BIO SKETCH

NAME : Stéphane Mélik Parsadaniantz

POSITION TITLE : Research Director at CNRS (DR2)

EDUCATION / TRAINING

INSTITUTION AND LOCATION	DEGREE	Month/Year	FIELD OF STUDY
Paris VI	Master 1	1987	Physiology
Paris VI	Master 2	1988	Endocrinology
Paris VI	PhD	1990-1992	Life science and health
Paris VI	Habilitation to supervise Research (HDR)	2010	Medicine

POSITIONS AND EMPLOYMENTS

	Name of the Institution - Title of the Position
1994-1998	Research Scientist (CR2) at the CNRS, URA 1310 CNRS, Faculté de Pharmacie, Paris.
1998-2000	Research Scientist at CNRS(CR1) CNRS, EP 1591 CNRS, Faculté de Pharmacie, Paris.
2000-2002	Research Scientist at CNRS (CR1) U339 INSERM, Saint Antoine Hospital, Paris.
2003-2008	Research Scientist at CNRS (CR1) Team Leader, U 732 INSERM, Saint Antoine Hospital, Paris.
2009-2011	Research Scientist at CNRS (CR1) Spine and brain Institute, UMR S 975 INSERM- UMR 7225 CNRS- UPMC, Team "Pain ", Pitié Salpétrière Hospital, Paris
2011-2012 March	Research Director at CNRS (DR2), Spine and brain Institute, UMR S 975 INSERM- UMR 7225 CNRS, UPMC, Team Pain, Pitié Salpétrière Hospital, Paris
April 2012 to present	Research Director at CNRS (DR2), Co Director Team S12, UMR 968 INSERM, UMR 7210 CNRS, Vision Institute, UPMC, Paris.

Scientific Interests:

My scientific interests focus on the molecular and cellular mechanisms induced by chemokines in neuroimmune interactions during neuropathic pain (at the spinal and trigeminal levels) and in neuroinflammatory and neurodegenerative diseases. My works was among pioneers to demonstrate the role of chemokine as new neuromodulators in the central nervous system. (Rostene et al. Nature review in neuroscience (2008).

Other Experiences and Professional Memberships:

Membership

- French Society for Neurosciences
- French Society of Ophthalmology (SFO)
- Society for Neuroscience (American)
- Association for Research in Vision and ophthalmology (ARVO)

Reviewer for

- Journal of Comparative Neurology, Journal of Neurochemistry. European Journal of Neuroscience, Neuroscience, Pain, Glia, J Neuroinflammation, Molecular Neurobiology, Journal of Neurochemistry.

Scientific direction of grants:

- 2000-2003 **DRET/DGA**;
- 2006-2007 **INSERM-FRSQ** "Chemokine and Pain" ;
- 2007 **BQR UPMC**: « Role of CCL2 in nociception»;
- 2006-2010 **ANR Neurosciences et Psychiatrie**: « Chemokine and Pain";
- 2012-2016 **ANR Blanc** "Chemokpain 2"

Student management:

- Master II research: 6,
- Thesis: 8,
- Post Doc: 2

Selected Peer-reviewed Publications:

2014:

Van Steenwinckel J, Auvynet C, Sapienza A, Reaux-Le Goazigo A, Combadiere C, Melik Parsadaniantz S (2014) Stromal cell-derived CCL2 drives neuropathic pain states through myeloid cell infiltration in injured nerve. Brain, behavior, and immunity.

Rivat C, Sebaihi S, Van Steenwinckel J, Fouquet S, Kitabgi P, Pohl M, Melik Parsadaniantz S, Reaux-Le Goazigo A (2014) Src family kinases involved in CXCL12-induced loss of acute morphine analgesia. Brain, behavior, and immunity 38:38-52.

Belkouch M, Dansereau MA, Tetreault P, Biet M, Beaudet N, Dumaine R, Chraibi A, Melik-Parsadaniantz S, Sarret P (2014) Functional up-regulation of Nav1.8 sodium channel in Abeta afferent fibers subjected to chronic peripheral inflammation. Journal of neuroinflammation 11:45.

2013

Dauvergne C, Molet J, Reaux-Le Goazigo A, Mauborgne A, Melik-Parsadaniantz S, Boucher Y, Pohl M (2013) Implication of the chemokine CCL2 in trigeminal nociception and traumatic neuropathic orofacial pain. European journal of pain.

