Laurence Lanfumey-Mongrédien

Born on 7/11/54 (France) Married, three children PhD Neurophysiology: *Paris VI-1981* Doctorat d'Etat es-Sciences (HDR): *Paris VI-1988*



INSERM : Directeur de Recherche (DR2) Team Leader: Pathophysiology of anxio-depressive and addictive disorders. "Centre de Psychiatrie et Neuroscience" INSERM 894 CPN Faculté de Médecine Pitié-Salpêtrière 91, Bd de l'Hôpital - 75634 Paris Cedex 13 tel: 01 40 77 97 07 fax: 01 40 77 97 90 e-mail: laurence.lanfumey@upmc.fr

Research Activity

1978-1979: INSERM U 52 (Lyon, Pr. M. Jouvet)
1979-1981: INSERM U 3 (Paris, Pr. J. Scherrer)
1981-1982: Dept of Psychology, Princeton Univ. (Princeton, USA, Pr. B.L. Jacobs) Dept of Psychiatry, Yale Univ. (New-Haven, USA, Pr. G.K. Aghajanian)
1982-1984: INSERM U 3 (Paris, Pr. J. Scherrer)
1984-1986: INSERM U 29 (Paris, Dr. Y. Ben-Ari)
1985-2008: INSERM U 288/UMR 677 (Paris, Dr. M. Hamon)
2008- Now: INSERM U 894 (Paris, Dr. Epelbaum)

Expertise and Consultancy

Expertise domains

Preclinical research in Neurosciences and Molecular Neuropsychopharmacolgy *Expertise activities*

- Expert at the Expertise Collective at Inserm (Mésuage dse medicaments Psychotropes), 2010-2011
- Expert at European Commissions within the frame of i) the 5°, 6° and 7° FWP, ii) ERC and iii) European organizations (Wellcome Trust, UK; MRC, UK; MIUR, IT; Spanish Ministry of Health, S).
- Expert in jury for University positions (Bordeaux, Nancy, Lille..)
- Paired reviewer for specialized scientific publications
- Editor board for Neurochemical Research (2004-2010)
- Editor board for Naunyn-Schmiedeberg Archives of Pharmacology (2011-)
- Editor board for Neuroscience (2012-)
- Editor board for Courrier des Addictions (2012-)
- Editorial Board of Frontiers in Neuropharmacology (2012-)

Scientific Societies

- Société des Neurosciences (elected at the Administrative Council 2005-2009, and at the Nominating Committee 2011-2015),
- European Collegium of Neuropsychopharmacology (ECNP) (member of the External Review Board and of the Nominating Committee)
- Association Française de Psychiatrie Biologique et de Neuropsychopharmacologie
- Society for Neurosciences (US).
- Société Française de Pharmacologie

Teaching (2000-now)

• DU Pharmacologie des Médicaments Psychotropes, Faculté de Médecine Pierre et Marie Curie, site Pitié Salpêtrière, Paris VI France

- M2R Spécialité : Bioingénierie-Pharmacologie Faculté de Pharmacie, Université Nancy I France
- M2R Neuroscience (3C) UPMC Paris 6 France
- EURON (European Graduate School of Neuroscience)

Prizes

1994: Lauréate du Prix du Collegium Internationale NeuroPsychoPharmacologicum 2002: Merck Sharp and Dohme Medical School Grant

10 major publications (since 2000)

