

Natalie R. Powers

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CURRICULUM VITAE

Education:

- 2013 Ph.D. Genetics, Yale University; New Haven, CT
Thesis Title: "Discovery of the 6p21.3 Reading Disability Gene"
Thesis Advisor: Jeffrey Gruen, M.D.
- 2010 M.Phil. Genetics, Yale University; New Haven, CT
- 2005 B.S. Biology (Cellular, Molecular, and Developmental), California State University, Fresno; Fresno, California
- 2003 A.S. Biological Sciences, Antelope Valley College; Lancaster, California
- 2003 A.S. Physical Sciences, Antelope Valley College; Lancaster, California

Career:

- 2014 Postdoctoral Associate, The Jackson Laboratory, Bar Harbor, ME
- 2013-2014 Postdoctoral Associate, Yale University; New Haven, CT
- 2007-2013 Doctoral Student, Yale University; New Haven, CT
- 2005-2007 Undergraduate/Graduate Student Researcher, California State University, Fresno; Fresno, CA

Professional Honors or Recognition:

- 2013 C.W. Cotterman Award, American Society of Human Genetics; Boston, MA
- 2005-2007 MBRS-RISE Scholarship, California State University, Fresno; Fresno, CA
- 2003 Lilaine D. Wells Scholarship, California State University, Fresno; Fresno, CA
- 2003 Biology Department Award, Antelope Valley College; Lancaster, CA
- 2001 International Baccalaureate Diploma, Quartz Hill High School; Quartz Hill, CA
- 2001 Valedictorian, Quartz Hill High School; Quartz Hill, CA

Bibliography:

Original Articles

1. Eicher JD*, **Powers, NR***, Miller LL, Mueller KL, Mascheretti S, Marino C, Willcutt EG, DeFries JC, Olson RK, Smith SD, Pennington BF, Tomblin JB, Ring SM, Gruen JR. Characterization of the DYX2 locus on chromosome 6p22 with reading disability, language impairment, and IQ. *Hum Genet* 133(7): 869-81, 2014.
2. Eicher JD, **Powers NR**, Miller LL, Akshoomoff N, Amaral D, Bloss C, Libiger O, Schork NJ, Darst B, Casey BJ, Chang L, Ernst T, Frazier J, Kaufmann W, Keating B, Kenet Tal, Kennedy D, Mostofsky S, Murray S, Sowell E, Bartsch H, Kuperman J, Brown T, Hagler D, Dale A, Jernigan T, St. Pourcain B, Davey-Smith G, Ring SM, Gruen JR. Genome-Wide Association Study of Shared Components of Reading Disability and Language Impairment.

Genes Brain Behav, 12(8):792-801, 2013.

3. **Powers NR**, Eicher JD, Butter F, Kong Y, Miller LL, Ring SM, Mann M, Gruen JR. Alleles of a polymorphic ETV6 binding site in DCDC2 confer risk of reading and language impairment. *Am J Hum Genet*, 93(1):19-28, 2013.
4. Eicher JD, **Powers NR**, Cho K, Miller LL, Mueller KL, Ring SM, Tomblin JB, Gruen JR. Associations of prenatal nicotine exposure and the dopamine related genes ANKK1 and DRD2 to verbal language. *Plos One*. 8(5), e63762, 2013.
5. Jamadar S, **Powers NR**, Meda SA, Calhoun VD, Gelernter J, Gruen JR, Pearlson GD. Genetic influences of resting state fMRI activity in language-related brain regions in healthy controls and schizophrenia patients: a pilot study. *Brain Imaging Behav*. 7(1):15-27, 2013.
6. Jamadar S, **Powers NR**, Meda SA, Gelernter J, Gruen JR, Pearlson GD. Genetic influences of cortical gray matter in language-related regions in healthy controls and schizophrenia. *Schizophr Res* 129(2-3):141-148, 2011
7. Meng H*, **Powers NR***, Tang L, Cope NA, Zhang PX, Fuleihan R, Gibson C, Page GP, Gruen JR. A Dyslexia-Associated Variant in *DCDC2* Changes Gene Expression. *Behav Genet* 41:58-66, 2011.

*Authors contributed equally to the paper.

Presentations:

Powers NR, Eicher JD, Kong Y, Miller LL, Ring SM, Gruen JR. READ1, a Regulatory Element with DCDC2, Epistatically Affects Reading and Language with both Deleterious and Protective Alleles. American Society of Human Genetics Meeting, Boston, MA 2013 (Poster).

Eicher JD, **Powers NR**, Miller LL, Ring SM, for the Pediatric Imaging, Neurocognition, and Genetics Study. Genome-wide Association Study of Shared Components of Reading Disability and Language Impairment. American Society of Human Genetics Meeting, Boston, MA 2013 (Poster).

Eicher JD, **Powers NR**, Gruen JR. Genome-Wide Association Studies of Severe Communication Processes and Affection of Multiple Prevalent Pediatric Communication Disorders. Pediatrics Academic Society Annual Meeting, Washington DC, 2013 (Poster)

Eicher JD, **Powers NR**, Gruen JR. Genome-Wide Association Studies of Severe Communication Processes and Affection of Multiple Prevalent Pediatric Communication Disorders. Experimental Biology Annual Meeting, Boston, MA, 2013 (Poster)

Eicher JD, **Powers NR**, Cho K, Miller LL, Ring SM, Gruen JR. Assessing Environmental and Genetic Risk Factors of Specific Language Impairment. Pediatrics Academic Society Meeting, Boston, MA, 2012 (Slide)

Powers NR, Eicher JD, Butter F, Miller LL, Ring SM, Mann M, Gruen JR. Alleles of a Rapidly-Evolving ETV6 Binding Site in DCDC2 Confer Risk of Reading and Language Impairment. American Society of Human Genetics Meeting, San Francisco, CA, 2012 (Poster).

Eicher JD, **Powers NR**, Miller LL, Mueller KL, Tomblin JB, Ring SM, Gruen JR, on behalf of the Pediatrics Imaging Neurocognitive Genetics (PING) Study. Contribution of the Reading Disability risk locus DYX2 and dopamine signaling factors ANKK1/DRD2 to Language Impairment and brain imaging phenotypes. American Society of Human Genetics Meeting, San Francisco, CA, 2012 (Poster).

Powers NR, Constable JVH, Calderón-Urrea A. Analysis and Characterization of Putative *ATWRKY6*- and *ATWRKY53*-like Sequences in *Podophyllum peltatum*. CSU Program for Education and Research in Biotechnology (CSUPERB) Annual Meeting, San Jose, CA, 2007 (Poster).