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PERSONAL

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EDUCATION

1992-1996	Postdoctoral. The Scripps Research Institute, La Jolla, CA
1991	Ph.D. Molecular Biology. University of Barcelona. Spain
1987	B.Sc. Biology. University of Barcelona. Spain.

RESEARCH POSITIONS

2017	Visiting Professor. Brain and Mind Institute. EPFL. Switzerland
2011-present	Professor. Department of Psychiatry and Behavioral Sciences. Stanford University School of Medicine.
2006-2011	Associate Professor. (University Tenure Line). Department of Psychiatry and Behavioral Sciences. Stanford University.
2004-06	Associate Professor. Departments of Molecular Biology and Neuropharmacology. The Scripps Research Institute. La Jolla, California
1996-04	Assistant Professor. Department of Molecular Biology. The Scripps Research Institute La Jolla, California
1994-96	Senior Research Associate. Department of Molecular Biology. The Scripps Research Institute La Jolla, California
1992-94	Post-doctoral fellow. Molecular Neurobiology. The Scripps Research Institute. La Jolla, California.

1991-92

Research Associate. Neurobiology. Dept. of Biochemistry and Physiology. Faculty of Biology. University of Barcelona

TEACHING

Research Trainees

Student	Training Period	Previous Institution	Status during training	Current position
Cristina Garcia-Frigola, PhD	1996-98	University of Barcelona	Graduate student	Staff Scientist .Neurosciences Institute, Alicante (Spain)
*Marta Calbet PhD	1997-99	University of Barcelona	Research Associate	Senior Scientist. Almirall Prodesfarma Barcelona
Ana Guadaño-Ferraz PhD	1998	University of Madrid	Research Associate	Principal Investigator. Institute for Biomedical Research (Madrid)
Patrice Bourgin MD PhD	1998-2000	University of Paris XII	Postdoctoral fellow	Professor of Neurology. University Louis Pasteur. Strasbourg
Beatriz Morte PhD	1999-2001	CSIC Madrid	Research Associate	Investigator Institute of Biomedical research CSIC (Madrid)
Avron Spier PhD	1998-2003	Cambridge, UK	Postdoctoral fellow	Director. Business Development. Genomics Institute of the Novartis Foundation (La Jolla)
Véronique Fabre, PhD	1999-2001	INSERM Pitie Salpetriere	Postdoctoral fellow	Charge de Recherche PI) INSERM (Paris)
Raphaëlle Winsky-Sommerer PhD	2002-2004	INSERM Centre Paul Broca	Postdoctoral fellow	Reader. University of Surrey. UK
Benjamin Boutrel PhD	2003-2005	INSERM	Postdoctoral fellow	Senior Researcher. Dept of Psychiatry. CHUV Lausanne
Covadonga Paneda PhD	2004-2005	University of Madrid	Postdoctoral fellow	Research Director Sylentis
Alicia Rubio PhD	2005	CSIC	Visiting scholar	Researcher. Ospedale San Raffaele Milano
Antoine Adamantidis PhD#	2006-2010	University of Liege	Postdoctoral fellow	Professor Bern University Medical Center
Yanling Xu MD PhD	2006-2007	UC Irvine	Postdoctoral fellow	Physician. Internal Medicine. Kaiser Permanente. Santa Clara
*Matt Carter PhD#	2007-2011	Stanford U	Graduate student	Professor. Williams College
*Jana Schaich Borg MSc	2007-2012	Stanford U	Graduate student	Director of Graduate Studies of the Duke Master in Interdisciplinary Data

				Science Assistant Research Professor Duke University
Tope Lanre Amos, MD	2009-11	Stanford U.	Medical student	Surgeon. Los Angeles, CA
Asya Rolls PhD	2008-12	Weizmann Institute, Israel	Postdoc	Fellow. Howard Hugues Medical Institute/Welcome Trust. Associate Professor. Technion. Haifa. Israel
Patricia Bonnavion PhD	2009-2013	University of Paris	Postdoc	Assistant Professor. Universite Libre de Bruxelles.
Daniel Kroeger PhD	2009-2010	Laval University	Postdoc	Assistant Professor. Auburn University
Clara Tourino PhD	2009-2015	Universitat Pompeu Fabra	Postdoc	Director In vivo Pharmacology. Prothena Pharmaceuticals
Simal Ozen PhD	2010-2013	Rutgers University	Postdoc	Master Public Health UC Berkeley
Ada Eban, PhD#	2011-17	Hebrew University	Postdoc	Assistant Professor. Dept. of Psychology. University of Michigan
Andrew Whittle, PhD	2013-17	Cambridge University, UK	Postdoc	Sr. Associate Director. Strategic Partnering. Boehringer Ingelheim
Alex C Jackson PhD	2013-14	UCSF	Sr. Postdoc	Tenured Associate Professor. U. Conn
Will Giardino, PhD	2013-19	University of Oregon	Postdoc	Assistant Professor. Stanford University
Jessica Walsh, PhD	2013-14	Mt Sinai School of Medicine, NY	Postdoc	Assistant Professor University of North Carolina
Shibin Li, PhD#	2015-2022	Univ Heidelberg	Postdoc	Assistant Professor. Fudan University. Shanghai, China.
Jeff R Jones, PhD	2015-2016	Vanderbilt University	Postdoc	Assistant Professor Texas A&M University
Hiroshi Yamaguchi, PhD	2015-2019	Kyoto University	Postdoc	Assistant Professor Nagoya University. Japan
Suszie Tyree, PhD	2016-2019	University of Berlin	Postdoc	Data Scientist. Otago, New Zealand
Jeremy Borniger, PhD	2017-2019	Ohio State University	Postdoc	Assistant Professor. Cold Spring Harbor Laboratories
Natalie Nevarez, PhD	2017-2019	University of Michigan	Postdoc	Associate Director for Faculty Diversity and Development at Woods Hole Laboratories

Kim Jennings, PhD	2017-2022	UC Berkeley	Postdoc	Grant administration and Faculty Development. University of Texas. Austin.
Wenjie Bian, PhD#	2017	ION Chinese Academy of Sciences Shanghai	Postdoc	Assistant Professor. West Lake University. Hangzhou, China
Chris Angelakos, PhD	2018	University of Pennsylvania	Postdoc	-
Keith Murphy, PhD	2018	Scripps Florida	Postdoc	Life Sciences Research Associate
Erica Seigneur, PhD	2019	Stanford Graduate Program	Postdoc	Life Sciences Research Associate
Oscar Gonzalez PhD	2021	UCSD	Postdoc	Postdoc
YaNan Zhao, PhD	2022	Fudan University	Postdoc	Postdoc
Charlotte Luff, PhD	2023	Imperial College	Postdoc	Postdoc

*Thesis advisor

SRS Outstanding Early Investigator Award

Course director: Sleep and Cancer (BIOS278) March 2019

Neurobiology of sleep circuits. Didactic lectures to Residents and Fellows in Sleep Medicine: (2010-

PUBLICATIONS

>32,000 citations; h-index:81(Google Scholar)

A) Original reports

1.- Graña, X., **de Lecea, L.**, El Maghrabi, R., Ureña, J.M., Caelles, C., Carreras, J., Puigdomènech, P., Pilakis, S., Climent, F.(1992) "Cloning and sequencing of a cDNA encoding 2,3 bisphosphoglycerate-independent phosphoglycerate mutase from maize" *J. Biol. Chem.* 267: 12797-12803

