



## Vincent Van Waes

Professor of Neuroscience  
Université Bourgogne-Franche Comté  
Laboratory of Integrative and Clinical Neuroscience EA481  
19 rue Ambroise Paré  
25030 Besançon Cedex, France  
☎ +33 (0)3.81.66.55.97  
✉ [vincent.van\\_waes@univ-fcomte.fr](mailto:vincent.van_waes@univ-fcomte.fr)  
<http://neurosciences.univ-fcomte.fr/>

**Key words: Addiction, Depression, Behavior, Gene Expression, Neuromodulation, Animal models, Translational studies**

### PROFESSIONAL EXPERIENCE

- **2017-present:** • **Co-director of the Laboratory of Integrative and Clinical Neuroscience EA481 (60 members)**
  - **Head of the Master's degree program in Physiology, Neuroscience and Behavior (2<sup>nd</sup> year)**
  - **Member of the National University Council (2020-2024), CNU section 69**

*Thematic: Effects of transcranial direct current stimulation (tDCS) on cognition, depression and addiction: translational studies*
- **2010- 2017:** **Assistant Professor of Neuroscience**  
Laboratory of Integrative and Clinical Neuroscience EA481 - INSERM CIT 1431  
Besançon, France
- **2011-2016:** **Visiting Scientist (Summers 2011-2016; total: 7 months)**  
Prozac-Ritalin interactions: an addictive combo?  
Department of Cellular and Molecular Pharmacology  
The Chicago Medical School / RFUMS, North Chicago, IL, USA  
Contact: Prof. Kuei Tseng and Prof. Heinz Steiner
- **2008-2010:** **Postdoctoral Researcher**  
Regulation of basal ganglia-cortical interactions by psychostimulants  
Department of Cellular and Molecular Pharmacology  
The Chicago Medical School / RFUMS, North Chicago, IL, USA  
Contact: Prof. Heinz Steiner
- **2005-2008:** **PhD in Neuroscience (European Label)**  
Ethanol vulnerability in adolescent and adult rats: Impact of prenatal stress  
Perinatal Stress Team, University of Lille 1, France  
& Department of Human Physiology and Pharmacology Università di Roma "La Sapienza", Roma, Italy (6 months)

## EDUCATION & DEGREES

- **2016:**            **Accreditation to supervise researches** (University of Franche-Comté)  
Habilitation à diriger des recherches (HDR)

*How does the brain become addicted?*

*Factors of vulnerability, implication of corticostriatal circuits and non-invasive electrical therapy: insight from preclinical studies*

**Jury :**

Dr. Christelle Baunez	Directeur de recherche CNRS, Marseille	(Rapporteur)
Dr. Jean-Pol Tassin	Directeur de recherche INSERM, Paris	(Rapporteur)
Dr. Emmanuel Valjent	Chargé de recherche INSERM, Montpellier	(Rapporteur)
Pr. Muriel Darnaudéry	Professeur des Universités, Bordeaux	(Examineur)
Pr. Emmanuel Haffen	Professeur des Universités, Besançon	(Examineur)
Pr. Jean-Louis Millot	Professeur des Universités, Besançon	(Président)

- **2008:**            **PhD in Neuroscience European Label:** Lille 1, France / “La Sapienza”, Roma, Italy

*Ethanol vulnerability in adolescent and adult rats: Impact of prenatal stress*

**Jury :**

Pr. Stefania Maccari	Professeur des Universités, Lille	(Présidente)
Pr. Philippe De Witte	Professeur des Universités, Louvain (Belgium)	(Rapporteur)
Dr. Anna Moles	Istituto di Neuroscienze del CNR, Roma (Italy)	(Rapporteur)
Dr. Gerard Barbanel	Directeur de recherche CNRS, Montpellier	(Rapporteur)
Pr. Michel Lhermitte	Professeur des Universités, Lille	(PhD supervisor)
Pr. Muriel Darnaudéry	Professeur des Universités, Bordeaux	(PhD supervisor)

- **2004:**            DEA in Neuroscience (Lille1/Lille2)
- **2002-2003:**    Licence and Maîtrise in Cognitive Science (Lille1/Lille3)
- **2001:**            DEUG Biology (Lille1)

### OTHER

- **2012:**            **Accreditation to practice experimental surgery** (VetAgro, Lyon)
- **2007:**            **Certification for animal experimentation** (Level 1, A-25-41; Pasteur Institute, Lille)

