

## **Brooke Kaigler Tata**

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### **Education :**

2015-2017 **Post-Doctoral Fellow INSERM U1172**, Development & Plasticity of the Neuroendocrine Brain  
Bâtiment Biserte, 1 place de Verdun, 59045 Lille cedex, France.

2012-2015 **PhD** in Molecular and Cellular Biology of Development & Neuroendocrinology  
Doctoral School "Bio-Sorbonne Paris Cite", University of Paris 7-Denis Diderot, Hopital Robert Debré,  
INSERMU1141, PhD conducted under the supervision of Nicolas de Roux, Professor. Mention Très Honorable  
**Avec Felicitations du jury** 21/09/2015

2011-2012 **Master of Genetics** at the Université Paris 7-Denis Diderot, Paris, France,  
Mention « **Trés Bien** », Rank 2 out of 86, **Summa cum Laude**. INSERM U1141, M.S. conducted under the  
supervision of Nicolas de Roux, Professor.

2006-2010 **Bachelor of Science in Integrative Physiology**, University of Colorado of Boulder USA  
**Summa cum Laude (Highest Honors) & With Distinction**. B.Sc. Thesis Conducted in  
the laboratory of Dr. Pei-San Tsai and Dr. Wilson C.J. Department of Integrative Physiology  
Major GPA: **3.9 out of 4.0**; Class rank: 10 out of 279

### **Publications :**

**Brooke K. Tata**<sup>1,2\*</sup>, Zsolt Csaba<sup>1</sup>, Sandrine Jacquier<sup>1</sup>, Philippe Rostaing<sup>4</sup>, Carole Harbulot<sup>2</sup>,  
Nicolas de Roux<sup>1,2,3</sup>. **Evidence for the Requirement of the Vesicular Protein, Rabconnectin3- $\alpha$ , in the  
Activation and Maturation of the GnRH Neuronal Network.** 2015, *Submitted, PNAS*.

**Tata B**, Huijbregts L, Jacquier S, Csaba Z, Genin E, Meyer V, Leka S, Dupont J, Charles P, Chevenne D, Carel JC,  
Léger J, de Roux N (2014). Haploinsufficiency of Dmxl2, encoding a synaptic protein, causes infertility associated  
with a loss of GnRH neurons in mouse. *PLoS Biol.* Sep 23;12(9):e1001952.

Lucie Chevrier, **Brooke Tata**, and Nicolas de Roux (2013). Yearbook of Pediatric Neuroendocrinology. Table of  
Contents « Neuroendocrinology ».

**Tata BK**, Chung WC, Brooks LR, Kavanaugh SI, Tsai PS (2012). Fibroblast Growth Factor Signaling Deficiencies  
Impact Female Reproduction and Kisspeptin Neurons in Mice. *Bio Reprod.* 86, 1-7. DOI  
10.1095/biolreprod.111.095992.

Chung WC, Matthews TA, **Tata BK**, Tsai PS (2010). Compound deficiencies in multiple fibroblast growth factor  
signalling components differentially impact the murine gonadotrophin-releasing hormone system. *J Neuroendocrinol.*  
22, 944-50.

### **Posters, Presentations, and Conferences:**

2015 BSN/SNE 3<sup>rd</sup> Annual Meeting, Lille France, (Poster Communication)  
"Haploinsufficiency of Dmxl2 Impedes GnRH Neuron Maturation and Functional Plasticity in Mice".  
**Tata BK\***, Csaba Z, Jacquier S, de Roux N.

