



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4646

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze Farmacologiche e Biomolecolare**

Scientist- in - charge: Prof. Fabrizio Gardoni

**Jennifer Stanic**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	STANIC
Name	Jennifer
Date of birth	19/09/1986

### PRESENT OCCUPATION

Appointment	Structure
Researcher (Post-doct)	INSERM U1215 - Neurocentre Magendie - Bordeaux, France

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Degree	-	-	-
Specialization	-	-	-
PhD	Pharmacological Sciences	University of Milan	2014
Master	Cellular Biology, Physiology & Pathology, Neurobiology specialty	Université Paris Descartes (Paris 5)	2010
Degree of medical specialization	-	-	-
Degree of European specialization	-	-	-
Other	Certificate of Proficiency in English	University of Cambridge	2006



## FOREIGN LANGUAGES

Languages	level of knowledge
French	Mother tongue
English	Fluent
Italian	Fluent

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2017	University of Bordeaux - 2017 Idex Bordeaux Postdoctoral Fellowship Program. "Role of the Planar Cell Polarity pathway in Synapse formation, Maintenance and plasticity". Supervisor: Dr Nathalie Sans at Neurocentre Magendie, lab of Planar Polarity and Plasticity, Bordeaux, France. From July 2017 to February 2018. Budget: 31,664.96 euros
2018	Marie Sklodowska Curie Actions Individual Fellowship (H2020-MSCA-IF-2016). Project ID: 750253 "SynPCP- Synapse formation and maturity through planar cell polarity pathway". Supervisor: Dr Nathalie Sans at INSERM U1215 Neurocentre Magendie, lab of Planar Polarity and Plasticity, Bordeaux, France. From March 2018 to April 2020 . Budget: 173,076.00 euros

## TRAINING OR RESEARCH ACTIVITY

My main interest is studying the composition and organisation of the post-synapse and the mechanisms involved in physiological and pathological conditions. During my PhD and first post doc the lab of pharmacology of neurodegeneration at DiSFEB, university of Milan, Italy, I have described the role of Rabphilin 3A in the synaptic availability of GluN2A subunit of NMDA receptors from physiological mechanisms to pathology (L-DOPA-induced Dyskinesia) as well as the significance of the modulation NMDA receptor composition at the corticostriatal synapse in L- DOPA-induced dyskinesia as a therapeutic target. Then during my second postdoc in the lab of Planar polarity and plasticity at Neurocentre Magendie, Bordeaux, France, I have studied the role of Planar cell polarity (PCP) protein Scribble in the nanoscale organization of the post-synapse and synaptic integration by describing the nano-organization of post-synaptic proteins in basal conditions and pathological conditions linked with mutations of Scribble, i.e. Autism spectrum disorder and Spina Bifida.

## PROJECT ACTIVITY

Year	Project
2016-2020	Role of the Planar Cell Polarity pathway in Synapse formation, Maintenance and plasticity
2014-2016	Modulation of NMDA receptor composition at the corticostriatal synapse in a rat model of L-DOPA-induced Dyskinesia
2010-2014	Synapse:from Molecules to Brain and Diseases" (SyMBaD) of Marie Curie Actions "Synaptic availability of GluN2A subunit of NMDA receptors from physiological mechanisms to pathology: the role of new interactor Rabphilin 3A



