

Curriculum Vitae

Michele Bellesi, MD, PhD

School of Bioscience and Veterinary Medicine
University of Camerino, Italy

Positions

2020 -	Associate Professor, School of Bioscience and Veterinary Medicine University of Camerino, Italy
2019 - 2020	Research Fellow, School of Physiology, Pharmacology, and Neuroscience, University of Bristol, UK
2018 - 2019	Consultant for Philips Respironics, Inc. Murrysville, PA, USA
2016 - 2018	Fixed-term researcher (Senior post-doc equivalent), Dept. of Experimental and Clinical Medicine, Università Politecnica delle Marche, Italy
2016 - 2017	Honorary Fellow, Dept. of Psychiatry, University of Wisconsin-Madison, USA
2011 - 2016	Research Associate, Dept. of Psychiatry, University of Wisconsin-Madison, USA
2010 - 2011	Research Scholar, Dept. of Psychiatry, University of Wisconsin-Madison, USA

Education and Training

2022	Italian Academic Habilitation for Full Professor (ASN2016 I fascia - 05/D1)
2017	Italian Academic Habilitation for Associate Professor (ASN2016 II fascia - 05/D1)
2016	Post-doctoral training in Sleep Neurophysiology, University of Wisconsin, WI USA
2011	PhD in Neuroscience, Università Politecnica delle Marche, Italy
2007	Residency in Neurology (50/50 and honors), University of Ancona, Italy
2002	Medical Doctor Degree (110/110 and honors), University of Ancona, Italy

Awards and Honours

2018	Travel Award sponsored by The R Foundation, Taiwan – 2.2K €
2017	FFABR 2017. Italian Ministry for University Research Award for basic research - 3K €
2016	Sleep Research Society DataBlitz Hypnos Cup (awarded best talk)
2006	Italian Society for Neuroscience Travel Award for the 2006 FENS forum, Geneva - 600€

Fellowships and Funding

2021-24	Alzheimer Research UK foundation grant – “Enhancing sleep to delay tauopathy” (PI) – 50K £
2021-24	BIAL foundation grant – “Mentation report analysis across distinct states of consciousness: a linguistic approach” (co-PI) – 33K €
2022-24	BrAMS charity - “Acoustic stimulation of sleep in relapsing-remitting multiple sclerosis – a feasibility study” (co-PI) – 7.4K £
2022-24	Above & Beyond Charity – “Feasibility study of SmartSleep® technology to improve efficiency and restorative quality of sleep in people with relapsing remitting multiple sclerosis” (co-PI) – 21K £
2021-22	Ormendes industrial grant – “SLAB51 in sleep deprivation” (co-PI) – 5K €
2020-21	ARUK Bristol & Bath Network – “Rocking to enhance sleep and delay the progression of tauopathy” (PI) – 5K £
2019-22	Wellcome Trust Seed Award in Science – “Boosting sleep to promote myelination” (PI) – 100K £
2018	Cariverona Foundation PhD grant – “Role of sleep in neurodevelopment” (PI) - 60K €

2007-11 PhD Fellowship sponsored by MIUR, Italy – 50K €

2002-07 5-year Resident Fellowship sponsored by University of Ancona, Italy – 150K €

Memberships in professional societies

2020- member of the Italian Sleep Medicine Society

2019- member of the European Sleep Research Society

2015- member of the Sleep Research Society

2012- member of the Society for Neuroscience

2007- member of the Italian Society for Neuroscience

2002- member of the Italian Society for Neurology

University-Industry Collaboration

2020 - present. Led a research project testing the use of probiotics to reduce the cellular burden of sleep deprivation in collaboration with swiss company Ormendes inc., specializing in the development and distribution of high quality microbionics.

2010 - present. Contributed to a research project in collaboration with Philips Research and Respiroics aimed at developing an innovative technology for brain stimulation to improve sleep quality. This collaboration has led to seven patents and the manufacturing of a product that is being commercialized (<https://www.usa.philips.com/c-e/smartsleep-cs.html>).

Editorial activity and peer review for international journals

Associate Editor for Brain Sciences, Guest Associate Editor for Sleep and Circadian Rhythms, Associate Editor for Frontiers in Psychiatry, Frontiers in Neurogenetics (Review Editor). Reviewer for Journal of Neuroscience, JOVE, Scientific Reports, Sleep Medicine, Neuroimage, Sleep, Molecular Neurobiology, PloSOne, BMC Psychiatry, Clinical Neurology and Neuropsychiatry, Acta Neurologica Scandinavica, etc.

