

Aurore THIBAUT, PhD

Personal details

Born in Liège, Belgium, September 15, 1987

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Present positions

Director of the NeuroRecovery Lab, GIGA-Consciousness, University of Liege, Liege, Belgium
FNRS Research Associate, GIGA-Consciousness, University of Liege, Liege, Belgium
Associate Professor, Faculty of Medicine, University of Liege, Liege, Belgium

Education

Sept 2006 – June 2009: Bachelor in Physiotherapy and rehabilitation, University of Liège, Liège, Belgium.
Sept 2009 – June 2010: Master in Physiotherapy and rehabilitation, University of Liège, Liège, Belgium.
Sept 2010 – June 2011: Master in Neurosciences, University of Liège, Liège, Belgium.
Sept 2011 – Sept 2015: PhD, Coma Science Group, University of Liege, Belgium
Sept 2015 – August 2017: Post-doctoral Research Fellowship, Neuromodulation Laboratory, Spaulding Rehabilitation Hospital, Harvard Medical School, Boston, USA

Professional responsibilities

2015 – Present: International Brain Injury Association DOC-SIG: leader of the treatment subgroup
2015 – Present: Principles and Practice of Clinical Research journal, Harvard Medical School, Boston, USA: Managing editor – Editor in chief: Felipe Fregni
2017 – 2021: Adjunct Research Associate – Laboratory of Neuromodulation – Spaulding Rehabilitation Hospital, Harvard Medical School, Boston, USA
2018 – 2020: Consultant – Boston-Harvard Burn Injury Model System – Spaulding Rehabilitation Hospital, Harvard Medical School, Boston, USA
2018 – 2020: Team leader – neuromodulation team; GIGA-Consciousness; University of Liège, Belgium
2020 – 2025: Co-director of the Coma Science Group, University of Liège, Liege, Belgium
2020 – Present: Panel member of the Neurocritical Care Society Curing Coma Campaign, Coma Science Working Group (CSWG)
2022 – Present: Leader of the DOC management guidelines for the European Academy of Neurology (EAN) Panel on coma and DoC
2022 – Present: Coordinator of the Concussion Care Pathway, University Hospital of Liège, Belgium
2023 – Present: Leader of the motor disorders task force of the IBIA DOC-SIG

Teaching

2013 – Present: *Disorders of consciousness*; Master Psychologie des Processus Neurocognitifs et Sciences Affectives, University of Lille 3, Lille, France
2018 – Present: Therapeutic intervention for patients with disorders of consciousness. GIGA doctoral school. University of Liège, Belgium

2019 – Present: Prise en charge du patient traumatisé crânien. Certificat Universitaire en kinésithérapie neurologique, Université Libre de Bruxelles, Belgium

2021 - Present: Méthodologie de Recherche Clinique. Master complémentaire en Kinésithérapie et Réadaptation, Université de Liège, Belgium

Thesis co-director (PhD index: 3)

2015 – 2020: **Geraldine Martens**: *Non-invasive brain stimulation to improve the recovery of patients in an altered state of consciousness*. Université de Liège, Liège, Belgium

2018 – 2022: **Alice Barra**: *Towards a patient-tailored approach of transcranial electrical stimulation as a treatment to post-comatose patients with disorders of consciousness* Université de Liège, Liège, Belgium

2019 – 2022: **Estelle Bonin**: *Pain and nociception assessment and management in patients with severe brain injuries*. Université de Liège, Liège, Belgium

Ongoing:

2021 – : **Marie Vitello**: “Neural correlates and biomarkers of responsiveness to complementary neuromodulation treatments for post-coma patients with disorders of consciousness”. University of Liege, Belgium

2021 – : **Emilie Szymkowicz**: “Treating severe brain-injured patients with apomorphine: a behavioral and neuroimaging study”. University of Liege, Belgium

2022 – : **Michiel Meys**: “Auditory processes in acute and chronic patients with disorders of consciousness”. University of Liege, Belgium

2023 – : **Fatemeh Seyfzadehdarabad**: “Multimodal Assessments of Therapeutic Techniques in Disorders of Consciousness”. University of Liege, Belgium

2023 – : **Mélanie Louras**: “A novel neurobiological model of persisting symptoms following concussion: a multilevel analysis combining functional imaging, neurochemical markers and neuromodulation” University of Liege, Belgium

2024 – : **Marie Poncelet**: “Unlocking Consciousness: Investigating the Synergistic Effects of Music and Neuromodulation in the Rehabilitation of Patients with Disorders of Consciousness.” Cotutelle University of Liege and University of Hasselt (promotor: Prof Feys).

2025 - : **Gwennaig Joris** “Study of the needs and quality of life of relatives of patients with prolonged disorders of consciousness: a longitudinal approach” University of Liege, Belgium

Honors and Awards

2014: Brain Injury: Henry Stonnington Award for best review paper recognition – first place for the paper: “Spasticity after stroke: Physiology, assessment and treatment”.

2014: Travel grant, International Brain Injury Association world congress, San Francisco, USA

2015: Travel award, European Academy of Neurology, Berlin, Germany.

2015-2016: Post-Doctoral Scientific Research Travel grant, Duesberg Foundation, University of Liege, Belgium

2015-2016: Belgian American Education Foundation fellowship.

2016-2017: Post-Doctoral Scientific Research Travel grant, Fondation Léon Frédéricq, Liège, Belgium.

2016-2017: Scholarship for Excellence – Wallonie-Bruxelles International.

2019: International Brain Injury Association Young Investigator Award

2020: MSCA-IF – Certificate of Excellence

2020: Usern price top 5 nominee in Biological Sciences

Research Support

2016 – 2019: LUMINOUS project (EU-H2020-FETOPEN-GA686764) – PI: S. Laureys; WP delegate leader (545000€)

2017 – 2020: DOCMA project (MSCA-RISE-778234) – PI: S. Laureys; WP delegate leader (50000€)

2020 – 2021 : Fonds Léon Frédéricq (7500€)

2021 – 2024: FRNS PDR (40003763) – PI: S. Laureys; co-investigator (500000€)
2022 – 2024 : Crédits Sectoriels de Recherche en Sciences de la Santé ULiege – PI with A. Sala (45000€)
2023 – 2025 : Crédits Sectoriels de Recherche en Sciences de la Santé ULiege, PI (40000€)
2024 – 2026: BrainAct project. PINT-MULTI FLAG-ERA (40020356). PI with O. Gosseries (200000€)
2024 – 2027: DOC-BOX project (HORIZON-MSCA-101131344). PI and project coordinator with C. Martial (1 100 000€)
2026 – 2028: IMANDOC project (CDR – J.0216.26). PI with Prof Feys – UHasselt (37000€)

Organization of events

2015 – 2017: CRS-R workshops (annual)
2018 – 2023: Journée francophone sur les troubles de la conscience, Liège, Belgium (annual)
2020 – present: CRS-R online workshop (annual)
2024 – present: DOC-BOX days, ULiège, Belgium (annual)
2025 – present: IBIA DOC-SIG webinars (bimonthly)

Publications

A complete list of publications can be found on Orbi – Aurore THIBAUT u216824

First or co-first author :

1. Thibaut A., Bruno MA., Chatelle C., Gosseries O., Vanhaudenhuyse A., Demertzi A., Schnakers C., Thonnard M., Charland V., Bernard C., Bahri MA., Phillips C., Boly M., Hustinx R. and Laureys S. Metabolic activity in external and internal awareness networks in severely brain damaged patients *Journal of Rehabilitation Medicine*, 2012
2. Thibaut A., Chatelle C., Gosseries O., Laureys S., Bruno MA. Transcranial direct current stimulation: a new tool for neurostimulation; *La Revue Neurologique*, 2013, Feb ; 169(2) : 108-20
3. Thibaut A., Chatelle C., Ziegler E., Bruno M-A., Laureys S., Gosseries O. Spasticity after stroke : Physiology, assessment, and treatment. *Brain Injury*, 2014
4. Thibaut A., Bruno MA., Ledoux D., Demertzi A., Laureys S. tDCS in patients with disorders of consciousness: sham controlled randomized double blind study; *Neurology*, 2014
5. Chatelle C.*, Thibaut A.*, Whyte J., Laureys S., Schnakers C. Pain issues in disorders of consciousness, *Brain Injury*, 2014 *Equally contributed
6. Chatelle C.*, Thibaut A.*, Gosseries G., Thonnard M, Demertzi A., Tschibanda J-F, Bernard C., Hustinx R., Laureys S., Bruno M-A. Changes in cerebral metabolism in patients with a minimally conscious state responding to zolpidem, *Frontiers in Human Neuroscience*. 2014 *Equally contributed
7. Thibaut A., Chatelle C., Wannez S., Deltombe T., Stender J., Schnakers C., Laureys S., Gosseries O. Spasticity in disorders of consciousness: A behavioral study. *Eur J Phys Med Rehabil*. 2015
8. Thibaut A., Deltombe T., Wannez S., Gosseries O., Ziegler E., Dieni C., Deroy M., Laureys S., Impact of soft splints on upper limb spasticity in chronic patients with disorders of consciousness: A randomized, single-blind, controlled trial, *Brain Injury*, 2015
9. Thibaut A., Di Perri C., Chatelle C., Bruno MA., Wannez S., Bernard C., Hustinx R., Laureys S. Clinical response to tDCS depends on residual brain metabolism in patients with minimally conscious state, *Brain Stimulation*, 2015
10. Thibaut A., Laureys S. Brain Stimulation in patients with disorders of consciousness. *PPCR Journal* , 2015
11. Thibaut A., Reviews, opinions and insights for future clinical trials: an overview of PPCR journal. Editorial of PPCR journal, 2015
12. Thibaut A. & Morales-Quezada L. Transcranial direct current stimulation: a new technique for the rehabilitation of patients with disorders of consciousness. *Neurotrauma Letter*, 2016
13. Thibaut A, Moissenet F, Di Perri C, Schreiber C, Remacle A, Kolanowski E, Chantraine F, Bernard C, Hustinx R, Tschibanda JF, Filipetti P, Laureys S, Gosseries O, Brain plasticity after implanted

