



CURRICULUM VITAE

PERSONAL INFORMATION	<p>Michele Ferrara Department of Biotechnological and Applied Clinical Sciences Via Vetoio, loc. Coppito L'Aquila 67100 Italy E-mail address: michele.ferrara@univaq.it</p>
CURRENT POSITION	<p>Full Professor of Psychobiology and Physiological Psychology (M-PSI/02)</p>
EDUCATION OTHER QUALIFICATIONS	<ul style="list-style-type: none">- 1998: obtained a Ph.D. in Psychology at "Sapienza" University of Rome- 1993: passed the licensing examination required to practice as a Psychologist in Italy- November 1991: graduated in Experimental Psychology (with honours) at "Sapienza" University of Rome with a thesis entitled "Relationships between sleep and the immune function, with particular reference to slow-wave sleep: a pilot study"- 1995: visiting fellow in the Sleep Laboratory of the University of Texas, Southwestern Medical Center at Dallas, directed by Prof. Roseanne Armitage, studying quantitative methods of EEG analysis and psychophysiological techniques in sleep research- 1996: visiting fellow in the Sleep Study Unit of the University of Pennsylvania School of Medicine at Philadelphia, directed by Prof. David F. Dinges, mastering research methods of cognitive and behavioral performance upon awakening- 1990-2002: intern fellow in the Sleep Psychophysiology Laboratory, Department of Psychology, "Sapienza" University of Rome, directed by Prof. Mario Bertini- 1986: Classical high school diploma at the "M.T. Cicerone" Lyceum, Sala Consilina (Salerno), Italy
ACADEMIC APPOINTMENTS	<p>September 2019: elected President of the Didactic Area Council (CAD) of Psychology for the period 2019-20/2021-22</p> <p>April 2017: elected President of the Council of the Didactic Area (CAD) of Psychology</p> <p>February 2017: appointed Vice-President of the CAD of Psychology</p> <p>January 2017-April 2017: Coordinator of the Master's Degree Course in Applied, Clinical and Health Psychology</p> <p>April 2016: appointed member of the University of L'Aquila Quality Presidium for the period 2016-2019</p> <p>October 2015-February 2016: President of the Erasmus Commission of the Psychology Area</p> <p>October 2015-December 2016: Vice-President of the Master's Degree Course in Applied, Clinical and Health Psychology; Member of the Didactic</p>



	<p>Commission, and of the Joint Commission of the CAD of Psychology</p> <p>2014: Member of the Joint Commission for post-graduate internship activities according to D.M. 239/1992</p> <p>2014: President of the Commission for State Exams for the qualification to the profession of Psychologist, University of L'Aquila</p> <p>2013-present: Member of the Psychology CAD Review Group, Bachelor's Degree Course in Applied Psychological Sciences and Master's Degree Course in Applied, Clinical and Health Psychology</p> <p>2013-2015: Member of the Joint Didactic Commission of the Department of Clinical Medicine, Public Health, Life and Environmental Sciences</p> <p>2012-2015: Vice-president of the Didactic Area Council (CAD) of Psychology</p> <p>2012-2015: President of the Master's Degree Course in Applied, Clinical and Health Psychology, Department of Clinical Medicine, Public Health, Life and Environmental Sciences, University of L'Aquila</p> <p>2012-2015: Coordinator of the Psychological and Social Sciences Section of the Department of Clinical Medicine, Public Health, Life and Environmental Sciences, University of L'Aquila</p> <p>2012: Holds the Prolusion entitled "The psychological signs of the earthquake: getting up after a catastrophe" at the inauguration of the Academic Year 2011-2012 of the University of L'Aquila</p> <p>2011: Member of the Commission rewriting the Statute of the University of L'Aquila</p> <p>2009-2012: Coordinator of the specialization in Clinical and Dynamic Psychology of the Master's Degree Course in Applied, Clinical and Health Psychology, Faculty of Psychology, University of L'Aquila</p> <p>2008 - Member of the Commission for State Exams for the qualification to the profession of Psychologist, University of L'Aquila</p> <p>2008-2012: Coordinator of the course in Cognitive Neuroscience of the Master's Degree Course in Applied, Clinical and Health Psychology, Faculty of Psychology, University of L'Aquila</p> <p>2008-2012: President of the Master's Degree Course in Applied, Clinical and Health Psychology, Faculty of Psychology, University of L'Aquila</p> <p>2001: Research consultant of the Department of Medicine of the Experimental Flight Center of the Italian Air Force, Pratica di Mare Airport, Pomezia (Rome)</p> <p>2000-2002: Research fellow (SSD M10B) at the Department of Psychology of the University of Rome "La Sapienza"</p> <p>1999: Research contractor at the Department of Psychology of the University of Rome "La Sapienza".</p> <p>1993-1999: Research consultant of the Department of Neuropsychophysiology of the Air Division "Research Studies and Experiments" of the Italian Air Force, Pratica di Mare Airport, Pomezia (Rome)</p> <p>1992 - Research assignment of the Istituto Superiore di Sanità</p>
--	--