2.- Ureña, J.M., Graña, X., **de Lecea, L.**, Ruiz, P., Castellà, J., Carreras, J., Pons, G., Climent, F. (1992) "Isolation and sequencing of a cDNA encoding a B isozyme of rat phosphoglycerate mutase" *Gene* 113: 281-282

- 3.- Soriano, E., del Rio, J.A., Ferrer, I., Auladell, C., **de Lecea, L.**, Alcántara, S. (1992) "Late appearance of parvalbumin-immunoreactive neurons in the rodent cerebral cortex does not follow an inside-out sequence". *Neurosci. Lett.* 142: 147-150
- 4.- Erlander, M.G., Lovenberg, T.W., Baron, B.M., **de Lecea, L.**, Danielson, P.E., Racke, M., Slone, A.L., Foye, P.E., Cannon, K., Burns, J.E., Sutcliffe J.G (1993) "Two members of a distinct subfamily of 5HT receptors differentially expressed in rat brain" *Proc. Natl. Acad. Sci. USA* 90:3452-3456
- 5.- Lovenberg, T.W., Baron, B.M., **de Lecea, L.**, Miller, J.D., Prosser, R.A., Rea, M.A., Foye, P.E., Racke M., Slone A.L., Siegel, B.W., Danielson, P.E., Sutcliffe, J.G., Erlander, M.E. (1993) "A novel adenylyl cyclase-activating serotonin receptor (5HT7) implicated in the regulation of mammalian circadian rhythms" *Neuron* 11:449-458
6. Danielson, P.E., Watson J.B., Gerendasy, D., Erlander, M.G., Lovenberg, T.W., **de Lecea, L.**, Sutcliffe, J.G., Frankel, W.N. (1994) "Chromosomal mapping of mouse genes expressed selectively within the central nervous system" *Genomics*, 19: 454-461
7. Usui, H., Falk, J., Dopazo, A., **de Lecea, L.**, Erlander M.G., Sutcliffe. J.G. (1994) "Isolation of clones of rat striatum-specific mRNAs by directional tag PCR subtraction" *J. Neurosci.* 14(8):4915-4926
8. Danielson, P.E., Forss-Petter, S., Battenberg, E.L.F., **deLecea, L.**, Bloom, F.E., Sutcliffe, J.G. (1994). "Four structurally distinct neuron specific glycoproteins produced by differential promoter utilization and alternative mRNA splicing from a single gene". *J. Neurosci. Res.* 38:468-478
9. del Rio, J.A., **de Lecea, L.**, Ferrer, I., Soriano, E. (1994) "The development of parvalbumin immunoreactivity in the neocortex of the mouse". *Dev. Brain Res.*, 81:247-259
10. **de Lecea, L.**, Soriano, E., Criado, J.C., Steffensen, S.J., Henriksen, S.J., Sutcliffe, J.G. (1994) "Transcripts encoding a neural membrane CD26-like protein are stimulated by synaptic activity". *Mol. Brain Res.* 25: 286-296
11. Watson, J.B., Coulter III, Margulies, J.E., **de Lecea, L.**, Danielson, P.E., Erlander, M.G., Sutcliffe, J.G. (1994) " G-protein γ_7 subunit is highly enriched in medium-sized neurons of the rat neostriatum" *J. Neurosci. Res.* 39:108-116
12. Ruiz-Lozano, P. **de Lecea, L.** Buesa, C., Pérez-de-la-Ossa, P., LePage D. , Gualberto, A., Walsh, K., Pons, G. (1994) The gene encoding rat phosphoglycerate mutase subunit M: cloning and promoter analysis in muscle cells. *Gene* 147:243-248
13. **de Lecea, L.**, del Rio. J.A., Soriano, E. (1995) "Developmental expression of

parvalbumin mRNA in the cerebral cortex and hippocampus of rat" . *Mol. Brain Res.* 32:1-13

14. Alcántara, S., **de Lecea, L.**, del Rio, J.A., Ferrer, I., Soriano, E. (1996) "Transient co-localization of parvalbumin and calbindin in the postnatal cerebral cortex: evidence for a phenotypic shift in developing nonpyramidal neurons". *Eur. J. Neurosci.* 8:1329-1339

15. Iñiguez, MA, **de Lecea L.**, Morte, B., Sutcliffe, J.G., Bernal, J. (1996) "Hypothyroidism and cerebral damage: Identification of RC3 (neurogranin)-expressing, thyroid hormone-sensitive neurons in the rat forebrain" *Endocrinology* 137: 1032-1041

16. Morales M, Battenberg ELF, **de Lecea L**, Sanna PP, Bloom FE (1996) "Cellular and subcellular immunolocalization of the type 3 serotonin receptor in the rat central nervous system" *Mol. Brain Res.* 36:251-260

17. **de Lecea, L.**, Criado, J.R., Prospero O., Gautvik, K.M., Schweitzer, P., Danielson, P.E., Dunlop, C.M., Siggins G.R., Henriksen, S.J., Sutcliffe, J.G. (1996) "A cortical neuropeptide with neuronal depressant and sleep-modulating properties". *Nature* 381:242-245

18. Rocamora, N., Pascual M., Acsády, L., **de Lecea, L.**, Freund, T., Soriano, E. (1996) "Expression of NGF and NT3 mRNAs in hippocampal interneurons innervated by the septohippocampal pathway" *J. Neurosci.* 16:3991-4004

19. Gautvik, K.M., **de Lecea, L.**, Gautvik, V., Danielson P.E., Tranque, P., Dopazo, A., Bloom, F.E., Sutcliffe, J.G. (1996) "Overview of the most prevalent hypothalamic-specific mRNAs, as identified by directional-tag PCR subtraction" *Proc. Natl. Acad. Sci. USA.* 93:8733-8738

20. Morales, M., Battenberg, E.L.F., **de Lecea, L.**, Bloom, F.E. (1996) "The type 3 serotonin receptor is expressed in a subpopulation of GABAergic neurons in the rat cortex and hippocampus". *Brain Res.* 731:199-202

21. **de Lecea, L.**, del Rio, J.A., Criado, J.R., Alcántara, S., Morales, M. Henriksen, S.J., Soriano, E., Sutcliffe, J.G. (1997) "Cortistatin is expressed in a distinct subset of cortical interneurons" *J. Neurosci.* 17:5868-5880

22. **de Lecea, L.**, Ruiz-Lozano, P., Danielson, P.E., Peelle-Kirley, J., Foye, P.E., Frankel, W., Sutcliffe J.G. (1997) "cDNA cloning, mRNA distribution and chromosomal mapping of mouse and human preprocortistatin". *Genomics* 42:499-506

23. **de Lecea, L.**, Criado, J.R., Rivera, S., Wen W., Soriano E, Henriksen, S.J., Taylor, S.S., Gall, C.M., Sutcliffe, J.G. (1998) "Endogenous protein kinase A inhibitor (PKI α) modulates synaptic activity". *J. Neurosci. Res.* 53:269-278

