

CURRICULUM VITAE

Personal Data

Place of Birth: Zagreb, Croatia
Citizenship: USA
Contact: zbrkanac@uw.edu; (206) 543-9573

Education

1988–1993 M.D., Medical School, University of Zagreb, Croatia

Postgraduate Training

1994–1997 Postdoctoral Fellow, Department of Cellular and Structural Biology,
University of Texas Health Science Center, San Antonio, TX
1997–1998 Intern, Psychiatry, Department of Psychiatry, University of Chicago,
Chicago, IL
1998–2001 Resident, Psychiatry - Neuroscience Track, Department of Psychiatry and
Behavioral Sciences, University of Washington, Seattle, WA
2001–2003 Resident, Child and Adolescent Psychiatry, Department of Psychiatry and
Behavioral Sciences, University of Washington, Seattle, WA
2002–2005 Advanced Fellow in Psychiatry, Mental Illness Research, Education, and
Clinical Center, Department of Veterans Affairs, Puget Sound Health
Care System, Seattle, WA

Faculty Positions

2003–2005 Acting Instructor, Department of Psychiatry and Behavioral Sciences,
University of Washington, Seattle, WA
2005–present Assistant Professor, Department of Psychiatry and Behavioral Sciences,
University of Washington, Seattle, WA

Hospital Positions

2005–present Attending Psychiatrist, Children's Hospital, Seattle, WA
2005–present Attending Psychiatrist, University of Washington MC, Seattle, WA

Honors

2001 Graduating Acknowledgment for Academic Excellence, Department of
Psychiatry and Behavioral Sciences, University of Washington
2002 Young Investigator Travel Award, Psychiatric Research Society

Board Certification

2003 Diplomat in Psychiatry, American Board of Psychiatry and Neurology
2003 Board Certified in Subspecialty of Child and Adolescent Psychiatry,
American Board of Psychiatry and Neurology

Current License to Practice

1999–present Physician and Surgeon License, State of Washington

Professional Organizations

1996–present Member, The American Society of Human Genetics

1999–present Member, American Psychiatric Association

2001–present Member, American Academy of Child and Adolescent Psychiatry

Teaching Responsibilities

1989 Student Assistant in Anatomy, University of Zagreb, Croatia
1991 Student Assistant in Pharmacology, University of Zagreb, Croatia
1995 Instructor in Medical Genetics, Department of Cellular and Structural Biology, University of Texas Health Science Center, San Antonio, TX
1997 Presenter, journal club for psychiatry residents, Department of Psychiatry, University of Chicago, IL
2000 Instructor, Resident Didactic on Development of DSM-IV, University of Washington, Seattle, WA
2002 Presenter, Session on Mood Disorders for school-based mental health workers, Seattle, WA
2003 Presenter, Genetics of Attention-Deficit Hyperactivity Disorder, Mental Illness Research, Education, and Clinical Center, VISN-20, Veterans Affairs Puget Sound Health Care System, Seattle, WA
2004 Instructor, Fellow Didactic on Genetics of Attention-Deficit Hyperactivity Disorder, University of Washington, Seattle, WA
2007 Lecturer, Neurobiology of ADHD, Neurobiology of Disease Graduate Lecture
2009 Lecturer, Resident Didactic on Genetics of Schizophrenia, University of Washington, Seattle, WA

Mentor Responsibilities

2006 Sarah Summer, Undergraduate Student, University of Washington, Seattle, WA
2007 Zarshid Arbaby MD, Volunteer, Seattle WA
2008 Ruben Burbank, Undergraduate Student, University of Washington, Seattle, WA
2009 Mark Lisowsky, Undergraduate Student, University of Washington, Seattle, WA
2009 Tiffany Vu, Undergraduate Student, University of Washington, Seattle, WA
2008-present Beate Peter, MA, PHD, Postdoctoral Research Associate, Department of Medicine, University of Washington, Seattle, WA