CLINIC APPOINTMENTS	1993 - Qualified to practice as a psychologist in Italy
TEACHING EXPERIENCE	<p>- 2002-today: tutoring of over 100 Bachelor's, Master's and Doctoral degree theses</p> <p>- In the Academic Year 2020-2021 holds the following courses: 1st Cycle Degree in APPLIED PSYCHOLOGICAL SCIENCE - L-24</p> <ol style="list-style-type: none">1. Physiological Psychology (M-PSI/02) 56 Hours2. Psychophysiological and Behavioral Techniques (Module of Techniques Applied to Neuroscience) (M-PSI/02) 8 Hours3. Psychophysiology of Sleep (M-PSI/02) 56 Hours4. Psychobiology of learning and memory (M-PSI/02) 16 Hours
RESEARCH ACTIVITIES	<p>- Author of over 160 full-length papers in indexed and peer-reviewed international journals, and of about 500 total publications</p> <p>- 2006-present: Head of the Laboratory of Sleep Psychophysiology and Cognitive Neuroscience, University of L'Aquila</p> <p>- 2012: Member of the Board of the Italian Sleep Research Society (SIRS)</p> <p>- since 2019: Member of the Scientific Committee of the Italian Sleep Medicine Association (AIMS)</p> <p>- 2020-2022: Member of the Scientific Committee of the European Sleep Research Society</p> <p>- since 2020: Member of the Scientific Committee of the Italian Society of Medical, Surgical, Aesthetic Dermatology and Sexually Transmitted Diseases (SIDeMaST)</p> <p>- 2020: Guest Editor of the Special Issue "Dream Recall and the Brain" for <i>Brain Sciences</i></p> <p>- He served as a Reviewer for the following international scientific journals: <i>Nature Communications; Journal of Neuroscience; Cerebral Cortex; NeuroImage; Neurobiology of Stress; Scientific Reports; Sleep Medicine Reviews; Hippocampus; Sleep; Cortex; Psychopharmacology; Journal of Sleep Research; Neuropsychology; Sleep Medicine; Brain Research; Current Topics in Medicinal Chemistry; PLoS ONE; International Journal of Psychophysiology; Sleep and Hypnosis; Neurobiology of Sleep and Circadian Rhythms; Aviation, Space and Environmental Medicine; Canadian Journal of Experimental Psychology; Journal of Experimental Psychology: Applied; Biological Psychology; Journal of Psychiatric Research; Neurobiology of Learning and Memory.</i></p> <p>- He has served as a Reviewer in the evaluation of national and international scientific projects for the following agencies:</p> <ul style="list-style-type: none">• MIUR (PRIN, FIRB, VQR)• Polytechnic of Turin• Human Frontiers Science Program (HFSP)• The Netherlands Organization for Scientific Research (NWO)• The Marsden Fund (New Zealand)• Hong Kong Research Grants Council



• Czech Science Foundation

- Invited Speaker

2014: Chairman of the Symposium "Sleep and the social brain", 22nd Congress of the European Sleep Research Society (ESRS), Tallinn, Estonia