- Froger N, Gardier Am, Moratalla R, Alberti I, Lena I, Boni C, De Felipe C, Rupniak Nmj, Hunt SP, Jacquot C, Hamon M, <u>Lanfumey L.</u> (2001) 5-Hydroxytryptamine (5-HT)_{1A} autoreceptor adaptive changes in substance P (NK1) receptor knockout mice mimic antidepressant-induced desensitization. *J Neurosci* 21:8188-8197.
- Mannoury La Cour C, Boni C, Hanoun N, Lesch KP, Hamon M, Lanfumey L. (2001) Functional consequences of 5-HT transporter gene disruption on 5-HT_{1A} receptor- mediated regulation of dorsal raphe and hippocampal cell activity. *J Neurosci* 21:2178-2185.
- Froger N, Palazzo E, Boni C, Hanoun N, Saurini F, Joubert C, Dutriez-Casteloot I, Enache M, Maccari S, Barden N, Cohen-Salmon C, Hamon M, <u>Lanfumey L</u> (2004) Neurochemical and behavioral alterations in glucocorticoid receptor-impaired transgenic mice after chronic mild stress. *J Neurosci* 24:2787-2796.
- Mannoury La Cour C, El Mestikawy S, Hanoun N, Hamon M, Lanfumey L (2006) Regional differences in the coupling of 5-HT_{1A} receptors to G proteins in the rat brain. *Mol Pharmacol* 70:1013-1020.
- Trigo JM, Renoir T, Lanfumey L, Hamon M, Lesch KP, Robledo P, Maldonado R. (2007) MDMA selfadministration is abolished in serotonin transporter knockout mice. *Biol Psychiatry* 62:669-679.
- Lanfumey L, Mongeau R, Cohen-Salmon C, Hamon M. (2008) Corticosteroid-serotonin interactions in the neurobiological mechanisms of stress-related disorders. *Neurosci Biobehav Rev* 32:1174-1184.
- Boulle F, Van Den Hove DLA, Jakob S, Rutten BP, Hamon M, Van Os J , Lesch Kp, <u>Lanfumey L</u>, Steinbusch HW, Kenis G. (2012) Epigenetic regulation of the *Bdnf* gene: implications for psychiatric disorders *Mol Psychiatry* 17:584-596
- Massart R, Mongeau R, <u>Lanfumey L</u>, (2012) Beyond the monoaminergic hypothesis: neuroplasticity and epigenetic changes in a transgenic mouse model of depression. *Philos Trans R Soc Lond B Biol Sci.* 367:2485-94
- Martin CBP, Ramond F, Farrington DT, Aguiar ASJr, Chevarin C, Berthiau AS, Boude S, Lanfumey L, Herrick-Davis K, Hamon M, Madjar JJ, Mongeau R (2013) RNA splicing and editing modulation of 5-HT2C receptor function: relevance to anxiety and aggression in VGV mice. *Mol Psychiatry* 2012 Dec 18. doi: 10.1038/mp.2012.171. [Epub ahead of print]
- Molet J, Herve D, Thiebot MH, Hamon M, <u>Lanfumey L</u>. (2013) Juvenile ethanol exposure increases rewarding properties of cocaine and morphine in adult DBA/2J mice. *Eur Neuropsychopharmacol* (in press)

Short CV

Laurence Lanfumey (PhD), 58, is the leader of the team entitled "Pathophysiology of mood disorders and addiction" of the Research Centre of Psychiatry and Neurosciences (UMR 894). The goal of her research team is to analyze the roles played by environmental and genetic factors, as well as the interactions between these components, in the etiology and treatment of psychiatric disorders such as depression, anxiety and addiction. The main objective of the team is to identify cellular and molecular mechanisms underlying these pathologies which are associated with major dysfunctions of the monoamine and HPA systems and characterized by cellular plasticity alterations of different brain areas and in particular the hippocampus. The current research is focused on i) the involvement of 5-HT in the genesis of anxiety-related disorders, ii) the role of neuroplasticity in depressive-like and addiction disorders, and iii) the epigenetic mechanisms associated with gene regulation in rodent depression-like models and addiction. She is co author of 105 papers and reviews in international journals (h index=36). Projects of the team have been and are still supported by national and international funding agencies. She was previously coordinator and co-coordinator of two European consortiums (FP4 and FP6). She participated as PI in two others (FP5 and FP7). She is now involved in a European PhD program (EURON). She was an elected member of the scientific council of the Société des Neurosciences (2006-2009) and is currently a member of the Scientific Committee of the European College of Neuropsychopharmacology (ECNP), where she acts in the External Review Board and in the Nomination Committee. She acts also as Editor at Naunyn-Schmiedeberg Archives of Pharmacology, at Neuroscience, and at the Courrier des Addictions.