24. **de Lecea, L.** Kilduff T., Peyron C, Gao XB, Fukuhara C, Danielson PE, Foye PE, Bartlett II FS, Gautvik VT, van den Pol AN, Frankel WN, Bloom FE, Sutcliffe JG (1998) "The hypocretins: two hypothalamic peptides with neuroexcitatory activity". *Proc. Natl. Acad. Sci. USA* 95:322-327 * **ISI Highly cited paper Top 100 most cited PNAS papers ever published**

25. Alcántara S, Ruiz M, D'Arcangelo G, Ezan F, **de Lecea L.**, Curran T, Sotelo C, Soriano E. (1998) "Regional and cellular patterns of *reelin* mRNA expression in the forebrain of the developing and adult mouse". *J. Neurosci.* 18(19):7779-99

26. Peyron C, Tighe D, van den Pol AN, **de Lecea L.**, Heller C, Sutcliffe JG and Kilduff TS. (1998) "Hypocretin-containing neurons have widespread projections throughout the brain". *J. Neurosci.* 18(23):9996-10015 **(4th most cited J Neurosci paper ever published)**

27. Broberger C, **de Lecea, L.**, Sutcliffe, JG, Hökfelt T. (1998) "Hypocretin/orexin- and melanin-concentrating hormone expressing cells form distinct populations in the rodent lateral hypothalamus: relationship to neuropeptide Y and agouti gene-related protein systems". *J. Comp. Neurol.* 402(4):460-74

28. Vassilaki, A., Lanneau, C., Dournaud, P., **de Lecea, L.**, Gardette, R., Epelbaum, J. (1999) Cortistatin affects glutamate sensitivity in mouse hypothalamic neurons through activation of sst2 somatostatin receptor subtype *Neuroscience*, 88:359-364

29. Håkansson, M-L, **de Lecea, L.**, Sutcliffe J.G., Yanagisawa, M., Meister B. (1999) "Leptin receptor and STAT3 immunoreactivities present in orexin/hypocretin-containing neurones of the lateral hypothalamus" *J. Neuroendocrinol.* 11(8):653-663

30. Criado JR, Li H., Jiang X, Spina M, Huitron-Resendiz S, Liapakis G, Calbet M, Siehler S, Henriksen SJ, Koob, GF, Hoyer D, Sutcliffe JG, Goodman M, **de Lecea L.** (1999) "Structural and compositional determinants of cortistatin activity". *J. Neurosci. Res.* 56:611-619

31. Campbell KM, **de Lecea L.**, Severynse DM, McGrath MJ, Sun LY, Sparber SB, Caron MG, Burton FH. (1999) "Repetitive and compulsive behaviors caused by transgenic activation of a subset of dopamine D1 receptor neurons". *J. Neurosci.* 19(12):5044-5053

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33. Galas L, Vaudry H, Braun B, **de Lecea L.**, Chartrel N (2001) "Immunohistochemical localization and biochemical characterization of Hypocretin/Orexin-related peptides in the central nervous system of the frog *Rana ridibunda*" *J. comp Neurol.* 429(2):242-252

34. Bourgin P, Huitron S, Spier AD, Morte B, Criado JR, Sutcliffe JG, Henriksen SJ, **de Lecea L**. (2000) "Hypocretin-1 modulates REM sleep through activation of locus coeruleus neurons". *J. Neurosci* 20: 7760-7765
35. Krucker T, Siggins GR, McNamara R, Lindsley KA, Dao A, Allison DW, Carson MJ, Danielson P, **de Lecea L**, Lovenberg TW, Sutcliffe JG, Gerendasy DD (2002). "Targeted disruption of RC3 reveals a mechanism for regulating metaplasticity in the hippocampus" *J. Neurosci.* Jul 1;22(13):5525-35.
36. García-Frigola C, Burgaya F, Calbet M, **de Lecea L**, Soriano, E (2000) "Mouse Tspan-5, a member of the tetraspanin superfamily, is highly expressed in brain cortical structures". *Neuroreport* 11(14):3181-5
37. Sutcliffe JG and **de Lecea, L** (2000) "The hypocretins: excitatory neuromodulatory peptides for multiple homeostasis systems, including sleep and feeding". *J. Neurosci. Res* 62(2):161-168.
38. Loseth OP, **de Lecea L**, Calbet M, Danielson PE, Gautvik V, Hovring PI, Walaas SI, Gautvik KM (2000). "Developmental regulation of two isoforms of Ca²⁺/calmodulin-dependent protein kinase I beta in rat brain". *Brain Res.* 869(1-2):137-45.
39. Garcia-Frigola C, Burgaya F, Calbet M, **de Lecea L** , Soriano E. (2001). "Pattern of expression of the tetraspanin Tspan 5 during brain development in the mouse" *Mech. of development.* 106:207-12
40. Kilduff TS and **de Lecea L** (2001) " Mapping the mRNAs for the hypocretin/orexin and melanin concentrating hormone receptors: networks of overlapping peptide systems". *J. comp neurol*;435(1):1-5
41. Martin G., Fabre, V., Siggins, G.R., **de Lecea, L**. (2002) " Interaction of the hypocretins with neurotransmitters in the nucleus accumbens". *Regulatory Peptides* 104:111-117
42. Spier, AD, Fabre, V and **de Lecea, L** (2005) "Autoradiographic localization of cortistatin binding in the brain: evidence for cortistatin selective binding sites" *Regul. peptides* 124/1-3 :179-186
43. Mikkelsen JD, Hauser F, **de Lecea L**, Sutcliffe JG, Kilduff TS, Calgari C, Pevet P, Simonneaux V. (2001) "Hypocretin (orexin) in the rat pineal gland: a central transmitter with effects on noradrenaline-induced release of melatonin". *Eur J Neurosci.*;14(3):419-25.
44. García-Frigola C, Burgaya F, Calbet M, **de Lecea, L**, Soriano, E. (2004) A collection of cDNAs enriched in upper cortical layers of the embryonic mouse brain. *Brain Research* 30;122(2):133-50