Invited and selected talks (last 5 years)

- Sonno e Neuroplasticità. Simposio su Sonno e Demenza. Neurocentro della Svizzera Italiana, Lugano oct 21st 2021
- How sleep and wake shape astrocyte physiology. The Sleeping Brain Conference 2019, Paris, Oct 4th 2019.
- Sleep and wake at cortical synapses: a glial perspective. NeuroFrance 2019, Marseille, May 2019 (Speaker in a symposium).
- Sleep and wake at cortical synapses. Annual meeting – Society for Psychology – Taiwan. October 15th, 2018 (Speaker in a symposium).
- Effects of sleep loss on cortical microstructure. XIX World Congress of Psychophysiology – Lucca. September 5th, 2018 (Speaker in a symposium).
- Effects of sleep and wake on glia. University of Helsinki (Plenary Lecture). May 29th, 2018
- Enhancing sleep slow waves using acoustic stimuli: insight from home-based studies. CUBRIC, University of Cardiff, UK April 2018.
- Sleep and wake at cortical synapses: a glial perspective. International Symposium Sleep and Health Zurich February 1st-2nd 2018.
- Sleep and wake at cortical synapses. IMT School of Advanced Studies. Lucca, Italy December 5th, 2017.

- Sleep loss promotes structural changes in astrocytes. *Society for Neuroscience Annual Meeting*, Washington, November 2017 (Speaker in a Mini-symposium).
- Astrocytes mediate the reshaping of cortical synapses in response to sleep loss. *World Sleep Congress*, Prague, October 2017 (Speaker in a Symposium).
- Effects of sleep and wake on glial cells. BENESCO Lecture Series on sleep, epilepsy, consciousness and cognition at the University of Bern. September 15th, 2017.
- Sleep and wake at cortical synapses. Dept. Physiology, Pharmacology and Neuroscience. University of Bristol, July 11th, 2017.
- Effects of sleep and wake on glia. Center for Neuroscience, University of Copenhagen, June 5th, 2017.
- Looking for the functions of sleep: insights from molecular and ultrastructural studies. VIB & KU Leuven Center for Brain & Disease Research, May 31st, 2017
- Sleep and synapses: insights from ultrastructural studies. Dept Life Sciences, Imperial College London, May 4th, 2017

Publications in peer-reviewed journals

1. Role of corpus callosum in sleep spindle synchronization and coupling with slow waves. Bernardi G, Avvenuti, Cataldi J, Lattanzi S, Ricciardi E, Polonara G, Silvestrini M, Siclari F, Fabri M, **Bellesi M**. *Brain Comm* 2021 May 25;3(2):fcab108..
2. Characterization of subcellular organelles in perisynaptic cortical astrocytes. Aboufares El Alaoui A, Jackson M, Fabri M, de Vivo L and **Bellesi M**. *Front Cell Neurosci* 2021 Jan 28;14:573944.
3. Toschi N, Passamonti L, **Bellesi M**. Sleep quality relates to emotional reactivity via intra-cortical myelination. *Sleep*. 2020;zsaa146. doi:10.1093/sleep/zsaa146
4. Avvenuti, G, Handjaras, G, Betta, M, Cataldi, J, Imperatori, LS, Lattanzi, S, Riedner, BA, Pietrini, P, Ricciardi, E, Tononi, G, Siclari, F, Polonara, G, Fabri, M, Silvestrini, M, **Bellesi, M.**, & Bernardi, G. Integrity of Corpus Callosum Is Essential for the Cross-Hemispheric Propagation of Sleep Slow Waves: A High-Density EEG Study in Split-Brain Patients. *J Neurosci*. 2020;40(29):5589-5603.
5. **Bellesi M**, de Vivo L. Structural synaptic plasticity across sleep and wake. *Curr Op Physiol* 2020 June, 15;74-81
6. Bernardi G, Siclari F, **Bellesi M**. Editorial: Local Aspects of Sleep and Wakefulness. *Front Neurosci*. 2020 Feb 7;14:58.
7. de Vivo L, Nagai H, De Wispelaere N, Spano GM, Marshall W, **Bellesi M**, Nemec KM, Schiereck SS, Nagai M, Tononi G, Cirelli C. Evidence for sleep-dependent synaptic renormalization in mouse pups. *Sleep*. 2019 Oct 21;42(11).
8. Maria Spano G, Weyn Banningh S, Marshall W, de Vivo L, **Bellesi M**, Loschky SS, Tononi G, Cirelli C. Sleep deprivation by exposure to novel objects increases synapse density and axon-spine interface in the hippocampal CA1 region of adolescent mice. *J Neurosci*. 2019 Jul 1.
9. de Vivo L, **Bellesi M**. The role of sleep and wakefulness in myelin plasticity. *Glia*. 2019
10. Tai CH, **Bellesi M**, Chen AC, Lin CL, Li HH, Lin PJ, Liao WC, Hung CS, Schwarting RK, Ho YJ. A new avenue for treating neuronal diseases: Ceftriaxone, an old antibiotic demonstrating behavioral neuronal effects. *Behav Brain Res*. 2019 May 17;364:149-156.
11. **Bellesi M**, de Vivo L, Koebe S, Tononi G, Cirelli C. Sleep and Wake Affect Glycogen Content and Turnover at Perisynaptic Astrocytic Processes. *Front. Cell. Neurosci* 2018 12:308.