- peroneal nerve electrical stimulation to improve gait in chronic stroke patients: two case reports. *Neurorehabilitation*, 2017.
14. Thibaut A, Russo C, Morales-Quezada L, Hurtado-Puerto A, Deitos A, Freedman S, Carvalho S, Fregni F. Neural signature of tDCS, tPCS and their combination: Comparing the effects on neural plasticity. *Neurosci Lett*. 2017.
 15. Thibaut A., Wannez S., Donneau AF., Chatelle C., Gosseries O., Bruno MA., Laureys S. Controlled clinical trial of repeated prefrontal tDCS in chronic minimally conscious state patients. *Brain Injury*, 2017.
 16. Thibaut A., Zeng D., Caumo A., Liu J., Fregni F. Corticospinal excitability as a biomarker of myofascial pain syndrome. *Pain Report*, 2017
 17. Pintucci M*, Imamura M*, Thibaut A*, De Exel Nunes L, Mayumi Nagato M, Hideko Seguchi Kaziyaama H, Tomikawa Imamura S, Stecco A, Fregni F, Battistella LR. Evaluation of fascial manipulation in carpal tunnel syndrome: a pilot randomized clinical trial, *European Journal of Physical Medicine and Rehabilitation*, 2017. *Equally contributed
 18. Thibaut A, Simis M, Battistella LR, Fanciullacci C, Bertolucci F, Huerta-Gutierrez R, Chisari C, Fregni F. Using brain oscillations and corticospinal excitability to understand and predict post-stroke motor function, *Frontiers in Neurology*, 2017
 19. Thibaut A, Russo C, Hurtado-Puerto AM, Morales-Quezada JL, Deitos A, Petrozza JC, Freedman S, Fregni F. Effects of Transcranial Direct Current Stimulation, Transcranial Pulsed Current Stimulation, and Their Combination on Brain Oscillations in Patients with Chronic Visceral Pain: A Pilot Crossover Randomized Controlled Study. *Frontiers in Neurology*, 2017
 20. Thibaut A, O'Brien AT, Fregni F. Strategies for replacing non-invasive brain stimulation sessions: recommendations for designing neurostimulation clinical trials. *Expert Rev Med Devices*. 2017
 21. Thibaut A, Carvalho S, Morse LR, Zafonte R, Fregni F. Delayed pain decrease following M1 tDCS in spinal cord injury: A randomized controlled clinical trial. *Neuroscience Letters*, 2017
 22. Thibaut A, Wannez, Deltombe T, Martens G, Laureys S, Chatelle C Physical therapy in patients with disorders of consciousness: impact on spasticity and muscle contracture, *NeuroRehabilitation*, 2018
 23. Thibaut A, Zafonte R, Morse LR, Fregni F. Understanding negative results in tDCS research: the importance of neural targeting and cortical engagement. *Frontiers in Neuroscience*, 2017.
 24. Thibaut A, Chatelle C, Vanhaudenhuyse A, Martens G, Cassol H, Martial C, Carrière M, Barra A, Laureys S, Gosseries O. Transcranial direct current stimulation unveils covert consciousness. *Brain Stimulation*, 2018
 25. Thibaut A, Chennu S, Chatelle C, Martens G, Annen J, Cassol A, Laureys S. Theta network centrality correlates with tDCS response in disorders of consciousness, *Brain Stimulation*, 2018
 26. Thibaut A, Ohrtman EA, Morales-Quezada L, Simko LC, Ryan CM, Zafonte R, Schneider JC, Fregni F. Distinct behavioral response of primary motor cortex stimulation in itch and pain after burn injury. *Neuroscience Letters*, 2018
 27. Thibaut A, Schiff ND, Giacino JT, Laureys S, Gosseries O. Therapeutic interventions in patients with prolonged disorders of consciousness. *Lancet Neurology*, 2019
 28. Thibaut A, Piarulli A, Martens G, Chatelle C, Laureys S. Effects of multifocal transcranial direct current stimulation to reduce hypertonia in patients with prolonged disorders of consciousness: a randomized controlled pilot study, *Ann Phys Rehabil Med*. 2019
 29. Thibaut A, Bodien YG, Laureys S, Giacino JT. Minimally conscious state "plus": diagnostic criteria and relation to functional recovery. *J Neurol*. 2020
 30. Thibaut A, Di Perri C, Heine L, Moissenet F, Chantraine F, Schreiber C, Filipetti P, Martial C, Annen J, Laureys S, Gosseries O. Neuroplastic changes mediate motor recovery with implanted peroneal nerve stimulator in individuals with chronic stroke: an open-label multimodal pilot study. *Ann Phys Rehabil Med*. 2020
 31. Thibaut A, Panda R, Annen J, Sanz LRD, Naccache L, Martial C, Chatelle C, Aubinet C, Bonin EAC, Barra A, Briand MM, Cecconi B, Wannez S, Stender J, Laureys S, Gosseries O. Preservation of Brain Activity in Unresponsive Patients Identifies MCS Star. *Ann Neurol* 2021.

32. Thibaut A, Shie VL, Ryan CM, Zafonte R, Ohrtman EA, Schneider JC, Fregni F. A review of burn symptoms and potential novel neural targets for non-invasive brain stimulation for treatment of burn sequelae. *Burns*. 2021
33. Thibaut A, Beaudart C, Quinet M, Bouquiaux O, Delstanche S, Lievens I, Grosjean D, Ortman I, Kaux JF, Halleux C. Prise en charge psychologique et cognitive au cours de l'accompagnement de fin de vie de patients atteints de sclérose latérale amyotrophique: Une revue systématique. *Revue Médicale de Liège*. 2022
34. Thibaut A, Beaudart C, Maertens de Noordhout B, Geers S, Kaux JF, Pelzer D. Impact of microprocessor prosthetic knee on mobility and quality of life in patients with lower limb amputation: a systematic review of the literature. *Eur J Phys Rehabil Med*. 2022
35. Thibaut A, Beaudart C, Martens G, Bornheim S, Kaux JF. Common Bias and Challenges in Physical and Rehabilitation Medicine Research: How to Tackle Them. *Front Rehabil Sci*. 2022
36. Thibaut A, Aloisi M, Dreessen J, Alnagger N, Lejeune N, Formisano Neuro-orthopaedic assessment and management in patients with prolonged disorders of consciousness: A review. *NeuroRehabilitation*. 2024
37. Thibaut A, Fregni F, Estraneo A, Fiorenza S, Noe E, Llorens R, Ferri J, Formisano R, Morone G, Bender A, Rosenfelder M, Lamberti G, Kodratyeva E, Kondratyev S, Legostaeva L, Suponeva N, Krewer C, Müller F, Dardenne N, Jedidi H, Laureys S, Gosseries O, Lejeune N, Martens G; IBIA DOC-SIG. Sham-controlled randomized multicentre trial of transcranial direct current stimulation for prolonged disorders of consciousness. *Eur J Neurol*. 2023
38. Thibaut A, Martens G, Neuromodulation for severe brain injury; time for a paradigm shift? *Nature Review Neuroscience*, 2024
39. Thibaut A, Martens G. Uncovering Subclinical Neural Alterations in Sport-Related Concussion: The Added Value of Longitudinal Neuroimaging. *Neurology*. 2025

Last author

1. Huang, W., Wannez S., Fregni F., Hu X., Jing S., Martens G., He M., Di H., Laureys S. Thibaut A. Repeated stimulation of the posterior parietal cortex in patients in minimally conscious state: a sham-controlled randomized clinical trial. *Brain Stimulation*, 2017.
2. Martens G, Laureys S, Thibaut A. Spasticity management in disorders of consciousness. *Brain Science*, 2017
3. O'Brien AT, Torrealba Acosta G, Huerta R, Thibaut A. Does non-invasive brain stimulation modify hand dexterity? Protocol for a systematic review and meta-analysis. *BMJ Open*, 2017
4. Martens G, Lejeune N, O'Brien AT, Fregni F, Martial C, Wannez S, Laureys S, Thibaut A. Randomized controlled trial of home-based 4-week tDCS in chronic minimally conscious state. *Brain Stimulation*, 2018
5. O'Brien AT, Bertolucci F, Torrealba-Acosta G, Huerta R, Fregni F, Thibaut A. Non-invasive brain stimulation for fine motor improvement after stroke: a meta-analysis. *European Journal of Neurology*, 2018
6. Martens G, Deltombe T, Foidart-Dessale M, Laureys S, Thibaut A. Clinical and electrophysiological investigation of spastic muscle overactivity in patients with disorders of consciousness, *Clinical Neurophysiology*, 2019
7. Aubinet C, Panda R, Larroque SK, Cassol H, Bahri MA, Carrière M, Wannez S, Majerus S, Laureys S, Thibaut A. Reappearance of command-following is associated with the recovery of language and internal-awareness networks: a longitudinal multiple-case report. *Front Syst Neurosci*. 2019
8. Martens G, Fregni F, Carrière M, Barra A, Laureys S, Thibaut A. Single tDCS session of motor cortex in patients with disorders of consciousness: a pilot study. *Brain Inj*. 2019
9. Aubinet C, Cassol H, Gosseries O, Bahri MA, Larroque SK, Majerus S, Martial C, Martens G, Carrière M, Chatelle C, Laureys S, Thibaut A. Brain Metabolism but Not Gray Matter Volume Underlies the Presence of Language Function in the Minimally Conscious State (MCS): MCS+ Versus MCS- Neuroimaging Differences. *Neurorehabil Neural Repair*. 2020

