

**Christelle PEYRON**

Director of research,

Team leader of the research group on narcolepsy

Co-leader of the SLEEP lab since January 2021

**Centre de Recherche en Neurosciences de Lyon**

**(CRNL), SLEEP lab,**

UMR5292 CNRS / INSERM U1028 / Université Lyon1

CH Le Vinatier, NeuroCampus Michel Jovet

95 bd Pinel, 69675 BRON

Tel: +33 481 10 65 81 ; peyron@sommeil.univ-lyon1.fr

**ORCID ID : 0000-0002-9317-3546**

<https://lyonsleeplab.cnrs.fr/>

<https://www.crnl.fr/fr/equipe/sleep>

## DIPLOMA

2001 : **Habilitation to direct research**, University Lyon1

1996 : **PhD in Neuroscience**, University Lyon1

1992 : **Master degree in Neuroscience**, University Lyon1

## PROFESSIONNEL EXPERIENCES

01/2021 - **co-Director of the SLEEP lab at CRNL,**

2020 - **CNRS Director of research, leader on NARCOLEPSY,**

2002-2020 **CNRS Tenured-researcher, leader on NARCOLEPSY,**

1999-2000 **Post-doctoral fellow**, Stanford University, California (Dir. E Mignot)

1996-1999 **Post-doctoral fellow**, Stanford University, California (Dir. TS Kilduff)

1992-1996 **Doctoral student**, University Lyon1

## VISIBILITY

42 publications, 18 reviews/commentaries, 8 book chapters, 1 keynote lecture et 41 invited oral presentations (including 22 at international conferences)

## DISTINCTIONS

2000 : Young investigator award for excellence, Sleep Research Society (USA)

1998 : Young investigator award, American Sleep Disorder Association, 1<sup>st</sup> price.

1997 : Young investigator award, American Sleep Disorder Association, with honors.

## GRANTS and CONTRACTS

Twenty contracts including seventeen as a PI. Among them, 7 funding are from academic institutions, 10 from association or foundations and 3 from private companies (ConfoTherapeutics, Belgium ; Bioprojet Biotech, France).

Details for the last 5 years (role, amount attributed to CP) :

2022-2026: ANR (French research agency), CATAPLexSLEEP (**Coordinator**, 750k€)

2019-2025 : ANR NarcoT1 de type PRC (**PI**, 220 320€)

2019-2020 : French Foundation for rare diseases (**PI**, 16 817€)

2018-2020 : Collaborative contrat with CONFOTherapeutics (**PI**, 144 000€)

2018-2022 : Collaborative contrat with Bioprojet Biotech (**PI**, 96 132€)

2016-2018 : French foundation of brain research (FRC) 2016 (**PI**, 50 000€).

2014-2019 : ANR ImmunitySleep de type PRC (**PI\***, 131 000€)

2013-2017 : ANR optoREM (**Partner**, 90 000€)

## ADMINISTRATIVE DUTIES for RESEARCH and EDUCATION

\* Board member of the European network on narcolepsy and hypersomnia (EUNN) and chair of the scientific committee

- \* Associate editor of the Editorial Board of Sleep and Circadian Rhythms at Frontiers in Neuroscience
- \* Member of the management committee of the French society for sleep research and Medicine SFRMS (2015-2017).
- \* Member of management committee of the master in Neuroscience (University Lyon1) 2004-2017
- \* Co-organizer of the Neuro-conferences for the master in Neuroscience (University Lyon1) 2004-2017

#### MAIN ACTIVITIES as SCIENTIFIC EXPERT

- \* Expert for the European Community (MSCA, 2022)
- \* Nominated expert of the evaluation committee for neuroscience at INSERM (2016-2021);
- \* Consultant for Bioprojet biotech and Jazz Pharma
- \* Recruitment jury for 3 assistant-professors and a chair for excellence
- \* Jury for 8 French and 3 European thesis defenses and 3 HDR
- \* Expert for the program « investissements et Emergence », Paris
- \* Expert for the French funding research agency (ANR);
- \* Evaluation of symposia applications for the European sleep society (4 years)
- \* Evaluation of abstracts for the French, European and world sleep meetings (2014- 2022)
- \* Reviewer of manuscripts for NatureComm, J neurosci, Neuron, Sleep, JSR, Frontiers in Neuroci. (env 15/year)
- \* Member of 8 thesis committee.