## CONGRESSES AND SEMINARS

Date	Title	Place
11-15 July 2020	12th FENS Forum of Neuroscience (poster presentation)	Virtual meeting
26 February 2020	Neurocentre Magendie's Hot topics seminar (oral presentation)	Bordeaux, France
26-27 September 2019	8th annual symposium of Neurocentre Magendie (poster presentation)	Bordeaux, France
7-11 July 2018	11th FENS Forum of Neuroscience (poster presentation)	Berlin, Germany
17-19 May 2017	NeuroFrance congress from French neuroscience society (poster presentation)	Bordeaux, France
13-14 April 2017	6th annual symposium of Neurocentre Magendie (oral presentation)	Bordeaux, France
2-6 July 2016	10th FENS Forum of Neuroscience (poster presentation)	Copenhagen, Denmark
9-10 June 2016	SIF Monothematic "Controversies in Neurodegeneration" (poster presentaion)	Catania, Italy
5-9 July 2014	9th FENS Forum of Neuroscience (poster presentation)	Milan, Italy
28-29 October 2013	4th annual meeting MSCA ITN SyMBaD (oral presentation)	Stresa, Italy
18 September 2013	DiSFeB Seminar	Milan, Italy
28-30 August 2013	4th European Synapse Meeting (poster presentation)	Bordeaux, France
17 July 2013	Next Step IV: La Giovane Ricerca Avanza meeting (oral presentation)	Milan, Italy
13-14 November 2012	3rd annual meeting MSCA ITN SyMBaD (oral presentation)	Alicante, Spain
14-18 July 2012	8th FENS Froum of Neuroscience (poster presentation)	Barcelona, Spain
26 June 2012	Next Step III: La Giovane Ricerca Avanza meeting (poster presentation)	Milan, Italy
13-15 October 2011	2nd annual meeting MSCA ITN SyMBaD (oral presentation)	Balatonfüred, Hungary