10. Carrière M, Mortaheb S, Raimondo F, Annen J, Barra A, Binda Fossati MC, Chatelle C, Hermann B, Martens G, Di Perri C, Laureys S, Thibaut A. Neurophysiological Correlates of a Single Session of Prefrontal tDCS in Patients with Prolonged Disorders of Consciousness: A Pilot Double-Blind Randomized Controlled Study. *Brain Sci.* 2020
11. Briand MM, Gosseries O, Staumont B, Laureys S, Thibaut A. Transcutaneous Auricular Vagal Nerve Stimulation and Disorders of Consciousness: A Hypothesis for Mechanisms of Action. *Front Neurol.* 2020 Aug 25
12. Martens G, Kroupi E, Bodien Y, Frasso G, Annen J, Cassol H, Barra A, Martial C, Gosseries O, Lejeune N, Soria-Frisch A, Ruffini G, Laureys S, Thibaut A. Behavioral and electrophysiological effects of network-based frontoparietal tDCS in patients with severe brain injury: A randomized controlled trial. *Neuroimage Clin.* 2020
13. Martens G, Ibáñez-Soria D, Barra A, Soria-Frisch A, Piarulli A, Gosseries O, Salvador R, Rojas A, Nitsche MA, Kroupi E, Laureys S, Ruffini G, Thibaut A. A novel closed-loop EEG-tDCS approach to promote responsiveness of patients in minimally conscious state: A study protocol. *Behav Brain Res* 2021
14. Bonin EAC, Fossati MLB, Chatelle C, Martens G, Martial C, Briand MM, Bejor M, Laureys S, Thibaut A. Pain and spastic features in chronic DOC patient: A cross-sectional retrospective study. *Ann Phys Rehabil Med.* 2021
15. Mortaheb S, Filippini MM, Kaux JF, Annen J, Lejeune N, Martens G, Calderón MAF, Laureys S, Thibaut A. Neurophysiological Biomarkers of Persistent Post-concussive Symptoms: A Scoping Review. *Front Neurol.* 2021
16. Lejeune N, Zasler N, Formisano R, Estraneo A, Bodart O, Magee WL, Thibaut A. Epilepsy in prolonged disorders of consciousness: a systematic review. *Brain Inj.* 2021
17. Vitello MM, Szymkowicz E, Laureys S, Alnagger N, Gosseries O, Thibaut A. Neuroimaging and neurophysiological diagnosis and prognosis in paediatric disorders of consciousness. *Dev Med Child Neurol.* 2022
18. Briand MM, Lejeune N, Zasler N, Formisano R, Bodart O, Estraneo A, Magee WL, Thibaut A. Management of Epileptic Seizures in Disorders of Consciousness: An International Survey. *Front Neurol.* 2022
19. Bonin EAC, Binda Fossati ML, Filippini MM, Bornheim S, Lejeune N, O'Brien AT, Bodart O, Laureys S, Thibaut A*, Chatelle C*. Evaluation of the effect of analgesic treatment on signs of nociception-related behaviors during physiotherapy in patients with disorders of consciousness: a pilot crossover randomized controlled trial. *Pain.* 2022. *Co-last.
20. Barra A, Rosenfelder M, Mortaheb S, Carrière M, Martens G, Bodien YG, Morales-Quezada L, Bender A, Laureys S, Thibaut A* and Fregni F*. Transcranial Pulsed-Current Stimulation versus Transcranial Direct Current Stimulation in Patients with Disorders of Consciousness: A Pilot, Sham-Controlled Cross-Over Double-Blind Study. *Brain Sciences.* 2022. *Co-last.
21. Barra A, Monti M, Thibaut A. Noninvasive Brain Stimulation Therapies to Promote Recovery of Consciousness: Where We Are and Where We Should Go. *Semin Neurol.* 2022
22. Vitello MM, Briand MM, Ledoux D, Annen J, El Tahry R, Laureys S, Martin D, Gosseries O, Thibaut A. Transcutaneous vagal nerve stimulation to treat disorders of consciousness: Protocol for a double-blind randomized controlled trial. *Int J Clin Health Psychol.* 2023
23. Ippoliti C, Fadeur M, Malherbe C, De Flines J, Verbrugge AM, Gosseries O, Ledoux D, Misset B, Laureys S, Paquot N, Thibaut A. What is the nutritional status of patients with prolonged disorders of consciousness? A retrospective cross-sectional study. *Brain Inj.* 2023
24. Bonin EAC, Lejeune N, Szymkowicz E, Bonhomme V, Martial C, Gosseries O, Laureys S, Thibaut A. Assessment and management of pain/nociception in patients with disorders of consciousness or locked-in syndrome: A narrative review. *Front Syst Neurosci.* 2023
25. Martens G, Khosravi MH, Lejeune N, Kaux JF, Thibaut A. Gender Specificities in Sleep Disturbances following Mild Traumatic Brain Injury: A Preliminary Study. *Brain Sci.* 2023
26. Barra A, Huerta-Gutierrez R, Annen J, Martens G, Laureys S, Llorens R, Kurth T, Thibaut A.

Characterization of responders to transcranial direct current stimulation in disorders of consciousness: A retrospective study of 8 clinical trials. *Neurotherapeutics*. 2025

Co-author

1. Bruno MA., Vanhauzenhuyse A., Thibaut A., Moonen G., Laureys S. From unresponsive wakefulness to minimally conscious PLUS and functional locked-in syndromes: recent advances in our understanding of disorders of consciousness, *Journal of Neurology*, 2011
2. Gosseries O., Demertzi A., Ledoux D, Bruno MA., Vanhauzenhuyse A., Thibaut A., Laureys S., Schnakers C. Burnout in healthcare workers managing patients recovering from coma, *Brain Injury*, 2012
3. Cruse D., Thibaut A., Demertzi A., Nantes J., Bruno MA., Gosseries O., Vanhauzenhuyse A., Bekinstein T., Owen A., Laureys S. Actigraphy Assessments of Circadian Sleep-Wake Cycles in the Vegetative and Minimally Conscious States, *BMC Neuroscience*, 2013
4. Chatelle C., Thibaut A., Bruno M-A., Boly M., Bernard C., Hustinx R., Schnakers C., Laureys S., Nociception Coma Scale-Revised scores correlate with metabolism in anterior cingulate cortex, *Neurorehab Neural Repair*, Septembre 2013
5. Gosseries O., Thibaut A., Boly M., Rosanova M., Massimini M., Laureys S. Assessing consciousness in coma and related states using transcranial magnetic stimulation combined with electroencephalography, *Annales Francaises d'Anesthésie et Réanimation*, 2014
6. Stender J., Gosseries O., Bruno MA., Charland-Verville V., Vanhauzenhuyse A., Demertzi A., hatelle C., Thonnard M., Thibaut A., Heine L., Soddu A., Boly M., Schnakers C., Gjedde A., Laureys S. Diagnostic precision of PET imaging and functional MRI in disorders of consciousness: a clinical validation study, *Lancet*. 2014.
7. Thonnard M., Gosseries O., Demertzi A., Lugo Z., Vanhauzenhuyse A., Bruno MA., Chatelle C., Thibaut A., Charland-Verville V., Habbal D., Schnakers C., Laureys S. Effect of zolpidem in chronic disorders of consciousness: a prospective open-label study. *Funct Neurol* 2013
8. Di Perri C, Thibaut A, Heine L, Soddu A, Demertzi A, Laureys S., Measuring consciousness in coma and related states. *World J Radiol*. 2014
9. Di H, Nie Y, Hu X, Tong Y, Heine L, Wannez S, Huang W, Yu D, He M, Thibaut A, Schnakers C, Laureys S. Assessment of visual fixation in vegetative and minimally conscious states. *BMC Neurol*. 2014 Jul 16;14:147.
10. Stender J, Kupers R, Rodell A, Thibaut A, Chatelle C, Bruno MA, Gejl M, Bernard C, Hustinx R, Laureys S, Gjedde A. Quantitative rates of brain glucose metabolism distinguish minimally conscious from vegetative state patients. *J Cereb Blood Flow Metab*. 2015
11. Wang F, Di H, Hu X, Jing S, Thibaut A, Di Perri C, Huang W, Nie Y, Schnakers C, Laureys S. Cerebral response to subject's own name showed high prognostic value in traumatic vegetative state. *BMC Med*. 2015
12. Kirsch M, Wannez S, Thibaut A, Laureys S, Brichant JF, Bonhomme V. Positron Emission Tomography: Basic Principles, New Applications, and Studies Under Anesthesia. *Int Anesthesiol Clin*. 2016
13. Soddu A, Gómez F, Heine L, Di Perri C, Barhi MA, Voss HU, Bruno MA, Vanhauzenhuyse A, Phillips C, Demertzi A, Chatelle C, Schrouff J, Thibaut A, Charland-Verville V, Noirhomme Q, Salmon E, Tshibanda JF, Schiff ND, Laureys S. Correlation between resting state fMRI total neuronal activity and PET metabolism in healthy controls and patients with disorders of consciousness. *Brain & Behavior*. 2015
14. Di Perri C, Bahri MA, Amico E, Thibaut A, Heine L, Antonopoulos G, Charland-Verville V, Wannez S, Gomez F, Hustinx R, Tshibanda L, Demertzi A, Soddu A, Laureys S. Neural correlates of consciousness in patients who have emerged from a minimally conscious state: a cross-sectional multimodal imaging study. *Lancet Neurol*. 2016
15. Stender J, Nygaard Mortensen K, Thibaut A, Darkner S, Laureys S, Gjedde A, Kupers R. The Minimal Energetic Requirement of Sustained Awareness after Brain Injury. *Current Biology*, 2016.