2012: Chairman of the Symposium "New approaches to the study of sleep and dreams: tACS and tDCS", 21st Congress of the European Sleep Research Society (ESRS), Paris, France

2012: "Electrophysiological behavior of cortical and subcortical structures at sleep onset and during sleep", within the Symposium "Recording in and outside of the human brain: what we learn about sleep", 21st Congress of the European Sleep Research Society (ESRS), Paris, France

2012: Department of Psychology, University of Calgary, Canada: "The role of sleep in spatial memory consolidation"

2005: Symposium, 19th Annual Meeting of the Associated Professional Sleep Societies (APSS), Denver, CO, USA: "Slow Wave Sleep Deprivation-Induced Asymmetries In The Human Sleep EEG"

2005: Symposium, 19th Annual Meeting of the Associated Professional Sleep Societies (APSS), Denver, CO, USA: "Relationships Between Delta and Sigma activity: Stability And Heritability"

2003: Institute of Pharmacology and Toxicology, University of Zurich, Switzerland: "Regional differences of the human sleep EEG in response to selective SWS deprivation"

- National and international funding

2011: Ministry of Health, 2009 Finalized Research, as Head of Unit

2011: CARISPAQ Foundation, PI

2009: "Neuroscience 2008 Program", Compagnia di San Paolo, PI

2008: European Sleep Research Society (ESRS-Sanofi-Synthelabo Research Grant) as member of the research unit

2008: Projects of Relevant National Interest (PRIN 2007) of the Ministry of Education, University and Research (MIUR) as Head of Research Unit

2006: Projects of Relevant National Interest (PRIN) as member of research unit

2004: Projects of Relevant National Interest (PRIN) as member of research unit

2002: Murst "Young Researchers Project"

2002: European Sleep Research Society (ESRS-Sanofi-Synthelabo Research Grant) as PI

- Participation in PhD Boards

2016-present: member of the Board of the Research Doctorate in Experimental Medicine, Department of Applied and Biotechnological Clinical Sciences, University of L'Aquila

2013-2015: member of the Board of the Research Doctorate in Health and Environmental Sciences, University of L'Aquila

2012: member of the Board of the Research Doctorate in Translational Medicine, University of L'Aquila

2007-2011: member of the Board of the Research Doctorate in Biochemical Sciences and Neurosciences, University of L'Aquila



	<p>- Other assignments</p> <p>2011: President of the Organizing Committee of the XVI Annual Meeting of the Italian Sleep Research Society (SIRS), held in L'Aquila on May 27-28, 2011</p> <p>2008-2012: Member of the Scientific Committee of the Department of Health Sciences, University of L'Aquila</p> <p>2008-2011: Member of the Scientific Committee of the University Publishing Company "Edizioni L'UNA - S.r.l." (University Press)</p> <p>2007: Proponent of the institution of the "Interdepartmental Research Center in Applied Psychophysiology" of the University of L'Aquila</p> <p>- Awards</p> <p>2002 - Among the winners of the Young Researchers Award, assigned by the Italian Association of Psychology, Experimental Psychology Section.</p> <p>1991 - Winner of the "E. Valentini" of the Faculty of Psychology, University of Rome "La Sapienza", for the best degree thesis.</p> <p>- Lines of Research</p> <ol style="list-style-type: none"> 1. - Relationships between sleep and higher cognitive processes (learning, memory, attention, executive functions) 2. Sleep and regulation of emotional processes 3. Psychophysiological, cognitive, behavioral and emotional effects of sleep deprivation and of the alteration of sleep-wake rhythms 4. Methods to counteracting sleepiness 5. Cortical topography of sleep and wake EEG. 6. Sleep inertia: performance and cortical reactivity upon awakening. 7. Psychophysiology of falling asleep. 8. Psychophysiological and anatomical-functional correlates of dreaming. 9. Phasic events and microstructure of normal and pathological sleep. 10. Effects of Transcranial Stimulation on wakefulness and sleep. 11. In the late 1990s-early 2000s he refined a non-invasive technique for selective slow-wave sleep deprivation. 12. In the second half of the 2000s he co-started a line of research that introduced the study of human hippocampal and neocortical sleep, based on the recording of intracerebral electrical activity with stereo-EEG method in epileptic patients.
--	--