45. Spier A.D. Winsky-Sommerer R, Fabre V, Games, D., **de Lecea, L.** Criado JR (2004). Altered expression of cortistatin mRNA during aging and in PDAPP transgenic mice. *Brain Res*;1023(1):157-62).
46. Guillén-Gómez E., Calbet M, Casado, J., **de Lecea, L.**, Soriano E., Pastor-Anglada M and Burgaya (2004) Presence and distribution of CNT2 transcript in rat brain: influence of sleep deprivation. *J. Neurochem.* 2004 Aug;90(4):883-93
47. Martin G, Guadaño-Ferraz A. , Morte B, Ahmed S, Koob GF, **de Lecea L** Siggins GR (2004) Chronic Morphine Treatment Alters NMDA Receptors of Nucleus Accumbens Freshly-Isolated Neurons. *J Pharmacol Exp Ther.*; 311: 265-73.
48. Winsky Sommerer R, Yamanaka A, Roberts A, Sakurai T, Diano S Kilduff TS, Horvath TL and **de Lecea L.** (2004) Interaction between the corticotropin-releasing factor system and hypocretins (orexins): a novel circuit mediating stress response. *J. Neurosci.* 24(50): 11439-48
49. Xu Y., Reinscheid RR, Huitron-Resendiz S, Clark SD, Wang Z, Lin SH, Brucher FA, Zeng J., Ly HK, Henriksen SJ, **de Lecea L**, Civelli O (2004) "Neuropeptide S: a novel neuropeptide promoting arousal and anxiolytic-like effects" *Neuron* . 43:487-497
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- 51 . Huitron-Resendiz, S. Kristensen,MP Sánchez-Alavez M, Clark SD, Grupke SL, Tyler C, Suzuki C, Nothacker HP, Civelli O, Criado JR, Henriksen SJ, Leonard CS **de Lecea, L.** (2005) Urotensin II modulates REM sleep through activation of brainstem cholinergic neurons. *J. Neurosci* :25: 5465-5474
52. Levine,AS, Winsky-Sommerer, R, Huitron-Resendiz,S.,Grace, MK **de Lecea, L.** (2005) Injection of Neuropeptide W into the Paraventricular Nucleus of the Hypothalamus Increases Food Intake. *Am. J. Physiol.Regul Integr Comp Physiol* 288:1727-1732
- 53.Winsky- Sommerer R, Boutrel B **de Lecea , L** (2005) Stress and arousal: the corticotropin-releasing factor / hypocretin circuitry . *Mol Neurobiol.*32:285-294
- 54.Tallent MK, Fabre V, Qiu C, Calbet M, Lamp T, Baratta MV, Suzuki C, Levy CL, Siggins, GR Henriksen SJ, Criado JR, Roberts A and **de Lecea L** "Cortistatin overexpression in transgenic mice produces deficits in synaptic plasticity and learning". *Mol Cell Neurosci* 30(3) 465-475

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57. Bourgin, P., Fabre V, Huitron-Resendiz S, Henriksen SJ, Prospero Garcia O, Criado JR, **de Lecea, L.** (2007) "Cortistatin promotes and negatively correlates with slow wave sleep". *Eur J. Neurosci.* 26:729-738
58. Adamantidis A, Zhang, F., Aravanis AM, Deisseroth K, **de Lecea L.** (2007) Neural substrates of awakening probed by optogenetic control of hypocretin neurons. *Nature* 15;450(7168):420-424.
59. Rubio, A, Perez, M, **de Lecea, L**, Avila J.(2008) Effect of cortistatin on tau phosphorylation at ser262 site. *J. Neurosci res* 86:2462-75
60. Qiu C, Zeyda T, Hochgeschwender U, **de Lecea, L.**, Tallent MK (2008) "Somatostatin receptor subtype 4 couples to the K⁺ M-current to regulate seizures and hippocampal excitability" *J. Neurosci Apr* 2;28(14):3567-76.
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62. Tsai, H.C., Zhang, F., Adamantidis, A., Stuber, G.D., Bonci, A., **de Lecea, L.**, Deisseroth, K. (2009) Phasic firing in dopaminergic neurons is sufficient for behavioral conditioning. *Science*. 324, 1080-4.
- 63 Adamantidis A, **de Lecea L.** A role for Melanin-Concentrating Hormone in learning and memory. *Peptides*. 2009 Nov;30(11):2066-70.
64. Carter, M.E., Adamantidis, A., Ohtsu, H., Deisseroth, K. & **de Lecea, L.** (2009). Sleep homeostasis modulates hypocretin-mediated sleep-to-wake transitions. *J Neurosci* 29, 10939-49
65. Zhang F, Gradinaru V, Adamantidis A, Durand R, Airan RD, **de Lecea L** & Deisseroth K (2010) Optogenetic interrogation of neural circuits: technology for probing deep mammalian brain structures. *Nature protocols* 5: 439 - 456
66. Plaza-Zabala A, Martín-García E, **de Lecea L**, Maldonado R, Berrendero F (2010) Hypocretins regulate the anxiogenic-like effects of nicotine and induce reinstatement of nicotine-seeking behavior *J. Neurosci* 30:2300-10

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68. Sánchez-de-la-Torre M, Pierola J, Vidal C, Barceló A, de la Peña M, Hussain Z, Capote F, Durán J, Agustí AG, **de Lecea L**, Torres G, Esquinas C, Martinez M, Barbé F. (2010) Non-synonymous polymorphism in the neuropeptide S precursor gene and sleep apnea. *Sleep Breath*. 2010 Apr 21.
69. Pujadas L, Gruart A, Bosch C, Delgado L Teixeira CM, Rossi D, **de Lecea L** Martinez A, Delgado-Garcia JM, Soriano E (2010) Reelin Regulates Postnatal Neurogenesis and Enhances Spine Hypertrophy and Long-Term Potentiation. *J Neurosci* 30: 4636-4649
70. Carter ME, Yizhar O, Chikahisa S, Nguyen H, Adamantidis A ,Nishino S, Deisseroth K, **de Lecea L** (2010) "Tuning arousal with optogenetic modulation of locus coeruleus neurons" *Nature Neurosci* 13:1526-33
71. Cao J, **de Lecea L**, Ikemoto S (2011) Intraventricular administration of Neuropeptide S has reward-like effects. *Eur J Pharmacol*. 2011 Feb 21. [Epub ahead of print]
72. Adamantidis A, Tsai HC, Boutrel B, Zhang F, Stuber G, Budygin E, Tourino C, Bonci A, Deisseroth K, **de Lecea L** (2011) Optogenetic interrogation of dopaminergic neurons modulation of the multiple phases of reward seeking behavior. *J Neurosci* 31:10829
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43. Li SB, Jones JR, **de Lecea L.** Hypocretins, Neural Systems, Physiology, and Psychiatric Disorders. *Curr Psychiatry Rep.* 2016 Jan;18(1):7. doi: 10.1007/s11920-015-0639-0. Review PMID: 26733323
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45. **de Lecea L.**, Huerta R. Hypocretin (orexin) regulation of sleep-to-wake transitions. *Front Pharmacol.* 2014 Feb 12;5:16. doi: 10.3389/fphar.2014.00016. eCollection 2014. Review. PMID: 24575043
46. Chen Q, **de Lecea L.**, Hu Z, Gao D. The hypocretin/orexin system: an increasingly important role in neuropsychiatry. *Med Res Rev.* 2015 Jan;35(1):152-97. doi: 10.1002/med.21326. Epub 2014 Jul 12. Review.
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50. Eban-Rothschild A, Giardino WJ, **de Lecea L.** To sleep or not to sleep: neuronal and ecological insights. *Curr Opin Neurobiol.* 2017 May 10;44:132-138. doi: 10.1016/j.conb.2017.04.010. [Epub ahead of print] Review.
51. Eban-Rothschild A, **de Lecea L.** Neuronal substrates for initiation, maintenance, and structural organization of sleep/wake states. *F1000Res.* 2017 Mar 3;6:212. doi: 10.12688/f1000research.9677.1. eCollection 2017. Review.
52. Li SB, Giardino WJ, **de Lecea L.** Hypocretins and Arousal. *Curr Top Behav Neurosci.* 2017;33:93-104. doi: 10.1007/7854_2016_58.

