



First & last name	Antoine Adamantidis
Title	Prof. Dr.
Date of birth	October 22 th 1975 (Tourcoing, France)
Marital status	Married, 3 boys (Bastien 13, Leo 12, Nikola 3)
Citizenship	Belgium
Swiss Immigration status	Work permit (C)
Language	French, English, Dutch (basic)
Website	tidis-lab.org

• EDUCATION

- 2006-2010 **Postdoctoral Fellow**, Stanford University, USA.
Neural circuits of arousal, Optogenetics.
Advisor: Professor Luis de Lecea, Ph.D.
- 2000-2005 **Ph.D.**
Faculty of Medicine, Dept of Biomedical Sciences, University of Liege, Belgium.
PhD Supervisor: Prof. Th. Grisar
- 2000-2002 **Master in Biomedical Science**
Faculty of Medicine, Dept of Biomedical Sciences, University of Liege, Belgium.
Msc Supervisor: Prof. Th. Grisar
- 1993-1997 **Baccalaureate in Molecular & Cellular Biology**, University of Liege, Belgium.

• CURRENT POSITION(S)

- 2014 – present **Associate Professor (Extraordinarius)**
Dept of Neurology, Inselspital, University of Bern, Switzerland.
- 2014 – present **Director**
Center for Experimental Neurology, Dept of Neurology, Inselspital, University of Bern, Switzerland.

• PREVIOUS POSITIONS

- 2014 – present **Extra-ordinarius Assistant Professor (tenured-track)**
Dept of Neurology, Inselspital, University of Bern, Switzerland.
- 2014 – 2017 **Adjunct Professor** (< 5% time commitment, co-supervision of 1 graduate student)
Dept of Psychiatry, McGill University & Douglas Mental Health University Research Institute, Canada.
- 2010 – 2014 **Tenured-track Assistant Professor**
Dept of Psychiatry, McGill University & Douglas Mental Health University Research Institute, Canada.
- 2008 – 2010 **Research Associate**
Dept of Psychiatry, Stanford University School of Medicine, USA.

• HONORS & AWARDS

- 2017 European Research Council - ERC Consolidator Grant
- 2017 Pfizer Research Prize, Switzerland.
- 2013 R. Broughton Young Investigator Award, Canadian Sleep Society, Canada.
- 2011 Canadian Research Chair, Canada.
- 2010 Canadian Funds for Innovation, Canada.
- 2010 European Research Council - ERC Starter Grant (declined to accept McGill position).
- 2009 NIH Pathway to Independence (PI) Award-K99/R00, USA.
- 2008 First Annual Sammy Kuo Prize, Stanford University, USA.
- 2008 NARSAD Young Investigator Award, USA.
- 2008 Sleep Research Society Young Investigator Award, USA.
- 2007-2010 FRS-FNRS Postdoctoral fellowship, Belgium.
- 2006-2007 D. Collen Research Foundation Fellow-BAEF, Belgium-USA.
- 2000-2005, 2007 Prize from the Leon Fredericq Foundation, Belgium.

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

- 2014 – present **5 Postdocs/3 PhDs/6 Master Students**
Faculty of Medicine, Department of Neurology, Zentrum Fur Experimentelle Neurology, University of Bern, Switzerland.
- 2010 – 2014 **3 Postdocs/2 PhDs/2 Master Students**

Faculty of Medicine, Department of Psychiatry, McGill University, Canada.

