Science, Boulder CO.

Johnson, Mina (1998). Strategy training for poor reading comprehenders: Strengthening the visual code versus the verbal code. Current position: Arizona State University, Assoc Research Scientist, School of Arts Media & Engr.

Ring, Jerry (2000). An investigation of orthographic representation in skilled spelling production and word recognition. Current position: Research Director in Reading, Scottish Rite Hospital, Dallas, Texas.

Gayan, Javier (2000). Genetic etiology and linkage to chromosome 6p of reading disability and language and reading component skills. Current position: Neocodex, a small biotech specialized in genome-wide analysis of common diseases. Seville, Spain.

Friend, Angela (2009). Environmental Moderation of Genetic Influences on Group Membership for Reading Disability and High Reading Ability. Current position: Research Associate, Institute for Cognitive Science, Boulder, Colorado.

Christopher, Micaela (2012). Etiology and predictors of individual differences in early reading development. Current position: Postdoctoral research associate, Colorado Learning Disabilities Research Center, Boulder, Colorado