Editorial Responsibilities

2003–present Ad Hoc Reviewer, *American Journal of Medical Genetics*

2003–present Ad Hoc Reviewer, *Annals of Human Genetics*

Zoran Brkanac, M.D.
July, 2010

2003–present Ad Hoc Reviewer, *Genes to Behavior*
2003–present Ad Hoc Reviewer, *Journal of Learning Disabilities*

Special Local Responsibilities

2006–2007 Consultant, State of Washington DSHS, ADHD medication utilization review program
2007 Grant Reviewer, UW Alzheimer's Disease Research Center
2007–present Departmental Coordinator, Medical Student Independent Investigative Inquiry Program, University of Washington, Seattle, WA

Research Funding

Principal Investigator

Active 1 K08 HD049342 Z. Brkanac (PI) 1/1/05–12/31/10
NIH/National Institute of Child Health and Human Development
Molecular genetics of executive function in dyslexia
Total Amount: \$858,086

Young Investigator Award Z. Brkanac (PI) 7/1/2008–6/30/10
National Alliance for Research on Schizophrenia and Depression
22q11 and psychosis
Total Amount: \$60,000

Completed Research Award Z. Brkanac (PI) 11/1/03–11/1/05
National Organization for Rare Disorders
Candidate Genes for Autosomal Dominant Sensory/Motor Neuropathy with Ataxia
Total Amount: \$39,998

Pending 1R01MH092367-01 Z. Brkanac (PI)
NIMH/NICHD
Next Generation Gene Discovery in Familial Autism
Priority score 24, **Percentile 9.0**, Pending Council review 10/2010

1R01AG039700-01 Z. Brkanac (PI)
NIA/NINDS
Next Generation Mendelian Genetics in Familial Alzheimer Disease
Pending Scientific Review 10/2010

Co-Investigator

Active RC1 AG035681 W.H. Raskind (PI) 9/1/09–8/31/11
NIH/National Institute on Aging

Zoran Brkanac, M.D.
July, 2010

Mutational Cloning in Familial Dementia and Alzheimer's Disease
2009 Amount: \$493,030

RC2 HG005608 D. Nickerson (PI) 9/1/09–8/31/11
NIH/National Institute for Human Genome Research
Next-Generation Mendelian Genetics
2009 Amount: \$1,960,613

R01 NS069719 W.H. Raskind (PI) 4/1/10–3/31/14
NIH/National Institute of Neurological Disorders and Stroke
Next-Generation Gene Discovery in Neurogenetics
2009 Amount: \$632,335

R01 1R01HD054562 W.H.Raskind (PI) 9/01/07-6/30/12
NIH/ National Institute of Child Health and Human Development
Genetic Contributions to Endophenotypes of Dyslexia
2009 Amount: \$246,200

Pending RC4 D.W. Tsuang (PI)
NIH, Identification of Functional Sequence Variations in Schizophrenia

Bibliography

Manuscripts

- 1) Yoshikawa T, **Brkanac Z**, Dupont BR, Xing GQ, Leach RJ, Detera-Wadleigh SD. Assignment of the human nuclear hormone receptor, NUC1 (PPARD), to chromosome 6p21.1-p21.2. *Genomics* 1996 Aug 1;35(3):637-8.
- 2) Cody JD, Pierce JF, **Brkanac Z**, Plaetke R, Ghidoni PD, Kaye CI, Leach RJ. Preferential loss of the paternal alleles in the 18q- syndrome. *Am J Med Genet* 1997 Mar 31;69(3):280-6.
- 3) Cody JD, Hale DE, **Brkanac Z**, Kaye CI, Leach RJ. Growth hormone insufficiency associated with haploinsufficiency at 18q23. *Am J Med Gen* 1997 Sep 5;71(4):420-5.
- 4) **Brkanac Z**, Cody JD, Leach RJ, DuPont BR. Identification of cryptic rearrangements in patients with 18q- deletion syndrome. *Am J Hum Genet* 1998 Jun;62(6):1500-6.
- 5) Nellissery MJ, Padalecki SS, **Brkanac Z**, Singer FR, Roodman GD, Unni KK, Leach RJ, Hansen MF. Evidence for a novel osteosarcoma tumor-suppressor gene in the chromosome 18 region genetically linked with Paget disease of bone. *Am J Hum Genet* 1998 Sep;63(3):817-24.
- 6) Saric T, **Brkanac Z**, Troyer DA, Padalecki SS, Sarosdy M, Williams K, Abadesco L, Leach RJ, O'Connell P. Genetic pattern of prostate cancer progression. *Int J Cancer* 1999 Apr 12;81(2):219-24.
- 7) **Brkanac Z**, Fernandez M, Matsushita M, Lipe H, Wolff J, Bird TD, Raskind WH. Autosomal dominant sensory/motor neuropathy with Ataxia (SMNA): Linkage to chromosome 7q22-q32. *Am J Med Genet* 2002 May 8;114(4):450-7.
- 8) **Brkanac Z**, Bylenok L, Fernandez M, Matsushita M, Lipe H, Wolff J, Nochlin D, Raskind WH, Bird TD. A new dominant spinocerebellar ataxia linked to chromosome 19q13.4-qter. *Arch Neurol* 2002 Aug;59(8):1291-5.