## PUBLICATIONS



Articles in reviews
Mellone M, Zianni E, <b>Stanic J</b> , Campanelli F, Marino G, Ghiglieri V, Longhi A, Thiolat ML, Qin L, Calabresi P, Bezard E, Picconi B, Di Luca M & Gardoni F. <i>NMDA receptor GluN2D subunit participates to levodopa-induced dyskinesia pathophysiology</i> . <i>Neurobiol Dis</i> . 2019. Doi: 10.1016/j.nbd.2018.09.021. IF: 5.3.
Franchini L*, <b>Stanic J*</b> , Ponzoni L, Mellone M, Carrano N, Musardo S, Zianni E, Olivero G, Marcello E, Pittaluga A, Sala M, Bellone C, Racca C, Di Luca M & Gardoni F. <i>Linking NMDA Receptor Synaptic Retention to Synaptic Plasticity and Cognition</i> . <i>iScience</i> . 2019. Doi: 10.1016/j.isci.2019.08.036. IF: 4.4 (*equal contribution)
Maltese M, <b>Stanic J</b> , Tassone A, Sciamanna G, Ponterio G, Vanni V, Martella G, Imbriani P, Bosni P, Mercuri NB, Gardoni F & Pisani A. <i>Early structural and functional plasticity alterations in a susceptibility period of DYT1 dystonia mouse striatum</i> . <i>eLife</i> . 2018. Doi: 10.7554/eLife.33331. IF: 7.1.
<b>Stanic J*</b> , Mellone M*, Zianni E, Napolitano F, Longhi A, Racca C, Usiello A, Di Luca M and Gardoni F. <i>Rabphilin 3A: novel target for the treatment of levodopa-induced dyskinesia</i> . <i>Neurobiol Dis</i> . 2017. doi: 10.1016/j.nbd.2017.08.001. IF 5.3. (*equal contribution)
Borroni B, <b>Stanic J</b> , Verpelli C, Bonomi E, Alberici A, Bernasconi P, Culotta L, Zianni E, Archetti S, Manes M, Gazzina S, Ghidoni R, Benussi L, Stuani C, Diluca M, Sala C, Buratti E, Padovani A, Gardoni F. <i>Anti-AMPA GluA3 antibodies in Frontotemporal Dementia: a new molecular target</i> . <i>Sci Rep</i> . 2017. doi: 10.1038/s41598-017-06117-y. IF 4.
<b>Stanic J*</b> , Mellone M*, Cirnaru MD, Zianni E, Gardoni F# and Piccoli G#. <i>LRRK2 phosphorylation level correlates with abnormal motor behaviour in experimental model of L-DOPA-induced dyskinesia</i> . - <i>Molecular Brain</i> , 2016 May 11;9(1):53. doi: 10.1186/s13041-016-0234-2. IF: 4.7. (#senior authors, *equal contribution)
Massart, R., Mignon, V., <b>Stanic, J.</b> , Munoz-Tello, P., Becker, J. A. J., Kieffer, B. L., Sokoloff P. and Diaz J. <i>Developmental and adult expression patterns of the G protein-coupled receptor GPR88 in the rat: Establishment of a dual nuclear-cytoplasmic localization</i> . <i>J Comp Neurology</i> , published online 16 March 2016. <a href="http://doi.org/10.1002/cne.23991">http://doi.org/10.1002/cne.23991</a> . I.F.: 2.8.
Dinamarca MC*, Guzzetti F*, Karpova A, Lim D, Mitro N, Musardo S, Mellone M, Marcello E <b>Stanic J</b> , Samaddar T, Burguière A, Caldarelli A, Genazzani AA, Perroy J, Fagni L, Canonico PL, Kreutz MR, Gardoni F# and Di Luca M#. <i>Ring finger protein 10 is a novel synaptonuclear messenger encoding activation of NMDA receptors in hippocampus</i> . <i>eLife</i> , 5, 11390. Published: 15 March 2016 <a href="http://doi.org/10.7554/eLife.12430">http://doi.org/10.7554/eLife.12430</a> . IF: 7.1 (#senior authors, *equal contribution).
Ghiglieri V, Mineo D, Vannelli A, Cacace F, Mancini M, Pendolino V, Napolitano F, di Maio A, Mellone M, <b>Stanic J</b> , Tronci E, Fidalgo C, Stancampiano R, Carta M, Calabresi P, Gardoni F, Usiello A, Picconi B. <i>Modulation of serotonergic transmission in L-Dopa-induced dyskinesia: behavioral, molecular, and electrophysiological mechanisms</i> . <i>Neurobiol Dis</i> . 2016. <a href="https://doi.org/10.1016/j.nbd.2015.11.022">https://doi.org/10.1016/j.nbd.2015.11.022</a> . IF: 5.3.
<b>Stanic J</b> , Carta M, Pelucchi S, Marcello E, Genazzani AA, Mulle C, Di Luca M and Gardoni F. <i>Rabphilin 3A retains NMDA receptors at synaptic sites through interaction with GluN2A/PSD-95 complex</i> - <i>Nature Commun</i> , 6, 10181. Published: 18 Dec 2015 <a href="http://doi.org/10.1038/ncomms10181">http://doi.org/10.1038/ncomms10181</a> . IF: 12.1.
Mellone M*, <b>Stanic J*</b> , Hernandez LF, Iglesias E, Zianni E, Longhi A, Prigent A, Picconi B, Calabresi P, Hirsch EC, Obeso JA, Di Luca M and Gardoni F. <i>NMDA receptor GluN2A/GluN2B subunit ratio as synaptic trait of levodopa-induced dyskinesias: from experimental models to patients</i> - <i>Front. Cell. Neurosci</i> . published: 06 July 2015 doi: 10.3389/fncel.2015.00245. I.F.: 3.9 (*equal contribution)
Vastagh C, Gardoni F, Bagetta V, <b>Stanic J</b> , Zianni E, Giampa C, Picconi B, Calabresi P and Di Luca M. <i>N-Methyl-d-Aspartate (NMDA) Receptor Composition Modulates Dendritic Spine Morphology in Striatal Medium Spiny Neurons</i> - <i>J. Biol. Chem</i> . 2012, 287:18103-18114 doi: 10.1074/jbc.M112.347427 originally published online April 9, 2012. IF: 4.2.



## OTHER INFORMATION

### Technical skills:

**Molecular Biology and Biochemistry:** site directed mutagenesis, RT-PCR, restriction digest, DNA/RNA extraction, Western Blotting, Co-Immunoprecipitation, GST-pulldown, protein cross-linking, protein expression, isolation, purification and quantification, Cell-permeable peptide design and use in in vitro and in vivo models.

**Cell and tissue Biology:** immortalized cell cultures, primary cell cultures (cortical and hippocampal neurons, astrocytes, embryonic fibroblast), hippocampal organotypic slices cultures, plasmid transfection, patch clamp recordings in organotypic slices (voltage clamp recording of NMDA and AMPA currents), Immunohistochemistry/Immunocytochemistry, Proximity Ligation Assay, Dil labeling of neurons for spine morphology analysis, , synaptosome and postsynaptic density purification, vibratome and cryostat sectioning.