16. Magis D., D'Ostilio K, Thibaut A., De Pasqua V, Gerard P, Hustinx R, Laureys S, Schoenen J. Cerebral metabolism before and after external trigeminal nerve stimulation in episodic migraine. *Cephalgia*, 2016.
17. Di Perri C, Thibaut A, Heine L, Annen J, Laureys S. Towards new methods of diagnosis in disorders of consciousness - Authors' reply. *Lancet Neurol*, 2016
18. Piarulli A, Bergamasco M, Thibaut A, Cologan V, Gosseries O, Laureys S. EEG ultradian rhythmicity differences in disorders of consciousness during wakefulness. *J Neurol*. 2016
19. Wannez S, Gosseries O, Azzolini D, Martial C, Cassol H, Aubinet C, Annen J, Martens G, Bodart O, Heine L, Charland-Verville V, Thibaut A, Chatelle C, Vanhauzenhuysse A, Demertzi A, Schnakers C, Donneau AF, Laureys S. Prevalence of coma-recovery scale-revised signs of consciousness in patients in minimally conscious state. *Neuropsychol Rehabil*. 2017
20. Bodart O, Gosseries O, Wannez S, Thibaut A, Annen J, Boly M, Rosanova M, Casali AG, Casarotto S, Tononi G, Massimini M, Laureys S. Measures of metabolism and complexity in the brain of patients with disorders of consciousness. *Neuroimage Clinical*. 2017
21. Cavaliere C, Aiello M, Di Perri C, Amico E, Martial C, Laureys S, Soddu A., Thibaut A. Functional Connectivity Substrates for tDCS Response in Minimally Conscious State Patients. *Front Cell Neurosci*. 2017
22. Vasquez A, Thibaut A, Morales-Quezada L, Leite J, Fregni F. Patterns of brain oscillations across different electrode montages in transcranial pulsed current stimulation. *NeuroReport*, 2017
23. Bornheim S, Criellard JM, Thibaut A, Maquet P, Croisier JL. Les effets immédiats de la stimulation transcrânienne (tDCS) sur la force maximale concentrique et excentrique des membres inférieurs. *Kinesithérapie la Revue*, 2017.
24. Leite J, Morales-Quezada L, Carvalho S, Thibaut A, Doruk D, Chen CF, Schachter SC, Rotenberg A, Fregni F. Surface EEG-Transcranial Direct Current Stimulation (tDCS) Closed-Loop System. *Int J Neural Syst*. 2017
25. Bodart O, Amico E, Gómez F, Casali AG, Wannez S, Heine L, Thibaut A, Annen J, Boly M, Casarotto S, Rosanova M, Massimini M, Laureys S, Gosseries O. Global structural integrity and effective connectivity in patients with disorders of consciousness. *Brain Stimulation*, 2017
26. Chennu S, Annen J, Wannez S, Thibaut A, Chatelle C, Cassol H, Martens G, Schnakers C, Gosseries O, Menon D, Laureys S. Brain networks predict metabolism, diagnosis and prognosis at the bedside in disorders of consciousness. *Brain*, 2017
27. El Hagrassy M, Dante D, Thibaut A, Figueiro M, Fregni F. Clinical Trial Design – A Short and Practical Guide, *Current Behavioral Neuroscience Reports*, 2018.
28. Victor de Souza Brangiono MC, Pereira DA, Thibaut A, Fegni F, Brasil-Neto JP, de Barros RB. Effects of prefrontal transcranial direct current stimulation and motivation to quit in tobacco smokers : A randomized, sham controlled, double blind trial. *Frontiers in Pharmacology*, 2018
29. Annen J, Blandiaux S, Lejeune N, Bahri MA, Thibaut A, Cho W, Guger C, Chatelle C, Laureys S. BCI Performance and Brain Metabolism Profile in Severely Brain-Injured Patients Without Response to Command at Bedside. *Frontiers in Neuroscience*, 2018
30. Carvalho S, French M, Thibaut A, Lima W, Simis M, Leite J, Fregni F. Median nerve stimulation induced motor learning in healthy adults: A study of timing of stimulation and type of learning. *European Journal of Neuroscience*, 2018
31. van Ommen HJ, Thibaut A, Vanhauzenhuysse A, Heine L, Charland-Verville V, Wannez S, Bodart O, Laureys S, Gosseries O. Resistance to eye opening in patients with disorders of consciousness. *Journal of Neurology*, 2018
32. Cassol H, Aubinet C, Thibaut A, Wannez S, Martial C, Martens G, Laureys S. Diagnostic, Pronostic and traitement des troubles de la conscience. *NPG Neurologie, Psychiatrie, Gériatrie*, 2018
33. Vanhauzenhuysse A, Charland-Verville V, Thibaut A, Chatelle C, Tshibanda JL, Maudoux A, Faymonville ME, Laureys S, Gosseries O. Conscious While Being Considered in an Unresponsive Wakefulness Syndrome for 20 Years. *Front Neurol*. 2018

34. Aubinet C, Murphy L, Bahri MA, Larroque SK, Cassol H, Annen J, Carrière M, Wannez S, Thibaut A, Laureys S, Gosseries O. Brain, Behavior, and Cognitive Interplay in Disorders of Consciousness: A Multiple Case Study. *Front Neurol.* 2018
35. Cruse D, Thibaut A, Demertzi A, Nantes JC, Bruno MA, Gosseries O, Vanhaudenhuyse A, Bekinschtein TA, Owen AM, Laureys S. Correction to: Actigraphy assessments of circadian sleep-wake cycles in the Vegetative and Minimally Conscious States. *BMC Med.* 2018
36. El-Hagrassy MM, Duarte DGG, Thibaut A, Lucena MFG, Fregni F. Principles of designing a clinical trial: optimizing chances of trial success. *Curr Behav Neurosci Rep.* 2018
37. Gallucci A, Lucena PH, Martens G, Thibaut A, Fregni F. Transcranial direct current stimulation to prevent and treat surgery-induced opioid dependence: a systematic review. *Pain Manag.* 2019
38. Costa B, Ferreira I, Trevizol A, Thibaut A, Fregni F. Emerging targets and uses of neuromodulation for pain. *Expert Rev Neurother.* 2019
39. Sanz LRD, Lejeune N, Blandiaux S, Bonin E, Thibaut A, Stender J, Farber NM, Zafonte RD, Schiff ND, Laureys S, Gosseries O. Treating Disorders of Consciousness With Apomorphine: Protocol for a Double-Blind Randomized Controlled Trial Using Multimodal Assessments. *Front Neurol.* 2019
40. Rizkallah J, Annen J, Modolo J, Gosseries O, Benquet P, Mortaheb S, Amoud H, Cassol H, Mheich A, Thibaut A, Chatelle C, Hassan M, Panda R, Wendling F, Laureys S. Decreased integration of EEG source-space networks in disorders of consciousness. *Neuroimage Clin.* 2019
41. Mortaheb S, Annen J, Chatelle C, Cassol H, Martens G, Thibaut A, Gosseries O, Laureys S. A Graph Signal Processing Approach to Study High Density EEG Signals in Patients with Disorders of Consciousness. *Conf Proc IEEE Eng Med Biol Soc.* 2019 Jul;2019:4549-4553
42. Bonin EAC, Lejeune N, Thibaut A, Cassol H, Antonopoulos G, Wannez S, Martial C, Schnakers C, Laureys S, Chatelle C. Nociception Coma Scale Revised allows to identify patients with preserved neural basis for pain experience. *J Pain.* 2019 Nov 13
43. Wang F, Hu N, Hu X, Jing S, Heine L, Thibaut A, Huang W, Yan Y, Wang J, Schnakers C, Laureys S, Di H. Detecting Brain Activity Following a Verbal Command in Patients With Disorders of Consciousness. *Front Neurosci.* 2019 Sep 13;13:976.
44. Annen J, Filippini MM, Bonin E, Cassol H, Aubinet C, Carrière M, Gosseries O, Thibaut A, Barra A, Wolff A, Sanz LRD, Martial C, Laureys S, Chatelle C. Diagnostic accuracy of the CRS-R index in patients with disorders of consciousness. *Brain Inj.* 2019;33(11):1409-1412.
45. Santos Ferreira I, Teixeira Costa B, Lima Ramos C, Lucena P, Thibaut A, Fregni F. Searching for the optimal tDCS target for motor rehabilitation. *J Neuroeng Rehabil.* 2019 Jul 17;16(1):90.
46. Bornheim S, Thibaut A, Beudart C, Maquet P, Croisier JL, Kaux JF. Evaluating the effects of tDCS in stroke patients using functional outcomes: a systematic review. *Disabil Rehabil.* 2020
47. Pacheco-Barrios K, Cardenas-Rojas A, Thibaut A, Costa B, Ferreira I, Caumo W, Fregni F. Methods and strategies of tDCS for the treatment of pain: current status and future directions. *Expert Rev Med Devices.* 2020
48. Estraneo A, Fiorenza S, Magliacano A, Formisano R, Mattia D, Grippo A, Romoli AM, Angelakis E, Cassol H, Thibaut A, Gosseries O, Lamberti G, Noé E, Bagnato S, Edlow BL, Chatelle C, Lejeune N, Veeramuthu V, Bartolo M, Toppi J, Zasler N, Schnakers C, Trojano L; IBIA DoC-SIG. Multi-center prospective study on predictors of short-term outcome in disorders of consciousness. *Neurology.* 2020
49. Mélotte E, Maudoux A, Delhalle S, Lagier A, Thibaut A, Aubinet C, Kaux JF, Vanhaudenhuyse A, Ledoux D, Laureys S, Gosseries O. Swallowing in individuals with disorders of consciousness: A cohort study. *Ann Phys Rehabil Med.* 2020
50. Mensen A, Bodart O, Thibaut A, Wannez S, Annen J, Laureys S, Gosseries O. Decreased Evoked Slow-Activity After tDCS in Disorders of Consciousness. *Front Syst Neurosci.* 2020 Sep
51. Aubinet C, Cassol H, Bodart O, Sanz LRD, Wannez S, Martial C, Thibaut A, Martens G, Carrière M, Gosseries O, Laureys S, Chatelle C. Simplified Evaluation of CONsciousness Disorders (SECONDS) in individuals with severe brain injury: a validation study. *Ann Phys Rehabil Med.* 2020 S
52. Lejeune N, Thibaut A, Martens G, Martial C, Wannez S, Laureys S, Chatelle C. Can the Nociception Coma Scale-Revised Be Used in Patients With a Tracheostomy? *Arch Phys Med Rehabil.* 2020 Jun