- **TEACHING ACTIVITIES**

- 2018 Course Director, FENS Cajal Advanced Courses on “Linking neural circuits to behavior”, October 8-26 2018, IINS, Bordeaux, France.
- 2017-present Teacher - "Optogenetic dissection of sleep circuits and functions", University of Lausanne, Switzerland.
- 2017-present Teacher - "Sleep mechanisms and sleep disorders", University of Geneva, Switzerland.
- 2016 Teacher - "Optogenetic dissection of sleep circuits and functions", ESRS teaching day, Bologna, Italy.
- 2016 Teacher - "Optogenetic in experimental sleep research", Oxford Sleep Summerschool, Oxford, UK.
- 2015 Teacher - "Optogenetic in sleep neurology", "Master Class on Narcolepsy", Budapest, Hungary.
- 2014-present Teacher - "Optogenetic in sleep neurology", BENESCO Lectures, University of Bern, Inselspital, Switzerland.
- 2014-present Teacher - "Sleep mechanisms and sleep disorders", Master in Biomedicine, University of Bern, Switzerland.
- 2014-present Teacher - "Optogenetic deconstruction of sleep-wake circuits", Alpine Sleep Summerschool, University of Southern Switzerland, Lugano, Switzerland
- 2014 Teacher "Optogenetics in sleep research" - CRPP, University of Zurich, Switzerland.
- 2014 Teacher "Optogenetics dissection of sleep-wake circuits in the brain" - APSS, USA.
- 2011-2013 Teacher & Course organizer - "NEUR602: Current Topics in Neurosciences ", Integrated Program in Neurosciences, McGill.
- 2013 Teacher - "Optogenetics", European Synapse Summer School (EScube), Bordeaux, France 2013.
- 2010-2013 Teacher - "Optogenetics dissection of neural circuits", Neurophotonics Summerschool, U Laval (Canada).
- 2010-present Examiner on Master thesis (5) and PhD thesis (6).

- **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2018 Symposium Chair, “Neuromodulation and brain states” SFN, San Diego 2018.
- 2015-present Program Committee Member - Swiss Society for Sleep Research, Sleep Medicine and Chronobiology (SSSSC), Basel, Switzerland.
- 2015 Program Committee Member - Worldsleap 2015 Congress (2000 participants), Istanbul, Turkey.
- 2014-present Organisator - BENESCO Lectures and teaching series (weekly, ~ 30 participants), University of Bern, Switzerland.
- 2013 Session Chair - Canadian Sleep Society, Halifax, Canada (2013)
- 2012 Session Chair - 21st Congress of the European Sleep Research Society, Paris, France.
- 2011-2014 Organizer - The Montreal All-Opto-Club (bi-monthly, ~ 50 participants), Montreal, Canada.

- **INSTITUTIONAL RESPONSIBILITIES**

- 2014-present Member of the Faculty Committee, University of Bern, Switzerland.
- 2014-present Member of the Graduate School for Cellular and Biomedical Sciences Committee, University of Bern, Switzerland.
- 2014-present Member of the BENESCO Committee, University of Bern, Switzerland.
- 2010-2017 Member of the Faculty Committee, McGill University, Canada.

- **MEMBERSHIP OF INTERNATIONAL REVIEW PANEL**

- 2012 - present Committee Member, Fonds de la Recherche Scientifique (FRS-FNRS), Belgium.
- 2012 Review panel member of Intramural NICHD-Program in Developmental Endocrinology and Genetics (PDEGEN), NIH Intramural laboratories, USA.

- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2006-present Regular member of the Swiss Society for Sleep Research, Sleep Medicine and Chronobiology (SSSSC), the Canadian Sleep Society (Board member), the American Professional Sleep Society-Sleep Research Society (APSS-SRS), the Canadian Association for Neurosciences (CAN), the Society for Neurosciences (SFN).

- **AD HOC REVIEWER**

Science (2), Nat Neurosci (16), Cur Bio (8), J. Neurosci. (11) J Physiol (4), J Neurophysiol (3), Cerebral Cortex (2), SLEEP (10), Plos One (6), Biol Psy (2), Front in Neur Circuit (1), EJM (2), EJP (1), Behav Brain Res (3), Neuroscience (3), eLife (1), The Int J Neuropsychopharm (1), ACS Chem Neurosci (2), Psych and Clin Neurosci (1).