## PUBLICATIONS

- **Peer-reviewed publications (International journals):**

- 1) Pedron S., Dumontoy S., Dimauro J., Haffen E., Andrieu P., and **Van Waes V.**  
Open-tES: An open-source stimulator for transcranial electrical stimulation designed for rodent research  
*Plos One*, 15(7): e0236061, **2020**
- 2) Bennabi D., Haffen E., and **Van Waes V.**  
Vortioxetine for cognitive enhancement in major depression: from animal models to clinical research  
*Frontiers in Psychiatry*, Vol. 10, Art. 771, **2019**
- 3) Ekhtiari H., Tavakoli H., Addolorato G., [...], **Van Waes V.**, [...], and Hanlon C.  
Transcranial Electrical and Magnetic Stimulation (tES and TMS) for Addiction Medicine: A consensus paper on the present state of the science and the road ahead  
*Neuroscience & Biobehavioral Reviews*, Vol. 104, p 118-140, **2019**
- 4) Peanlikhit T., **Van Waes V.**, Pedron S., Risold P.Y., Haffen E., Etievant A., and Monnin J.  
The antidepressant-like effect of tDCS in mice: a behavioral and neurobiological characterization  
*Brain Stimulation*, Vol. 10(4), p 748-756, **2017**
- 5) Pedron S., Beverley J., Haffen E., Andrieu P., Sechter D., Steiner H., and **Van Waes V.**  
Transcranial direct current stimulation produces long-lasting attenuation of cocaine-induced behavioral responses and gene regulation in corticostriatal circuits  
*Addiction Biology*, Vol. 22(5), p 1267-1278, **2017**
- 6) Chometton S., Pedron S., Peterschmitt Y., **Van Waes V.**, Fellmann D. and Risold P.Y.  
A preliminary lateral hypothalamic nuclear complex responds to hedonic but not aversive tastes in male rat  
*Brain Structure and Function*, Vol. 221(4), p 109-116, **2016**
- 7) **Van Waes V.**, Ehrlich S., Beverley J., and Steiner H.  
Fluoxetine potentiation of methylphenidate-induced gene regulation in striatal output pathways: Potential role for 5HT1B receptor  
*Neuropharmacology*, Vol. 89C, p 77-86, **2015**
- 8) Beverley J., Piekarski C., **Van Waes V.**, and Steiner H.  
Potentiated gene regulation by methylphenidate plus fluoxetine treatment: Long-term gene blunting (Zif268, Homer1a) and behavioral correlates  
*Basal Ganglia*, Vol. 4, p 109-116, **2014**
- 9) Bennabi D.\*, Pedron S.\*, Haffen E., Monnin J., Peterschmitt Y., and **Van Waes V.**  
Transcranial direct current stimulation for cognitive enhancement: from clinical research to animal models  
*Frontiers in Systems Neuroscience*, Vol. 8, Art. 159, **2014**
- 10) Pedron S., Monnin J., Haffen E., Sechter D., and **Van Waes V.**  
Repeated transcranial direct current stimulation prevents abnormal behaviors associated with abstinence from chronic nicotine consumption  
*Neuropsychopharmacology*, Vol. 39 (4), p 981-988, **2014**

- 11) Steiner H., Warren B., **Van Waes V.**, and Bolaños-Guzmán C.  
Life-long consequences of juvenile exposure to psychotropic drugs on brain and behavior  
***Progress in Brain Research*, Vol. 21, p 13-30, 2014**
- 12) **Van Waes V.**, Vandrevala B., Beverley J., and Steiner H.  
SSRIs potentiate gene blunting induced by repeated methylphenidate treatment: Zif268 vs. Homer1a  
***Addiction Biology*, Vol. 19(6), p 986-995, 2014**
- 13) Steiner H. and **Van Waes V.**  
Addiction-Related Gene Regulation: Risks of exposure to cognitive enhancers vs. other psychostimulants  
***Progress in Neurobiology*, Vol. 100, p 60-80, 2013**
- 14) **Van Waes V.**, Carr B., Beverley J., and Steiner H.  
Fluoxetine potentiation of methylphenidate-induced neuropeptide expression in the striatum occurs selectively in the direct (striatonigral) neurons  
***Journal of Neurochemistry*, Vol. 122(5), p 1054-64, 2012**
- 15) **Van Waes V.**, Beverley J., Siman H., Tseng K.Y, and Steiner H.  
CB1 cannabinoid receptor expression in the striatum: association with corticostriatal circuits and developmental regulation  
***Frontiers in Neuropharmacology*, Vol. 3, Art. 21, 2012**
- 16) **Van Waes V.**, Tseng K.Y, and Steiner H.  
GPR88: a putative signaling molecule predominantly expressed in the striatum; Cellular localization and developmental regulation  
***Basal Ganglia*, Vol. 1(2), p 83-89, 2011**
- 17) **Van Waes V.**, Darnaudéry M., Marrocco J., Gruber S., Talavera E., Mairesse J., Van Camp G., Casolla B., Nicoletti F., Mathe A., Maccari S., and Morley-Fletcher S.  
Impact of early life stress on alcohol consumption and on the short- and long-term responses to alcohol in adolescent female rats  
***Behavioural Brain Research*, Vol. 221(1), p 43-49, 2011**
- 18) **Van Waes V.**, Enache M., Berton O., Vinner E., Lhermitte M., Maccari S., and Darnaudéry M.  
Effect of prenatal stress on alcohol preference and sensitivity to chronic alcohol exposure in male rats  
***Psychopharmacology*, Vol. 214(1), p 197-208, 2011**
- 19) **Van Waes V.**, Beverley J., Marinelli M., and Steiner H.  
SSRI antidepressants potentiate methylphenidate (Ritalin)-induced gene regulation in the adolescent striatum  
***European Journal of Neuroscience*, Vol. 32, p 435-447, 2010**
- 20) Steiner H., **Van Waes V.**, and Marinelli M.  
Fluoxetine potentiates methylphenidate-induced gene regulation in addiction related brain regions: concerns for use of cognitive enhancers?  
***Biological Psychiatry*, Vol. 67(6), p 592-594, 2010**