<p align="center">RESPONSIBILITY IN ACADEMIC ACTIVITIES</p>	<ul style="list-style-type: none"> • President of the Didactic Area Council (CAD) of Psychology • President of the Didactic and Orientation Commission, Department of Biotechnological and Applied Clinical Sciences • Member of the University of L'Aquila Working Group for the activation of online didactic activity • Member of the Steering Group of the School of Specialization in Clinical Psychology, University of L'Aquila, as head of the Educational Continuity Coordination • Head of the Laboratory of Sleep Psychophysiology and Cognitive Neuroscience, Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila
---	---



EDITORIAL BOARD, EDITORIAL ACTIVITIES, SOCIETY MEMBERSHIP	<p>- Member of the Editorial Board of the following journals: Brain Sciences (from 2020); Journal of Sleep Medicine and Disorders; International Journal of Neurology Research; World Journal of Neurology (until July 2018); World Journal of Radiology (until 2017), International Journal of Brain Science (until 2016)</p> <p>- Member of the European Sleep Research Society (ESRS); Federation of European Neuroscience Societies (FENS); Italian Association of Sleep Medicine (AIMS)</p>
SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS	<p>Scopus Author ID: 7101722312; Orcid ID: http://orcid.org/0000-0003-2304-7576</p> <p>- H-index Scopus: 43 (al 5/3/2021); Total citations Scopus: 6284 (al 5/3/2021)</p> <p>- H-index Google Scholar: 53 (al 5/3/2021); Total citations Google Scholar: 9800 (al 5/3/2021)</p>
SELECTED PUBLICATIONS	<p>A selection of peer-reviewed papers published in the last 10 years:</p> <p>-De Gennaro L., Cipolli C., Cherubini C., Marzano C., Curcio G., Ferrara M., Caltagirone C., Spalletta G. (2011) Amygdala and hippocampus volumetry and diffusivity in relation to dreaming. <i>Human Brain Mapping</i>, 32: 1458–1470. [2010 Aug 25 Epub ahead of print]. Doi: 10.1002/hbm.21120.</p> <p>-Marzano C., Ferrara M., Mauro F., Moroni F., Tempesta D., Cipolli C., De Gennaro L. (2011) Recalling and forgetting dreams: Theta and alpha oscillations during sleep predict subsequent dream recall. <i>Journal of Neuroscience</i>, 31 (18): 6674-6683. Doi: 10.1523/JNEUROSCI.0412-11.2011.</p> <p>-Nobili L., Ferrara M., Moroni F., De Gennaro L., Lo Russo G., Campus C., Cardinale F., De Carli F. (2011) Dissociated wake-like and sleep-like electrocortical activity during sleep. <i>NeuroImage</i>, 58 (2): 612-619. Doi: 10.1016/j.neuroimage.2011.06.032.</p> <p>-Ferrara M., De Gennaro L. (2011) Going local: Insights from EEG and stereo-EEG studies of the human sleep-wake cycle. (Invited Review). <i>Current Topics in Medicinal Chemistry</i>, 11 (19): 2423-2437. Doi: 10.2174/156802611797470268.</p> <p>-De Gennaro L., Marzano C., Cipolli C., Ferrara M. (2012) How we remember the stuff that dreams are made of: Neurobiological approaches to the brain mechanisms of dream recall. <i>Behav Brain Research</i>, 226 (2): 592–596.</p> <p>-Moroni F., Nobili L., De Carli F., Massimini M., Francione S., Marzano C., Proserpio P., Cipolli C., De Gennaro L., Ferrara M. (2012) Slow EEG rhythms and inter-hemispheric synchronization across sleep and wakefulness in the human hippocampus. <i>NeuroImage</i>, 60: 497–504. Doi:10.1016/j.neuroimage.2011.11.093.</p> <p>-Tempesta D., Mazza M., Iaria G., De Gennaro L., Ferrara M. (2012) A specific deficit in spatial memory acquisition in post-traumatic stress disorder and the role of sleep in its consolidation. <i>Hippocampus</i>, 22 (5): 1154–1163. Doi: 10.1002/hipo.20961. Epub 2011 Jul 7.</p> <p>-Ferrara M., Moroni F., De Gennaro L., Nobili L. (2012) Hippocampal sleep</p>



features: relations to human memory function. *Frontiers in Neurology*, 3: 57. Doi: 10.3389/fneur.2012.00057.

