

# Stanford

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## Stephan Gehrke

Casual - Non-Exempt, Pathology Sponsored Projects

### Bio

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#### HONORS AND AWARDS

- Pre-doctoral Fellowship, Dr. Mildred Scheel Foundation (2000-2002)

#### EDUCATION AND CERTIFICATIONS

- Postdoctoral degree, Stanford University , Neurobiology, Oncology (2010)
- Ph.D., University of Marburg, Germany , Molecular Biology, Oncology, Hematology (2004)
- M.S., University of Kiel, Germany , Genetics, Biology, Biochemistry (2000)

### Professional

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#### PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Peer-reviewing, Nature Review Neuroscience, RNA Biology (2010 - present)

### Publications

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#### PUBLICATIONS

- **The bantam microRNA acts through Numb to exert cell growth control and feedback regulation of Notch in tumor-forming stem cells in the Drosophila brain.** *PLoS genetics*  
Wu, Y., Lee, K., Song, Y., Gehrke, S., Lu, B.  
2017; 13 (5)
- **PINK1 and Parkin Control Localized Translation of Respiratory Chain Component mRNAs on Mitochondria Outer Membrane.** *Cell metabolism*  
Gehrke, S., Wu, Z., Klinkenberg, M., Sun, Y., Auburger, G., Guo, S., Lu, B.  
2015; 21 (1): 95-108
- **RNA metabolism in the pathogenesis of Parkinson's disease** *BRAIN RESEARCH*  
Lu, B., Gehrke, S., Wu, Z.  
2014; 1584: 105-115
- **RNA metabolism in the pathogenesis of Parkinson's disease.** *Brain research*  
Lu, B., Gehrke, S., Wu, Z.  
2014; 1584: 105-115
- **The synaptic function of LRRK2** *BIOCHEMICAL SOCIETY TRANSACTIONS*  
Lee, S., Imai, Y., Gehrke, S., Liu, S., Lu, B.  
2012; 40: 1047-1051
- **Pathogenic LRRK2 negatively regulates microRNA-mediated translational repression** *NATURE*  
Gehrke, S., Imai, Y., Sokol, N., Lu, B.  
2010; 466 (7306): 637-U9
- **Leucine-rich repeat kinase 2 interacts with Parkin, DJ-1 and PINK-1 in a Drosophila melanogaster model of Parkinson's disease** *HUMAN MOLECULAR GENETICS*

Venderova, K., Kabbach, G., Abdel-Messih, E., Zhang, Y., Parks, R. J., Imai, Y., Gehrke, S., Ngsee, J., LaVoie, M. J., Slack, R. S., Rao, Y., Zhang, Z., Lu, et al  
2009; 18 (22): 4390-4404

● **Neuroprotective effects of compounds with antioxidant and anti-inflammatory properties in a Drosophila model of Parkinson's disease** *BMC NEUROSCIENCE*

Faust, K., Gehrke, S., Yang, Y., Yang, L., Beal, M. F., Lu, B.  
2009; 10

● **Phosphorylation of 4E-BP by LRRK2 affects the maintenance of dopaminergic neurons in Drosophila** *EMBO JOURNAL*

Imai, Y., Gehrke, S., Wang, H., Takahashi, R., Hasegawa, K., Oota, E., Lu, B.  
2008; 27 (18): 2432-2443

● **LRRK2 regulates protein translation via eIF4E/4E-BP pathway and influences dopaminergic neuron maintenance**

Imai, Y., Gehrke, S., Lu, B.  
ELSEVIER IRELAND LTD.2008: S71

● **Mitochondrial pathology and muscle and dopaminergic neuron degeneration caused inactivation of Drosophila Pink1 is rescued by by Parkin** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Yang, Y., Gehrke, S., Imai, Y., Huang, Z., Ouyang, Y., Wang, J., Yang, L., Beal, M. F., Vogel, H., Lu, B.  
2006; 103 (28): 10793-10798

● **Modeling Parkinson's disease using RNAi** *37th Annual Meeting of the American-Society-for-Neurochemistry*

Lu, B., Yang, Y., Gehrke, S., Wang, J., Imai, Y., Ouyang, Y., Huang, Z.  
WILEY-BLACKWELL.2006: 14-14

● **Inactivation of Drosophila DJ-1 leads to impairments of oxidative stress response and phosphatidylinositol 3-kinase/Akt signaling** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

Yang, Y. F., Gehrke, S., Haque, M. E., Imai, Y., Kosek, J., Yang, L. C., Beal, M. F., Nishimura, I., Wakarnatsu, K., Ito, S., Takahashi, R., Lu, B. W.  
2005; 102 (38): 13670-13675

● **Chimeric transcriptional control units for improved liver-specific transgene expression** *GENE*

Gehrke, S., Jerome, V., Muller, R.  
2003; 322: 137-143