#### MAIN SCIENTIFIC DUTIES – ORGANISATION Of WORKSHOPS and CONFERENCES

- \* Chair of the EUNN scientific committee (2021-)
- \* Member of the local committee for the Neurofrance meeting 2023 (French society for neuroscience)
- \* Organizer for the SFRMS-ESRS miniconference on sleep at the FENS meeting (July 9, 2022)
- \* Member of Labex Cortex 2 (2020-2025)
- \* Member of the scientific committees of « The SleepingBrain » international workshop, Paris (4 octobre 2019)
- \* Member of the scientific committee of the SFRMS (2018-2022)
- \* Elected member of the scientific committee of the European sleep research society (2008-2012)
- \* Organization committee for the international congress « The paradox of sleep» 2003.

#### PUBLIC INTERVENTIONS

Interviews for vulgarisation magazines (Science et Vie, La recherche, Madame Figaro magazines) and radio programs (Nostalgie-Lyon et Chérie FM)

Interventions in secondary schools

Debate at the « Nuit des Idées 2018 » in Toronto (2018) invited by the French embassy

#### TEACHING DUTIES

- \* Miniconference « Physiopathology of sleep-wake cycle », Master 2 NeuroSchool Marseille, 2020.
- \* MasterClass, European narcolepsy network, Visioconference, september 2020.
- \* MasterClass, European narcolepsy network, Bern (Switzerland), mai 2019.
- \* School on translational research in Neuroscience, ITMO NNP, Bordeaux, France 2016.
- \* Teaching course, WorldSleep meeting, Istanbul, Turkey, 2015

#### PUBLICATIONS

ORIGINAL ARTICLES IN PEER REVIEWED JOURNALS
---

- 1.
2. Arthaud S\*, Villalba M\*, Blondet C, Morel AL, **Peyron C**. Effects of sex and estrous cycle on sleep and cataplexy in narcoleptic mice. *SLEEP* 2022, doi:10.1093/sleep/zsac089.
3. Bernard-Valnet R\*, Frieser D\*, Nguyen XH\*, Khajavi L, Quériault C, Arthaud S, Melzi S, Fusade-Boyer M, Masson F, Zytnicki M, Saoudi A, Dauvilliers Y, **Peyron C**, Bauer J, Liblau R. Influenza vaccination induces autoimmunity against orexin neurons in a mouse model for narcolepsy. *Brain* 2022, <https://doi.org/10.1093/brain/awab455>.

