

Sarah Shoichet

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Curriculum vitae

- 2010 Professor (W2), Molecular Neurobiology and Genetics, Charité
- 2008 – 2009 Rahel-Hirsch postdoctoral fellow, Neuroscience Research Center, Charité
- 2000 – 2007 Doctoral studies and junior postdoc (including maternity leave and part-time research activity in 2006/2007), Department Neurogenetics (Prof. H.H. Ropers), Max Planck Institute for Molecular Genetics Berlin
- 1998 – 2000 Research assistant, Dana Farber Cancer Institute, Boston
- 1998 – 1999 Part-time studies, Cellular & Molecular Biology, Genetics Harvard Extension School, Cambridge, Massachusetts
- 1996 – 1997 Research assistant, NeuroVir Inc. (startup biotech company), Vancouver
- 1992 – 1995 B.Sc. Physics, Upper Second Class, Queen's University, Kingston, Canada

Research fields

Our group is active in the field of molecular neurobiology and genetics with primary interests in:

- Molecular mechanisms underlying neurodevelopmental disorders such as autism, intellectual disability, and epilepsy
- Post-translational modifications of neuronal proteins and subsequent effects on neuron development and function

Activities in the scientific community, honors, awards

- 2011 Board member, Admissions and Examination Committee, International Graduate Program Medical Neurosciences, Charité
- 2011 Selected participant, Charité Mentoring Program
- 2009 Selected participant, Roche-Nature Medicine Translational Neuroscience Symposium 2009: Autism and Other Developmental Brain Disorders (Switzerland)
- 2008 Rahel-Hirsch Stipend, Charité, ranked first among successful applicants
- 2005 PhD Thesis Awards: Berlin Academic Society Thesis Award (Berliner Wissenschaftliche Gesellschaft Promotionspreis), Otto Hahn Medal, Max Planck Society
- 2003 Conference Award "Best Presented Scientific Work" International Workshop on Fragile X Syndrome and XLMR
- 1992 Canada Scholarship for Scientists and Engineers
Queen's University Entrance Scholarship

Selected publications

Lesch, KP, Selch, S, Renner, TJ, Jacob, C, Nguyen, TT, Hahn, T, Romanos, M, Walitza, S, Shoichet, S, Dempfle, A, Heine, M, Boreatti-Hummer, A, Romanos, J, Gross-Lesch, S, Zerlaut, H, Wulfsch, T, Heinzl, S, Fassnacht, M, Fallgatter, A, Allolio, B, Schafer, H, Warnke, A, Reif, A, Ropers, HH and Ullmann, R. Genome-wide copy number variation analysis in attention-deficit/hyperactivity disorder: association with neuropeptide Y gene dosage in an extended pedigree. *Mol Psychiatry*. 2011; 16, 491-503.

Shoichet, SA*, Waibel, S*, Endruhn, S, Sperfeld, AD, Vorwerk, B, Muller, I, Erdogan, F, Ludolph, AC, Ropers, HH and Ullmann, R. Identification of candidate genes for sporadic amyotrophic lateral sclerosis by array comparative genomic hybridization. *Amyotroph Lateral Scler*. 2009; 10, 162-9.

| * equal contribution

Kalscheuer, VM, FitzPatrick, D, Tommerup, N, Bugge, M, Niebuhr, E, Neumann, LM, Tzschach, A, Shoichet, SA, Menzel, C, Erdogan, F, Arkesteijn, G, Ropers, HH and Ullmann, R. Mutations in autism susceptibility candidate 2 (AUTS2) in patients with mental retardation. *Hum Genet*. 2007; 121, 501-9.

Shoichet, SA, Duprez, L, Hagens, O, Waetzig, V, Menzel, C, Herdegen, T, Schweiger, S, Dan, B, Vamos, E, Ropers, HH and Kalscheuer, VM. Truncation of the CNS-expressed JNK3 in a patient with a severe developmental epileptic encephalopathy. *Hum Genet*. 2006; 118, 559-67.

Shoichet, SA, Kunde, SA, Viertel, P, Schell-Apacik, C, von Voss, H, Tommerup, N, Ropers, HH and Kalscheuer, VM. Haploinsufficiency of novel FOXP1B variants in a patient with severe mental retardation, brain malformations and microcephaly. *Hum Genet*. 2005; 117, 536-44.

Shoichet, SA, Hoffmann, K, Menzel, C, Trautmann, U, Moser, B, Hoeltzenbein, M, Echenne, B, Partington, M, Van Bokhoven, H, Moraine, C, Fryns, JP, Chelly, J, Rott, HD, Ropers, HH and Kalscheuer, VM. Mutations in the ZNF41 gene are associated with cognitive deficits: identification of a new candidate for X-linked mental retardation. *Am J Hum Genet*. 2003; 73, 1341-54.

Kalscheuer, VM, Freude, K, Musante, L, Jensen, LR, Yntema, HG, Gecz, J, Sefiani, A, Hoffmann, K, Moser, B, Haas, S, Gurok, U, Haesler, S, Aranda, B, Nshedjan, A, Tzschach, A, Hartmann, N, Roloff, TC, Shoichet, S, Hagens, O, Tao, J, Van Bokhoven, H, Turner, G, Chelly, J, Moraine, C, Fryns, JP, Nuber, U, Hoeltzenbein, M, Scharff, C, Scherthan, H, Lenzner, S, Hamel, BC, Schweiger, S and Ropers, HH. Mutations in the polyglutamine binding protein 1 gene cause X-linked mental retardation. *Nat Genet*. 2003; 35, 313-5.

Shoichet, SA, Baumer, AT, Stamenkovic, D, Sauer, H, Pfeiffer, AF, Kahn, CR, Muller-Wieland, D, Richter, C and Ristow, M. Frataxin promotes antioxidant defense in a thiol-dependent manner resulting in diminished malignant transformation in vitro. *Hum Mol Genet*. 2002; 11, 815-21.

Malik, TH, Shoichet, SA, Latham, P, Kroll, TG, Peters, LL and Shivdasani, RA. Transcriptional repression and developmental functions of the atypical vertebrate GATA protein TRPS1. *EMBO J*. 2001; 20, 1715-25.

Shoichet, SA, Malik, TH, Rothman, JH and Shivdasani, RA. Action of the *Caenorhabditis elegans* GATA factor END-1 in *Xenopus* suggests that similar mechanisms initiate endoderm development in ecdysozoa and vertebrates. *Proc Natl Acad Sci U S A*. 2000; 97, 4076-81.