- 9) Chen DH, **Brkanac Z**, Verlinde CLMJ, Tan XJ, Bylenok L, Nochlin D, Matsushita M, Lipe H, Wolff J, Fernandez M, Cimino PJ, Bird TD, Raskind WH. Missense mutations in the regulatory domain of PKC γ : A novel mechanism for dominant cerebellar ataxia. *Am J Hum Genet* 2003 Apr;72(4):839-49.
- 10) **Brkanac Z**, Myers K. Specific Learning Disabilities and Difficulties in Children and Adolescents; Psychological assessment and evaluation; Book review. *J Am Acad Child Adolesc Psychiatry* 2003 Jan;42(1):121-122.
- 11) **Brkanac Z**, Pastor JF, Storck M. Prazosin in PTSD; Case report. *J Am Acad Child Adolesc Psychiatry* 2003 Apr;42(4):384-385.
- 12) Chapman NH, Igo RP, Thompson JB, Matsushita M, **Brkanac Z**, Holzman T, Berninger VW, Wijsman EM, Raskind WH. Linkage analyses of four regions previously implicated in dyslexia: Confirmation of a locus on chromosome 15q. *Am J Med Genet* 2004 Nov 15;131B(1):67-75.
- 13) Raskind WH, Igo RP, Chapman NH, Berninger VW, Thompson JB, Matsushita M, **Brkanac Z**, Holzman T, Brown M, Wijsman EM. A genome scan in multigenerational families with dyslexia: Identification of a novel locus on chromosome 2q that contributes to phonological decoding efficiency. *Mol Psy* 2005 Jul;10(7):699-711.
- 14) Saxon AJ, Oreskovich MR, **Brkanac Z**. Genetic determinants of addiction to opioids and cocaine. *Harv Rev Psychiatry* 2005 Jul-Aug;13(4):218-32.
- 15) Igo RP, Chapman NH, Berninger VW, Matsushita M, **Brkanac Z**, Rotshstein JH, Holzman T, Nielsen K, Raskind WH, Wijsman EM. Genomewide scan for real-word reading subphenotypes of dyslexia: Novel chromosome 13 locus and genetic complexity. *Am J Med Genet B Neuropsychiatr Genet* 2006 141(1):15-27.
- 16) **Brkanac Z**, Chapman NH, Matsushita M, Chun L, Nielsen K, Cochrane E, Berninger VW, Wijsman EM, Raskind WH. Evaluation of candidate genes for DYX1 and DYX2 in families with dyslexia. *Am J Med Genet B Neuropsychiatr Genet* 2007 Jun 5;144(4):556-60.
- 17) **Brkanac Z**, Chapman NH, Igo RP Jr, Matsushita MM, Nielsen K, Berninger VW, Wijsman EM, Raskind WH. Genome scan of a nonword repetition phenotype in families with dyslexia: Evidence for multiple loci. *Behav Genet* 2008 Sep;38(5):462-75.
- 18) **Brkanac Z**, Raskind WH, King BH. Pharmacology and genetics of autism: implications for diagnosis and treatment. *Per Med* 2008 Nov;5(6):599-607.
- 19) **Brkanac Z**, Spencer D, Shendure J, Robertson P, Matsushita M, Vu T, Bird TD, Olson M, Raskind WH. IFRD1 is a candidate gene for SMNA on chromosome 7q22-q23. *Am J Hum Genet* 2009 May;84(5):692-7. *featured article, **AJHG** online edition*

