

William ERB

EDUCATION

- 2007-2010:** **Ph.D.** in Organic Chemistry under supervision of Prof. Jieping Zhu, Institute of Chimie des Substances Naturelles (ICSN), CNRS, Gif-sur-Yvette, France.
- 2006-2007:** **Master II Recherche Chimie Organique**, equivalent to fifth year University degree in Organic Chemistry at the University of Paris XI; **with honours (2/15)**
- 2005-2006:** **Maîtrise de chimie**, equivalent to fourth-year University degree in Organic Chemistry at the University of Paris XI.
- 2004-2005:** **Licence de chimie**, bachelor (third-year University degree in Chemistry) at the University of Paris XI.
- 2002-2004:** **DEUG Sciences de la Matière**, equivalent to two-year university degree in multidisciplinary sciences at the University of Paris XI.

WORK EXPERIENCE

2007-2010 **Ph.D.** in organic chemistry with **Prof. Jieping Zhu**, Institute of Chimie des Substances Naturelles (ICSN), CNRS, Gif-sur-Yvette, France



- *Intermolecular Buchwald-Hartwig coupling or amide arylation for the synthesis of dihydroquinoxalinones and oxindoles*
- *Intermolecular domino Heck/carboamination process for the synthesis of spirooxindoles*
- *Synthetic studies toward the total synthesis of Lipiarmycin A3*

2008-2010 **Ecole Polytechnique – Lab Demonstrating and Tutorials** under supervision of Dr. Fabien Gagosz, Palaiseau, France



Supervision during organic lab sessions, understanding of theoretical and practical concepts and assessment of submitted work

2007 **Institut Curie - Two months academical placement** with Dr. Philippe Maillard, Orsay, France



Synthesis and characterisation of tetrapyrrolic compounds used in photodynamic therapy

2007 **Sanofi-Aventis R&D - Three months industrial placement** with Dr Jean-Luc Malleron, Vitry-sur-Seine, France



Synthesis of pharmacologically active compounds for Central Nervous System

PROFESSIONAL SKILLS

- **Total synthesis and methodology:** Multi-steps asymmetric synthesis, transition-metals catalyzed cross coupling, heterocyclic chemistry, domino processes, peptide couplings, small and large scale synthesis...
- **Chemical and purification techniques:** microwave, HPLC, CombiFlash...
- **Analysis techniques :** NMR (1D & 2D), LCMS, IR, MS, HPLC
- **First aid at work habilitation** delivered by French Red Cross
- **Softwares :** ChemDraw, SciFinder, Beilstein, Mestrec, Hyperchem, Isis
- **Languages :** French : Native fluency, English : Fluent, Spanish : Notions

PUBLICATIONS

- Erb, W.; Neuville, L.; Zhu, J. Ugi-Post Functionalization, from a Single Set of Ugi-Adducts to Two Distinct Heterocycles by Microwave-Assisted Palladium-Catalyzed Cyclizations: Tuning the Reaction Pathways by Ligand Switch, *J. Org. Chem.* **2009**, *74*, 3109–3115.
- Jaegli, S.; Erb, W.; Retailleau, P.; Vors, J.-P.; Neuville, L.; Zhu, J. Palladium-Catalyzed Domino Process to Spirooxindoles: Ligand Effect on Aminopalladation versus Carbopalladation, *Chem. Eur. J.* **2010**, *16*, 5863-5867.
- Erb, W.; Payet, E. Synthèse totale de l'aplysamine 6 et de ses dérivés, *L'Act. Chim.* **2010**, *345*, 33-37.

POSTERS AND ORAL COMMUNICATIONS

- Poster at the 10th Tetrahedron Symposium, Paris, France, **2009**: Erb W.; Neuville L.; Zhu J. "Ugi-Post Functionalization, from a Single Set of Ugi-Adducts to Two Distinct Heterocycles by Microwave-Assisted Palladium-Catalyzed Cyclizations"
- Poster at the Journées de l'Ecole Doctorale, Orsay, France, **2009**: Erb W.; Linder D.; Neuville L.; Zhu J. "Synthetic studies toward the total synthesis of Lipiarmycin A3"
- Poster at the Journées de Chimie Organique, Palaiseau, France, 2010, Erb, W.; Jaegli, S.; Retailleau, P.; Vors, J.-P.; Neuville, L.; Zhu, J. "Palladium-catalyzed cyclizations : an easy access to 3,4-dihydroquinoxalin-3-ones, oxindoles and spirooxindoles"