- 53 Bonnavion P, Mickelsen LE, Fujita A, **de Lecea L**, Jackson AC. Hubs and spokes of the lateral hypothalamus: cell types, circuits and behaviour. *J Physiol*. 2016 Nov 15;594(22):6443-6462. doi: 10.1113/JP271946. Epub 2016 Jul 19.
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56. Eban-Rothschild A, Appelbaum L, **de Lecea L**. Neuronal Mechanisms for Sleep/Wake Regulation and Modulatory Drive. *Neuropsychopharmacology*. 2017 Dec 5. doi: 10.1038/npp.2017.294. [Epub ahead of print] Review.
57. López M, de Lecea L, Diéguez C. Editorial: Hypocretins/Orexins. *Front Endocrinol (Lausanne)*. 2020 Jun 2;11:357. doi: 10.3389/fendo.2020.00357. PMID: 32582031; PMCID: PMC7280482.
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60. Dorsey A, de Lecea L, Jennings KJ. Neurobiological and Hormonal Mechanisms Regulating Women's Sleep. *Front Neurosci*. 2021 Jan 14;14:625397. doi: 10.3389/fnins.2020.625397. PMID: 33519372; PMCID: PMC7840832.
61. de Lecea L. Twenty-Three Years of Hypocretins: The "Rosetta Stone" of Sleep/Arousal Circuits. *Front Neurol Neurosci*. 2021;45:1-10. doi: 10.1159/000514961. Epub 2021 May 28. PMID: 34052811.
62. Jennings KJ, de Lecea L. Neural and Hormonal Control of Sexual Behavior. *Endocrinology*. 2020 Oct 1;161(10):bqaa150. doi: 10.1210/endocr/bqaa150. PMID: 32845294; PMCID: PMC7507403.
63. Jacobson LH, Hoyer D, de Lecea L. Hypocretins (orexins): The ultimate translational neuropeptides. *J Intern Med*. 2022 Jan 19. doi: 10.1111/joim.13406. Epub ahead of print. PMID: 35043499.

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65. Brown RE, **de Lecea L**. Editorial: Insights in sleep and circadian rhythms: 2021. *Front Neurosci*. 2023 Jan 17;17:1133907. doi: 10.3389/fnins.2023.1133907. PMID: 36733335; PMCID: PMC9887309.

65. Nir Y, **de Lecea L**. Sleep and vigilance states: Embracing spatiotemporal dynamics. *Neuron*. 2023 Jul 5;111(13):1998-2011. doi: 10.1016/j.neuron.2023.04.012. Epub 2023 May 5. PMID: 37148873.

66. Adamantidis AR, **de Lecea L**. Sleep and the hypothalamus. *Science*. 2023 Oct 27;382(6669):405-412. doi: 10.1126/science.adh8285. Epub 2023 Oct 26. PMID: 37883555.

Book chapters

1. Kilduff, T., **de Lecea L**, Usui H, Sutcliffe J.G. " Isolation and identification of specific transcripts by subtractive hybridization". In: *Molecular Regulation of Conscious States*. pp 103-118. R. Lydic ed. CRC press. Boca Raton FL. 1997.

2. Sutcliffe, J.G. and **de Lecea, L** .Novel Neurotransmitters for Sleep and Energy Homeostasis. In: *Results and Problems in Cell Differentiation* (vol. 26) Chapter 11 pp. 239-255 D. Richter ed. Springer Verlag. Heidelberg. 1999.

3. Fabre V, Spier AD, Criado JR, **de Lecea L**. "Cortistatin, a novel member of the somatostatin gene family". In: *Somatostatin*. (2004) (Srikant, C.. ed). Kluwer Academic. NY.

4. Fabre V, Bourgin P, Sutcliffe JG and **de Lecea L**. Activation of hypocretin neurons and sleep. In: *Catecholamine Research: From Molecular Insights to clinical medicine*. Nagatsu et al. eds. Kluwer Academic/Plenum. NY (2002)

5. **de Lecea, L**. Reverse genetics and the study of the sleep/wake cycle: cortistatin and the hypocretins. In *Sleep: Circuits and functions* (PH Luppi ed.) CRC press Boca Raton FL 2004

6. **de Lecea, L**. and Sutcliffe JG (2005) The discovery of hypocretins: New hypothalamic peptides. In: *The hypocretins: integrators of physiological functions* (de Lecea, L and Sutcliffe JG eds). Springer, NY 2005.

7. Adamantidis A and **de Lecea L.** (2009) The hypocretins/orexins. In: The new Encyclopedia of Neuroscience. Elsevier.
8. Carter ME and **de Lecea L.** Hyperarousal and post-traumatic stress disorder: A role for the Hypocretin system. In *Post-traumatic stress disorder*. Basic Science and Clinical disorder (Shiromani et al., eds) Humana Press, NY 2009
9. **de Lecea L** and Sutcliffe JG Hypocretins Handbook of Biologically active peptides Abba J. Kastin Ed. CRC press
10. **de Lecea, L.** Hypocretins In: Encyclopedia of Psychopharmacology. D. Hoyer ed. Springer 2009
11. **de Lecea L.** and Carter ME Optical control of neuronal activity. In Encyclopedia of Life Sciences. John Wiley & Sons (www.els.net) 2011
12. **de Lecea L.** Hipocretinas (orexinas). In: Tratado de Medicina del Sueño. Edited by Sociedad Española del Sueño. Médica Panamericana. Madrid 2014 (In Spanish)
13. Eban-Rothschild, A., Touriño, C. and **de Lecea L** (2013) In vivo application of optogenetics in rodents. In Optogenetics, P Hegemann and S Sigrist, Eds, pp 143-156, Berlin: De Gruyter.

BOOKS

The hypocretins :integrators of physiological functions. 2005. **L de Lecea** and J.G. Sutcliffe (eds) Springer. NY.

SELECT INVITED LECTURES (from > 300) Listed from 2007

- "Cortistatin" NIDA- Intramural Research, Baltimore. January 2007
- " Attention and memory in narcolepsy" Dept of Psychology, Stanford University, January 2007
- "The hypocretins and sleep" The Science Network Broadcast " Waking up to sleep". The Salk Institute. February 2007
- Dept. of Psychiatry Univ. of Pennsylvania. Philadelphia, PA. March 2007
- Gallo Center. UCSF. Emeryville, CA April 2007
- " The hypocretins: integrators of physiological functions" .Obesity and metabolism. Tihany Hungary April 2007
- " Cortistatin in the CNS" European Congress of Endocrinology. Budapest April 2007
- "Hypocretins: arousal and beyond" Course on Drug Discovery in Neuropsychiatry. Jackson Laboratories. Bar Harbor ME June 2007
- "Arousal and addiction: the hypocretin connection" Research Society of Alcoholism Annual Meeting. Chicago IL July 2007
- "Hypocretins: arousal and beyond" ESBRA meeting. Berlin September 2007
- "Hypocretins (orexins): arousal and beyond" Neurobiology of Disease Workshop. Society for Neuroscience. San Diego, November 2007

