

## **Curriculum Vitae – Gilberto Fisone**

### Doctoral degree

1990 – Ph.D. in Neurochemistry, Stockholm University.

### Postdoctoral work

1991-1994 – Postdoctoral Fellow, Laboratory of Molecular and Cellular Neuroscience (headed by Dr. Paul Greengard), The Rockefeller University, New York.

### Current position

**From 2006 – Professor of Neuroscience, Department of Neuroscience, Karolinska Institutet.**

### Previous positions and periods of appointment

2000-2006 – Associate Professor, Karolinska Institutet, Department of Neuroscience.

1996-2000 – Assistant Professor, Karolinska Institutet, Department of Neuroscience.

1994-1995 – Assistant Professor, Laboratory of Molecular and Cellular Neuroscience, The Rockefeller University.

### International activities and distinctions

1990 – Sigrid Arrhenius Prize - Stockholm University

1995-2008 – Adjunct Faculty (Professor) in the Laboratory of Molecular and Cellular Neuroscience (directed by Dr. Paul Greengard), The Rockefeller University, New York.

1994-1995 – Visiting Assistant Professor in Neuropharmacology – University of Pavia (Italy).

2005 – Lecturer at the Doctoral School of Interdisciplinary Biomedical Research, Université Libre de Bruxelles (Belgium).

2007 – Visiting Professor at the Doctoral School of Toxicology, University of Cagliari (Italy).

2008-2009 - Visiting Professor at the University of Ferrara (Italy).

2012 – Visiting Professor – University of Pavia (Italy).

### Invited Speaker (last 5 years)

2007. 17th Neuropharmacology Conference “Cannabinoid Signaling in the Nervous System”, San Diego, CA, USA.

2010. International Symposium on Protein Phosphorylation in Neurodegenerative Diseases”, January 28th-30th, Valencia, Spain.

2011. 3<sup>rd</sup> Biennial Workshop on Dystonia “Dystonia and Parkinson’s Disease: The Dopamine Connection”, Monte Porzio Catone (Rome).

2011. FENS Symposium ”Intracellular Signaling Mechanisms of Dopamine Related Dysfunctions”, Ljubljana (Slovenia), September 22-25.

2011. 7th International Meeting on Metabotropic Glutamate Receptors, Taormina, Italy.

2011. Symposium ”Runaway Dopamine Receptor Signaling in L-DOPA-induced Dyskinesia: New Therapeutic Approaches”, Annual Meeting of the Society for Neuroscience, Washington, DC, USA.

2012. 8th FENS Forum - Symposium ” The interplay between ERK and mTOR signalling in drug addiction and hyperdopaminergic disorders”, Barcelona, July 14-18.

### Reviewer (Grants-International)

National Science Foundation (U.S.A.), Austrian Science Foundation, Fondazione Telethon (Italy), The Michael J. Fox Foundation for Parkinson’s Research, Member of the French National Institute of Health (INSERM) Expert Base, Ontario Mental Health Foundation (Canada), Parkinson’s Disease Society (U.K.), The Wellcome Trust (U.K.), Singapore National Medical Research Council.

*Editorial/Advisory Board:* PLoS ONE, Frontiers in Behavioral Neuroscience, Dataset Papers in Neuroscience, Antibodypedia (<http://www.antibodypedia.com>, Nature Publishing Group).

## **Publications (selected from a total of 94 peer-reviewed articles)**

- Svenningsson, P., Lindskog, M., Ledent, C., Parmentier, M., Greengard, P., Fredholm, B.B. and Fisone, G. (2000). Regulation of DARPP-32 phosphorylation *in vivo* by dopamine D<sub>1</sub>, dopamine D<sub>2</sub> and adenosine A<sub>2A</sub> receptors. *Proc. Natl. Acad. Sci. U.S.A.* 97: 1856-1860.
- Lindskog, M., Pozzi, L., Svenningsson, P., Yong, K., Fienberg, A., Bibb, J., Fredholm, B.B., Nairn, A.C., Greengard, P. and Fisone, G. (2002) Involvement of DARPP-32 phosphorylation in the stimulant action of caffeine. *Nature* 418: 774-778.
- Lindgren N., Usiello, A., Goiny, M., Haycock, J., Erbs, E., Greengard, P., Hökfelt, T., Borrelli, E. and Fisone, G. (2003) Distinct roles of dopamine D<sub>2L</sub> and D<sub>2S</sub> receptor isoforms in the regulation of protein phosphorylation at presynaptic and postsynaptic sites. *Proc. Natl. Acad. Sci. USA* 100: 4305-4309.
- Picconi, B., Centonze, D., Håkansson, K., Bernardi, G., Greengard, P., Fisone, G., Cenci, M.A. and Calabresi, P. (2003) Loss of bidirectional striatal synaptic plasticity in dyskinetic parkinsonian rats. *Nat. Neurosci.* 6: 501-506.
- Santini, E., Valjent, E., Usiello, A., Carta, M.; Borgkvist, A., Girault, J.-A., Hervé, D., Greengard, P., Fisone, G. (2007) Critical involvement of cAMP/DARPP-32 and extracellular signal-regulated protein kinase signaling in L-DOPA-induced dyskinesia. *J. Neurosci.* 27: 6995-7005.
- Santini, E., Heiman, M., Greengard, P., Valjent, E., Fisone, G. (2009) Inhibition of mTOR signaling in Parkinson's disease prevents L-DOPA-induced dyskinesia. *Sci. Signal.* 2: ra36.
- Bateup, H.S., Santini, E., Shen, W., Birnbaum, S., Valjent, E., Surmeier, D.J., Fisone, G., Nestler, E.J., Greengard, P. (2010) Distinct subclasses of medium spiny neurons differentially regulate striatal motor behaviors. *Proc Natl Acad Sci U S A.* 107:14845-50.
- Bonito-Oliva, A., Pignatelli, M., Spigolon, G., Yoshitake, T., Seiler, S., Longo, F., Piccinin, S., Kehr, J., Mercuri, N.B., Nisticò, R., Fisone, G. (2013) Cognitive impairment and dentate gyrus synaptic dysfunction in experimental parkinsonism. *Biol. Psychiatry*. In press.