- **MAJOR COLLABORATIONS**

Prof S. Williams, McGill University (Canada)
 Prof M. Massimini, University of Milano (IT)
 Prof E. Hamel, McGill University (Canada)
 Prof B. Jones, McGill University (Canada)
 Dr D. Burdakov, NIMH, University College London (UK)
 Prof S. Brown, University of Zurich (CH)
 Prof C. Bassetti, UNIBE-Inselspital (CH)
 Prof R. Huber, University of Zurich (CH)

- **INTERNATIONAL STANDING**

- Invited Speaker at International Symposia/Conferences (last 4 years)**

World Life Science Conference, *Frontiers in Sleep Studies* Beijing, China, 2018.
 Gordon Research Conference “Inhibition in the CNS, Les Diablerets, Switzerland, 2017.
 Neuromodulation NM2, EPFL, Lausanne, Switzerland, 2017.
 Japanese Neuroscience Society, Chiba, Japan, 2017.
 European Academy of Neurology, Amsterdam, The Netherlands, 2017.
 1st World Sleep Federation conference, Prague, Czech Republic, 2017.
 Swiss Society for Sleep Research, Sleep Medicine and Chronobiology, 2017 (Keynote).
 12th Meeting of the German Neuroscience Society, 2017.
 5th WPI-IIIS Symposium, Tokyo, Japan, 2016.
 4th Bordeaux Neurocampus Conference, Bordeaux, France, 2016.
 Sleep-Circadian Oxford Summerschool, 2016.
 Hellenic Sleep Research Society, 2016.
 18th International Neuroscience Winter Conference, Soelden, Austria, 2016.
 7th World Sleep Federation, Istanbul, Turkey, 2015.
 Societe Francaise de Recherche sur le Sommeil, Nantes, France, 2015.
 45th Society for Neurosciences, Chicago, USA, 2015.
 Brain & Brain PET Conference 2015, Vancouver, Canada, 2015.
 6th World Association of Sleep Medicine Congress, Seoul, South Korea, 2015.
 1st Gordon Research Conference on Sleep, Galveston, TX, USA, 2014.
 11th edition of the annual Giessbach meeting, Switzerland, 2014.
 Swiss Society for Neurosciences, Annual Meeting, Bern, Switzerland, 2014.
 Asian Sleep Research Society, Kerala, India, 2014.
 European Academy of Neurology, Istanbul, Turkey, 2014. (Keynote lecture)

- Selected invited Seminars (last 4 years)**

European Institute for theoretical Neuroscience (EITN), Paris, France, 2018.
 Weizmann Institute, Israel, 2018.
 University of Liege, 2018.
 University of Groningen, The Netherlands, 2018.
 University of Warwick, Coventry, UK, 2017.
 Edimburgh, Roslin, Institute, UK, 2017.
 IIIS Lecture, Tsukuba University, Tsukuba, Japan, 2016.
 IPMC, Nice Sophia-Antopolis, France 2016.
 Aix Marseille University, France 2016.
 INMED, Marseille, France, 2016.
 LNC, EPFL, Switzerland, 2016.
 Pasteur Institute, Paris, France, 2016.
 University of Cardiff, Cardiff, UK, 2015.
 Universite Libre de Bruxelles, Bruxelles, Belgium, 2015.
 University of Zurich, Zurich, Switzerland, 2015.
 Harvard Medical School, Sleep Grand Rounds, Boston, USA, 2014.
 Yale School of Medicine, Yale, USA, 2014.
 University of Pennsylvania, Philadelphia, USA, 2014.

- PUBLICATIONS**

Full publications list: <http://www.ncbi.nlm.nih.gov/pubmed/?term=adamantidis+a>
h-Index: 24 (~ 4400 citations, average: ~ 45 citations/publications over last 5 year)