Reaux-Le Goazigo A, Van Steenwinckel J, Rostene W, Melik Parsadaniantz S (2013) Current status of chemokines in the adult CNS. Progress in neurobiology 104:67-92.

2012

Van Steenwinckel J, Reaux-Le Goazigo A, Pommier B, Mauborgne A, Dansereau MA, Kitabgi P, Sarret P, Pohl M, Melik Parsadaniantz S (2011) CCL2 released from neuronal synaptic vesicles in the spinal cord is a major mediator of local inflammation and pain after peripheral nerve injury. J Neurosci 31:5865-5875.

Kular L, Rivat C, Lelongt B, Calmel C, Laurent M, Pohl M, Kitabgi P, Melik-Parsadaniantz S, Martinerie C (2012) NOV/CCN3 attenuates inflammatory pain through regulation of matrix metalloproteinases-2 and -9. Journal of neuroinflammation 9:36.

Reaux-Le Goazigo A, Rivat C, Kitabgi P, Pohl M, Melik Parsadaniantz S (2012) Cellular and subcellular localization of CXCL12 and CXCR4 in rat nociceptive structures: physiological relevance. The European journal of neuroscience 36:2619-2631.

2011

Belkouch M, Dansereau MA, Reaux-Le Goazigo A, Van Steenwinckel J, Beaudet N, Chraibi A, Melik-Parsadaniantz S, Sarret P (2011) The chemokine CCL2 increases Nav1.8 sodium channel activity in primary sensory neurons through a Gbetagamma-dependent mechanism. J Neurosci 31:18381-18390.

Rostene W, Dansereau MA, Godefroy D, Van Steenwinckel J, Reaux-Le Goazigo A, Melik-Parsadaniantz S, Apartis E, Hunot S, Beaudet N, Sarret P (2011a) Neurochemokines: a menage a trois providing new insights on the functions of chemokines in the central nervous system. Journal of neurochemistry 118:680-694.

Rostene W, Guyon A, Kular L, Godefroy D, Barbieri F, Bajetto A, Banisadr G, Callewaere C, Conductier G, Rovere C, Melik-Parsadaniantz S, Florio T (2011b) Chemokines and chemokine receptors: new actors in neuroendocrine regulations. Front Neuroendocrinol 32:10-24.

2010

Le Dreau G, Kular L, Nicot AB, Calmel C, Melik-Parsadaniantz S, Kitabgi P, Laurent M, Martinerie C (2010) NOV/CCN3 upregulates CCL2 and CXCL1 expression in astrocytes through beta1 and beta5 integrins. Glia 58:1510-1521.

2009

Abbadie C, Bhangoo S, De Koninck Y, Malcangio M, Melik-Parsadaniantz S, White FA (2009) Chemokines and pain mechanisms. Brain Res Rev 60:125-134.

Guyon A, Skrzydelski D, De Giry I, Rovere C, Conductier G, Trocello JM, Dauge V, Kitabgi P, Rostene W, Nahon JL, Melik Parsadaniantz S (2009) Long term exposure to the chemokine CCL2 activates the nigrostriatal dopamine system: a novel mechanism for the control of dopamine release. Neuroscience 162:1072-1080.

2008

Callewaere C, Fernette B, Raison D, Mechighel P, Burlet A, Calas A, Kitabgi P, Parsadaniantz SM, Rostene W (2008) Cellular and subcellular evidence for neuronal interaction between the chemokine

stromal cell-derived factor-1/CXCL 12 and vasopressin: regulation in the hypothalamo-neurohypophysial system of the Brattleboro rats. Endocrinology 149:310-319.

Dansereau MA, Gosselin RD, Pohl M, Pommier B, Mechighel P, Mauborgne A, Rostene W, Kitabgi P, Beaudet N, Sarret P, Melik-Parsadaniantz S (2008) Spinal CCL2 pronociceptive action is no longer effective in CCR2 receptor antagonist-treated rats. Journal of neurochemistry 106:757-769.

Gosselin RD, Dansereau MA, Pohl M, Kitabgi P, Beaudet N, Sarret P, Melik Parsadaniantz S (2008) Chemokine network in the nervous system: a new target for pain relief. Curr Med Chem 15:2866-2875.

Guyon A, Skrzydelski D, Rovere C, Apartis E, Rostene W, Kitabgi P, Melik Parsadaniantz S, Nahon JL (2008) Stromal-cell-derived factor 1alpha /CXCL12 modulates high-threshold calcium currents in rat substantia nigra. The European journal of neuroscience 28:862-870.