- "Sex, drugs and Hypocretins" Centre de Regulacio Genomica Barcelona, Spain. November 2007
- "Hypocretins: Role in arousal and addiction" ACNP. Boca Raton FL. December 2007
- "Optogenetic control of arousal" Dept. of comp Anatomy. Yale University School of Medicine. New Haven CT February 2008
- "Optogenetic control of arousal" Keystone Symposia. Genetics and Biochemistry of Sleep. Granlibakken, CA. March 2008
- "Cortistatin and hypocretins: peptides in control of cortical activity" University of Cordoba. March 2008
- "The hypocretins in control of sleep and addiction" Biomedical Research Institute, Madrid March 2008
- "The Biological basis of sleep" Dept. of Pharmacology. Vanderbilt University. Memphis, TN April 2008
- "The hypocretin system in sleep apnea" XII Hot Topics on Sleep Apnea. Lleida May 2008
- "Optogenetic control of arousal" Dept. of Neuroscience. University of Pennsylvania. Philadelphia.PA May 2008
- "Optogenetic control of arousal" Dept. of Pharmacology. University of California, Irvine CA May 2008
- "Optogenetic control of arousal" The Burnham Institute. La Jolla CA June 2008
- "Discovery of the hypocretins " The hypocretins/orexins International Symposium. Oulu (Finland) August 2008
- European Neuropsychopharmacology Conference. Barcelona (Spain) Sept 2008
- "Sex, drugs and hypocretins". Dep of Psychiatry. Yale University, New Haven CT. Sept 2008
- "Optogenetic control of arousal" NHSN Annual Conference. Bethesda MD. October 2008
- Plenary lecture. 50 years of paradoxical sleep. Lyon (France) January 2009
- 6th International symposium on Narcolepsy. Monte Verita. Ascona Switzerland Sept 2009
- Neuropeptides conference. Elsevier. Chicago. October 2009
- Janelia Conference on Hypothalamic circuits. HHMI. Janelia Farm, VA. November 2009
- Winter brain conference. Breckenridge CO January 2010
- Stanford Sleep Center Symposium. Stanford, CA. February 2010
- Meeting of the Minds international congress on Alzheimer's disease. Monaco. February 2010
- Distinguished Lecture on Drug Addiction. University of Arkansas Medical Center. Little Rock, AR. March 2010
- Optogenetic control of brain reward. Dept of Pharmacology. Wake Forest University. NC. March 2010
- College on Problems of Drug Dependence. Phoenix AZ June 2010
- ISGIDAR Keynote Speaker Phoenix AZ June 2010
- Keynote Lecture. Society for Behavioral Neuroendocrinology. Toronto July 2010
- Society for the Study of Ingestive Behavior. Pittsburgh July 2010

- Biocircuits Institute. UCSD. La Jolla CA. September 2010
- UCLA Arrowhead Workshop on Sleep. Invited Lecture. Sept 2010
- Genetic Manipulation of Neuronal Activity II. HHMI Janelia Farm. November 2010
- Society for Neuroscience Symposium. San Diego. November 2010
- Chongqing International Symposium on Neuroscience. Chongqing (China) December 2010
- ACNP symposium on Recent advances in sleep science. Miami. December 2010
- NIDA Intramural research program. Baltimore, MD February 2011
- Sleep Grand Rounds. Brigham Women's Hospital. Harvard Medical School. Boston, MA. March 2011
- University of Massachusetts Worcester. March 2011.
- Centre de Recherche du Cerveau et du Moelle Epiniere. Hopital Pitie Salpetriere. Paris. April 2011
- Keynote Lecture. "Sleep and Breathing". Barcelona, April 2011
- Plenary Lecture" Optogenetics and arousal" APSS meeting. Minneapolis MN June 2011
- University of Massachusetts. Amherst. October 2011
- Neuroscience symposium. Institut Fer a Moulin. Paris. October 2011
- Cell Biology Meeting . Merida, MX. October 2011
- UT Southwestern Medical Center. Dallas, TX. September 2011
- Winter Brain Conference. Snowbird UT. January 2012
- Sleep Grand Rounds. Stanford. CA January 2012
- Instituto de Neurociencias de Alicante. March 2012
- University of Calgary. February 2012
- Institute of Neuroscience. Chinese Academy of Sciences. Shanghai. March 2012
- Frontiers in Behavior. Tokyo. March 2012
- University of Hiroshima. March 2012
- Killam Lecture. McGill University. Montreal. April 2012
- Max Planck Institute for Psychiatry. Munich, May 2012
- McKnight Foundation Meeting. Aspen, CO June 2012
- Spanish Biophysical Society, July 2012
- European Pharmacology Meeting, Granada, Spain July 2012
- National Institute of Ageing Workshop on Optogenetics. Bethesda, MD August 2012
- ACE Conference on Epigenetics and Sleep. Philadelphia, PA October 2012
- Dahlem Conference on Optogenetics. Berlin, September 2012
- Elsevier Conference on Optogenetics. New Orleans October 2012
- Invited Symposium ACNP. Hollywood, FL December 2012
- Dept of Pharmacology Seminar Series. UCSD. February 2013
- Universite Libre de Bruxelles. Belgium. March 2013
- Dept. of Pharmacology. University of Colorado. Boulder, CO. March 2013
- Dept of Neuroanatomy. Drexel University School of Medicine. Philadelphia. March 2013
- ASPET Symposium. Experimental Biology. Boston April 2013
- University of Lausanne, Switzerland. May 2013
- University of Pennsylvania Medical Center. September 2013

- International Neuroscience Symposium . Beijing, China, September 2013
- World Association of Sleep Medicine. Valencia, Spain September 2013
- Keynote Lecture. Texas A&M University Neuroscience Symposium. October 2013
- Spanish Society of Neurology. Barcelona November 2013
- Jose del Castillo Lecture. Puerto Rico Neuroscience Conference. December 2013.
- Winter Brain Conference, Steamboat Springs Colorado, Jan 2014
- Dept of Microbiology and Molecular Biology. UC Irvine. February 2014
- Gordon Conference on Sleep Mechanisms. Galveston TX March 2014
- SU2P Symposium. Glasgow April 2014
- University of Strathclyde. Glasgow April 2014
- Klarman Family Foundation. Boston May 2014
- Janelia Farm Conference on Neuronal Manipulation. Ashburn, VA. May 2014
- APSS Meeting. Minneapolis. June 2014
- American Chemical Society. San Francisco, CA August 2014. US-UK Workshop on Advanced Neuroscience Techniques. Stanford, November 2014
- Dept of Pharmacology. University of Melbourne. December 2014
- Dept of Physiology Third Medical Military University Chongqing. China. Jan 2015
- Pennington Institute. Baton Rouge LA. February 2015
- Collaborative Program in Neuroscience Distinguished Lecture. University of Toronto. March 2015
- Center for Functional Connectomics. Korean Institute of Science and Technology. Seoul. March 2015
- DARPA Workshop on Sleep. Arlington VA April 2015
- University of Granada (Spain). September 2015
- Grand Rounds. Mallorca General Hospital. Majorca, Spain. September 2015
- Janelia Farm Workshop on Hypothalamic Circuits October 2015
- University of Aberdeen. December 2015
- World Federation of Sleep Societies. Istanbul, November 2015
- Barcelona Photonics Institute (ICFO). November 2015
- Japanese Workshop on Optogenetics. Tokyo December 2015
- Pablo de Olavide University. Seville, Spain, November 2015
- College of Health Sciences. Marquette University. February 2016
- Oslo University Medical Center. February 2016
- Karolinska Institute. February 2016
- Washington University St Louis. April 2016
- Sleep Research Society Symposium. Denver, CO June 2016
- International Meeting on Peptide Research, Rouen France, June 2016
- Gordon Research Conference, Optogenetic Mapping of Neuronal Circuits. Sunday River, VT July 2016
- NIA Workshop on Optogenetics. Bethesda, August 2016
- Kavli Foundation Salon on Sleep and Neurodegeneration. August 2016.
- Dept of Physiology. Chongqing Third Military Medical University. September 2016
- Dept of Pharmacology and Neuroscience. Nanjing University. November 2016
- Society for Neuroscience Symposium. San Diego, November 2016
- Keynote Speaker. SfN Indiana Chapter. Indianapolis, March 2017