12. Bourdon AK, Spano G, Marshall W, **Bellesi M**, Tononi G, Serra PA, Baghdoyan HA, Lydic R, Campagna SR, Cirelli C. Sleep/wake Changes in the Metabolome of Mouse Cortex as Revealed by Ultra-performance Liquid Chromatography Coupled with High-Resolution Mass Spectrometry. ***Sci Rep*** 2018 Jul 25;8(1):11225.
13. **Bellesi M**, Haswell D, de Vivo L, Marshall W, Roseboom PH, Tononi G, Cirelli C. Myelin modifications after chronic sleep loss in adolescent mice. ***Sleep*** 2018 May 1;41(5). doi: 10.1093/sleep/zsy034.
14. Funk CM, Peelman K, **Bellesi M**, Marshall W, Cirelli C, Tononi G. Role of somatostatin-positive cortical interneurons in the generation of sleep slow waves. ***J Neurosci*** 2017 September 2017, 37 (38) 9132-9148.
15. **Bellesi M**, de Vivo L, Chini M, Gilli F, Tononi G, Cirelli C. Sleep loss promotes astrocytic phagocytosis and microglial activation in mouse cerebral cortex. ***J Neurosci*** 2017 May 24;37(21):5263-5273. *This paper is the #1 output from J Neurosci and is in the top 5% of all research outputs ever tracked by Altmetric, the attention research meter.*
16. de Vivo L, **Bellesi M**, Marshall W, Bushong EA, Ellisman MH, Tononi G, Cirelli C. Ultrastructural Evidence for Synaptic Scaling Across the Wake/sleep Cycle. ***Science*** 03 Feb 2017: Vol. 355, Issue 6324, pp. 507-510
17. Nagai H, de Vivo L, **Bellesi M**, Ghilardi MF, Tononi G, Cirelli C. Sleep consolidates motor learning of complex movement sequences in mice. ***Sleep*** 2016; 40 (2): zsw059. doi: 10.1093/sleep/zsw059.
18. **Bellesi M**, Bushey D, Chini M, Tononi G, Cirelli C. Contribution of sleep to the repair of neuronal DNA double-strand breaks: evidence from flies and mice. ***Sci Rep***. 2016 Nov 10;6:36804.
19. Billeh Y*, Rodriguez A*, **Bellesi M**, Bernard A, de Vivo L, Funk C, Harris J, Honjoh S, Mihalas S, Ng L, Koch C, Cirelli C, Tononi G. Effects of chronic sleep restriction during early adolescence on the adult pattern of connectivity of mouse secondary motor cortex. ***eNeuro***. 2016 Jun 20;3(2). * first co-authors.
20. Bernardi G, Cecchetti L, Siclari F, Buchmann A, Yu X, Handjaras G, **Bellesi M**, Ricciardi E, Kecskemeti SR, Riedner BA, Alexander AL, Benca RM, Ghilardi MF, Pietrini P, Cirelli C, Tononi G. Sleep reverts changes in human grey and white matter caused by wake-dependent training. ***Neuroimage***. 2016 Jan 23. pii: S1053-8119(16)00026-4.
21. Santostasi G, Malkani R, Riedner B, **Bellesi M**, Tononi G, Paller KA, Zee PC. Phase-locked loop for precisely timed acoustic stimulation during sleep. ***J Neurosci Methods***. 2016 Feb 1;259:101-14.
22. **Bellesi M**, Tononi G, Cirelli C, Serra PA. Region-Specific Dissociation between Cortical Noradrenaline Levels and the Sleep/Wake Cycle. ***Sleep***. 2016 Jan1;39(1):143-54.
23. de Vivo L, Nelson AB, **Bellesi M**, Noguti J, Tononi G, Cirelli C. Loss of sleep affects the ultrastructure of pyramidal neurons in the adolescent mouse frontal cortex. ***Sleep***. 2015 Dec 22. pii: sp-00267-15.
24. **Bellesi M**, de Vivo L, Tononi G, Cirelli C. Transcriptome profiling of sleeping, waking, and sleep deprived adult heterozygous Aldh1L1 - eGFP-L10a mice. ***Genom Data***. 2015 Dec;6:114-117.
25. **Bellesi M**, de Vivo L, Tononi G, Cirelli C. Effects of sleep and wake on astrocytes: clues from molecular and ultrastructural studies. ***BMC Biol***. 2015 Aug 25;13:66. *This study has been recommended by F1000.*
26. Bernardi G, Siclari F, Yu X, Zenning C, **Bellesi M**, Ricciardi E, Cirelli C, Ghilardi MF, Pietrini P, Tononi G. Neuronal and behavioral correlates of extended training during sleepdeprivation in humans: evidence for local, task-specific effects. ***J Neurosci*** 2015 35(11):4487-4500.
27. **Bellesi M**. Sleep and oligodendrocyte functions. ***Curr Sleep Med Rep***. 2015, Mar;1(1): 20-26. *(Invited Review)*