53. Bonin EAC, Lejeune N, Thibaut A, Cassol H, Antonopoulos G, Wannez S, Martial C, Schnakers C, Laureys S, Chatelle C. Nociception Coma Scale-Revised Allows to Identify Patients With Preserved Neural Basis for Pain Experience. *J Pain*. 2020
54. Bonin EAC, Binda Fossati ML, Filippini MM, Bornheim S, Lejeune N, O'Brien AT, Bodart O, Laureys S, Thibaut A, Chatelle C. Evaluation of the effect of analgesic treatment on signs of nociception-related behaviors during physiotherapy in patients with disorders of consciousness: a pilot crossover randomized controlled trial. *Pain*. 2021
55. Edlow BL, Sanz LRD, Polizzotto L, Pouratian N, Rolston JD, Snider SB, Thibaut A, Stevens RD, Gosseries O; Curing Coma Campaign and its contributing members. Therapies to Restore Consciousness in Patients with Severe Brain Injuries: A Gap Analysis and Future Directions. *Neurocrit Care*. 2021
56. Sanz LRD, Thibaut A, Edlow BL, Laureys S, Gosseries O. Update on neuroimaging in disorders of consciousness. *Curr Opin Neurol*. 2021
57. Candia-Rivera D, Annen J, Gosseries O, Martial C, Thibaut A, Laureys S, Tallon-Baudry C. Neural Responses to Heartbeats Detect Residual Signs of Consciousness during Resting State in Postcomatose Patients. *J Neurosci*. 2021
58. Sanz LRD, Aubinet C, Cassol H, Bodart O, Wannez S, Bonin EAC, Barra A, Lejeune N, Martial C, Chatelle C, Ledoux D, Laureys S, Thibaut A, Gosseries O. SECONDS Administration Guidelines: A Fast Tool to Assess Consciousness in Brain-injured Patients. *J Vis Exp*. 2021
59. Hagrassy M, Duarte D, Lu J, Uygur-Kucukseymen E, Münger M, Thibaut A, Lv P, Morales-Quezada L, Fregni F. EEG modulation by different transcranial direct current stimulation (tDCS) montages: a randomized double-blind sham-control mechanistic pilot trial in healthy participants. *El- Expert Rev Med Devices*. 2021
60. López-González A, Panda R, Ponce-Alvarez A, Zamora-López G, Escrichs A, Martial C, Thibaut A, Gosseries O, Kringelbach ML, Annen J, Laureys S, Deco G. Loss of consciousness reduces the stability of brain hubs and the heterogeneity of brain dynamics. *Commun Biol*. 2021
61. Estraneo A, Magliacano A, Fiorenza S, Formisano R, Grippo A, Angelakis E, Cassol H, Thibaut A, Gosseries O, Lamberti G, Noé E, Bagnato S, Edlow BL, Chatelle C, Lejeune N, Veeramuthu V, Bartolo M, Mattia D, Toppi J, Zasler N, Schnakers C, Trojano L. Risk factors for 2-year mortality in patients with prolonged disorders of consciousness: An international multicentre study. *Eur J Neurol*. 2022
62. Lee M, Sanz LRD, Barra A, Wolff A, Nieminen JO, Boly M, Rosanova M, Casarotto S, Bodart O, Annen J, Thibaut A, Panda R, Bonhomme V, Massimini M, Tononi G, Laureys S, Gosseries O, Lee SW. Quantifying arousal and awareness in altered states of consciousness using interpretable deep learning. *Nat Commun*. 2022
63. Panda R, Thibaut A, Lopez-Gonzalez A, Escrichs A, Bahri MA, Hillebrand A, Deco G, Laureys S, Gosseries O, Annen J, Tewarie P. Disruption in structural-functional network repertoire and time-resolved subcortical fronto-temporoparietal connectivity in disorders of consciousness. *Elife*. 2022
64. Mainali S, Aiyagari V, Alexander S, Bodien Y, Boerwinkle V, Boly M, Brown E, Brown J, Claassen J, Edlow BL, Fink EL, Fins JJ, Foreman B, Frontera J, Geocadin RG, Giacino J, Gilmore EJ, Gosseries O, Hammond F, Helbok R, Claude Hemphill J, Hirsch K, Kim K, Laureys S, Lewis A, Ling G, Livesay SL, McCredie V, McNett M, Menon D, Molteni E, Olson D, O'Phelan K, Park S, Polizzotto L, Javier Provencio J, Puybasset L, Venkatasubba Rao CP, Robertson C, Rohaut B, Rubin M, Sharshar T, Shutter L, Sampaio Silva G, Smith W, Stevens RD, Thibaut A, Vespa P, Wagner AK, Ziai WC, Zink E, I Suarez J; Curing Coma Campaign collaborators. Proceedings of the Second Curing Coma Campaign NIH Symposium: Challenging the Future of Research for Coma and Disorders of Consciousness. *Neurocrit Care*. 2022
65. Bonin EAC, Delsemme Z, Blandin V, Alnagger NL, Thibaut A, Faymonville ME, Laureys S, Vanhaudenhuyse A, Gosseries O. French Survey on Pain Perception and Management in Patients with Locked-In Syndrome. *Diagnostics (Basel)*. 2022

66. Winters B, Kuluris B, Pathmanaban R, Vanderwalt H, Thibaut A, Schnakers C. Changes of Spasticity across Time in Prolonged Disorders of Consciousness: A Retrospective Study. *Brain Sci.* 2022
67. Brunoni AR, Ekhtiari H, Antal A, Auvichayapat P, Baeken C, Benseñor IM, Bikson M, Boggio P, Borroni B, Brighina F, Brunelin E, Carvalho S, Caumo W, Ciechanski P, Charvet L, Clark VP, Cohen Kadosh R, Cotelli M, Datta A, Deng ZD, De Raedt R, De Ridder D, Fitzgerald PB, Floel A, Frohlich F, George MS, Ghobadi-Azbari P, Goerigk S, Hamilton RH, Jaberzadeh SJ, Hoy K, Kidgell DJ, Zonoozi AK, Kirton A, Laureys S, Lavidor M, Lee K, Leite J, Lisanby SH, Loo C, Martin DM, Miniussi C, Mondino M, Monte-Silva K, Morales-Quezada L, Nitsche MA, Okano AH, Oliveira CS, Onarheim B, Pacheco-Barrios K, Padberg F, Nakamura-Palacios EM, Palm U, Paulus W, Plewnia C, Priori A, Rajji TK, Razza LB, Rehn EM, Ruffini G, Schellhorn K, Zare-Bidoky M, Simis M, Skorpinski P, Suen P, Thibaut A, Valiengo LCL, Vanderhasselt MA, Vanneste S, Venkatasubramanian G, Violante IR, Wexler A, Woods AJ, Fregni F. Digitalized transcranial electrical stimulation: A consensus statement. *Clin Neurophysiol.* 2022
68. Soler-Toscano F, Galadí JA, Escrichs A, Sanz Perl Y, López-González A, Sitt JD, Annen J, Gosseries O, Thibaut A, Panda R, Esteban FJ, Laureys S, Kringelbach ML, Langa JA, Deco G. What lies underneath: Precise classification of brain states using time-dependent topological structure of dynamics. *PLoS Comput Biol.* 2022
69. Schnakers C, Bauer C, Formisano R, Noé E, Llorens R, Lejeune N, Farisco M, Teixeira L, Morrissey AM, De Marco S, Veeramuthu V, Ilina K, Edlow BL, Gosseries O, Zandalasini M, De Bellis F, Thibaut A, Estraneo A. What names for covert awareness? A systematic review. *Front Hum Neurosci.* 2022
70. Maurer-Karattup P, Zasler N, Thibaut A, Poulsen I, Lejeune N, Formisano R, Løvstad M, Hauger S, Morrissey AM. Neurorehabilitation for people with disorders of consciousness: an international survey of health-care structures and access to treatment, (Part 1). *Brain Inj.* 2022
71. Magliacano A, Liuzzi P, Formisano R, Grippo A, Angelakis E, Thibaut A, Gosseries O, Lamberti G, Noé E, Bagnato S, Edlow BL, Lejeune N, Veeramuthu V, Trojano L, Zasler N, Schnakers C, Bartolo M, Mannini A, Estraneo A; IBIA DoC-SIG. Predicting Long-Term Recovery of Consciousness in Prolonged Disorders of Consciousness Based on Coma Recovery Scale-Revised Subscores: Validation of a Machine Learning-Based Prognostic Index. *Brain Sci.* 2022
72. Claassen J, Kondziella D, Alkhachroum A, Diringer M, Edlow BL, Fins JJ, Gosseries O, Hannawi Y, Rohaut B, Schnakers C, Stevens RD, Thibaut A, Monti M. Cognitive Motor Dissociation: Gap Analysis and Future Directions. *Curing Coma Campaign, and Its Contributing Collaborators. Neurocrit Care.* 2023
73. Wang A, Sun L, Cheng L, Hu N, Chen Y, Sanz LRD, Thibaut A, Gosseries O, Laureys S, Martial C, Di H. Validation of the simplified evaluation of consciousness disorders (SECONDS) scale in Mandarin. *Ann Phys Rehabil Med.* 2023
74. Panda R, López-González A, Gilson M, Gosseries O, Thibaut A, Frasso G, Cecconi B, Escrichs A; Coma Science Group Collaborators; Deco G, Laureys S, Zamora-López G, Annen J. Whole-brain analyses indicate the impairment of posterior integration and thalamo-frontotemporal broadcasting in disorders of consciousness. *Hum Brain Mapp.* 2023
75. Gosseries O, Schnakers C, Vanhauzenhuyse A, Martial C, Aubinet C, Charland-Verville V, Thibaut A, Annen J, Ledoux D, Laureys S, Grégoire C. Needs and Quality of Life of Caregivers of Patients with Prolonged Disorders of Consciousness. *Brain Sci.* 2023
76. Regnier A, Mélotte E, Aubinet C, Alnagger N, Fischer D, Lagier A, Thibaut A, Laureys S, Kaux JF, Gosseries O. Swallowing dysfunctions in patients with disorders of consciousness: Evidence from neuroimaging data, assessment, and management. *NeuroRehabilitation.* 2024.
77. Monti MM, Beekman R, Spivak NM, Thibaut A, Schnakers C, Whyte J, Molteni E; Curing Coma Campaign and its Contributing Members. Common Data Element for Disorders of Consciousness: Recommendations from the Working Group on Therapeutic Interventions. *Neurocrit Care.* 2023
78. Zheng R, Qi Z, Thibaut A, Wang Z, Xu Z, Di H, Wu X, Mao Y, Laureys S. Clinical application of neuromodulation therapy in patients with disorder of consciousness: A pooled analysis of 544 participants. *NeuroRehabilitation.* 2023.