- 21) **Van Waes V.**, Enache M., Zuenna A.R., Mairesse J., Nicoletti F., Vinner E., Lhermitte M., Maccari S., and Darnaudéry M.  
Ethanol attenuates spatial memory deficits and increases mGlu1a receptor expression in the hippocampus of rats exposed to prenatal stress  
***Alcoholism: Clinical and experimental research***, Vol. 33(8), p 1346-1354, **2009**
- 22) **Van Waes V.\***, Enache M.\*, Vinner E., Lhermitte M., Maccari S., and Darnaudéry M.  
Impact of an acute exposure to ethanol on the oxidative stress status in the hippocampus of prenatally stressed adolescent male rats  
***Brain Research***, Vol. 1191C, p 55-62, **2007** \* co-first authorship.
- 23) **Van Waes V.**, Enache M., Dutriez I., Lesage J., Morley-Fletcher S., Vinner E., Lhermitte M., Vieau D., Maccari S., and Darnaudéry M.  
Hyporesponse of the hypothalamic-pituitary-adrenocortical axis after an ethanol challenge in prenatally stressed adolescent male rats  
***European Journal of Neuroscience***, Vol. 24(4), p 1193-1200, **2006**

- **Peer-reviewed publications (National journals):**

- 1) Suaud-Chagny MF., Haesebaert F., Gory-Fauré S., **Van Waes V.\***, Dockx R., De Bundel D.  
Brain stimulation for psychiatric disorders: Insight from animal models  
***L'encéphale***, Vol. 45(S2), p 59-60, **2019** \*corresponding author
- 2) Pedron S., Coune F., Haffen E., Andrieu P., Sechter D., Naassila M., Gonzalez-Marin M.C., and **Van Waes V.**  
Effets de la stimulation transcrânienne par courant continu sur l'autoadministration d'alcool chez la souris  
***Cahier de l'IREB n°22***, 2015
- 3) Pedron S. and **Van Waes V.**  
Effets de la stimulation transcrânienne par courant continu chez la souris: etudes comportementales  
***PUFC Presses Universitaires de Franche-Comté***, 2014
- 4) Pedron S., Monnin J., Andrieu P., Nicolier M., Millot J., Sechter D., Haffen E., and **Van Waes V.**  
Effets de la stimulation transcrânienne par courant continu chez la souris: etudes comportementales  
***Cahier de l'IREB n°21***, p69-74, **2013**.
- 5) Darnaudéry M., **Van Waes V.**, Enache M., Zuena A.R., Mairesse J., Nicoletti F., Vinner E., Lhermitte M., and Maccari S.  
Stress prénatal et mémoire: effets paradoxaux de la consommation chronique d'alcool chez le rat  
***Cahier de l'IREB n°19***, p63-69, **2009**.
- 6) **Van Waes V.**, Enache M., Vinner E., Lhermitte M., Maccari S., and Darnaudéry M.  
Impact du stress prénatal sur la vulnérabilité à l'éthanol chez le rat  
***Cahier de l'IREB n°18***, p15-21, **2007**.

- 7) Darnaudéry M., **Van Waes V.**, Enache M., Morley Fletcher S., Dutriez-Casteloot I., Lesage J., Vinner E., Lhermitte M., and Maccari S.  
Conséquences d'un stress prénatal sur l'anxiété et l'activité de l'axe corticotrope après administration aiguë d'alcool chez le rat adolescent  
**Cahier de l'IREB n°17, p35-41, 2005.**

- **Books and book chapters**

- 1) Etievant A., **Van Waes V.**, and Monnin J.  
Chapitre 2. Bases neurobiologiques de la tDCS : apports des modèles animaux  
In book: Stimulation transcrânienne par courant continu: Principes et applications en psychiatrie  
**Presses Universitaires François-Rabelais, p27-40, 2018**
- 2) **Van Waes V.** and Steiner H.  
SSRI antidepressants potentiate addiction-related gene regulation by psychostimulant medications (Book Chapter) in Fluoxetine: Pharmacology, Mechanisms of Action and Potential Side Effects.  
**Nova Biomedical, Book Chapter, p207-226, 2015**
- 3) **Van Waes V.**  
Vulnérabilité à l'alcool chez le rat: Impact du stress prénatal. Comment un stress précoce peut avoir des répercussions tout au long de la vie.  
**Éditions Universitaires Européennes, 2011**

## GRANTS, HONORS & AWARD

### ➤ Grants (*principal investigator*):

▪ Université de Franche-Comté travel grant Chicago (2020)	1 k€
▪ Université de Franche-Comté Formation Expérimentation Animale (2020)	1,5 k€
▪ Mission Exploration France (ambassade de France) (2019)	1 k€
▪ Allocation doctorale Bourgogne-Franche Comté (2018)	91 k€
▪ Projet Amorçage Bourgogne-Franche Comté (2018)	9 k€
▪ Fondation pour la Recherche en Alcoologie (2018)	7,5 k€
▪ Mission Exploration Japon (ambassade de France) (2017)	1 k€
▪ Fondation pour la Recherche en Alcoologie (2017)	7,5 k€
▪ Boehringer Ingelheim Fonds (2017)	2 k€
▪ Fondation pour la recherche en alcoologie (2016)	7,5 k€
▪ Société des neurosciences françaises (2016)	0,5 k€
▪ Institut de recherche sur les boissons (2015)	7,5 k€
▪ Institut de recherche sur les boissons (2014)	7,5 k€
▪ Université de Franche-Comté Qualité Recherche (2013)	2 k€
▪ Université de Franche-Comté Qualité Recherche (2012)	4 k€
▪ PRES Bourgogne/Franche-Comté Qualité Recherche (2012)	10 k€
▪ Institut de recherche sur les boissons (2012)	7 k€
▪ Allocation doctorale Ville de Besançon (2012)	86 k€
▪ Université de Franche-Comté Qualité Recherche (2010)	5 k€
	<b>326 k€</b>