28. **Bellesi M**, Riedner BA, Garcia-Molina GN. Cirelli C, Tononi G. Enhancement of sleep slow waves: underlying mechanisms and practical consequences. *Front Sys Neurosci*. 2014 doi: 10.3389/fnsys.2014.00208.
29. **Bellesi M**, Pfister-Genskow M, Maret S, Keles S, Tononi G, Cirelli C. Effects of sleep and wake on oligodendrocytes and their precursors. *J Neurosci*. 2013 Sep;33(36):14288-142300. *This paper has been featured in Nature (vol 503 7 Nov, 2013) as the most viewed paper in science.*
30. Dash MB, **Bellesi M**, Tononi G, Cirelli C. Sleep/wake dependent changes in cortical glucose concentrations. *J Neurochem*. 2013 Jan;124(1):79-89.
31. **Bellesi M**, Vyazovskiy VV, Tononi G, Cirelli C, Conti F. Reduction of EEG theta power and changes in motor activity in rats treated with ceftriaxone. *PLoS One*. 2012;7(3):e34139.
32. Ferrarelli F, Sarasso S, Guller Y, Riedner BA, Peterson MJ, **Bellesi M**, Massimini M, Postle BR, Tononi G. Reduced Natural Oscillatory Frequency of Frontal Thalamocortical Circuits in Schizophrenia. *Arch Gen Psychiatry*. 2012 Aug;69(8):766-74.
33. Cizak M, **Bellesi M**. Synaptic plasticity modulates autonomous transitions between waking and sleep states: insights from a Morris-Lecar model. *Chaos*. 2011 21(4):043119.
34. Melone M, **Bellesi M**, Ducati A, Iacoangeli M, Conti F. Cellular and synaptic localization of EAAT2 in human cerebral cortex. *Front Neuroanat*. 2011 14;4:151. doi:10.3389/fnana.2010.00151.
35. **Bellesi M**, Di Bella P, Provinciali L. Diagnostic difficulties with central nervous system actinomycosis. *Neurol Sci*. 2011 32:945:947.
36. **Bellesi M**, Conti F. The mGluR2/3 agonist LY379268 blocks the effects of GLT-1 upregulation on prepulse inhibition of the startle reflex in adult rats. *Neuropsychopharmacology*. 2010 May;35:1253-1260.
37. Omrani A*, Melone M*, **Bellesi M**, Safiulina V, Aida T, Tanaka K, Cherubini E, Conti F. Up-regulation of GLT-1 severely impairs LTD at mossy fibre-CA3 synapses. *J Physiol*. 2009 Oct 1;587:4575-88. * first co-authors.
38. **Bellesi M**, Melone M, Gubbini A, Battistacci S, Conti F. GLT-1 upregulation impairs prepulse inhibition of the startle reflex in adult rats. *Glia*. 2009 May; 57(7): 703-713.
39. Melone M, **Bellesi M**, Gubbini A, Conti F. GLT-1 up-regulation enhances the effect of PCP on prepulse inhibition of the startle reflex in adult rats. *Schizophr Res*. 2009. Apr 109:196-197.
40. Melone M, **Bellesi M**, Conti F. Synaptic localization of GLT-1a in the rat somatic sensory cortex. *Glia*. 2009 Jan; 57(1):108-17.
41. Muglia M, Magariello A, Citrigno L, Passamonti L, Sprovieri T, Conforti FL, Mazzei R, Patitucci A, Gabriele AL, Ungaro C, **Bellesi M**, Quattrone A. A novel locus for dHMN with pyramidal features maps to chromosome 4q34.3-q35.2. *Clin Genet*. 2008 May;73(5):486-91.
42. **Bellesi M**, Logullo F, Di Bella P, Provinciali L. CNS demyelination during anti-TNF alpha therapy. *J Neurol*. 2006 May; 253(5):668-9.
43. **Bellesi M**, Passamonti L, Silvestrini M, Bartolini M, Provinciali L Non-convulsive status epilepticus during lithium treatment at therapeutic doses. *Neurol Sci*. 2006 Feb;26(6):444-6.
44. Passamonti L, Muglia M, Magariello A, **Bellesi M**, Conforti FL, Mazzei R, Patitucci A, Gabriele AL, Sprovieri T, Peluso G, Caracciolo M, Medici E, Logullo F, Provinciali L, Quattrone A. Further evidence of genetic heterogeneity in autosomal dominant distal motor neuronopathy. *Neuromuscul Disord*. 2004 Nov;14(11):705-10.