Melik-Parsadaniantz S, Rostene W (2008) Chemokines and neuromodulation. J Neuroimmunol 198:62-68.

2007

Callewaere C, Banisadr G, Rostene W, Parsadaniantz SM (2007) Chemokines and chemokine receptors in the brain: implication in neuroendocrine regulation. Journal of molecular endocrinology 38:355-363.

Rostene W, Kitabgi P, Parsadaniantz SM (2007) Chemokines: a new class of neuromodulator? Nature reviews 8:895-903.

Skrzydelski D, Guyon A, Dauge V, Rovere C, Apartis E, Kitabgi P, Nahon JL, Rostene W, Parsadaniantz SM (2007) The chemokine stromal cell-derived factor-1/CXCL12 activates the nigrostriatal dopamine system. Journal of neurochemistry 102:1175-1183.

2006

Callewaere C, Banisadr G, Desarmenien MG, Mechighel P, Kitabgi P, Rostene WH, Melik Parsadaniantz S (2006) The chemokine SDF-1/CXCL12 modulates the firing pattern of vasopressin neurons and counteracts induced vasopressin release through CXCR4. Proceedings of the National Academy of Sciences of the United States of America 103:8221-8226.

Guyon A, Skrzydelsi D, Rovere C, Rostene W, Parsadaniantz SM, Nahon JL (2006) Stromal cell-derived factor-1alpha modulation of the excitability of rat substantia nigra dopaminergic neurones: presynaptic mechanisms. Journal of neurochemistry 96:1540-1550.

2005

Banisadr G, Gosselin RD, Mechighel P, Kitabgi P, Rostene W, Parsadaniantz SM (2005a) Highly regionalized neuronal expression of monocyte chemoattractant protein-1 (MCP-1/CCL2) in rat brain: evidence for its colocalization with neurotransmitters and neuropeptides. The Journal of comparative neurology 489:275-292.

Banisadr G, Gosselin RD, Mechighel P, Rostene W, Kitabgi P, Melik Parsadaniantz S (2005b) Constitutive neuronal expression of CCR2 chemokine receptor and its colocalization with neurotransmitters in normal rat brain: functional effect of MCP-1/CCL2 on calcium mobilization in primary cultured neurons. The Journal of comparative neurology 492:178-192.

Banisadr G, Rostene W, Kitabgi P, Parsadaniantz SM (2005c) Chemokines and brain functions. Current drug targets 4:387-399.

Gosselin RD, Varela C, Banisadr G, Mechighel P, Rostene W, Kitabgi P, Melik-Parsadaniantz S (2005) Constitutive expression of CCR2 chemokine receptor and inhibition by MCP-1/CCL2 of GABA-induced currents in spinal cord neurones. Journal of neurochemistry 95:1023-1034.

Guyon A, Banisadr G, Rovere C, Cervantes A, Kitabgi P, Melik-Parsadaniantz S, Nahon JL (2005) Complex effects of stromal cell-derived factor-1 alpha on melanin-concentrating hormone neuron excitability. The European journal of neuroscience 21:701-710.

2004

Jardinaud F, Banisadr G, Noble F, Melik-Parsadaniantz S, Chen H, Dugave C, Laplace H, Rostene W, Fournie-Zaluski MC, Roques BP, Popovici T (2004) Ontogenic and adult whole body distribution of aminopeptidase N in rat investigated by in vitro autoradiography. Biochimie 86:105-113.

2003

Banisadr G, Skrzydelski D, Kitabgi P, Rostene W, Parsadaniantz SM (2003) Highly regionalized distribution of stromal cell-derived factor-1/CXCL12 in adult rat brain: constitutive expression in cholinergic, dopaminergic and vasopressinergic neurons. The European journal of neuroscience 18:1593-1606.

2002

Banisadr G, Fontanges P, Haour F, Kitabgi P, Rostene W, Melik Parsadaniantz S (2002a) Neuroanatomical distribution of CXCR4 in adult rat brain and its localization in cholinergic and dopaminergic neurons. The European journal of neuroscience 16:1661-1671.

Banisadr G, Queraud-Lesaux F, Boutterin MC, Pelaprat D, Zalc B, Rostene W, Haour F, Parsadaniantz SM (2002b) Distribution, cellular localization and functional role of CCR2 chemokine receptors in adult rat brain. Journal of neurochemistry 81:257-269.