- Institute of Nanotechnology and Bioengineering. Barcelona, June 2017
- Brain and Mind Institute. EPFL Lausanne, June 2017
- Department of Physiology, University of Lille. June 2017
- Institute of Pharmacology. University of Zurich. July 2017
- Boehringer Ingelheim, Biberach, Germany, August 2017
- Neuromodulation NM2. EPFL. Lausanne, September 2017
- Technion, Haifa (Israel). September 2017
- World Sleep Meeting, Prague, October 2017
- University of Bern, October 2017
- Endocrinology and Metabolism Grand Rounds. Northwestern School of Medicine. October 2017
- Keynote Lecture. Washington State University Center for Sleep and Performance Retreat. Coeur d'Alene. ID Oct 2017.
- Keynote Lecture Chinese Sleep Research Society. Shanghai, December 2017
- Ramon Areces Foundation. Madrid January 2018
- McLean Hospital Grand Rounds. Belmont, MA. March 2018.
- UNAM. Sleep Research Symposium. Mexico City. May 2018
- Sleep Research Society, Baltimore MD June 2018
- International Narcolepsy Symposium. Beverly, MA Sept 2018
- Regulatory Peptides Society. Acapulco, MX Sept 2018
- UCSF Neurology Grand Rounds. Sept 2018
- BDebate. Sleep: The Fourth Pillar of Health. Barcelona, October 2018
- Oriental Workshop on Neuronal Circuitry. Shanghai October 2018
- World Conference on Biomedical Sciences. Beijing, October 2018
- Keynote Lecture. Chinese Association of Physiological Societies. Nanchang, November 2018
- Keynote Lecture. Datablitz Hypnos. Society for Neuroscience. San Diego. Nov. 2018
- Florey Institute of Neuroscience. Melbourne, January 2019
- University of New South Wales Seminars. January 2019
- Woolcock Institute. University of Sydney. January 2019
- University of Newcastle, SW. January 2019
- Buck Institute of Aging Formal Seminar. January 2019
- Neuroscience Seminars. Tufts University. January 2019
- ACSC Workshop Sleep Research Society. Clearwater FL. February 2019
- Keynote Speaker. Spanish Society for Narcolepsy. Madrid. March 2019
- Sleep Grand Rounds. Harvard Medical School. May 2019
- Keynote Speaker. Neurobiology Retreat. University of Pennsylvania School
- ASPET Symposium on Neuropeptides. Orlando, FL. April 2019
- Brain Mind Workshop. MIT. May 2019
- Keynote Lecture. University of Pennsylvania Center for Sleep and Circadian Biology Retreat. May 2019
- Keynote Lecture. Mexican Society of Sleep Medicine. Mexico City. August 2019
- NIDA Intramural Program. Baltimore, MD. October 2019
- Chair. SCPKU Workshop on Sleep Regulation. Beijing, September 2019
- IBRO Conference, Daegu KR. October 2019.

- Distinguished Lecture. University of Virginia. Charlottesville. October 2019
- Plenary Lecture. Sleep in Drosophila. Janelia Farm HHMI. November 2019
- MURI Winter Workshop on Sleep and Memory. Supercomputer Center UCSD. Dec 2019
- Chair. Plenary NPPR Symposium "Sleep and Neuropsychiatric Illness" ACNP. Orlando, FL Dec 2019
- Chan Zuckerberg Workshop of Sleep Regulation. San Francisco, January 2020
- Amsterdam Neuroscience Seminar (Virtual). May 2020
- Florey Neuroscience Institute Seminar Series (Virtual). August 2020
- Keynote Lecture (Virtual). European Society of Sleep Research. September 2020
- ACNP Virtual Symposium. December 2020
- Yale University Neuroscience Seminar (Virtual). December 2020
- Columbia University Sleep Center of Excellence (Virtual). January 2021
- Orexin Workshop. Sponsored by Idorsia. Rome. October 2021
- Keynote Lecture. Asian Chronobiology Meeting (virtual). June 2021
- Cold Spring Harbor Meeting on Sleep and Circadian Rhythms (virtual). June 2021
- Jackson Labs Workshop on Sleep and Aging. October 2021
- Keynote Lecture. Chinese Pharmacology Society (virtual). December 2021
- Keynote Lecture. Regulatory Peptide Society (virtual).
- World Sleep 2022. Rome (Italy). March 2022
- Brain Mind interactions. Champalimaud Institute. April 2022 (virtual)
- Gordon Conference on Sleep regulation. Il Ciocco (Barga) Italy. March 2022
- Nobel Forum on Neuropeptides. Karolinska Institute. Stockholm. June 2022
- Gordon Conference on Hypothalamus. Ventura, CA. July 2022
- Keynote Lecture. Regulatory Peptide Society. University of Sterling. August 2022
- Beijing Brain Conference (virtual). August 2022
- Instituto de Investigación en Biomedicina de Buenos Aires (IBioBA) (virtual). August 2022
- Keynote Lecture Chinese Sleep Research Society (virtual). September 2022
- Invited speaker: Exploring Sleep Disturbance in Central Nervous System Disorders. National Academy of Sciences. Washington DC, November 2022
- Workshop on Neuronal Plasticity and Developmental Critical Periods. International Research Center for Neurointelligence. University of Tokyo. January 2023
- COBRA Seminar. Washington University School of Medicine. Saint Louis. April 2023
- Gordon Conference on Neuromodulation. Les Diablerets. CH. May 2023
- Chongqing Institute for Brain and Intelligence. (virtual). July 2023
- Argentinian Society for Neuroscience. San Luis. Argentina. October 2023
- World Sleep Congress. Rio de Janeiro, Brazil. October 2023
- Harvard Medical School. Boston MA October 2023
- UT Southwestern Medical Center. Dallas, January 2024
- Dept of Neuroscience. U Mass Med. Worcester MA February 2024
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D. Research Projects:

Ongoing:

R01 NS104950 (de Lecea, Murrain coPIs) "Impact of sleep-wake circuits on cortical synapse plasticity during motor learning. (2018-2023)

1R01MH116470-01A1 (de Lecea PI, Appelbaum Col)" Functional Heterogeneity of Hypocretin neurons" (2018-2023)

R01MH128140 (de Lecea, PI). Neuropeptide S in arousal (2021-26)

R21DA05505 (de Lecea PI) Interrogation of dopaminergic activity using non-invasive ultrasound (2022-2024)

RF1AG082202 (de Lecea PI) Mechanisms of sleep fragmentation in a mouse model of Alzheimer's disease (2022-2026)

Discovery Grant (Kauer PI, de Lecea Col) BD2 Breakthrough Discoveries for thriving with Bipolar Disorder
Bipolar disorder genes in brain circuits controlling sleep/wake cycles (2023-2026)

KCG-113 (Kauer PI, de Lecea CoPI) Wu Tsai Neurosciences Institute
Sleep circuits in neurodegenerative disease and aging (2023-2025)