45. Capecchi M, Passamonti L, Annesi F, Annesi G, **Bellesi M**, Candiano IC, Ricciuti R, Iacoangeli M, Scerrati M, Zappia M, Tarantino P, De Marco EV, Civitelli D, Carrideo S, Provinciali L, Ceravolo MG, Quattrone A. Chronic bilateral subthalamic deep brain stimulation in a patient with homozygous deletion in the Parkin gene. **Mov Disord**. 2004. Dec;19(12):1450-2.

Conference Proceedings

Garcia-Molina G, Vissapragada S, Mahadevan A, Goodpaster R, Riedner B, **Bellesi M**, Tononi G. Probabilistic Characterization of Sleep Architecture: Home Based Study on Healthy Volunteers. **Conf Proc IEEE Eng Med Biol Soc**. 2016 Aug;2016:2834-2838.

Garcia-Molina GN, **Bellesi M**, Riedner BA, Pastoor S, Pfundtner S, Tononi G. Automatic Characterization of Sleep Need Dissipation Dynamics Using a Single EEG Signal. **Conf Proc IEEE Eng Med Biol Soc**. 2015;2015:5993-7.

Book chapters

Garcia-Molina G, **Bellesi M**, Pastoor S, Pfundtner S, Riedner B, Tononi G. Online Single EEG Channel Based Automatic Sleep Staging. In book: **Engineering Psychology and Cognitive Ergonomics. Applications and Services**. Springer Berlin Heidelberg, Editors: Don Harris, pp.333-342. 2013.

Bellesi M. The effects of sleep loss on brain functioning. **Handbook of Sleep Research**. Elsevier, Editors: Hans Dringenberg.

