



EPA COURSE TITLE	Noninvasive brain stimulation methods (rTMS – tDCS): from scientific data to practical aspects
COURSE DIRECTOR	Emmanuel Poulet, France
COURSE CO-DIRECTORS	Chris Baeken, Belgium Franck Padberg, Germany
COURSE LEVEL	Basic
EDUCATIONAL INTENTIONS/ COURSE OUTCOMES	<ul style="list-style-type: none">- A better knowledge of clinical indications according to current international guidelines- A better knowledge of practical procedures with rTMS and tDCS (design of treatment session – optimal parameters)- Describe a titration procedure with rTMS and electrode positioning with tDCS
COURSE DESCRIPTION	<p>Objectives: The goals of this workshop are to:</p> <ol style="list-style-type: none">1) Review recent noninvasive brain stimulation approaches (rTMS and tDCS) for the treatment of psychiatric symptoms.2) Practice with available brain stimulation devices approved as medical device by health authorities.3) Discuss the strengths, weaknesses and gaps of the various approaches in each indication <p>Description: Despite advance in psychopharmacology, up to 30% of patients with psychiatric condition continue to experience disabling symptoms despite being on medication. Thanks to their ability to modulate cerebral networks, noninvasive brain stimulation methods have been proposed as an alternative method to alleviate treatment-resistant symptoms in patients with psychiatric conditions, especially depression, schizophrenia and substance use disorders. Noninvasive brain stimulation methods cover a broad range of approaches including electroconvulsivotherapy (ECT), repetitive transcranial magnetic stimulation (rTMS), transcranial electrical stimulation (tES: tDCS, tRNS, tACS, tSOS,...).</p> <p>The workshop will have four sections:</p> <ol style="list-style-type: none">1. Overview of rTMS and tDCS methods2. Brief presentations of their main indications in psychiatry (depression, schizophrenia and substance use disorders) and their place in the treatment algorithm3. Practice exercises with the devices4. General Discussion about strengths, weaknesses and gaps
PREREQUISITE KNOWLEDGE	Psychiatrists and residents in psychiatry.
COURSE METHODS AND MATERIAL	Small group discussions - Slides - Handouts - Other
TARGET AUDIENCE	N/A



RECOMMENDED READINGS	<p>- Lefaucheur JP, André-Obadia N, Antal A, Ayache SS, Baeken C, Benninger DH, Cantello RM, Cincotta M, de Carvalho M, De Ridder D, Devanne H, Di Lazzaro V, Filipović SR, Hummel FC, Jääskeläinen SK, Kimiskidis VK, Koch G, Langguth B, Nyffeler T, Oliviero A, Padberg F, Poulet E, Rossi S, Rossini PM, Rothwell JC, Schönfeldt-Lecuona C, Siebner HR, Slotema CW, Stagg CJ, Valls-Sole J, Ziemann U, Paulus W, Garcia-Larrea L. Evidence-based guidelines on the therapeutic use of repetitive transcranial magnetic stimulation (rTMS). Clin Neurophysiol. 2014 Nov;125(11):2150-206. doi: 10.1016/j.clinph.2014.05.021. 1.</p> <p>- Lefaucheur JP, Antal A, Ayache SS, Benninger DH, Brunelin J, Cogiamanian F, Cotelli M, De Ridder D, Ferrucci R, Langguth B, Marangolo P, Mylius V, Nitsche MA, Padberg F, Palm U, Poulet E, Priori A, Rossi S, Schecklmann M, Vanneste S, Ziemann U, Garcia-Larrea L, Paulus W. Evidence-based guidelines on the therapeutic use of transcranial direct current stimulation (tDCS). Clin Neurophysiol. 2017 Jan;128(1):56-92.</p>
LANGUAGE(S)	French, German, Dutch