RESEARCH ARTICLES

- Gent T, Bandarabadi M, Gutierrez Herrera C, Adamantidis A. Thalamic dual-control of sleep and wakefulness. (2018) **Nat. Neurosci.** *In press*.
- Pace M, Adamantidis A, Facchin L, Bassetti C. Role of REM Sleep, Melanin Concentrating Hormone and Orexin/Hypocretin Systems in the Sleep Deprivation Pre-Ischemia. *PLoS One* (2017) 6;12(1):e0168430.
- Kassiri H, Chemparathy A, Salam MT, Boyce R, Adamantidis A, Genov R. Electronic Sleep Stage Classifiers: A Survey and VLSI Design Methodology. **IEEE Trans Biomed Circuits Syst.** (2017). 11(1):177-188.
- Boyce R, Glasgow SD, Williams S, Adamantidis A. Causal evidence for the role of REM sleep theta rhythm in contextual memory consolidation. **Science** (2016) May 13;352(6287):812-6.
- Sclafani A, Adamantidis A, Ackroff K. MCH receptor deletion does not impair glucose-conditioned flavor preferences in mice. **Physiol Behav.** 2016 Sep 1;163:239-44.
- González JA, Iordanidou P, Strom M, Adamantidis A, Burdakov D. Awake dynamics and brain-wide direct inputs of hypothalamic MCH and orexin networks. **Nat. Commun.** 2016 Apr 22;7:11395. doi: 10.1038/ncomms11395.
- Herrera CG, Cadavieco MC, Jego S, Ponomarenko A, Korotkova T, Adamantidis A. Hypothalamic feedforward inhibition of thalamocortical network controls arousal and consciousness. **Nat. Neurosci.** (2016) 19(2):290-8.
- Sherwood, A., Holland, P.C., Adamantidis, A., and Johnson, A.W. (2015) Deletion of Melanin Concentrating Hormone Receptor-1 disrupts overeating in the presence of food cues. **Physiol. Behav.** 152(Pt B):402-7.
- Colby-Milley, J., Cavanagh, C., Jego, S., Breitner, J.C.S., Quirion, R., and Adamantidis, A. (2015) Sleep-Wake Cycle Dysfunction in the TgCRND8 Mouse Model of Alzheimer's Disease: From Early to Advanced Pathological Stages. **PLoS ONE** 10, e0130177.
- Apergis-Schoute, J., Iordanidou, P., Faure, C., Jego, S., Schöne, C., Aitta-Aho, T., Adamantidis, A., and Burdakov, D. (2015) Optogenetic evidence for inhibitory signaling from orexin to MCH neurons via local microcircuits. **J. Neurosci.** 35, 5435–5441.
- Amilhon, B., Huh, C.Y.L., Manseau, F., Ducharme, G., Nichol, H., Adamantidis, A., and Williams, S. (2015) Parvalbumin Interneurons of Hippocampus Tune Population Activity at Theta Frequency. **Neuron** 86, 1277–1289.
- Schöne, C., Apergis-Schoute, J., Sakurai, T., Adamantidis, A., and Burdakov, D. (2014) Coreleased orexin and glutamate evoke nonredundant spike outputs and computations in histamine neurons. **Cell Rep** 7, 697–704.
- Conductier G, Martin AO, Risold PY, Jego S, Lavoie R, Lafont C, Mollard P, Adamantidis A, Nahon JL. (2013) Control of ventricular ciliary beating by the melanin concentrating hormone-expressing neurons of the lateral hypothalamus: a functional imaging survey. **Front Endocrinol.** 4:182.
- Jego, S., Glasgow, S.D., Herrera, C.G., Ekstrand, M., Reed, S.J., Boyce, R., Friedman, J., Burdakov, D., and Adamantidis, A.R. (2013) Optogenetic identification of a rapid eye movement sleep modulatory circuit in the hypothalamus. **Nat. Neurosci.** 16, 1637–1643.
- Zhang Z, Cordeiro Matos S, Jego S, Adamantidis A, Séguéla P. (2013) Norepinephrine drives persistent activity in prefrontal cortex via synergistic $\alpha 1$ and $\alpha 2$ adrenoceptors. **PLoS One** Jun 13;8(6):e66122.
- Conductier G, Brau F, Viola A, Langlet F, Ramkumar N, Dehouck B, Lemaire T, Chapot R, Lucas L, Rovère C, Maitre P, Hosseiny S, Petit-Paitel A, Adamantidis A, Lakaye B, Risold PY, Prévot V, Meste O, Nahon JL, Guyon A. (2013) Melanin-concentrating hormone regulates beat frequency of ependymal cilia and ventricular volume. **Nat Neurosci.** 16(7):845-7.
- Schöne, C., Cao, Z.F.H., Apergis-Schoute, J., Adamantidis, A., Sakurai, T., and Burdakov, D. (2012) Optogenetic probing of fast glutamatergic transmission from hypocretin/orexin to histamine neurons in situ. **J. Neurosci.** 32, 12437–12443.
- Sherwood, A., Wosiski-Kuhn, M., Nguyen, T., Holland, P.C., Lakaye, B., Adamantidis, A., and Johnson, A.W. (2012) The role of melanin-concentrating hormone in conditioned reward learning. **Eur. J. Neurosci.** 36, 3126–3133.