79. Szymkowicz E, Neumann O, Sanz LRD, Gosseries O, Thibaut A, Cavaliere C, Laureys S, Liepert J. Recovery of Acute Leukoencephalopathy Documented by Neuroimaging: A Case Report. *Neurol Clin Pract.* 2023
80. Simis M, Thibaut A, Imamura M, Battistella LR, Fregni F. Neurophysiological biomarkers of motor improvement from Constraint-Induced Movement Therapy and Robot-Assisted Therapy in participants with stroke. *Front Hum Neurosci.* 2023
81. Cordeiro BNL, Kuster E, Thibaut A, Rodrigues Nascimento L, Gonçalves JV, Arêas GPT, Paiva WS, Arêas FZDS. Is transcranial direct current stimulation (tDCS) effective to improve cognition and functionality after severe traumatic brain injury? A perspective article and hypothesis. *Front Hum Neurosci.* 2023
82. Vitello MM, Rosenfelder MJ, Cardone P, Niimi M, Willacker L, Thibaut A, Lejeune N, Laureys S, Bender A, Gosseries O. A protocol for a multicenter randomized and personalized controlled trial using rTMS in patients with disorders of consciousness. *Front Neurol.* 2023
83. Annen J, Frasso G, van der Lande GJM, Bonin EAC, Vitello MM, Panda R, Sala A, Cavaliere C, Raimondo F, Bahri MA, Schiff ND, Gosseries O, Thibaut A, Laureys S. Cerebral electrometabolic coupling in disordered and normal states of consciousness. *Cell Rep.* 2023
84. Wang A, Sun L, Cheng L, Hu N, Chen Y, Sanz LRD, Thibaut A, Gosseries O, Laureys S, Martial C, Di H. Validation of the simplified evaluation of consciousness disorders (SECONDS) scale in Mandarin. *Ann Phys Rehabil Med.* 2023
85. Pelzer D, Beaudart C, Thibaut A, Bornheim S, Kaux JF. Which factors may influence medium-term quality of life of patients with lower-limb loss? A systematic review of the literature. *Prosthet Ortho Int.* 2024
86. Khosravi MH, Louras M, Martens G, Kaux JF, Thibaut, Lejeune N. A Scoping Review on the Use of Non-Invasive Brain Stimulation Techniques for Persistent Post-Concussive Symptoms. *Biomedicines.* 2024
87. Ihalainen R, Annen J, Gosseries O, Cardone P, Panda R, Martial C, Thibaut A, Laureys S, Chennu S. Lateral frontoparietal effective connectivity differentiates and predicts state of consciousness in a cohort of patients with traumatic disorders of consciousness. *PLoS One.* 2024
88. Lejeune N, Fritz P, Cardone P, Szymkowicz E, Vitello MM, Martial C, Thibaut A, Gosseries O. Exploring the Significance of Cognitive Motor Dissociation on Patient Outcome in Acute Disorders of Consciousness. *Semin Neurol.* 2024
89. Bodien Y, Allanson J, Cardone P, Bonhomme A, Carmona J, Chatelle C, Chennu S, Conte M, Dehaene S, Finoia P, Heinonen G, Hersh J, Kamau E, Lawrence P, Lupson V, Meydan A, Rohaut B, Sanders WR, Sitt JD, Soddu A, Valente M, Velazquez A, Voss HU, Vrosgou A, Claassen J, Edlow BL, Fins JJ, Gosseries O, Laureys S, Menon D, Naccache L, Owen AM, Pickard J, Stamatakis EA, Thibaut A, Victor JD, Giacino JT, Bagiella E, Schiff ND. Cognitive Motor Dissociation in Disorders of Consciousness, *New England Journal Medicine.* 2024
90. Formisano R, Aloisi M, Ferri G, Schiattone S, Estraneo A, Magliacano A, Noé E, Pérez MDN, Hakiki B, Romoli AM, Bertoletti E, Leonardi G, Thibaut A, Martial C, Gosseries O, Brisbois M, Lejeune N, O'Valle M, Ferri J, Frédéric A, Zasler N, Schnakers C, Iosa M. Nociception Coma Scale-Revised with Personalized Painful Stimulus Versus Standard Stimulation in Persons with Disorders of Consciousness: An International Multicenter Study. *J Clin Med.* 2024
91. van der Lande GJM, Casas-Torremocha D, Manasanch A, Dalla Porta L, Gosseries O, Alnagger N, Barra A, Mejías JF, Panda R, Riefolo F, Thibaut A, Bonhomme V, Thirion B, Clasca F, Gorostiza P, Sanchez-Vives MV, Deco G, Laureys S, Zamora-López G, Annen J. Brain state identification and neuromodulation to promote recovery of consciousness. *Brain Commun.* 2024
92. Sanz LRD, Lejeune N, Szymkowicz E, Bonin EAC, Panda R, Sala A, Thibaut A, Huerta-Gutierrez R, Dardenne N, Dikstein D, Van Goethem S, Ledoux D, Hustinx R, Stender J, Farber NM, Zafonte RD, Schiff ND, Laureys S, Gosseries O. Apomorphine for prolonged disorders of consciousness: a multimodal open-label study. *Eclinical Medicine.* 2024
93. Martens G, Hody S, Bornheim S, Angius L, De Beaumont L, Fregni F, Ruffini G, Kaux JF, Thibaut A, Bury T.

94. Can transcranial direct current stimulation (tDCS) over the motor cortex increase endurance running performance? a randomized crossover-controlled trial. *PLoS One*. 2024
95. Keech K, Schnakers C, Murtaugh B, O'Brien K, Slomine B, Briand MM, Formisano R, Thibaut A, Estraneo A, Noé E, Gosseries O, da Conceição Teixeira L. Optimizing Neurobehavioral Assessment for Patients with Disorders of Consciousness: Proposal of a Comprehensive Pre-Assessment Checklist for Clinicians. *Brain Sci*. 2025
96. Martens G, Patricios JS, Schneider KJ, Davis GA, Blauwet C, Feddermann-Demont N, Tooth C, Thibaut A, Kaux JF, Leclerc S. ReFORM synthesis of the 6th International Consensus Statement on Concussion in Sport. *Br J Sports Med*. 2025
97. Vitello MM, Laureys S, Thibaut A, Gosseries O. Non-pharmacologic interventions in disorders of consciousness. *Handb Clin Neurol*. 2025;
98. Cardone P, Bonhomme A, Bonhomme V, Lejeune N, Staquet C, Defresne A, Alnagger N, Ezan P, Lee M, Piarulli A, Van Goethem S, Montupil J, Thibaut A, Martial C, Gosseries O. A pilot human study using ketamine to treat disorders of consciousness. *iScience*. 2025
99. Tewarie PKB, Abeysuriya R, Panda R, Núñez P, Vitello MM, van der Lande G, Gosseries O, Thibaut A, Laureys S, Deco G, Annen J. Individual trajectories for recovery of neocortical activity in disorders of consciousness. *PLoS Comput Biol*. 2025
100. Núñez P, Tewarie P, Rodríguez-González V, Alnagger NLN, van der Lande GJM, Vitello MM, Cardone P, Thibaut A, Belloli L, Laureys S, Sitt JD, Annen J, Gosseries O. Altered electrophysiological meta-state dynamics in disorders of consciousness. *Neuroimage*. 2025
101. Ferioli S, Schnakers C, Magliacano A, Zasler N, Ismari C, Formisano R, Gosseries O, Maurer-Karattup P, Molteni E, Murtaugh B, Slomine B, Thibaut A, Estraneo A. Centers for patients with prolonged disorder of consciousness: a preliminary international map. *Brain Inj*. 2025
102. Martens G, Thibaut A, Urhausen A, Tscholl PM, Beudart C, Romeas T, de Beaumont L, Caron JG, Le Garrec S, Hannouche D, Seil R, Kaux JF, Leclerc S. Sport-Related Concussion Knowledge in French-Speaking Athletes, Coaches, and Health Care Professionals: Results From an International Survey on 2073 Participants. *Clin J Sport Med*. 2025
103. Louras M, Thibaut A, Maquet N, Meys M, Delrue G, Barjona A, Kaux JF, Lejeune N, Martens G. [Multidisciplinary concussion management recommendations]. *Rev Med Liege*. 2025

Book chapters

1. Bruno MA., Ledoux D, Vanhauzenhuysse A., Gosseries O., Schnakers C., Thibaut A., Chatelle C., Thonnard M., Charland V., Laureys S. Pronostic des patients récupérant du coma. *Coma et états de conscience altérée*, Springer-Verlag France, 2011
2. Demertzi A., Gosseries O., Bruno MA., Schnakers C., Vanhauzenhuysse A., Chatelle C., Charland V., Thibaut A., Thonnard M., Laureys S. Désordres de la conscience: aspects éthiques in *Coma et états de conscience altérée*, Springer-Verlag France, 2011
3. Vanhauzenhuysse A., Boly M., Bruno M-A., Gosseries O., Demertzi A., Kirsch M., Tshibanda J-F., Thonnard M., Charland-Verville V., Chatelle C., Thibaut A., Laureys S, Soddu A. *Functional imaging and impaired consciousness in Coma and Consciousness*, Springer-Verlag France, 2012
4. Bruno MA., Ledoux D, Vanhauzenhuysse A., Gosseries O., Thibaut A., Laureys S. *Prognosis of patients with altered states of consciousness in Coma and Consciousness*, Springer-Verlag France, 2012
5. Demertzi A., Gosseries O., Bruno MA., Schnakers C., Vanhauzenhuysse A., Chatelle C., Charland V., Thibaut A., Thonnard M., Laureys S. *The ethics of managing disorders of consciousness in Coma and Consciousness*, Springer-Verlag France, 2012
6. Bodart O., Thibaut A., Laureys S., Gosseries O. *Disorders of consciousness*, Oxford Textbook of Neurocritical Care, Chap 25, 2013
7. Thibaut A., Chatelle C., Stender J., Demertzi A., Bernard C., Hustinx R., Laureys S., Bruno MA. *Positron emission tomography imaging in altered states of consciousness: Coma, sleep and hypnosis; PET and SPECT in Neurology*; 2014 Springer, Paris, Springer-Verlag France