-Tempesta D., Couyoumdjian A., Moroni F., Marzano C., De Gennaro L., **Ferrara M.** (2012) The impact of one night of sleep deprivation on moral judgments. *Social Neuroscience*, 7 (3): 292-300. First published online: 26 Sep 2011. Doi: 10.1080/17470919.2011.614002.

-Nobili L., De Gennaro L., Proserpio P., Moroni F., Sarasso S., Pigorini A., De Carli F., **Ferrara M.** (2012) Local aspects of sleep: observations from intracerebral recordings in humans. *Progress in Brain Research*, 199: 219-32. Doi: 10.1016/B978-0-444-59427-3.00013-7

-Tempesta D., Curcio G., De Gennaro L., **Ferrara M.** (2013) Long-term impact of earthquakes on sleep quality. *PLoS ONE*, 8(2): e55936. Doi:10.1371/journal.pone.0055936.

-Tempesta D., Cipolli C., Desideri G., De Gennaro L., **Ferrara M.** (2013) Can taking a nap during a night-shift counteract the impairment of executive skills in residents? *Medical Education*, 47(10): 1013-21. Doi: 10.1111/medu.12256.

-Sarasso S., Proserpio P., Pigorini A., Moroni F., **Ferrara M.**, De Gennaro L., De Carli F., Lo Russo G., Massimini M., Nobili L. (2014) Hippocampal sleep spindles preceding neocortical sleep onset in humans. *NeuroImage*, 86: 425-432. Doi: 10.1016/j.neuroimage.2013.10.031.

-Moroni F., Nobili L., Iaria G., Sartori I., Marzano C., Tempesta D., Proserpio P., Lo Russo G., Gozzo F., Cipolli C., De Gennaro L., **Ferrara M.** (2014) Hippocampal slow EEG frequencies during NREM sleep are involved in spatial memory consolidation in humans. *Hippocampus*, 24 (10): 1157-68. Doi: 10.1002/hipo.22299. **(Featured in the Journal's cover)**.

-Tempesta D., De Gennaro L., Presaghi F., **Ferrara M.** (2014) Emotional working memory during sustained wakefulness. *Journal of Sleep Research*, 23: 646–656. Doi: 10.1111/jsr.12170.

-Guadagni V., Burles F., **Ferrara M.**, Iaria G. (2014) The effect of sleep deprivation on emotional empathy. *Journal of Sleep Research*, 23: 657–663. Doi: 10.1111/jsr.12192.

-Mazza M., Tempesta D., Pino M., Nigri A., Catalucci A., Guadagni V., Gallucci M., Iaria G., **Ferrara M.** (2015) Neural activity related to cognitive and emotional empathy in post-traumatic stress disorder. *Behavioural Brain Research*, 282: 37–45. [Epub ahead of print: 2014 Dec 30]. pii: S0166-4328(14)00852-3. Doi: 10.1016/j.bbr.2014.12.049.

-**Ferrara M.**, Bottasso A., Tempesta D., Carrieri M., De Gennaro L., Ponti G. (2015) Gender differences in sleep deprivation effects on risk and inequality aversion: Evidence from an economic experiment. *PLoS ONE*, 10 (3): e0120029. Doi: 10.1371/journal.pone.0120029.