4. Melzi S, Morel AL, Scoté-Blachon C, Liblau R, Dauvilliers Y, **Peyron C**. Histamine in murine narcolepsy: what do genetic and immune models tell us? *Brain Pathol* 2021, doi: 10.1111/(ISSN)1750-3639.
5. Arthaud S, Libourel PA, Luppi PH, **Peyron C**. Insights on paradoxical (REM) sleep homeostatic regulation in mice using an innovative automated sleep deprivation method. *SLEEP*. 2020, Jan 12. doi: 10.1093/sleep/zsaa003.
6. Lacroix MM, de Lavilléon G, Lefort J, El Kanbi K, Bagur S, Laventure S, Dauvilliers Y, **Peyron C**, Benchenane K. Improved sleep scoring in mice reveals human-like stages. *BiorRxiv* 2018, 489005.
7. **Peyron C**, Rampon C, Petit JM, Luppi PH. Sub-regions of the Dorsal Raphé nucleus receive different inputs from the brainstem. *Sleep Med*. 2018, 49C:53-63.
8. Roman A, Meftah S, Arthaud S, Luppi PH, **Peyron C**. The inappropriate occurrence of REM sleep in narcolepsy is not due to a defect in homeostatic regulation of REM sleep. *SLEEP* 2018, 41(6). doi: 10.1093/sleep/zsy046.
9. Bernard-Valnet R, Yshii L, Quériault C, Nguyen XH, Arthaud S, Rodrigues M, Canivet A, Morel AL, Matthys A, Bauer J, Pignolet B, Dauvilliers Y, **Peyron C**, Liblau R. CD8 T cell-mediated killing of orexinergic neurons induces a narcolepsy-like phenotype in mice. *Proc Natl Acad Sci U S A* 2016, 113(39):10956-10961.
10. Marignier R, Ruiz A, Cavagna S, Nicolle A, Watrin C, Touret M, Parrot S, Malleret G, **Peyron C**, Benetollo C, Auvergnon N, Vukusic S, Giraudon P. Neuromyelitis optica study model based on chronic infusion of auto-antibodies in rat cerebrospinal fluid. *J Neuroinflammation* 2016, 13(1):111.
11. Renouard L, Billwiller F, Ogawa K, Clément O, Camargo N, Abdelkarim M, Gay N, Scoté-Blachon C, Touré R, Libourel PA, Ravassard P, Salvert D, **Peyron C**, Claustrat B, Léger L, Salin P, Malleret G, Fort P, Luppi PH. The supramammillary nucleus and the claustrum activate the cortex during REM sleep. *Science Advances* 2015, 1(3):e1400177.
12. Joseph MA, Fraize N, Ansoud-Lerouge J, Sapin E, **Peyron C**, Arthaud S, Libourel PA, Parmentier R, Salin PA\*, Malleret G\*. Differential involvement of the dentate gyrus in memory forms requiring, or not requiring, the processing of interference. *Plos One* 2015, 10(11):e0142065.
13. Sapin E, **Peyron C**, Roche F, Gay N, Carcenac C, Savasta M, Levy P\*, Dematteis M\*. Chronic intermittent hypoxia induces chronic low-grade neuroinflammation in the dorsal hippocampus of mouse. *SLEEP* 2015, 38(10):1537-1546.
14. Arthaud S, Varin C, Gay N, Libourel PA, Fort P, Luppi PH, **Peyron C**. Paradoxical (REM) Sleep Deprivation and rebound in mice: Polygraphic recordings and Hypothalamic Neuronal Activation. *J Sleep Res*. 2015, 24(3):309-319.
15. Dauvilliers Y, Bauer J, Rigau V, Lalloyer N, Labauge P, Carlander B, Liblau R, **Peyron C**, Lassmann H. Hypothalamic immunopathology in anti-Ma-associated diencephalitis with narcolepsy-cataplexy. *JAMA Neurol*. 2013, 70(10):1305-1310.
16. Sapin E, Gay N, **Peyron C**, Levy P, Dematteis M. Effets de l'hypoxie intermittente chronique sur différentes populations cellulaires cérébrales. *Neurophysiologie Clinique/Clinical Neurophysiology*. 2012; 42(3):145–146.
17. **Peyron C**, Valentin F, Bayard S, Hanriot L, Bedetti C, Rousset B, Luppi PH, Dauvilliers Y. Melanin concentrating hormone in central hypersomnia. *Sleep Med*. 2011 ; 12 :768-772.
18. Sapin E, Bérod A, Léger L, Herman PA, Luppi PH, **Peyron C**. A very large number of GABAergic neurons are activated in the tuberal hypothalamus during paradoxical (REM) sleep hypersomnia. *PLoS One* 2010; 5(7):e11766.
19. Léger L, Sapin E, Goutagny R, **Peyron C**, Salvert D, Fort P, Luppi PH. Dopaminergic neurons expressing Fos during waking and paradoxical sleep in the rat. *J Chem Neuroanat*. 2010; 39(4):262-271.
20. **Peyron C**, Sapin E, Leger L, Luppi PH and Fort P. Role of the Melanin-Concentrating Hormone neuropeptide in sleep regulation. *Peptides* 2009, 30(11) : 2052-2059. Revue