Collaborative agreement with Boehringer Ingelheim (\$250,000/y) on Role of Hcrt on compulsive behavior (2016-2023)

Completed:

R0HL1045 Sleep and opioid associated memories (de Lecea PI, Chen CoPI). (2019-22)

Collaborative agreement with Jazz Pharmaceuticals (\$450,000) on the role of Sodium Oxybate on arousal systems

NIH MH087592 (de Lecea – PI) 2010-2018
Optogenetic Control of Vigilance State Transition

R01AG047671 (de Lecea PI) 2015-2019
Optogenetic interrogation of sleep circuits during aging

R01MH102638 (de Lecea PI) 2015-2019
Neuronal mapping of anxiety and panic

BSF #2011335 (US-Israel Binational Science Fndn 09/01/12 - 08/31/17
(de Lecea & Applebaum / Co-PI's)
Optogenetic and live imaging of synapses in the hypothalamus:

NIH MH083702 (de Lecea – PI) 06/01/10 – 03/31/15

Optogenetic control of hypocretin neurons and stress

NARSAD Distinguished Scientist Award (de Lecea –PI)	1/1/13 12/31/13
Klarman Family Foundation (de Lecea – PI) The Role of Hypocretins and the Monoaminergic Nuclei in Anorexia: How to Control Fatal Motivation for Negative Energy Balance”	06/01/11 – 05/31/11
DARPA (Bhatnagars – PI / de Lecea - PI subcontract) Identifying The Neural Substrates of Emotional Arousal:Towards A Path To Stress Resistance	10/01/10 – 11/30/11
3R01DA021880S1 (de Lecea – PI) Hypocretin and Drug Addiction	9/30/10 – 9/29/11
NS23724 (Mignot-PI; de Lecea Project Director) NIH/NINDS Center for Narcolepsy and Related Disorders (Program Project)	08/15/06 - 07/31/11
1R01DA021880 (de Lecea - PI) 06/30/11Hypocretin and drug addiction	07/1/06 -
NIH 1R21DA025711 (de Lecea – PI) Optogenetic Manipulation of Brain Reward	09/30/08 – 11/30/10
NARSAD (de Lecea – PI) Optogenetic control of brain arousal	09/15/08 - 09/14/10
DARPA (de Lecea – PI) Optogenetic control of stress	02/1/08 - 11/30/09
NIH/NIMH R01MH58543 (de Lecea - PI) Role of the Neuropeptide Cortistatin in Sleep	09/12/02 - 04/30/08
NIAAA R21 AA1324 (de Lecea - PI) The Hypocretins and Alcohol Dependence	08/01/01 - 07/31/04
NIH/NIA R03 AG 17354 (de Lecea - PI) Cortistatin in the aging brain	07/1/99 - 06/30/00

E. EDITORIAL POSITIONS

Special Review Editor Neuropsychopharmacology Reviews 2020.
Section Chief Editor. Frontiers in Neuroscience. Sleep and Circadian Rhythms (2018-2023)
Associate Editor. Frontiers in Neural Circuits. (2013-2017)
Associate Editor. SLEEP (2015-2021)
Faculty of 1000. Integrative Physiology (2008-2018)

F. HONORS and AWARDS

Fellow. Stanford Center at Peking University (2019)

Visiting Professor. Brain and Mind Institute. Ecole Polytechnique Federale Lausanne. (2017)

Outstanding Research Achievement Award, Sleep Research Society (2016)

Senior Fulbright Scholar (2015)

Klarman Family Foundation Scientific Advisory Board (2014-present)

NARSAD Distinguished investigator award (2013)

US-Israel Binational Science Foundation Award (2012)

ACNP Integrative Behavioral Neuroscience Award (2010)

NARSAD Independent Investigator Award (2009-10)

Organizer Short Course on Chemo and Optogenetics. Sfn San Diego 2013

Member. Board of Scientific Counselors. National Institute of Drug Abuse (2006-2011)

Adhoc Reviewer. Member of Scientific Counselors. NIMH (2009-2013)

Klarman Family Foundation Scientific Advisory Board (2014-)

Board of Scientific Advisors. WPI. International Institute of Integrative Sleep. Tsukuba (2019)

Board of Scientific Advisors IBEC (Institute of Biotechnology of Catalonia). 2020-

Grant reviewer: SFARI
Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (DSPAN) Study section (2018-22)
Standing member PMDA Study Section (2017-20)
F32 Study section "Neuronal basis of behavior"(2012-13)
Study section committee for Neurobiology A. Department of Veterans Affairs. (2003)
Natural Sciences and Engineering Research Council of Canada,
Swiss National Foundation
Canadian National Research Foundation
NHMRC Australia
European Research Council (2009-2013).
Member Spanish National Expert Committee on Biosciences
Israeli National Foundation

BBSRC
Medical Research Council
India Medical Alliance
Wellcome Trust
Agence Nationale de Recherche INSERM (2009- present)
Deutsche Forschungsgemeinschaft (2013)
Human Frontiers Program

Member American College of Neuropsychopharmacology (2006-)

Journal Reviewer: *Nature, Cell, Science, Nature Medicine, Neuron, Nature Neuroscience, Nature Medicine, Nature methods, Nature Reviews Neuroscience, eLife, Current Biology, PNAS, Cerebral cortex, Frontiers in Neuroendocrinology, Journal of Neuroscience, European Journal of Neuroscience, JPET, Molecular and Cellular Neuroscience, Molecular Psychiatry, Biological Psychiatry, Neuropsychopharmacology, Pharmacology, Molecular Pharmacology, Biochemistry and Behavior, Journal of Comparative Neurology, Genomics, Journal of Neuroscience Research, Neuroscience Letters, Journal of Neuroendocrinology, The Journal of Clinical Endocrinology & Metabolism, Journal of Neuroimmunology, Brain Research, Endocrinology, Molecular Endocrinology, Endocrine Reviews, Regulatory Peptides, Peptides, Neuroparmacology, Neuroscience, Journal of Applied Physiology, Sleep, etc.*

1990 Gaspar de Portolà Young Scientist Award

1991 CIRIT Short term fellowship

1991-93 CIRIT Long-term Fellowship

1993-94 NATO Post-doctoral Fellowship

Industry

Consultant: Merck (2010-15); Grupo Ferrer Internacional (2009-11) Eisai (2019), Idorsia, Pepsico, Black Rock Investments, Vida Ventures, etc.

Founder. Attune Neuroscience 2019

Steering Committee “The Alliance for Sleep” sponsored by Idorsia (2022-2023)

University Committees

Faculty search Committee. Department of Anesthesia (2023)

Steering Committee. Stanford Center for Sleep and Circadian Science (2021-)

Dean’s Fellowship review Committee (2007-09, 2014-)

Stanford CHRI Fellowship Committee (2018-21)

Stanford Neuroscience Institute Multidisciplinary Awards Committee (2016)

Neuroscience Graduate Program Admissions Committee (2007-11; 2015-22)
Neuroscience Graduate Program Executive Committee (2010)
Dept of Psychiatry Award Committee (2012-14)

Diversity and Inclusion

Member School of Medicine Taskforce on Diversity and Inclusion (2018)
Member DSPAN Review Committee (2018-2022)