- Adamantidis, A.R., Tsai, H.-C., Boutrel, B., Zhang, F., Stuber, G.D., Budygin, E.A., Touriño, C., Bonci, A., Deisseroth, K., and de Lecea, L. (2011) Optogenetic interrogation of dopaminergic modulation of the multiple phases of reward-seeking behavior. **J. Neurosci.** 31, 10829–10835.
- Karnani, M.M., Apergis-Schoute, J., Adamantidis, A., Jensen, L.T., de Lecea, L., Fugger, L., and Burdakov, D. (2011) Activation of central orexin/hypocretin neurons by dietary amino acids. **Neuron** 72, 616–629.
- Zhang F.*, Gradinaru V.*, Adamantidis A.R.*, Durand R., Airan R.D., de Lecea L., Deisseroth K. (2010) Optogenetic interrogation of neural circuits: technology for probing mammalian brain structures. **Nat Protoc.** 5(3):439-56.
- Carter, M.E., Yizhar, O., Chikahisa, S., Nguyen, H., Adamantidis, A., Nishino, S., Deisseroth, K., and de Lecea, L. (2010) Tuning arousal with optogenetic modulation of locus coeruleus neurons. **Nat. Neurosci.** 13, 1526–1533.
- Pachoud, B. *, Adamantidis, A. *, Ravassard, P., Luppi, P.-H., Grisar, T., Lakaye, B., and Salin, P.-A. (2010) Major impairments of glutamatergic transmission and long-term synaptic plasticity in the hippocampus of mice lacking the melanin-concentrating hormone receptor-1. **J. Neurophysiol.** (London) 104, 1417–1425.
- Carter, M.E., Adamantidis, A., Ohtsu, H., Deisseroth, K., and de Lecea, L. (2009) Sleep homeostasis modulates hypocretin-mediated sleep-to-wake transitions. **J. Neurosci.** 29, 10939–10949.
- Tsai, H.-C. *, Zhang, F. *, Adamantidis, A., Stuber, G.D., Bonci, A., de Lecea, L., and Deisseroth, K. (2009) Phasic firing in dopaminergic neurons is sufficient for behavioral conditioning. **Science** 324, 1080–1084.
- Adamantidis A., Salvert D., Goutagny R., Lakaye B., Gervasoni D., Grisar T., Luppi P.H., Fort P. (2008) Sleep architecture of the melanin-concentrating hormone receptor 1-knockout mice. **Eur. J. Neurosci.** 27(7):1793-800.
- Hoerberichts, F.A., Vaeck, E., Kiddle, G., Coppens, E., van de Cotte, B., Adamantidis, A., Ormenese, S., Foyer, C.H., Zabeau, M., Inzé, D., et al. (2008) A Temperature-sensitive mutation in the Arabidopsis thaliana phosphomannomutase gene disrupts protein glycosylation and triggers cell death. **J. Biol. Chem.** 283, 5708–5718.
- Tyhon, A., Lakaye, B., Adamantidis, A., and Tirelli, E. (2008) Amphetamine- and cocaine-induced conditioned place preference and concomitant psychomotor sensitization in mice with genetically inactivated melanin-concentrating hormone MCH1 receptor. **Eur. J. Pharmacol.** 599, 72–80.
- Adamantidis, A.R. *, Zhang, F. *, Aravanis, A.M., Deisseroth, K., and de Lecea, L. (2007) Neural substrates of awakening probed with optogenetic control of hypocretin neurons. **Nature** 450, 420–424.
- Adamantidis, A. *, Thomas, E. *, Foidart, A., Tyhon, A., Coumans, B., Minet, A., Tirelli, E., Seutin, V., Grisar, T., and Lakaye, B. (2005) Disrupting the melanin-concentrating hormone receptor 1 in mice leads to cognitive deficits and alterations of NMDA receptor function. **Eur. J. Neurosci.** 21, 2837–2844.
- Duncan EA1, Sorrell JE, Adamantidis A, Rider T, Jandacek RJ, Seeley RJ, Lakaye B, Woods SC. (2007) Alcohol drinking in MCH receptor-1-deficient mice. **Alcohol Clin Exp Res.** 31(8):1325-37.
- Tyhon, A., Adamantidis, A., Foidart, A., Grisar, T., Lakaye, B., and Tirelli, E. (2006) Mice lacking the melanin-concentrating hormone receptor-1 exhibit an atypical psychomotor susceptibility to cocaine and no conditioned cocaine response. **Behav Brain Res** 173, 94–103.
- Pirottin, D., Grobet, L., Adamantidis, A., Farnir, F., Herens, C., Schröder, H.D., and Georges, M. (2005) Transgenic engineering of male-specific muscular hypertrophy. **Proc. Natl. Acad. Sci.** 102, 6413–6418.
- Lakaye, B., Adamantidis, A., Coumans, B., and Grisar, T. (2004) Promoter characterization of the mouse melanin-concentrating hormone receptor 1. **Biochim. Biophys. Acta** 1678, 1–6.
- Verlaet, M., Adamantidis, A., Coumans, B., Chanas, G., Zorzi, W., Heinen, E., Grisar, T., and Lakaye, B. (2002) Human immune cells express ppMCH mRNA and functional MCHR1 receptor. **FEBS Lett.** 527, 205–210.