### ➤ Awards:

- Business For Care PhD thesis award, *Solène Pedron* (2018)
- Best presentation Award FRA Rennes (2017)
- PERD (2015-19)
- A'Doc PhD thesis award, *Solène Pedron* (2014)
- Prix Gerard Vachonfrance, PhD thesis award from IREB (2008)

## INVITED LECTURES / SYMPOSIA

- 1) La stimulation transcrânienne par courant continu: Nouvelles avancées issues des modèles animaux  
**Groupe STEP (Stimulation Transcrânienne En Psychiatrie)**  
**AFPBN, Association Française de la Psychiatrie Biologique et Neuropharmacologie**  
**September 27, 2019, Bron, France.**
  
- 2) **Symposium organizer** – Brain stimulation for psychiatric disorders: insight from animal models.  
 Chairs: SUAUD-CHAGNY, Marie-Françoise; HAESEBAERT, Frédéric; Speakers: GORY-FAURÉ, Sylvie; **VAN WAES, Vincent**; DOCKX, Robrecht; De BUNDEL, Dimitri.  
**3rd European Conference on Brain Stimulation in Psychiatry: From mechanisms to medicine**  
**October 19, 2018, Bron, France.**
  
- 3) La stimulation transcrânienne par courant continu: Nouvelles avancées issues des modèles animaux  
**Groupe STEP (Stimulation Transcrânienne En Psychiatrie)**  
**AFPBN, Association Française de la Psychiatrie Biologique et Neuropharmacologie**  
**September 28, 2018, Bron, France.**
  
- 4) Transcranial direct current stimulation (tDCS) to treat neuropsychiatric disorders: Insights from animal models.  
**(Bourse de l'ambassade de France au Japon: "Mission exploration Japon" 2017)**  
**RIKEN Brain Science Institute October, 2017, Saitama, Japan**
  
- 5) Transcranial direct current stimulation (tDCS) to treat addiction-related behaviors: Insights from animal models  
**Bordeaux Neurocampus**  
**June 16, 2017, Bordeaux, France**  
<http://www.bordeaux-neurocampus.fr/fr/manifestations-scientifiques/seminaires-2017/vincent-van-waes.html>
  
- 6) New treatments for those who are on the slippery slope of addiction  
 Pr. Mickael Naassila (chair), **Pr. Vincent Van Waes (co-chair)**, Dr. Mickael Degoulet, Dr Claudio D'Addario  
**37<sup>th</sup> European Winter Conference on Brain Research/ The European Brain and Behaviour Society**  
**March 4-10, 2017, ARC 1800, France**
  
- 7) La stimulation transcrânienne par courant continu: Apports des modèles animaux  
**Groupe STEP (Stimulation Transcrânienne En Psychiatrie)**  
**AFPBN, Association Française de la Psychiatrie Biologique et Neuropharmacologie**  
**September 29, 2016, Bron, France.**
  
- 8) Transcranial direct current stimulation (tDCS): insights from animal models.  
**Rosalind Franklin University of Medicine and Science**  
**July 21, 2016, North Chicago, Illinois, USA**
  
- 9) Comment le cerveau succombe-t-il aux addictions? (Public presentation)  
**Semaine du cerveau 2016**  
**March 15, 2016, Besançon, France**



- 10) Modélisation de la tDCS chez la souris: effets comportementaux et neurobiologiques  
**Groupe STEP (Stimulation Transcrânienne En Psychiatrie)**  
**AFPBN, Association Française de la Psychiatrie Biologique et Neuropharmacologie**  
**October 2, 2015, Bron, France**
- 11) Impact de la stimulation transcrânienne en courant continu sur la prolifération cellulaire dans l'hippocampe. Solène Pedron.  
**21<sup>ème</sup> Forum des Jeunes Chercheurs**  
**June 18-19, 2015, Dijon, France**
- 12) La stimulation transcrânienne en courant continu comme aide au sevrage à la cocaïne  
Solène Pedron. Best Oral Communication Award.  
**20<sup>ème</sup> Forum des Jeunes Chercheurs**  
**June 23-24, 2014, Besançon, France**
- 13) Adolescence and addictive disorders: insights from preclinical studies and animal models  
(**Symposium chairman + speaker**; invited: Pr K. Tseng, Pr M. Naassila, Pr F Artigas)  
**III International Congress on Dual Disorders**  
**October 23-26, 2013, Barcelona, Spain**
- 14) Effects of repeated transcranial direct current stimulation (tDCS) on depression and addiction-related behaviors in mice  
Solène Pedron/Vincent Van Waes  
**Cambridge & Luton International Conference on Mental Health 2013**  
**September 5, 2013, Cambridge, UK**
- 15) SSRIs potentiate methylphenidate (Ritaline)-induced gene regulation in addiction related brain regions: risk for enhanced addiction liability?  
**Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC)**  
**November 20, 2012, Strasbourg, France**
- 16) Effects of repeated transcranial direct current stimulation (tDCS) on addiction-related behaviors in mice: a preliminary study.  
**Chicago Medical School, July 24, 2012, North Chicago, Illinois, USA**
- 17) SSRI antidepressants potentiate psychostimulant (Ritalin)-induced gene regulation: risk for enhanced addiction liability?  
**American Society for Pharmacology and Experimental Therapeutics**  
**Great Lake Chapter Annual Meeting, June 10, 2011, Chicago, Illinois, USA**
- 18) Ethanol vulnerability in adolescent and adult rats: Impact of prenatal stress.  
**Chicago Medical School, April 17, 2009, Zion, Illinois, USA**