8. Thibaut A., Bodart O., Laureys S., Canavero S. Chronic Disorders of Consciousness in Surgical Principles of Therapeutic Cortical Stimulation, De Gruyter, 2014
9. Thibaut A., Di Perri C., Bodart O., Laureys S., Behavioural Diagnosis of Disorders of Consciousness, in Clinical Neurophysiology in Disorders of Consciousness, Springer-Verlag France, 2015
10. Charland-Verville V., Laureys S., Gosseries O., Thibaut A., Bruno MA. The Chronic Clinical Setting, Clinical Neurophysiology in Disorders of Consciousness, Springer Vienna, 2015
11. Thibaut A., Di Perri C., Laureys S. Transcranial direct current stimulation in disorders of consciousness in Transcranial Direct Current Stimulation in Neuropsychiatric Disorders: Clinical Principles and Management, Springer Paris, 2016.
12. Thibaut A., Schiff ND. New Therapeutic Options for the Treatment of Patients with Disorders of Consciousness: The Field of Neuromodulation in Coma and Disorders of Consciousness, Springer, Paris, Springer-Verlag France, 2017
13. Di Perri C, Cavaliere C, Bodart O, Thibaut A, Bahri MA, Soddu A, Laureys S. Sleep, Coma, Vegetative and Minimally Conscious States. Sleep and Disorders Medicine, Springer 2017.
14. Zaninotto AL, French M, El-Hagrassy M, Thibaut A, Fregni F. Traumatic Brain Injury Rehabilitation—Principles and Practice for Transdisciplinary Teams. Traumatic Brain Injury and Non-invasive Brain Stimulation. Springer Nature, 2017.
15. Martens G, Foidart-Dessalle M, Laureys S, Thibaut A. How Does Spasticity Affect Patients with Disorders of Consciousness? In Coma and Disorders of Consciousness, Springer, Paris, Springer-Verlag France, 2017
16. Thibaut A, French M, Vasquez A, Fregni F. Optimization of non-invasive brain stimulation clinical trials. Neuromodulation 2nd edition, Elsevier, 2018
17. O'Brian AT, Thibaut A. Disorders of consciousness in Clinical Trials in Neurology. Springer, 2018.
18. Cassol H, Wolff A., Chatelle C, Gosseries O, Laureys S, Thibaut A. Conscience et états de conscience altérée. In Etats de conscience altérée Sauramps MEDICAL, 2018
19. Bonin E, Martens G, Cassol H, Chatelle C, Laureys S, Thibaut A. PET Imaging in Altered States of Consciousness: Coma, Sleep, and Hypnosis. In PET and SPECT in Neurology (2nd edition). Springer Nature, 2020
20. Szymkowicz E., Cardone P. Gosseries O., Laureys S., Thibaut A. Neurophysiology and traumatic brain injury. The Oxford Textbook of Traumatic Brain Injury. 2024
21. Vitello M., Laureys S., Thibaut A., Gosseries O. Non-pharmacologic interventions to improve disorders of consciousness. The Handbook of Clinical Neurophysiology, 2024
22. Hopkins A., Vitello M, Thibaut A, Monti M. Emerging treatment for patients with disorders of consciousness: the field of neuromodulation. Coma & Disorders of Consciousness third edition. Springer-Verlag France, 2024
23. Meys M., Thibaut A., Annen J. Brain–Computer Interfaces and Their Place in the Management of Disorders of Consciousness. Coma & Disorders of Consciousness third edition. Springer-Verlag France, 2024
24. Louras M, Delrue G, Lejeune N, Thibaut A. Non-invasive transcranial brain stimulation to treat cognitive aspects of traumatic brain injury. Handbook of Non-Invasive Transcranial Brain Stimulation In the Cognitive Domain. In preparation

Presentations

2011

« Effects of sham-controlled double blind transcranial direct current stimulation in patients with disorders of consciousness », XXth World Congress of Neurology, 2011, Marrakesh, Morocco

2012

« Improvement of consciousness after transcranial direct current stimulation - a sham-controlled double-blind study », International Brain Injury Association World Conference, 2012, Edinburgh, Scotland

« Effects of sham-controlled double blind transcranial direct current stimulation in patients with disorders of consciousness », Besta meeting, 2012, Chaudfontaines, Belgium

« Diagnostic clinique et paraclinique des états de conscience altérée », Neurology department, Clinique de l'IPAL, Belgium

« Les corrélats neuronaux de la Conscience », keynote lecture, Congrès du Sommeil, November 2012, Bordeaux, France

2013

« Disorders of consciousness », STAVEG Project, invited speaker, January 2013, Bucharest, Roumania

« La stimulation transcranienne à courant continu chez les patients en état de conscience altérée », STAVEG Project, January 2013, Bucharest, Roumania

« Disorders of consciousness: Belgium Federal Project », invited speaker, STAVEG Project, January 2013, Bucharest, Roumania

« La spasticité chez les patients en état de conscience altérée », invited speaker, STAVEG Project, January 2013, Bucarest, Roumanie

« Stimulateur ACTIGAIT – Neuroimagerie », Workshop, journée satellite du Congrès Sofamea, January 2013, Luxembourg, Luxembourg

« Imagerie encéphalique et perception du mouvement », keynote lecture, Congrès Sofamea, January 2013, Luxembourg, Luxembourg

« Etats de conscience altérée : les traitements », lecture at CMRRF de Kerpape, February 2013, Ploemeur, France.

« Treatments for patients with disorder of consciousness », invited speaker, SIZ KINE, June 2013, Bruxelles, Belgium

« What about treatments for patients with disorder of consciousness », invited speaker, 16 Interantional Long-Term Care Conference, September 2013, Torun, Poland

« Curative and palliative treatments for patients with disorder of consciousness », lecture at Hangzhu Noraml University, November 2013, Hangzhu, China

« Diagnosing non-communicating patients with clinical and paraclinical tools », lecture at Hangzhu Noraml University, November 2013, Hangzhu, China

2014

« Transcranial Direct Current Stimulation (tDCS) in patients with disorders of consciousness », May 2014, Annual IUAP meeting, Gant, Belgium

« How tDCS can help patients with disorders of consciousness? », July 2014, James S. McDonnell Foundation annual meeting, Tuscany, Italy

« Spécificité de la prise en charge de la spasticité chez le patient en état de conscience altérée », October 2014, invited speaker, Symposium de la prise en charge interdisciplinaire de la spasticité, CHU Dinant Godinne, UCL Namur, Belgium

« Quelle conscience dans le coma et les états de conscience altérée? », Cycle de conférences *Conscience et inconscience*, December 2014, Univerisity of Liège, Liège, Belgium

2015

« Patients with disorders of consciousness: how to treat them? », February 2015, 3rd LUCA meeting, University of Liege, Liege, Belgium

« Brain plasticity after implanted drop foot stimulator in chronic stroke », June 2015, 1st EAN conference, Berlin, Germany

« Neural correlates of tDCS & repeated stimulations », July 2015, James S. McDonnell Foundation annual meeting, Paris, France

« Treatments for patients with disorders of consciousness », July 2015, Symposium at the Association for the Scientific Study of Consciousness, Paris, France

2016

« Therapeutic challenges in disorders of consciousness », lecture at Spaulding Rehabilitation Hospital seminar, January 2016, Boston, USA

« Brain plasticity after implanted foot drop stimulator in stroke », invited symposium, 11th International Brain Injury Association World Conference, March 2016, De Hague, The Netherlands.

« Physical therapy in patients disorders of consciousness: impact on spasticity and muscle contracture », International Brain Injury Association World Conference, March 2016, De Hague, The Netherlands.

« Spasticity in chronic patients with disorders of consciousness », International Brain Injury Association World Conference, March 2016, De Hague, The Netherlands.

« Neuromodulation in disorders of consciousness », International Brain Injury Association World Conference, March 2016, De Hague, The Netherlands.

« Disorders of Consciousness: Definition, diagnosis and therapeutic options », Neuromodulation Center Seminar, Spaulding Rehabilitation Hospital, April 2016, Boston, USA

2017

« Multichannel tDCS of the frontoparietal network in patients with disorders of consciousness », NYC Neuromodulation conference, January 2017, New-York, USA

« Therapeutic options for the recovery of severely brain injured patients: the field of neuromodulation », Invited Symposium, IBIA Conference, April 2017, New Orleans, USA

« Neuroimaging assessments of consciousness in patients recovering from coma », Invited speaker, Barcelona Cognition, Brain and Technology Summer School, August 2017, Barcelona, Spain

« Does non-invasive brain stimulation enhance the recovery of patients with severe brain injury and disorders of consciousness », Invited speaker, IX international symposium on neuromodulation, September 2017, Sao Paulo, Brazil

« Transcranial Pulsed Current Stimulation: What has been done so far and what should be done next? », invited speaker, IX international symposium on neuromodulation, September 2017, Sao Paulo, Brazil

« Reclassification of behavioral criteria for MCS *plus* », JSMF Coma Consortium, October 2017, New-York, USA

« tCS for the improvement of behaviors and cortical connectivity in patients with disorders of consciousness », Luminous workshop, November 2017, Milano, Italy

« Assessments and treatments of patients with DOC », Invited speaker, China-Belgium Symposium on Disorders of Consciousness, November 2017, Hangzhou, China

« Brain stimulation in patients in minimally conscious state », Invited speaker, 11th International Conference on Complex Medical Engineering, November 2017, Shenzhen, China

« Brain stimulation in minimally conscious states », Invited speaker, British Neuroscience Society Christmas Symposium, December 2017, London, UK

2018

« tDCS in disorders of consciousness – on overview », FERB meeting, February 2018, Milan, Italy

« Is tDCS a valuable tool for DOC patients? », DOCMA symposium, February 2018, Valencia, Spain

« Brain activity in coma », Semaine du Cerveau, April 2018, Liège, Belgium

« tCS in DOC patients », Luminous annual meeting, April 2018, Liège, Belgium

« Evaluation Clinique et paraclinique des patients en état de conscience altérée », 1^{ère} journée francophone sur les troubles de la conscience : Rencontre entre recherche, pratiques cliniques et enjeux éthique, June 2018, Liège, Belgium

« The minimally conscious state plus and minus: clinical features and functional recovery » June 2018, HBP, Barcelona, Spain

« FDG-Positron emission tomography: a measure of brain metabolism », Symposium Single-case evaluation of consciousness: same patient, different modalities; June 2018, ASSC, Krakow, Poland

« Neuromodulation, expériences et ouvertures », invited speaker, 23^{ème} Colloque GERIMOC September 2018, Libramont, Belgium

« Managing pain in non-communicative patients with severe brain injury » symposium at the ACRM, October 2018, Dallas, USA

« La place de l'ingénierie dans la prise en charge des patients cérébrales: entre avancées technologiques et enjeux éthiques », Invited speaker, November 2018, Rehazenter, Luxembourg