REVIEWS

- Boyce R, Williams S, Adamantidis A. REM sleep and memory. *Curr Opin Neurobiol.* (2017) 44:167-177
- Ferreira JGP, Bittencourt JC, Adamantidis A. Melanin-concentrating hormone and sleep. *Curr Opin Neurobiol.* (2017) 44:152-158.
- Boyce R, Adamantidis A. REM Sleep on It! **Neuropsychopharmacology.** 2017 42(1):375.
- Herrera CG, Ponomarenko A, Korotkova T, Burdakov D, Adamantidis A. Sleep & metabolism: The multitasking ability of lateral hypothalamic inhibitory circuitries. **Front Neuroendocrinol.** 2017 44:27-34.
- Lőrincz ML, Adamantidis AR. Monoaminergic control of brain states and sensory processing: existing knowledge and recent insights obtained with optogenetics.

Prog Neurobiol. 2016 Sep 12. pii: S0301-0082(16)30034-X.

Adamantidis A, Arber S, Bains JS, Bamberg E, Bonci A, Buzsáki G, Cardin JA, Costa RM, Dan Y, Goda Y, Graybiel AM, Häusser M, Hegemann P, Huguenard JR, Insel TR, Janak PH, Johnston D, Josselyn SA, Koch C, Kreitzer AC, Lüscher C, Malenka RC, Miesenböck G, Nagel G, Roska B, Schnitzer MJ, Shenoy KV, Soltesz I, Sternson SM, Tsien RW, Tsien RY, Turrigiano GG, Tye KM, Wilson RI.

Optogenetics: 10 years after ChR2 in neurons--views from the community.

Nat Neurosci. 2015 Sep;18(9):1202-12.

Bassetti CL, Ferini-Strambi L, Brown S, Adamantidis A, Benedetti F, Bruni O, Cajochen C, Dolenc-Groselj L, Ferri R, Gais S, Huber R, Khatami R, Lammers GJ, Luppi PH, Manconi M, Nissen C, Nobili L, Peigneux P, Pollmächer T, Randerath W, Riemann D, Santamaria J, Schindler K, Tafti M, Van Someren E, Wetter TC. Neurology and psychiatry: waking up to opportunities of sleep. : State of the art and clinical/research priorities for the next decade.