21. Hanriot L\*, Keime C\*, Gay N, Faure C, Dossat C, Wincker P, Scote-Blachon C, **Peyron C**, Gandrillon O. A combination of LongSAGE with Solexa sequencing is well suited to explore the depth and the complexity of transcriptome. *BMC Genomics* 2008, 9(1) :418.
22. Hanriot L, Camargo N, Courau AC, Leger L, Luppi PH, **Peyron C**. Characterization of the Melanin-Concentrating Hormone neurons activated during paradoxical sleep hypersomnia in rats. *J Comp Neurol.*, 2007, 505(2) : 147-157.
23. Terao A, Wisor JP, **Peyron C**, Apte-Deshpande A, Wurts SW, Edgar DM, Kilduff TS. Gene expression in the rat brain during sleep deprivation and recovery sleep: an Affymetrix GeneChip study. *Neuroscience* 2006, 137(2):593-605.
24. Hairston IS, **Peyron C**, Denning DD, Ruby NF, Flores J, Sapolsky RM, Heller HC, O'Hara BF. Sleep deprivation effects on growth factor expression in neonatal rats: A potential role for BDNF in the mediation of delta power. *J Neurophysiol.* 2004, 91(4) : 1586-1595.
25. Verret L\*, Goutagny R\*, Fort P, Cagnon L, Salvart D, Leger L, Boissard R, Salin P, **Peyron C**, Luppi PH. A role of melanin-concentrating hormone producing neurons in the central regulation of paradoxical sleep. *BMC Neurosci.* 2003, 4(1):19-29.
26. Hairston IS, Ruby NF, Brooke S, **Peyron C**, Denning DP, Heller HC and RM Sapolsky. Sleep deprivation elevates plasma corticosterone levels in neonatal rats. *Neurosci Lett.* 2001, 315: 29-32.
27. **Peyron C\***, Faraco J\*, Rogers W, Ripley B, Overeem S, Charnay Y, Nevsimalova S, Aldrich M, Reynolds D., Albin R., Li R., Hungs M., Pedrazzoli M., Padigaru M, Kucherlapati M, Fan J, Maki R, Lammers G.J., Bouras C., Kucherlapati R., Nishino S. and E. Mignot. A mutation in a case of early onset narcolepsy and a generalized absence of hypocretin peptides in human narcoleptic brains. *Nature Med.* 2000, 6(9): 991-997.
28. Terao A\*, **Peyron C\***, Ding J, Wurts SW, Edgar DM, Heller HC and TS Kilduff. Preprohypocretin (prepro-orexin) expression is unaffected by short-term sleep deprivation in rats and mice. *SLEEP* 2000, 23(7): 867-874.
29. Gervasoni D\*, **Peyron C\***, Rampon C, Barbagli B, Chouvet G, Urbain N, Fort P and PH Luppi. Role and origin of the GABAergic innervation of dorsal raphe serotonergic neurons. *J. Neurosci.* 2000, 20(11): 4217-4225.
30. Horvath TL, **Peyron C**, Diano S, Ivanov A, Aston-Jones G, Kilduff TS and AN van den Pol. Hypocretin (orexin) activation and synaptic innervation of the Locus Coeruleus noradrenergic system. *J. Comp. Neurol.* 1999, 415(2): 145-159.
31. Rampon C, **Peyron C**, Gervasoni D, Pow DV, Luppi PH, Fort P. Origins of the glycinergic inputs of the locus coeruleus and dorsal raphe nuclei: A study combining retrograde tracing with glycine immunohistochemistry. *Eur J Neurosci.* 1999, 11: 1058-1066.
32. **Peyron C**, Tighe DK, van den Pol AN, de Lecea L, Heller HC, Sutcliffe JG and TS Kilduff. Neurons containing the hypocretin (orexin) precursor project to multiple neuronal systems. *J Neurosci.* 1998, 18(23): 9996-10015.
33. Fort P, Rampon C, Gervasoni D, **Peyron C** and PH Luppi. Anatomical Demonstration of a Medullary Enkephalinergic Pathway Potentially Implicated in the Oro-Facial Muscle Atonia of Paradoxical Sleep in the Cat. *Sleep Research Online* 1998, 1(3): 102-108.
34. de Lecea L\*, Kilduff TS\*, **Peyron C**, Gao XB, Foye PE, Danielson PE, Fukuhara C, Battenberg ELF, Gautvik VT, Bartlett II FS, Frankel WN, van den Pol AN, Bloom FE, Gautvik KM and JG Sutcliffe. The hypocretins: hypothalamus-specific peptides with neuroexcitatory activity. *Proc Natl Acad Sci U S A* 1998, 95: 322-327.
35. **Peyron C**, Petit JM, Rampon C, Jouvet M and PH Luppi. Forebrain afferents to the rat dorsal raphe nucleus using retrograde and anterograde tract-tracing techniques. *Neuroscience* 1998, 82: 443-470.
36. Didier-Bazes M, Voussinos B, Aguera M, **Peyron C**, Akaoka H and MF Belin. Specific potentialities of embryonic rat serotonergic neurons to innervate different periventricular targets in the adult brain. *J Comp Neurol.* 1997, 382: 29-45.
37. Hermann DM, Luppi PH, **Peyron C**, Hinckel P and M Jouvet. Afferent projections to the rat nuclei raphe magnus, pallidus and nuclei reticularis and gigantocellularis pars alpha demonstrated by iontophoretic application of cholera toxin (subunit b). *J Chem Neuroanat.* 1997, 13: 1-21.