-Tempesta D., De Gennaro L., Natale V., **Ferrara M.** (2015) Emotional memory processing is influenced by sleep quality. *Sleep Medicine*, 16 (7): 862-870. Doi: 10.1016/j.sleep.2015.01.024

-Gorgoni M., **Ferrara M.**, D'Atri A., Lauri G., Scarpelli S., Truglia I., De Gennaro L. (2015) EEG topography during sleep inertia upon awakening after a period of increased homeostatic sleep pressure. *Sleep Medicine*, 16 (7): 883-890. Doi: 10.1016/j.sleep.2015.03.009

-De Carli F., Proserpio P., Morrone E., Sartori I., **Ferrara M.**, Gibbs S.A., De Gennaro L., Lo Russo G., Nobili L. (2016) Activation of the motor cortex during phasic Rapid Eye Movement sleep. *Annals of Neurology*, 79 (2): 326–



330. Doi: 10.1002/ana.24556. **(Featured in the Journal's cover).**
- De Gennaro L., Lanteri O., Piras F., Scarpelli S., Assogna F., **Ferrara M.**, Caltagirone C., Spalletta G. (2016) Dopaminergic system and dream recall: An MRI study in Parkinson's Disease patients. *Human Brain Mapping*, 37(3): 1136-1147. Doi: 10.1002/hbm.23095.
- Tempesta D., Socci V., Coppo M., Dello Iorio G., Nepa V., De Gennaro L., **Ferrara M.** (2016) The effect of sleep deprivation on the encoding of contextual and non-contextual aspects of emotional memory. *Neurobiology of Learning and Memory*, 131: 9–17. Doi: 10.1016/j.nlm.2016.03.007
- Gorgoni M., Lauri G., Truglia I., Cordone S., Sarasso S., Scarpelli S., Mangiaruga A., D'Atri A., Tempesta D., **Ferrara M.**, Marra C., Rossini P.M., De Gennaro L. (2016) Parietal fast sleep spindle density decrease in Alzheimer's disease and amnesic mild cognitive impairment. *Neural Plasticity*, 2016: 8376108. Doi:10.1155/2016/8376108.
- D'Atri A., De Simoni E., Gorgoni M., **Ferrara M.**, Ferlazzo F., Rossini P.M., De Gennaro L. (2016) Electrical stimulation of the frontal cortex enhances slow-frequency EEG activity and sleepiness. *Neuroscience*, 324: 119-130. Doi: 10.1016/j.neuroscience.2016.03.007
- Ferrara M.**, Tempesta D., De Gennaro L. (2016) Do exoskeletons dream of plastic sleep? *Physics of Life Reviews*, 16: 178–180. [2015 Dec 14 Epub ahead of print]. Doi: 10.1016/j.plrev.2015.12.003.
- Grassi D., Socci V., Tempesta D., Ferri C., De Gennaro L., Desideri G., **Ferrara M.** (2016) Flavanol-rich chocolate acutely improves arterial function and working memory performance counteracting the effects of sleep deprivation in healthy subjects. *Journal of Hypertension*, 34 (7): 1298-1308. Doi:10.1097/HJH.0000000000000926
- Tempesta D., De Gennaro L., Natale V., **Ferrara M.** (2016) Poor sleep quality influences emotional evaluations even after controlling for depression. *Sleep Medicine*, 22: 101. Doi: 10.1016/j.sleep.2015.07.035.
- Valera S., Guadagni V., Slone E., Burles F., **Ferrara M.**, Campbell T., Iaria G. (2016) Poor sleep quality affects spatial orientation in virtual environments. *Sleep Science*, 9 (3): 225–231. Doi: <http://dx.doi.org/10.1016/j.slsci.2016.10.005>
- De Gennaro L., Gorgoni M., Reda F., Lauri G., Truglia I., Cordone S., Scarpelli S., Mangiaruga A., D'Atri A., Lacidogna G., **Ferrara M.**, Marra C., Rossini P.M. (2017) The fall of sleep K-complex in Alzheimer disease. *Scientific Reports*, 7: 39688. Doi: 10.1038/srep39688.
- Socci V., Tempesta D., Desideri G., De Gennaro L., **Ferrara M.** (2017) Enhancing human cognition with cocoa flavonoids. *Frontiers in Nutrition*, 4: 19. doi: 10.3389/fnut.2017.00019.
- Cipolli C., **Ferrara M.**, De Gennaro L., Plazzi G. (2017) Beyond the neuropsychology of dreaming: Insights on the neural basis of dreaming with new techniques of sleep recording and analysis. *Sleep Medicine Reviews*, 35: 8-20. Epub 2016 Jul 28. Doi: 10.1016/j.smr.2016.07.005.
- Scarpelli S., D'Atri A., Mangiaruga A., Marzano C., Gorgoni M., **Ferrara M.**, De Gennaro L. (2017) Predicting dream recall: EEG activation during NREM sleep or shared mechanisms with wakefulness? *Brain Topography*, 30(5): 629-638. Doi: 10.1007/s10548-017-0563-1.
- Vecchio F., Miraglia F., Gorgoni M., **Ferrara M.**, Iberite F., Bramanti P., De Gennaro L., Rossini P.M. (2017) Cortical connectivity modulation during sleep