## INTERNATIONAL CONGRESSES (Posters)

### 2019

- 1) Van Schuerbeek A., Pierre A., Vanderhasselt M.A., Pedron S., **Van Waes V.**, De Bundel D. Fear modulating by transcranial direct current stimulation. *3<sup>rd</sup> International Brain Stimulation Conference, February 24-27 2019, Vancouver, Canada.*

### 2018

- 2) Van Schuerbeek A., Vanderhasselt M.A., Pedron S., Andrieu P., **Van Waes V.**, De Bundel D. Fear modulating by transcranial direct current stimulation. *11<sup>th</sup> FENS Forum of Neuroscience, July 7-11 2018, Berlin, Germany.*

### 2017

- 3) Pedron S., Dumontoy S., Gonzales M.D.C, Van Schuerbeek A., Coune F., Andrieu P., Haffen H., Naassila M., **Van Waes V.** Utilisation de la stimulation transcrânienne par courant continu pour favoriser le sevrage chez des consommateurs abusifs d'alcool: Etudes précliniques chez la souris. *1<sup>er</sup> colloque de la Fondation pour la Recherche en Alcoologie, December 6-7 2017, Rennes, France. Best Presentation Award*
- 4) Van Schuerbeek A., **Van Waes V.**, Vanderhasselt M.A., Smolders I., De Bundel D. Modulation of neuronal fear circuits through transcranial direct current stimulation. *Center for Neuroscience, Vrije Universiteit Brussel, CAN day, 1<sup>st</sup> June 2017, Brussel, Belgium.*

### 2016

- 5) Pedron S., Salvadori A., Laribi L., Andrieu P., Risold P.Y., Etievant A., Monnin J., Sechter D., Haffen E., Peterschmitt Y., and **Van Waes V.** Repeated transcranial direct current stimulation in mice increases precursor cell proliferation in the dentate gyrus. *10<sup>th</sup> FENS Forum of Neuroscience, July 2-6 2016, Copenhagen, Denmark.*
- 6) Dimauno J., Pedron S., **Van Waes V.**, Haffen E., and Andrieu P. Open tES: an open hardware Transcranial Electrical Stimulation device designed for rodent research. *10<sup>th</sup> FENS Forum of Neuroscience, July 2-6 2016, Copenhagen, Denmark.*

### 2015

- 7) Pedron S., Coune F., Andrieu P., Haffen E., Naassila M., Gonzalez-Marin M.C. and **Van Waes V.** Impact of transcranial direct current stimulation on alcohol self-administration in mice. *22<sup>ème</sup> Colloque scientifique de l'IREB, March 17-18 2015, Paris, France.*

### 2014

- 8) **Van Waes V.**, Ehrlich S., Beverley J., and Steiner H. Fluoxetine potentiates methylphenidate-induced gene regulation in the striatum: Role of 5-HT1B serotonin receptor. *SFN 2014, November 15-19 2014, Washington, DC, USA.*
- 9) Pedron S., Beverley J., Haffen E., Andrieu P., Monnin J., Monnier R., Sechter D., Steiner H. and **Van Waes V.** Repeated transcranial direct current stimulation in mice reduces the rewarding effect of cocaine and blunts cocaine-induced zif268 in the striatum. *9<sup>th</sup> FENS Forum of Neuroscience, July 5-9 2014, Milan, Italy.*

## 2013

- 10) Pedron S., Monnin J., Andrieu P., Nicolier M., Millot J., Sechter D., Haffen E. and **Van Waes V.** Utilisation de la stimulation transcrânienne en courant continu (tDCS) comme aide au sevrage (alcool, nicotine): Etude comportementale chez la souris. Forum des Jeunes Chercheurs 2013, June 13-14 2013, Dijon, France.
- 11) Pedron S., Monnin J., Andrieu P., Nicolier M., Millot J., Sechter D., Haffen E. and **Van Waes V.** Transcranial direct current stimulation (tDCS) and addiction-related behaviors in mice: a preliminary study. *21<sup>st</sup> European Congress of Psychiatry, April 6-9 2013, Nice, France. Selected for oral presentation (e-poster).*
- 12) Pedron S., Monnin J., Andrieu P., Nicolier M., Millot J., Sechter D., Haffen E. and **Van Waes V.** Effects of repeated transcranial direct current stimulation (tDCS) on addiction-related behaviors in mice: a behavioral study. *21<sup>ème</sup> Colloque scientifique de l'IREB, March 13-14 2013, Paris, France.*

## 2012

- 13) Pedron S., Monnin J., Andrieu P., Nicolier M., Jacquot L., Millot J., Sechter D., Risold P., Haffen E. and **Van Waes V.** Effects of repeated transcranial direct current stimulation (tDCS) on addiction-related behaviors in mice: a preliminary study. *SFN 2012, October 13-17, New Orleans, LA, USA.*
- 14) Jacquot L., **Van Waes V.**, Millot JL. and Paillard A. Olfactory perception and motion sickness: a psychophysical and psychophysiological approach. *SFN 2012, October 13-17, New Orleans, LA, USA.*
- 15) **Van Waes V.**, Vandrevalla M., Beverley J. and Steiner H. SSRIs potentiate methylphenidate-induced blunting expression in the adolescent striatum. *SFN 2012, October 13-17, New Orleans, LA, USA.*