Manuscripts Submitted

- 20) Peter B, Raskind WH, Matsushita M, Lisowski M, Vu T, Berninger VW, Wijsman EM, **Brkanac Z**. A family based association study of CNTNAP2 and FOXP2 in dyslexia: support for involvement of FOXP2 in sequential motor activities and real word reading.
- 21) Debby W. Tsuang, Steven P. Millard, Benjamin Ely, Peter Chi, Kenneth Wang, Wendy Raskind, Zoran Brkanac, Chang-En Yu. The effects of algorithms on CNV detection.

Abstracts

- 1) **Brkanac Z**, O'Connell P, Leach RJ. STS content-based YAC map of distal long arm of human chromosome 18. Poster presentation, Genome Mapping and Sequencing meeting at Cold Spring Harbor laboratory, 1995.
- 2) Cody JD, Hale DE, **Brkanac Z**, Kaye CI, Leach RJ. Growth hormone insufficiency associated with haploinsufficiency at 18q23. Am J Med Genet 1996: S59 A1461.
- 3) **Brkanac Z**, Cody JD, Leach RJ, DuPont BR. Identification of cryptic rearrangements in patients with 18q- deletion syndrome. Am J Hum Genet 1996: S59 A113.
- 4) **Brkanac Z**, Fernandez M, Matsushita M, Lipe H, Bird TD, Raskind WH. A new syndrome of hereditary sensory and cerebellar ataxia with muscle atrophy, SCA18: Linkage to chromosome 7q31-32. Am J Hum Genet 2001: S69 A1846.
- 5) **Brkanac Z**, Chapman NH, Igo RP, Thomson JB, Matsushita M, Holzman T, Berninger VW, Wijsman EM, Raskind WH. Two-stage whole-genome linkage analysis of a phonologic working memory component phenotype of dyslexia: Identification of a locus on chromosome 4p. Poster presented at American Society of Human Genetics 56th Annual Meeting, New Orleans, LA, October 2006.
- 6) Peter B, **Brkanac Z**, Matsushita M, Lisowski M, Vu t, Berninger VW, Wijsman EM, Raskind WH. FOXP2 and CNTNAP2 Influence Phonology, Motor Praxis, and Reading in Individuals with Dyslexia. Poster presented at American Society of Human Genetics 56th Annual Meeting, October 2009

Presentations

National

- 1) **Brkanac Z**. Hereditary ataxias, a model for neuropsychiatric illness. Annual Psychiatric Research Society Meeting, Park City, UT, January 2003.
- 2) **Brkanac Z**. Genetics of ADHD, MIRECC, VAPSHCS, June 2004.
- 3) **Brkanac Z**. Genetics of Dyslexia. Division of Neurosciences, Department of Psychiatry, University of Washington, Seattle WA, September 2004.
- 4) **Brkanac Z**. What's new in genetics. Workshop presentation, Washington State Psychiatric Association, Annual Meeting, Seattle, WA, March 2008.
- 5) **Brkanac Z**. Genetics of dyslexia. Grand rounds presentation, University of Washington Harborview Medical Center, Seattle, WA, February 2009.

International

- 5) **Brkanac Z**. Whole-genome linkage analysis of working memory component phenotypes of dyslexia. World Congress of Psychiatric Genetics, Dublin, Ireland, October 2004.
- 6) **Brkanac Z**. CNVs in schizophrenia. Workshop presentation, Society for Biological Psychiatry Annual Meeting, Vancouver, Canada, May 2009.

Other

- 2002 Co-Inventor – “Mutations in PKC γ are a cause for Spinocerebellar Ataxia”, UW sponsored patent for a genetic test