- 2015 3<sup>rd</sup> Annual Training School in Neuroendocrinology, GnRH COST program, Prato Italy (Poster Presentation)  
 “Loss of Rabconnectin-3 $\alpha$  in Neurons Impedes GnRH Neuronal Maturation and Activation in Mice.”  
**Tata BK\***, Csaba Z, Jacquier S, de Roux N.
- 2015 Journé de la Recherche Robert Debre, Paris France (Oral Communication)  
 “Loss of Neuronal DMXL2 Disrupts Postnatal GnRH Neuronal Maturation”. **Tata BK\***
- 2014 Societe de Neuroendocrinologie (SNE) Conference, Paris, France (Oral Communication)  
 Role of Rabconnectin-3 $\alpha$  in the GnRH Neuroendocrine Network: A novel mechanism for delayed puberty & infertility in mice. **Tata BK\***
- 2014 International Congress of Neuroendocrinology (ICN), Sydney, Australia (Oral Presentation)  
 Decreased Number of GnRH neurons due to a conditional deletion of *Dmxl2* in neurons: A novel mechanism for delayed puberty & infertility. **Tata BK\***
- 2014 Techniques in Neuroendocrine Research Workshop, Dunedin, New Zealand  
 Techniques of *in-vitro* electrophysiology/optogenetics & *in-vivo* hormone sampling and analysis
- 2014 Young Researchers in Life Sciences (YRLS) Conference, Institut Pasteur, Paris, France (Oral Presentation)  
 Rabconnectin-3 $\alpha$ : A Synaptic Protein That Is a Key Regulator of the Hypothalamo-Pituitary-Gonadal (HPG) Axis in mice. **Tata BK\***
- 2014 2<sup>nd</sup> Annual Training School in Neuroendocrinology, GnRH COST program, Berlin Germany (Poster Presentation)  
 “Rabconnectin-3 $\alpha$ : A Synaptic Protein That Is a Key Regulator of the Hypothalamo-Pituitary- Gonadal (HPG) Axis in mice”  
**Brooke K.Tata\***, Sandrine Jacquier, Zsolt Csaba, and Nicolas de Roux
- 2013 Training School in Neuroendocrinology GnRH COST program, Prato Italy (Oral and Poster Presentation)  
 “ Rabconnectin-3  $\alpha$ : a synaptic protein that is a key regulator of the gonadotropic axis in humans and mice”. **Brooke K.Tata\***, Sandrine Jacquier, Lukas Huijibregts,Zsolt Csaba, and Nicolas de Roux
- 2013 The Endocrine Society Conference 2013, San Francisco: Oral and Poster Presentation  
 “ Rabconnectin-3  $\alpha$ : a synaptic protein that is a key regulator of the gonadotropic axis in humans and mice”. **Tata BK.\* Featured Oral Presentation and Featured Poster Presentation**
- 2012 2<sup>nd</sup> World Conference on Kisspeptin Signaling in the Brain, Tokyo, Japan
- 2012 Robert Debré Hospital Research Day 2012, Paris, France (Poster)  
 “ DMXL2: A novel gene involved in the regulation of pubertal onset. “ **Brooke K.Tata\*** and Nicolas de Roux.
- 2012 Young Researchers in Life Sciences (YRLS) Congress, Paris, France
- 2011 Colloque Médecine et Recherche of the Fondation IPSEN, Paris, France
- 2010 Society for Neuroscience (SfN) conference, San Diego, CA, USA (Poster)  
 “The impact of compound FGFR1 and FGF8 signaling deficiencies on the murine reproductive system.” **\*Brooke K.Tata**, Pei-San Tsai, and Wilson CJ Chung.
- 2010 Society for Neuroscience (SfN) conference, San Diego, CA, USA (Poster)  
 « Postnatal loss and reactivation of the GnRH system in aging male transgenic animals paired with females. » Johanna Rochester, Wilson C.J Chung, **Brooke K. Tata**, and Pei-San Tsai.
- 2010 Honors Thesis- Designated Summa cum Laude, Boulder CO, USA (Written and Oral Presentation)

“Mutations in FGFR1 and FGF8 Signaling Genes Exacerbate Loss of GnRH Neurons in Mice: A Model for Kallmann Syndrome”. **\*Brooke K. Tata**