## 2011

- 16) **Van Waes V.**, Carr B., Beverley J. and Steiner H. SSRIs potentiate methylphenidate-induced gene regulation in the striatum: transcription factors (zif 268, c-fos) vs. neuropeptides (substance P, dynorphin). *SFN 2011, November 12-16, Washington, DC, USA.*
- 17) **Van Waes V.**, Carr B., Beverley J. and Steiner H. SSRIs potentiate methylphenidate-induced gene regulation in the striatum: transcription factors vs. neuropeptides. *ASPET Great Lake Chapter Annual Meeting, 2011, June 10, Chicago, Illinois, USA.*
- 18) Maccari S., **Van Waes V.**, Darnaudéry M., Marrocco, J., Gruber S.H., Talavera E., Mairesse, J., Van Camp G., Casolla B., Nicoletti F., Mathé, A.A. and Morley-Fletcher, S. Impact of early life stress on alcohol consumption and on the short- and long-term responses to alcohol in adolescent female rats. *10<sup>ème</sup> Colloque de la Société des Neurosciences, May 24-27 2011, Marseille, France.*

## 2010

- 19) **Van Waes V.**, Tseng K.Y. and Steiner H. GPR88 - a putative G protein-coupled receptor highly expressed in the striatum: Cellular localization and developmental regulation. *SFN 2010, November 13-17, San Diego, California, USA.*
- 20) **Van Waes V.**, Tseng K.Y. and Steiner H. GPR88 - a putative G protein-coupled receptor selectively expressed in the striatum: Cellular localization and developmental regulation. *IBAGS Tenth Triennial Meeting, 2010, June 20-24, Long Branch, New Jersey, USA.*

- 21) **Van Waes V.**, Beverley J., Marinelli M. and Steiner H. SSRI antidepressants potentiate Ritalin-induced gene regulation in the striatum: Consequences for addiction liability? *ASPET Great Lake Chapter Annual Meeting, 2010, June 18, Chicago, Illinois, USA.*
- 22) **Van Waes V.**, Tseng K.Y. and Steiner H. Differential developmental trajectories for GPR88 expression in the caudate-putamen and nucleus accumbens. *SFN Chicago Chapter 2010, March 25th, Chicago, Illinois, USA.*
- 23) **Van Waes V.**, Beverley J., Marinelli M. and Steiner H. Fluoxetine (Prozac) potentiates methylphenidate (Ritalin)-induced gene regulation in addicted-related brain regions. *43<sup>rd</sup> winter Conference on Brain Research, 2010, January 23-29, Breckenridge, Colorado, USA.*

#### 2009

- 24) **Van Waes V.**, Beverley J., Marinelli M. and Steiner H. Fluoxetine (Prozac) potentiates methylphenidate (Ritalin)-induced gene regulation in the striatum. *SFN Neuroscience 2009, October 17-21, Chicago, Illinois, USA.*
- 25) Darnaudery M., **Van Waes V.**, Enache M., Berton O., Vinner E., Lhermitte M. and Maccari S. Prenatal stress does not affect spontaneous ethanol preference but increases DeltaFosB levels in the nucleus accumbens after chronic ethanol consumption. *SFN 2009, October 17-21, Chicago, Illinois, USA.*
- 26) Van Camp G., Mairesse J., Giovine A., Siletti V., **Van Waes V.**, Navara P., Van Reeth O. and Maccari M. Prenatal stress alters sleep structure and circadian rhythms of locomotor activity: Relation with hypothalamic CRH levels. *36<sup>eme</sup> Colloque de la Société de Neuroendocrinologie, 2009, September 15-18, Nice, France.*
- 27) **Van Waes V.**, Marinelli M., Steiner H. Fluoxetine potentiates methylphenidate-induced gene regulation in the striatum: consequences for addiction liability? *SFN Chicago Chapter 2009, March 26th, Chicago, Illinois, USA.*

#### 2008

- 28) **Van Waes V.**, Talavera E., Maccari S. and Darnaudery M. Influence of social housing condition on the ethanol preference and on emotional reactivity in prenatally stressed female rats. *6th Forum of European Neuroscience, July 12-16 2008, Geneva, Switzerland.*
- 29) Giovine A., Mairesse J., Zuena A., **Van Waes V.**, Giuli C., Cinque C., Catalani A., Mennuni G., Van Reeth O., Garcia C., Bergonzelli G. and Maccari S. Postnatal developmental profile of hippocampal metabotropic receptors expression of perinatal restraint stress rats. *6th Forum of European Neuroscience, July 12-16 2008, Geneva, Switzerland.*

#### 2007

- 30) Talavera E., **Van Waes V.**, Maccari S. and Darnaudéry M. Influence of social housing on the ethanol preference and on locomotor activity in female rats exposed to prenatal stress. Programme European Neuroscience Schools (PENS), Advanced Courses in Neuroplasticity, *September 5-11 2007, Roma, Italy.*
- 31) **Van Waes V.**, Enache M., Maccari S. and Darnaudéry M. Ethanol preference and induction of deltaFosB in the nucleus accumbens after a chronic ethanol treatment in prenatally stressed male rats. Programme European Neuroscience Schools (PENS), Advanced Courses in Neuroplasticity, *September 5-11 2007, Roma, Italy.*
- 32) **Van Waes V.**, Enache M., Maccari S. and Darnaudéry M. Ethanol preference and induction of deltaFosB in the nucleus accumbens after a chronic ethanol treatment in prenatally stressed male rats. *World Conference of Stress, August 23-26 2007, Budapest, Hungary.*