Eur J Neurol. 2015 Oct;22(10):1337-54.

Adamantidis AR. (Editorial)

[Modern neurosciences: with or without optogenetics?].

Med Sci (Paris). 2015 Mar;31(3):231-2.

Herrera CG, Adamantidis AR. (Highlight)

An integrated microprobe for the brain.

Nat Biotechnol. 2015 Mar;33(3):259-60.

Adamantidis AR.(Highlight)

Sleep: the sound of a local alarm clock.

Curr Biol. 2015 Jan 5;25(1):R49-51.

Jego S, Adamantidis A. MCH neurons: vigilant workers in the night. (2013) **Sleep** 36(12):1783-6.

Carter ME, de Lecea L, Adamantidis A. Functional wiring of hypocretin and LC-NE neurons: implications for arousal. (2013) **Front Behav Neurosci.** 7:43.

de Lecea, L., Carter, M.E., and Adamantidis, A. (2012) Shining Light on Wakefulness and Arousal.

Biol. Psychiatry, 1–7.

Adamantidis, A., Carter, M.C., and de Lecea, L. (2010) Optogenetic deconstruction of sleep-wake circuitry in the brain. **Front Mol Neurosci** 2, 31.

Adamantidis, A., and de Lecea, L. (2009) A role for Melanin-Concentrating Hormone in learning and memory. **Peptides** 30, 2066–2070.

Adamantidis, A., and de Lecea, L. (2009) The hypocretins as sensors for metabolism and arousal. **J. Physiol.** (Lond.) 587, 33–40.

Adamantidis A., de Lecea L. (2008) Sleep and metabolism: shared circuits, new connections. **Trends Endocrinol Metab.** 19(10):362-70.

Adamantidis, A., and de Lecea, L. (2008) Physiological arousal: a role for hypothalamic systems. **Cell. Mol. Life Sci.** 65, 1475–1488.

BOOK CHAPTERS

Luppi, PH., Adamantidis A., Fort P. A The neurophysiology and neurobiology of sleep ESRS 40th Anniversary book, In press.

Adamantidis, A., Carter, M.E. and de Lecea, L. Optogenetic control of arousal neurons. Shaw, P., Tafti, M. & Thorpy, M. The Genetic Basis of Sleep and Sleep Disorders. Cambridge University Press. In Press.

Zhang, F., Tsai, H.-C., Airan, R.D., Stuber, G.D., Adamantidis, A.R., de Lecea, L., Bonci, A., and Deisseroth, K. (2015) Optogenetics in Freely Moving Mammals: Dopamine and Reward. Cold Spring Harb Protoc pdb.top086330.

Adamantidis, A. & de Lecea, L. Optogenetic Probing of Hypocretin Regulation of Wakefulness. (2011) In Narcolepsy. Baumann, C.R., Bassetti, C.L., and Scammell, T.E. Springer Eds.

Adamantidis, A.R., Zhang, F., de Lecea, L., and Deisseroth, K. (2014) Establishing a fiber-optic-based optical neural interface. Cold Spring Harb Protoc 2014, 839–844.

Adamantidis, A.R., Zhang, F., de Lecea, L., and Deisseroth, K. (2014) Optogenetics: opsins and optical interfaces in neuroscience. Cold Spring Harb Protoc 2014, 815–822.

Zhang, F., Cong, L., Stuber, G.D., Adamantidis, A., and Deisseroth, K. (2011) Analysis of Neuronal Circuits with Optogenetics. Springer, Humana Press, pp. 207–223.

Adamantidis, A.R., Zhang, F., de Lecea, L. and Deisseroth, K.D. (2011) Optogenetics: Opsins and Optical Interfaces in Neuroscience in “Imaging in Neuroscience: A Laboratory Manual”, Edited By Fritjof Helmchen, Arthur Konnerth, Series Editor, Rafael Yuste. Cold Spring Harbor Laboratory Press.

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