38. Rampon C, Luppi PH, Fort P, **Peyron C** and M. Jouvet. Distribution of glycine-immunoreactive cell bodies and fibers in the rat brain. *Neuroscience* 1996, 75: 737-755.
  39. Hermann DM, Luppi PH, **Peyron C** and P Hinckel. Forebrain projections of the rat rostral raphe magnus revealed by cholera toxin b. *Neurosci Lett.* 1996, 216: 151-154.
  40. Rampon C, **Peyron C**, Petit JM, Fort P, Gervasoni D, Luppi PH. Origin of the glycinergic afferent projections to the trigeminal motor nucleus of the rat. *NeuroReport* 1996, 7: 3081-3085.
  41. **Peyron C**, Luppi PH, Fort P, Rampon C, Jouvet M. Lower brainstem catecholamine afferents to the rat dorsal raphe nucleus. *J Comp Neurol.* 1996, 364: 402-413.
  42. **Peyron C**, Luppi PH, Kitahama K, Hermann DM, Fort P, Jouvet M. Origin of the dopaminergic innervation of the rat dorsal raphe nucleus. *NeuroReport* 1995, 6: 2527-2531.
  43. Petit JM, Luppi PH, **Peyron C**, Rampon C, Jouvet M. VIP-like immunoreactive projections from the dorsal and caudal linear raphe nuclei to the bed nucleus of the stria terminalis demonstrated by a double immunohistochemical method in the rat. *Neurosci Lett.* 1995, 193: 77-80.
- \* The authors have contributed equally to the work.

REVIEWS AND COMMENTARIES
--------------------------

44. Melzi S, Prévot V, **Peyron C**. Precocious puberty in narcolepsy type 1: Orexin loss and/or neuroinflammation, which is to blame? *Sleep Med Rev.*2022, [doi :10.1016/j.smrv.2022.101683](https://doi.org/10.1016/j.smrv.2022.101683).
45. Villaba M, Girardeau G, Peyron C. Rôle du système limbique dans le déclenchement des cataplexies dans la narcolepsie de type 1. Role of the limbic system in triggering cataplexy in narcolepsy type 1. *Médecine du sommeil*, 2022, [doi.org/10.1016/j.msom.2022.10.005](https://doi.org/10.1016/j.msom.2022.10.005)
46. **Peyron C** & Rampon C. Young neurons tickle memory during REM sleep. *Neuron.* 2020, August 5, 107. <https://doi.org/10.1016/j.neuron.2020.07.018> Preview sur invitation.
47. **Peyron C**, Arthaud S, Villalba M, Fort P. Defining and measuring paradoxical (REM) sleep in animal models of sleep disorders. *Current opinion in Physiology* 2020. June 15, 203-209. Revue sur invitation
48. Adamantidis AR, Schmidt M, Carter ME, Burdakov D, **Peyron C**, Scammell TE. A circuit perspective on narcolepsy. *SLEEP.* 2020, 43(5):zsz296. doi: 10.1093/sleep/zsz296.
49. Barateau L, Liblau R, **Peyron C**, Dauvilliers Y. Narcolepsy type 1 as an Autoimmune Disorder: Evidence, and Implications for Pharmacological Treatment. *CNS Drugs* 2017, 31(10):821-834. Revue (IF: 4,2; 4 citations).
50. **Peyron C**, Kilduff TS. Mapping the Hypocretin/orexin Neuronal System: An Unexpectedly Productive Journey. *J Neurosci.* 2017, 37(9):2268-2272.
51. Luppi PH, **Peyron C**, Fort P. Not a single but multiple populations of GABAergic neurons control sleep. *Sleep Med Rev.* 2017, 32:85-94.
52. **Peyron C**, Seugnet L, Lin JS. Commentary: A Quest for a novel peripheral biomarker for narcolepsy. *CNS Neuroscience & Therapeutics* 2015, 21(9):681-682.
53. Bernard-Valnet R, Queriaux C, Yshii LM, Pignolet B, Dauvilliers Y, **Peyron C**, Liblau R. Investigation des processus auto-immuns dans la narcolepsie avec cataplexie. *Revue Neurologique* 2015, 171:A170-A171.
54. Luppi PH, Clément O, Sapin E, Garcia SV, **Peyron C**, Fort P. Animal models of REM dysfunctions : what they tell us about the cause of narcolepsy and RBD ? *Arch Ital Biol.* 2014, 152(2-3): 118-128. Revue.
55. Luppi PH, **Peyron C**, Fort P. Role of MCH Neurons in Paradoxical (REM) Sleep Control. *SLEEP* 2013, 36(12): 1775-1776.
56. Pałasz A, Lapray D, **Peyron C**, Rojczyk-Gołębiowska E, Skowronek R, Markowski G, Czajkowska B, Krzystanek M, Wiaderkiewicz R. Dual orexin receptor antagonists - promising agents in the treatment of sleep disorders. *Int J Neuropsychopharmacol.* 2013, 23:1-12.