- 33) **Van Waes V.**, Enache M., Maccari S. and Darnaudéry M. Ethanol preference and induction of deltaFosB in the nucleus accumbens after a chronic ethanol treatment in prenatally stressed male rats. *8<sup>ème</sup> Colloque de la Société des Neurosciences, May 12-25 2007, Montpellier, France.* (Bourse de Congrès IREB)
- 34) Darnaudéry M., **Van Waes V.**, Enache M., Zuena A.R. and Maccari S. Impact of chronic ethanol consumption on spatial memory and hippocampal metabotropic glutamate receptors in prenatally-stressed rats. *8<sup>ème</sup> Colloque de la Société des Neurosciences, May 12-25 2007, Montpellier, France.*

## 2006

- 35) **Van Waes V.**, Enache M., Zuena A.R., Maccari S. and Darnaudéry M. Un traitement chronique à l'éthanol atténue le déficit mnésique observé chez le rat stressé prénatalement: rôle possible des récepteurs métabotropiques au glutamate du type I. *10<sup>ème</sup> Journée Scientifique du réseau LARC-Neurosciences, November 10th 2006, Lille, France.*
- 36) **Van Waes V.**, Enache M., Dutriez I., Lesage J., Vinner E., Morley-Fletcher S., Lhermitte M., Vieau D., Maccari S. and Darnaudéry M. Impact d'un stress prénatal sur l'activation de l'axe corticotrope en réponse à un traitement à l'éthanol et sur la consommation spontanée d'éthanol chez le rat adolescent. *6<sup>ème</sup> Journée André Verbert, September 27th 2006, Villeneuve d'Ascq, France.*
- 37) **Van Waes V.**, Enache M., Dutriez I., Lesage J., Vinner E., Morley-Fletcher S., Lhermitte M., Vieau D., Maccari S. and Darnaudéry M. Impact of a prenatal stress on the HPA axis responsiveness to an ethanol challenge and on the ethanol preference in adolescent male rats. *Lille Summerschool in Neurosciences: Brain Plasticity in Life Span., September 2-7 2006, Villeneuve d'Ascq, France.*
- 38) Enache M., **Van Waes V.**, Vinner E., Lhermitte M., Dutriez-Casteloot I., Vieau D., Morley Fletcher S., Maccari S. and Darnaudéry M. Brain oxidative stress status in prenatally stressed adolescent rats after an acute alcohol administration. *Lille Summerschool in Neurosciences: Brain Plasticity in Life Span., September 2-7 2006, Villeneuve d'Ascq, France.*
- 39) Enache M., **Van Waes V.**, Vinner E., Lhermitte M., Dutriez-Casteloot I., Vieau D., Maccari S. et Darnaudéry M. Impact of prenatal stress in brain damage and behavioural response to drugs in rats. *9<sup>ème</sup> Journée Scientifique du réseau LARC-Neurosciences, October 14th 2005, Amiens, France.*

## 2005

- 40) **Van Waes V.**, Enache M., Dutriez-Casteloot I., Maccari S. and Darnaudéry M. Prenatal stress and alcohol preference in male rats. *7<sup>ème</sup> Colloque de la Société des Neurosciences, May 17-20 2005, Lille, France.*
- 41) Enache M., **Van Waes V.**, Morley-Fletcher S., Vinner E., Lhermitte M., Dutriez-Casteloot I., Lesage J., Vieau D., Maccari S. and Darnaudéry M. Effects of an acute alcohol administration on HPA axis and brain oxidative stress status in prenatally stressed adolescent rats. *7<sup>ème</sup> Colloque de la Société des Neurosciences, May 17-20 2005, Lille, France.*

## 2004

- 42) **Van Waes V.**, Enache M., Morley-Fletcher S., Dutriez-Casteloot I., Lesage J., Vinner E., Lhermitte M., Vieau D., Maccari S. et Darnaudey M. Conséquences d'un stress prénatal sur l'anxiété et l'activité de l'axe corticotrope en réponse à une administration aiguë d'alcool chez le rat adolescent. *8<sup>ème</sup> Journée Scientifique du réseau LARC-Neurosciences, October 15th 2004, Paris, France.*
- 43) Enache M., **Van Waes V.**, Morley-Fletcher S., Magni P., Lhermitte M., Vinner E., Humbert L., Dutriez-Casteloot I., Vieau D., Maccari S. and Darnaudey M. Effect of prenatal stress on endocrine and behavioural response to alcohol in adolescent male rats. *4<sup>th</sup> FENS Forum of Neuroscience, July 10-14 2004, Lisbon, Portugal.*

**MAJOR SCIENTIFIC COLLABORATIONS**

- Prof. Heinz Steiner, Chair of the Cellular and Molecular Pharmacology department at the Chicago Medical School (Chicago, USA):  
[heinz.steiner@rosalindfranklin.edu](mailto:heinz.steiner@rosalindfranklin.edu)
- Prof. Kuei Tseng, Professor at the University of Illinois at Chicago (Chicago, USA):  
[tsengky@uic.edu](mailto:tsengky@uic.edu)
- Dr Dimitri De Bundel, lecturer at the department of pharmaceutical sciences at Vrije Universiteit Brussel (Brussel, Belgium):  
[dimitri.de.bundel@vub.ac.be](mailto:dimitri.de.bundel@vub.ac.be)
- Prof. Michael Naassila, Head of the Groupe de Recherche sur l'Alcool et les Pharmacodépendances, INSERM U1247 (Amiens, France):  
[mickael.naassila@u-picardie.fr](mailto:mickael.naassila@u-picardie.fr)
- Prof. Hiromu Monai, Ochanomizu University (Tokyo, Japan):  
[monai.hiromu@ocha.ac.jp](mailto:monai.hiromu@ocha.ac.jp)