**Microscopy:** Epifluorescence microscopy, Confocal Microscopy (fixed or live imaging), TIRF microscopy, Super resolution microscopy: dSTORM, PALM.

**iPS cells:** culture and neuronal differentiation of human induced Pluripotent Stem cells derived from blood cells.

**Animal:** Embryonic and adult rodent dissection of neural tissue, transcardic peristaltic perfusion, Stereotaxic surgery in mouse and rat for viral injections (lentivirus, rAAV, pseudotyped Rabies virus for monosynaptic transynaptic tracing) or drug delivery (6-OHDA, inhibitors, antagonists, Cell-permeable peptides), Full and partial unilateral 6-OHDA lesions rat model of Parkinson and L-DOPA-induced dyskinesia with motor skills behavioral assessments (AIM scoring, stepping test, apomorphine test)

**Computational:** Image processing and analysis (Metamorph, ImageJ, image lab, Zeiss AIM confocal software, Photoshop, Inkscape), Super resolution image processing and analysis (PALM Tracer2, SR-Tesseler) statistical analysis (Graphpad Prism, Excel).

### Supervising, mentoring activities

Dec. 2018 - Sep. 2019	Supervisor of Sybille Marchese, Master Student in Neuroscience, University of Bordeaux
June 2017 - July 2017	Tutoring of Sooraj S Das ISER Pune University, Maharashtra, India
Dec. 2015 - July 2016	Supervisor of Angelica Palumbo, Bachelor student in Toxicology, University of Milan
Sept. 2011 - Sept. 2012	Tutoring of Elena Pecora, Master student in Chemistry and Pharmaceutical Technologies, University of Milan
July 2017	Training schools: The CAJAL Advanced Neuroscience Training Programme (FENS-IBRO initiative): Advanced Techniques for Synapse Biology course. Project: "Super-Resolution imaging with dSTORM to study the nanoscale organization of the dendritic spine and postsynaptic density"
May 2016	Adjunct lab instructor for Chemistry and Pharmaceutical Technologies program, University of Milan (cellular biology, biochemistry, confocal imaging)
May 2015	Adjunct lab instructor for Chemistry and Pharmaceutical Technologies program, University of Milan (cellular biology, confocal imaging)

### Scientific communication and representation activities:

March 2017- April 2020	Postdoctoral representative of Neurocentre Magendie INSERM U1215
Sept. 2017 - jan 2019	Member of editorial board of the Neurocentre Magendie Newsletter
July 2015 - Nov. 2016	Member of editorial team of the Dept. of Pharmacological and Biomolecular Sciences (DiSFeB) of the University of Milan (Italy) Newsletter "DIScovering DiSFeB"
July 2016	Member of the programme committee of Next Step VII: La Giovane Ricerca Avanza



July 2015	meeting, University of Milan (Italy) Chair of Marie Curie Fellows symposium at Next Step VII: La Giovane Ricerca Avanza meeting, University of Milan (Italy) Member of the programme committee of Next Step VI: La Giovane Ricerca Avanza meeting, University of Milan (Italy) Chair of Neuroscience symposium at Next Step VI: La Giovane Ricerca Avanza meeting, University of Milan (Italy)
<u>Outreach activities:</u>	
November 18th 2019	DECLICS (talks with high-schoolers about research and research positions)
March 12th, 2019	Semaine du Cerveau 2019 - Stanic/Mauriac/Bhourri. Workshop « Etude des systèmes nerveux et auditifs», Bordeaux, France
March 13th, 2018	Semaine du Cerveau 2018 - Stanic/Mauriac. Workshop for high-school students « De l'oreille au cerveau : exemple d'une maladie rare », Bordeaux, France
October 9th 2017	Fête de la Science 2017 - Workshop for high-school students "De l'oreille au cerveau: exemple d'une maladie rare », Bordeaux, France.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Milano, 03/09/2020

SIGNATURE