« Pharmacological and non-pharmacological approaches to improve the recovery of severely-brain injured patients », Invited speaker, X international symposium on neuromodulation, November 2018, Sao Paulo, Brazil

« Transcranial magnetic stimulation can help to measure level of consciousness », invited speaker, X international symposium on neuromodulation, November 2018, Sao Paulo, Brazil

« La stimulation cérébrale non-invasive comme outil thérapeutique dans les troubles de la conscience », 4^{ème} journée européenne de l'éveil du coma. Décembre 2018, Liège, Belgium

2019

« Therapeutic challenges in patients with prolonged disorders of consciousness », lecture at the Neuromodulation lab, Harvard Medical School, January 2019, Boston, USA

« Non-invasive brain stimulation in post-comatose patients with disorders of consciousness », Keynote lecture, 3rd International Brain Stimulation Conference, February 2019, Vancouver, Canada

« Non-invasive brain stimulation in DOC – what's new? », Invited symposium. 13th world congress on brain injury, March 2019, Toronto, Canada

« Neural correlates of behavioral signs of consciousness: what can we learn from the MCS*? », 13th world congress on brain injury, March 2019, Toronto, Canada

« Évaluation et prise en charge des patients en état de conscience altérée : quelles sont les dernières avancées ? », lecture at the Centre Neurologique de Réadaptation Fonctionnelle de Fraiture, April 2019, Fraiture, Belgium

« Clinical evaluation of consciousness in the ICU », Invited speaker, Neurosciences in Intensive Care International Symposium, June 2019, Paris, France

« Neuromodulation to improve post-comatose patients' responsiveness », Invited workshop, Polenovs Neurosurgical Institute, July 2019, Saint-Petersbourg, Russia

« Transcranial current stimulation in patients with disorders of consciousness », MIDOC meeting, December 2019, Milan, Italy

2020

« Multicentre study on tDCS in Patients with Disorders of Consciousness: A sham controlled double blind randomized trial », lecture at the Valdor Rehabilitation Center, March 2020

« A Majority of clinically unresponsive patients present residual brain activity », European Academy of Neurology Conference, (online event) May 2020

« Transcutaneous Auricular Vagal Nerve Stimulation in Disorders of Consciousness », International symposium on neuromodulation (chair), online event, November 2020

« Neuromodulation in patients with disorders of consciousness: behavioral and electrophysiological output », invited speaker, 7th International Conference on Non-Invasive Brain Stimulation, online event, November 2020

« Neural correlates of consciousness », GIGA Doctoral School, University of Liège (online event), December 2020.

2021

« Brain Stimulation in Patients With Severe Brain Injuries: An Overview », Invited speaker, Shanghai E-symposium, February 2021

« Non-Invasive Brain Stimulation in Patients With Disorders of Consciousness », 2021 KCL Neuroscience Society conference 'Touching The Brain', keynote speaker, online event, February 2021

« Stimulation Transcranienne en neuro-rééducation », colloque MPR, CHU Liège, online event, March 2021

« Can We Stimulate Awakening from Coma? » World Coma Day, Invited speaker, online event, March 2021

« Coma, is my patient really unconscious? Lessons from behaviour and neuroimaging studies » XIII Paulista Congress of Neurology, Keynote speaker, online event, May 2021

« Neural entrainment to promote motor learning », International symposium on neuromodulation, Invited speaker, online event, November 2021

« Treatment of DOC: Where We Are and Where We May Be Going » Symposium, IBIA Inaugural Conference on Disorders of Consciousness, Invited speaker, online event, December 2021

2022

« La place de la stimulation transcrânienne en rééducation », Webinaire de la Société Scientifique Francophone de Kinésithérapie, webinar, February 2022

« Coma and Related States », Invited speaker, online event, Inaugural Locked-in Syndrome International Zoom Conference, March 2022

« Therapies to restore consciousness: what is available and what's in the pipeline? », Invited speaker, EAN conference, Vienna, June 2022

« Transcranial direct current stimulation for patients with disorders of consciousness: a multicenter randomized double-blind sham-controlled clinical trial », EAN conference, Vienna, June 2022

« Effect of transcranial direct current stimulation in patients with disorders of consciousness: a multicenter randomized double-blind sham-controlled clinical trial », ISRPM conference, Lisbon, July 2022

« Changes of Spasticity across Time in Prolonged Disorders of Consciousness a retrospective study », ISRPM conference, Lisbon, July 2022

« Multicentre Study on tDCS in Patients with Disorders of Consciousness: A Sham Controlled Double Blind Randomized Trial », 25th ASSC conference, Amsterdam, July 2022

« Consciousness in the clinic », Chair, 25th ASSC conference, Amsterdam, July 2022

« Should tDCS be implanted in rehabilitation to promote recovery in DoC patients : lessons from a multicenter translational trial », IBIA DOC-SIG webinar, Invited speaker, December 2022

« Coma, mon patient est-il vraiment « inconscient » ?, Enseignements tirés d'études comportementales et de neuroimagerie » Congrès SOFMER, Rennes, France, Invited speaker, December 2022

2023

« What Behavioral, Pharmacological and Neuromodulation Treatments », Pre-congress symposium, Invited speaker, IBIA World Congress, Dublin, Ireland, March 2023

« Challenges and Perspectives for the Treatment and Management of Patients in Prolonged Disorders of Consciousness », Chair and speaker, IBIA World Congress, Dublin, Ireland, March 2023

« Implementation of Rehabilitative Approaches in the Treatment of Disorders of Consciousness – Results of an International Survey of the IBIA DoC-SIG », IBIA World Congress, Dublin, Ireland, March 2023

« Pharmacological and non-pharmacological innovative treatment options for DoC patients », G.TEC Spring School, Keynote speaker, Online Event, April 2023

« Follow up of disorder of consciousness from acute to chronic phase in clinical », ECCN Conference, Marseille, France, May 2023

« Prise en charge des commotions cérébrales », Journée Liégeoise de la Radiologie, Liège, Belgium, September 2023

« Coma and Disorders of Consciousness » GIGA-Consciousness Day, Liege, Belgium, December 2023

2024

« Diagnosis and therapeutic challenges in patients with disorders of consciousness », University of Montreal Seminar, Invited speaker, Montreal, March 2024

« Quels outils diagnostiques et thérapeutiques pour les patients en état de conscience altérée prolongé ? », CÉAMS, Hôpital Sacré Coeur, Invited speaker, Montreal, March 2024

« Patients with prolonged disorders of consciousness: Diagnostic & therapeutic options », McGill University Seminar, Invited speaker, Montreal, March 2024

« Transauricular Vagal Nerve Stimulation in Post-Coma Patients: Preliminary Findings from a Randomized Controlled Trial Conducted in Intensive Care Units », NABIS Conference, Las Vegas, USA, March 2024

« Neuromodulation for chronic minimally conscious state », EAN 10th congress, Invited Speaker, Helsinki, Finland, June 2024

« Non-invasive vagal nerve stimulation in DoC in the ICU and rTMS in DoC in a multicenter study », PDOC SIG, Cambridge University, Invited Speaker (online), July 2024

« Non-Invasive Brain Stimulation For Severely Brain-Injured Patients: Are We Ready For Clinical Use? », Neuroelectrics Webinar, August 2024

« Post-Coma Care: Diagnostic Challenges & Treatment Options », Seminar University of Hasselt, December 2024

2025

« Motor Dysfunction in Prolonged Disorders of Consciousness » Pre-congress symposium, Invited speaker, IBIA World Congress, Montreal, Canada, March 2025

« Exploring Neurophysiological & Neuroimaging Alterations in Concussion » Chair and speaker, IBIA World Congress, Montreal, Canada, March 2025

« Disorders of Consciousness: an introduction to diagnostic & therapeutic options » Seminar, University of Maastricht, June 2025

« Roles of neuro-technologies in the long-term management of concussions » ReFORM annual symposium, Invited speaker, Paris, June 2025

« FDG positron emission tomography: a measure of brain metabolism & Therapies for patients with DoC : what can we learn from neuroimaging ? » ASSC pre-congress, Invited speaker, ASSC annual conference, Greece, Jul 2025

« Restoring consciousness through neuromodulation: Scientific & clinical advances » DOC-BOX international scientific conference, Fondazione Don Gnocchi, Napoli, Italy, October 2025

« Neuromodulation techniques in prolonged disorders of consciousness » Symposium, Universidad Loyola Sevilla, Sevilla, Spain, December 2025

Memberships of Scientific Societies

2022 – present: World Federation for Neurorehabilitation (WFNR)

2021 – present: International Society of Physical and Rehabilitation Medicine (ISPRM)

2020 – present: Belgian Society for Neurorehabilitation (BSNR)

2020 – present: Coma Curing Campaign (CCC), Neurocritical Care Society

2020 – present: European Academy of Neurology (EAN)

2017 – present: Association for the Scientific Study of Consciousness (ASSC)

2015 – present: International Brain Injury Association (IBIA)

2017 – 2019: American Congress for Rehabilitation Medicine (ACRM)

Reviewer

A list of recent reviewed articles can be found on Publons publons.com/researcher/3046134

- American Journal of Physical Medicine and Rehabilitation
- Annals of Neurology
- BMC Neurology
- Brain
- Brain Imaging and Behavior
- Brain Injury
- Brain Stimulation
- Clinical Neurophysiology
- Current opinion in Neuroengineering
- Elife
- Encephale
- European Journal of Physical Rehabilitation Medicine
- Frontiers in Neuroscience
- Frontiers in Human Neuroscience
- Frontiers in Neurology
- Human Brain Mapping
- Journal of Neurology

- Journal of Neurological Science
- Journal of NeuroTrauma
- Nature
- Neurocritical Care
- Neuroimage: Clinical
- Neurology
- Neuromodulation
- Neurorehabilitation and Neural Repair
- Neuroscience
- Neuroscience and Behavioral Reviews
- New England Journal of Medicine
- PNAS
- PLOS one
- Scientific Reports

For grant agencies:

- National Science Center, Poland
- ERC - consolidator grant, EU
- Fundació La Marató, Spain
- Medical Research Council, UK
- Société de Réanimation de Langue Française, France
- Swiss National Science Foundation, Switzerland