57. Luppi PH, Clement O, Sapin E, **Peyron C**, Gervasoni D, Léger L, Fort P. Brainstem mechanisms of paradoxical (REM) sleep generation. *Pflugers Arch*. 2012; 463(1):43-52.
58. Luppi PH, Clément O, Sapin E, Gervasoni D, **Peyron C**, Léger L, Salvert D, Fort P. The neuronal network responsible for paradoxical sleep and its dysfunctions causing narcolepsy and rapid eye movement (REM) behavior disorder. *Sleep Med Rev*. 2011; 15(3):153-163.
59. Luppi PH, Gervasoni D, Verret L, Goutagny R, **Peyron C**, Salvert D, Leger L, Fort P. Paradoxical (REM) sleep genesis: The switch from an aminergic-cholinergic to a GABAergic-glutamatergic hypothesis. *J Physiol Paris* 2006, 100(5-6) : 271-283.
60. Goutagny R, Verret L, Fort P, Salvert D, Léger L, Luppi P-H, **Peyron C**. Posterior hypothalamus and regulation of vigilance states. *Arch Ital Biol*. 2004, 142(4): 487-500.
61. Luppi PH, Gervasoni D, Boissard R, Verret L, Goutagny R, **Peyron C**, Salvert D, Leger L, Barbagli B, Fort P. Brainstem structures responsible for paradoxical sleep onset and maintenance. *Arch Ital Biol*. 2004, 142(4):397-411.
62. **Peyron C** & Charnay Y. Hypocrétines/Orexines et Narcolepsie : de la molécule à la pathologie. *Revue Neurologique (Paris)* 2003, 159 : 6S35-6S41.
63. Kilduff TS & **C Peyron**. The Hypocretin/Orexin Ligand-Receptor System: Implications for Sleep and Sleep Disorders. *Trends Neurosci*. 2000, 23(8): 359-365.

BOOK CHAPTERS
---------------

Luppi PH, **Peyron C**. Neurobiologie du sommeil (Chapitre 2). *Dans : Les troubles du sommeil-3e édition*, (Y Dauvilliers, Ed) Elsevier Masson (2019) : pp.14-27.

Luppi PH, **Peyron C**, Fort P. Neuroanatomical and neurochemical systems involved in paradoxical sleep (PS) génération. *In Handbook of Sleep Research* (H C Dringenberg Ed) Elsevier (2019).

**Peyron C**. La neurorégulation du sommeil et de l'endormissement. *Dans : Prise en charge de l'insomnie. (S Royant-Parola, I Poirot, A Brion Eds)*. Elsevier Masson MediGuides (2017) pp. 22-26.

Luppi PH, Clement O, **Peyron C**, Fort P. Neurobiology of REM sleep. *In : Oxford Textbook of Sleep Disorders, (2017) in press*.

**Peyron C**. Is human narcolepsy a neurodegenerative disorder ? *In : Narcolepsy: Pathophysiology, Diagnosis, and Treatment, (C R Baumann, CL Bassetti, TE Scammell Eds)*. Springer (2011) pp27-33.

**Peyron C**. Molecular characterization of hypocretin/orexin and MCH neurons : relevance to narcolepsy. *In : Narcolepsy and hypersomnia (C Bassetti, M Billiard and E Mignot Eds)*. Informa healthcare USA (2007) pp211-218.

Luppi P-H, **Peyron C**, Rampon C., Gervasoni D., Barbagli B., Boissard R. and Fort P. Norepinephrine and REM sleep. *(B.N. Mallick and S. inoue Eds)*. Narosha Publishing House (1999) pp 107-122.

Luppi P-H., **Peyron C**, Rampon C., Gervasoni D., Barbagli B., Boissard R. and Fort P. Inhibitory mechanisms in the raphe dorsalis and locus coeruleus during sleep. *In Handbook of behavioral state control: cellular and molecular mechanisms (R. Lydic and H.A. Baghdoyan Eds)*. CRC Press, New-York (1998), pp 195-211.