onset: A study via graph theory on EEG data. *Human Brain Mapping*, 38: 5456-64. Doi: 10.1002/hbm.23736. **(Featured in the Journal's cover).**

-Tempesta D., Socci V., Dello Iorio G., De Gennaro L., **Ferrara M.** (2017) The effect of sleep deprivation on retrieval of emotional memory: A behavioral study using film stimuli. *Experimental Brain Research*, 235(10), 3059-67. Doi: 10.1007/s00221-017-5043-z

-Guadagni V., Burles F., Valera S., Brown E., **Ferrara M.**, Campbell T. Iaria G. (2017) The relationship between quality of sleep and emotional empathy. *Journal of Psychophysiology*, 31(4): 158-166. Doi: 10.1027/0269-8803/a000177

-D'Atri A., Romano C., Gorgoni M., Scarpelli S., Alfonsi V., **Ferrara M.**, Ferlazzo F., Rossini P.M., De Gennaro L. (2017) Bilateral 5 Hz transcranial alternating current stimulation on fronto-temporal areas modulates resting-state EEG. *Scientific Reports*, 7: 15672. Doi: 10.1038/s41598-017-16003-2.

-Tempesta D., Socci V., De Gennaro L., **Ferrara M.** (2018) Sleep and emotional processing. *Sleep Medicine Reviews*, 40: 183-195. pii: S1087-0792(17)30153-3. [Epub ahead of print 2017 Dec 22]. Doi: 10.1016/j.smrv.2017.12.005.

-Quercia A., Zappasodi F., Committeri G., **Ferrara M.** (2018) Local use-dependent sleep in wakefulness links performance errors to learning. *Frontiers in Human Neuroscience*, 12: 122. Doi: 10.3389/fnhum.2018.00122.

-Guadagni V., Burles F., **Ferrara M.**, Iaria G. (2018) Sleep quality and its association with the insular cortex in emotional empathy. *European Journal of Neuroscience*, 48: 2288–2300. Doi: 10.1111/ejn.14124.

-D'Atri A., Scarpelli S., Schiappa C., Pizza F., Vandi S., **Ferrara M.**, Cipolli C., Plazzi G., De Gennaro L. (2019) Cortical activation during sleep predicts dream experience in narcolepsy. *Annals of Clinical and Translational Neurology*, 6 (3): 445–455. Doi: 10.1002/acn3.718.

-Peretti S., Tempesta D., Socci V., Pino M.C., Mazza M., Valenti M., De Gennaro L., Di Dio C., Marchetti A., **Ferrara M.** (2019) The role of sleep in aesthetic perception and empathy: a mediation analysis. *Journal of Sleep Research*, 28 (3): e12664 [Epub ahead of print: 6 Feb 2018]. Doi: 10.1111/jsr.12664.

-Gorgoni M., Reda F., D'Atri A., Scarpelli S., **Ferrara M.**, De Gennaro L. (2019) The heritability of the human K-complex: a twin study. *Sleep*, 42 (6): zsz053. Doi: 10.1093/sleep/zsz053.