Patents

- ❖ System and method for enhancing REM sleep with sensory stimulation. Garcia-Molina GN, Papas N, Salazar J, Biring BS, **Bellesi M**, White DP. Publication number: US 20200197656
- ❖ System and method for adjusting the volume of auditory stimulation during sleep based on sleep depth latencies **Bellesi M**, Riedner B, Tononi G, Garcia-Molina G. Publication Number: 2016P00607US Joint Philips & UW
- ❖ System and method for adjusting the intensity of sensory stimulation during sleep based on sleep spindles. **Bellesi M**, Riedner B, Tononi G, Garcia-Molina G. Publication Number: WO2016005870 A1. Joint Philips & UW
- ❖ System and method for sleep session management based on slow wave sleep activity in a subject. Tononi G, Riedner B, **Bellesi M**, Garcia-Molina G, Pfundtner S, Pastoor S. Publication Numbers: US20160058970 A1, CN105324077A, EP2986208A1, WO2014170881A1. Joint Philips & UW
- ❖ Adjustment of sensory stimulation intensity to enhance sleep slow wave activity. **Bellesi M**, Riedner B, Tononi G, Garcia-Molina G. Publication Numbers: US20160082222 A1, CN105377129A, EP2986209A1, WO2014170781A1. Joint Philips & UW
- ❖ System and method for determining timing of sensory stimulation delivered to a subject during a sleep session. **Bellesi M**, Garcia-Molina G, Benzo J, Riedner B, Tononi G. Publication Numbers: US20170000970 A1, CN105960195A, EP3102094A1, WO2015118415A1. Joint Philips & UW
- ❖ System and method for enhanced knowledge consolidation by sleep slow wave induction and sensory context re-creation. Tononi G, Westerink J, Garcia-Molina G, **Bellesi M**. Publication Numbers: WO2014118650 A1, US20150374951, CN104955513A, EP2950868A1. Joint Philips & UW

- ❖ Sensory stimuli to increase accuracy of automated real-time sleep staging. Garcia-Molina G, Tononi G, Riedner B, **Bellesi M**, Pfundtner S, Pastoor S. Publication Numbers: [US20150359482 A1](#), [CN104955385A](#), [EP2950707A1](#), [WO2014118693A1](#). Joint Philips & UW.

Teaching

2020- Biosciences and Biotechnology – (physiology) - Unicam
 2020 Neuroscience Lectures on synaptic plasticity and sleep in The Rhythms of Life 2020 - UoBristol
 2016-2018 Nursing school (human physiology) - Univpm
 2010 Medical school (pH regulation, body temperature mechanisms) - Univpm
 2008-2009 Dentistry school (physiology of the digestive system) - Univpm
 2008-2009 Bio-engineering school (basics of computational models) - Univpm
 2005-2009 Medical school (biophysics of nerve pulses and relative pathophysiology) - Univpm

Univpm Teaching evaluation: 2017-18 evaluation for the human physiology course (Nursing school): 95.8% overall score, with 100% for items relative to clarity, motivation, availability, arousing general interest.

Impact of the research on the media (selected list)

Sleep deprivation can lead to the brain ‘eating itself’, study says. **Independent** 25/05/2017
 The brain starts to eat itself after chronic sleep deprivation. **New Scientist** 23/05/2017
 Sleep deprivation can cause brain to start 'eating' itself. **The Telegraph** 26/05/2017
 Your Brain Will Start To Eat Itself After Chronic Sleep Deprivation. **Huffingtonpost** 24/05/2017
 The Purpose of Sleep? To Forget, Scientists Say. **The New York Times**. 3/02/2017
 The Brain’s Connections Shrink During Sleep. **The Atlantic** 3/02/2017
 Sleep is about forgetting some memories and keeping others, studies suggest. **Independent** 3/02/2017
 Sleep may help us to forget by rebalancing brain synapses. **The Guardian** 3/02/2017
 Sleep Affects Formation Of Myelin, Vital To Brain Growth And Repair: Study. **HuffPost** 04/09/2013
 What's the point of sleep? **The Guardian**. 05/09/2013
 Beauty sleep or brains sleep? Switching off ‘helps regrow brain cells’. **Independent** 04/09/2013
 How Sleep Protects the Brain over Time. **Scientific American**. 01/01/2014
 Sleep 'boosts brain cell numbers'. **BBC**. 04/09/2013

Outreach Activities

Public engagement (Talks, Stands, Sleep Questionnaires, etc) at Sharper 2018 and 2020 - MSCAnight – September 2018 and 2020

Participated in Memex “Galileo”, a scientific format for popular science of Rai Cultura. Registered on May 9th, 2018

Participated in a popular radio podcast on Deutsche Welle, a Germany's international broadcaster. Topic: glial phagocytosis and sleep loss. June, 2017

Il Sonno e le Sinapsi. Lettere dalla Facoltà. Popular Scientific Bulletin of Università Politecnica delle Marche. Anno XX n.2, 2017.

TG3-Leonardo RAI 3: “La forma del sonno”, Popular Scientific Newscast 02.09.2017