2010 Howard Hughes Medical Institute Conference, Boulder CO, USA (Poster Presentation, Oral Communication)  
“Mutations in FGFR1 and FGF8 Signaling Genes Exacerbate Loss of GnRH Neurons in Mice: A Model for Kallmann Syndrome”. **\*Brooke K. Tata**

2009 Society for Neuroscience (SfN) conference (Poster)  
“Compound Deficiencies in Multiple FGF Signaling Components Exacerbate Disruption of the Gonadotropin-Releasing Hormone Neuronal System”. Wilson C.J. Chung, Tynesha A. Matthews, **Brooke K. Tata**, and Pei-San Tsai

#### **Awards:**

2014 Société de Neuroendocrinologie (SNE) Travel Award

Attend the International Congress of Neuroendocrinology (ICN) in Sydney, Australia for an Oral Presentation

2014 GNRH COST Network Short Term Scientific Mission Grant:

“Novel techniques and approaches in understanding the GnRH neuroendocrine network”: *In-vivo* neuron filling and analysis, supervised under Dr. Allan Herbison & Dr. Rebecca Campbell, University of Otago, Dunedin, NZ July-August 2014

2014 GNRH Network COST Travel Grant Award for Training School in Neuroendocrinology (Berlin, Germany) (Poster Presentation)

2013 GNRH Network COST Travel Grant Award for Training School in Neuroendocrinology (Prato, Italy) (Poster and Oral Presentation)

2013 Early Career Forum Travel Award for the Endocrine Society Conference

2012 Best Poster Award in Robert Debré Hospital Research Day

2012 Ranked Top Choice (#1) in Doctoral School Interviews at B3MI

2012 The Endocrine Society Summer Research Fellowship Award

2010 Honor Designations: *Summa cum Laude* and *With Distinction*

2009-2010 Howard Hughes Medical Institute (HHMI) Research Grant

2009 National Science Foundation (NSF) Undergraduate Research Fund

2009 Undergraduate Research Assistantship Program (UROP) Grant

2007-2009 College of Arts and Sciences Deans List (4.0 GPA)

2006 Daughters of the American Revolution, Humanitarian Award

#### **Affiliations :**

2014-present Société de Neuroendocrinologie (SNE)

2013- present GNRH COST Network: European Cooperation in Science & Technology

2013-present Representants Doctorants au Conseil B3MI et Jury d'audition

2011-present The Endocrine Society

2010-present Phi Beta Kappa Honor Society

2008-present Golden Key International Honour Society

2008-present National Society of Collegiate Scholars

2006-present Phi Sigma Theta National Honor Society

#### **Formations:**

1. Experimentation Animale Niveau I “Ethique et bien traitement”, INSERM et UPMC, 13-24 Mai 2013.
2. Frontieres du Vivant (FdV) formation “Routes to Scientific Careers” 16-30 Janvier, 2013 (3 sessions, 2 hours each).
3. Early Career Travel Forum, The Endocrine Society Conference, San Francisco, USA.
4. FENS/IBRO 1<sup>st</sup> Annual Training School in Neuroendocrinology, COST GnRH Neuroendocrine Network, July 27<sup>th</sup>-August 2<sup>nd</sup> 2013, Prato Italy, Monash University.
5. 2<sup>nd</sup> Annual Training School in Neuroendocrinology, COST GnRH Neuroendocrine Network, March 5-8, 2014, Berlin, Germany, Charité University.
6. IBRO/APRC Techniques in Neuroendocrine Research Workshop, August 2014, University of Otago, Centre of Neuroendocrinology (CNE), Dunedin, New Zealand
7. Short Term Scientific Mission BM1105: GnRH Deficiency, July-August 2014, University of Otago, Centre of Neuroendocrinology (CNE), Dunedin, New Zealand
8. 3<sup>rd</sup> Annual Training School in Neuroendocrinology, COST GnRH Neuroendocrine Network, April 26-April 29, 2015, Prato Italy, Monash University.