-Lauriola M., Carleton R. N., Tempesta D., Calanna P., Socci V., Mosca O., Salfi F., De Gennaro L., **Ferrara M.** (2019) A correlational analysis of the relationship among intolerance of uncertainty, anxiety sensitivity, subjective sleep quality and insomnia symptoms. *International Journal of Environmental Research and Public Health*, 16(18). Doi: 10.3390/ijerph16183253.

-Salfi F., Tempesta D., De Gennaro L., **Ferrara M.** (2019) Cued memory reactivation during motor imagery practice influences early improvement of procedural skill learning. *Neuroscience*, 418: 244–253. Doi: 10.1016/j.neuroscience.2019.08.047.

-D'Atri A., Alfonsi V., Gorgoni M., Scarpelli S., Giannini A.M., **Ferrara M.**, Ferlazzo F., Rossini P.M., De Gennaro L. (2019) Bilateral theta transcranial alternating current stimulation (tACS) modulates EEG activity: When tACS works awake it also works asleep. *Nature and Science of Sleep*, 11: 343–356. Doi: 10.2147/NSS.S229925.



- Tempesta D., Salfi F., De Gennaro L., **Ferrara M.** (2020) The impact of five nights of sleep restriction on emotional reactivity. *Journal of Sleep Research*, 29 (5): e13022. First published: 07 April 2020. Doi: 10.1111/jsr.13022.
- Gorgoni M., D'Atri A., Scarpelli S., **Ferrara M.**, De Gennaro L. (2020) The electroencephalographic features of the sleep onset process and their experimental manipulation with sleep deprivation and transcranial electrical stimulation protocols. *Neuroscience & Biobehavioral Reviews*, 114: 25–37. Doi: 10.1016/j.neubiorev.2020.04.003.
- Salfi F., D'Atri A., Tempesta D., De Gennaro L., **Ferrara M.** (2020) Boosting slow oscillations during sleep to improve memory function in elderly people: A review of the literature. *Brain Sciences*, 10: 300. Doi: 10.3390/brainsci10050300.
- Salfi F., Lauriola M., Tempesta D., Calanna P., Socci V., De Gennaro L., **Ferrara M.** (2020) Effects of total and partial sleep deprivation on reflection impulsivity and risk-taking in deliberative decision-making. *Nature and Science of Sleep*, 12: 309–324. Doi: 10.2147/NSS.S250586.
- Salfi F., Lauriola M., Amicucci G., Corigliano D., Viselli L., Tempesta D., **Ferrara M.** (2020) Gender-related time course of sleep disturbances and psychological symptoms during the COVID-19 lockdown: a longitudinal study on the Italian population. *Neurobiology of Stress*, 13: 100259. Doi: 10.1016/j.ynstr.2020.100259.
- Scarpelli S., Bartolacci C., D'Atri A., Camaioni M., Annarumma L., Gorgoni M., Cloos C., **Ferrara M.**, De Gennaro L. (2020) Electrophysiological correlates of dream recall during REM sleep: evidence from multiple awakenings and within-subjects design. *Nature and Science of Sleep*, 12: 1043-1052. Doi: 10.2147/NSS.S279786.
- Alfonsi V., Palmizio R., Rubino A., Scarpelli S., Gorgoni M., D'Atri A., Pazzaglia M., **Ferrara M.**, Giuliano S., De Gennaro L. (2020) The association between school start time and sleep duration, sustained attention, and academic performance. *Nature and Science of Sleep*, 12: 1161–1172. Doi: 10.2147/NSS.S273875.
- Gorgoni M., Sarasso S., Moroni F., Sartori I., **Ferrara M.**, Nobili L., De Gennaro L. (2021) The distinctive sleep pattern of the human calcarine cortex: a stereo-EEG study. *Sleep*, accepted for publication.
- Salfi F., D'Atri A., Tempesta D., **Ferrara M.** (2021) Sleeping under the waves: a longitudinal study across the contagion peaks of COVID-19 pandemic in Italy. *Journal of Sleep Research*, accepted for publication. Doi: 10.1111/JSR.13313.

L'AQUILA, 08/02/2021