

Curriculum Vitae

Name: Jörg Grigull
Position: Postdoctoral Scientist
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of Medical Research
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Education:

1990 Dipl.-Math.
(mathematics) Department of Mathematics,
Freie Universität Berlin, FR Germany

1993 Dr. rer. nat.
(mathematics) Department of Mathematics,
University of Göttingen, FR Germany
Thesis advisor: Manfred Denker
Thesis title: "Large Deviations and Fluctuations under
Equilibrium Measures for Rational Maps"

Positions held:

2001 - present: senior research associate at the Banting & Best Institute of Medical
Research in Toronto, Canada

1999 - 2001 : postdoctoral scientist at the Toronto Western Research Institute,
Neurocomputational Lab, Toronto/ Canada

1998 : research scientist at the Max-Planck-Institute for Mathematics in the
Sciences, Leipzig, Germany

1996 - 1997 : postdoctoral fellow at the Benjamin-Franklin-Klinikum, Lab for
Vestibular Research, Berlin, Germany

1995 : contract researcher and lecturer - Departments of Psychology and
Computer Science, Humboldt-Universität and Freie Universität Berlin

1994 : postdoctoral fellow at the Department of Mathematics, Hebrew
University of Jerusalem, Israel

Publications:

Peer-reviewed:

Peng, W-T, Robinson, M.D., Mnaimneh, S., Krogan, N., Cagney, G., Davierwala, A.P., **Grigull, J.**, Yang, X., Zhang, W., Mitsakakis, N., Ryan, O.W., Datta, N., Jojic, V., Pal, C., Morris, Q., Frey, B.J., Canadien, V., Richards, D., Beattie, B., Wu, L.F., Altschuler, S.J., Boone, C., Emili, A., Greenblatt, J. and Hughes, T.R. (2003) A panoramic view of yeast non-coding RNA processing. *Cell* 113, 919-933.

Grigull, J., and Skinner, F. K. (2002) The effect of synaptic depression on model inhibitory networks. *Canadian Applied Mathematics Quarterly* 10(1): 87-110, Spring 2002

Robinson, M., **Grigull, J.**, Naveed, M., and Hughes T.R. (2002) FunSpec: A web-based tool for statistical functional enrichment testing. *BMC Bioinformatics*. 3:35

Grigull, J., Aleksandrova, A., and Paterson, A. (2001) Clustering of pedigrees using marker allele frequencies: impact on linkage analysis. *Genetic Epidemiology* 21, Supplement S1: 61-66

Krogan, N., Cagney, G., Peng, W.-T., Lalev, A. Robinson, M., **Grigull, J.**, Canadien, V., Richards, D., Beattie, B., Hughes, T.R., Emili, A., and Greenblatt, J. High-definition macromolecular composition of yeast RNA processing complexes. (submitted).

Clarke, A.H., **Grigull, J.**, Mueller, R., Scherer, H. (2000) The three-dimensional vestibuloocular reflex during prolonged microgravity. *Experimental Brain Research* 134, 322-334

Grigull, J., Mnaimneh, S., Robinson, M., Pootoolal J., Hughes, T.R. Transcription inhibitors in the analysis of genome-wide mRNA decay with cDNA microarrays - A comparative study. (in preparation)

Jalil S., **Grigull, J.**, Skinner F.K. (2003) Novel bursting patterns emerging from model inhibitory networks with synaptic depression (in preparation)

Reviews and Conference Proceedings

Baker, P., **Grigull, J.**, Pennefather, P., Orser, B., Skinner, F. (2001) Frequency switches in inhibitory networks with anesthetics. *Neurocomputing* 38-40, 467-474

Grigull, J. Burst Coherency in Minimal Physiological Models (1999) *Publications of the Max-Planck-Institute for Mathematics in the Sciences, Leipzig*, No. 5

Grigull, J. Concepts of cooperativity in game theory (1995) - contract research paper for *Cooperative Games*, Marion Kauke (in German)

Grigull, J. A renewal equation for the free energy. (1992) *Mathematical Research*, Akademie-Verlag Berlin (1992) 66, 53-57

Invited Lectures and Presentations

May 20, 2003, "Investigation of messenger RNA stability with cDNA microarrays", Centre of Addiction and Mental Health, Toronto, Canada

October 2001, "A computational approach to rhythm generation in inhibitory networks with synaptic depression", Banting and Best Department of Medical Research, Toronto, Canada

June 2000, "Ethnic heterogeneity in marker allele frequencies - Impact on linkage analysis", Seminar in Statistical Genetics, Samuel Lunenfeld Research Institute, Toronto, Canada

November 1998, "Minimal physiological models in the study of neuronal rhythms", Department of Neurobiology, University of Leipzig, Germany

December 1997, "The human vestibuloocular reflex in microgravity", Collège de France, Laboratoire de la Perception et de l'Action, Paris, 1997

October 1997, "Mathematical thermodynamics - A new avenue in computational neuroscience", Max-Planck-Institute of Mathematics in the Sciences, Leipzig, Germany

March 1997, "Recording human eye movements with videooculography", Institute of Clinical Psychology, University of Magdeburg, Germany.

Record of Abstracts

"Investigating perturbations of the genome-wide mRNA decay in *Saccharomyces cerevisiae* with transcription inhibitors." **Jörg Grigull**, Sanie Mnaimneh, Jeffrey Pootoolal, and Timothy R. Hughes. 8th Annual Meeting of the RNA Society, Vienna/ Austria, July 2003.

"Inferring messenger RNA stability in *S. cerevisiae* with cDNA microarrays – New experimental and computational methods." **Jörg Grigull**, Sanie Mnaimneh, Mark Robinson, Jeffrey Pootoolal, and Timothy Hughes. Frontiers in Bioinformatics Symposium, Buffalo, NY, June 2003.

“FUNSPEC: A web-based tool for cluster exploration in yeast.” Mark D. Robinson, **Jörg Grigull** and Timothy R. Hughes. Northeast Regional Yeast meeting, Ithaca, New York, July 2002.

“Ribosomal RNA processing – an integrated functional genomics approach.” **Jörg Grigull**, Wen-Tao Peng, Nevan Krogan, Mark Robinson, Timothy Hughes. Northeast Regional Yeast Meeting, Ithaca, New York, July 2002.

“Synchrony patterns emerging from short-term synaptic plasticity in model inhibitory networks.” **Jörg Grigull** & Frances Skinner, Society of Neuroscience 31st Annual Meeting, San Diego, Nov 2001.

“Frequency switches in inhibitory networks with anesthetics” Pamela Baker, **Jörg Grigull**, Peter Pennefather, Bev Orser, Frances Skinner (2001) *Neurocomputing* 38-40, 467-474

“Frequency switches in inhibitory networks with synaptic depression.” **Jörg Grigull**, Pamela Baker, Bev A. Orser, Peter Pennefather, Frances Skinner. 9th Conference in Computational Neuroscience, Brugge/Belgium, July 2000.

“The human vestibuloocular reflex - Adaptation under prolonged microgravity.” Andrew Clarke, **Jörg Grigull**, Waldemar Krzok, Hans Scherer. European Science Foundation Conference Three-dimensional sensory and motor space, Giens, France, September 1997

“The human vestibuloocular reflex during prolonged microgravity.” Andrew Clarke, **Jörg Grigull**, Waldemar Krzok, Hans Scherer. 25th Creutzfeldt Neurobiology Conference, Göttingen, Germany, May 1996