## TEACHING

- **Director of the Master 2 “Physiology, Neuroscience and Behavior”  
University of Franche-Comté**  
<http://formation.univ-fcomte.fr/master/biologie-sante-physiologie-neurosciences-et-comportement>
  
- **Course Unit Responsibility (Besançon):**
  - Master 2 Physiology, Neuroscience and Behavior
    - Pluridisciplinary approach in neuroscience (since 2018)
    - Scientific valorization (since 2017)
    - Training (since 2017)
  - Master 1 Physiology, Neuroscience and Behavior
    - Neurobiology (since 2013)
  - Licence 3 Psychology
    - Integrative neuroscience for psychologist (since 2018)
  - Licence 1 Biology
    - Cellular and tissue physiology (since 2017)
  
- **Teaching (Integrative neuroscience, Besançon):**
  - License Biology (1<sup>st</sup> and 2<sup>nd</sup> year): Cellular communication; Excitable cells; Cellular biology; History of neuroscience.
  - License Psychology (3<sup>rd</sup> year): Integrative neuroscience.
  - Medicine (3<sup>rd</sup> year): Neuroanatomy; Neurobiology.
  - Master Neuroscience (1 and 2): Methodology in neuroscience; Neurobiology.
  - Master Psychology (1): Brain and cognition.
  
- **Teaching (Lyon):**
  - Master Neuroscience (2): Addiction and preclinical studies (University of Lyon)
  
- **Teaching (Dijon):**
  - Master International P2 Food: Addiction and food: neuromodulation techniques (University of Bourgogne)
  
- **Student supervision in the lab:**
  - Thesis: N= 2.5
  - Master 2: N= 6
  - Master 1: N=16
  - Other (Pharmacy...): N= 6

## OTHER INFORMATION

- **Editorial Board Member (International journals):**
  - Review Editor for Frontiers in Behavioral Neuroscience (Motivation and Reward) (since 2020)
  - Current Psychopharmacology (since 2018)
  
- **Reviewer for (International journals):**
  - Alcohol and Alcoholism
  - Brain stimulation
  - Behavioural Brain Research
  - eNeuro
  - European Journal of Neuroscience
  - European Neuropsychopharmacology
  - The Journal of Child Psychology and Psychiatry
  - Neurobiology of Learning and Memory
  - Neuropharmacology
  - Neuroscience Letter
  - Psychoneuroendocrinology
  - Psychopharmacology
  - Substance Use and Misuse
  - Synapse
  
- **Reviewer for (Institutions):**
  - The Netherlands Organisation for Scientific Research, NWO (“Open Programme for Earth and Life Sciences”) (2017)
  - The King Baudouin foundation, Belgium, Fund for PSY research (2017)
  
- **Recruiting committee:**
  - **Full Professor of Neuroscience, *President*, Besançon (2020)**
  - ATER 69ème section, Besançon (2020)
  - **Assistant Professor of Neuroscience, *President*, Besançon (2019)**
  - **ATER 69ème section, *President*, Besançon (2018)**
  - Professor of Neuroscience, Strasbourg (2018)
  - Engineer, Besançon (2016)
  - ATER 66<sup>ème</sup> section, Besançon (2016)
  
- **Member of:**
  - **INTAM**, International Network of tES/TMS Trials for addiction Medecine (since 2018)
  - **AFPBN**, Association Française de la Psychiatrie Biologique et Neuropharmacologie section STEP - Stimulation Transcrânienne En Psychiatrie. French association for brain stimulation in psychiatry (since 2017)
  - **SFN**, Society for Neuroscience (since 2009)
  - **Société des Neurosciences Française** (since 2004)



- **Thesis supervisor:**
  - Solène Pédrón (2012-16)
  - Stéphanie Dumontoy (2018-21)
  
- **Thesis jury:**
  - Josette Alsebaaly, University of Poitiers (2019), **external committee member (rapporteur)**
  
- **Thesis committee:**
  - Bahrie Ramadan, Université de Franche Comté (2017 - 20), scientific committee
  - Pierre Sauton, Université de Picardie (2018), scientific committee
  - Patrick Obermeier, Université de Franche Comté (2017 - 20), tutor
  
- **Boards:**
  - ✓ **Ethical committee CEBEA #58 member (Comité d'éthique Bisontin en expérimentation animale) - Since 2017**
  - ✓ **Management board of the animal facility of Besançon, UFR SMP - Since 2017**
  - ✓ **Responsible for the animal experimental projects of the Laboratory of Integrative and Clinical Neuroscience EA481**
  
- **Science outreach activities:**
  - Pint of Science: Comprendre son cerveau en un éclair! (**Besançon, 2019**)
  - Semaine du cerveau: Que vaut une intelligence artificielle face à un cerveau réel ? (**Besançon, 2019**)
  - Seminars in High School (Opération 1 Classe /1 Chercheur 2012-present). **Every year since 2010**
  - Semaine du cerveau: Comment le cerveau succombe aux addictions? (**Besançon, 2016**)
  - Radio interviews: Radio Campus (**2018, UniverCité**), France Bleu (**2015, Ca va se savoir**) etc...