

Dr Frédéric BONNET
Alaunstraße, 71a
01099 Dresden
GERMANY

Born 25/12/1989 in Castres
28 years old
Phone: (+33)6-84-35-05-75
fbonnet81@hotmail.fr

I have extensive research experience and also extensive hands-on microscopy experience. I am now in the transition period of my career and I really want to make a step towards the career in the scientific services. Light microscopy is close to my heart and I am now searching for the possibility to join a well-established light microscopy facility which might well use my knowledges.

Skills applicable Skills applicable for a Microscopy Facility

Light microscopy imaging (wide-field fluorescence microscopy, laser scanning confocal, spinning disk confocal microscopy, light sheet microscopy)

Scientific project discussions

Experiment planning

Sample preparation

Data acquisition

Data analysis

Teaching experience

Academic training and diplomas

- **2016/2018**: Post-doc position in Dr Caren NORDEN's Lab in MPI-CBG, Dresden
 - 16-20 April 2018: Principles of Light Microscopy course (MPI-CBG)
 - 30 November - 2 December 2016: Image analysis course (MPI-CBG)
- **2012/2016**: PhD student in Dr Fabienne PITUELLO's CBD – UPS, Toulouse
PhD directors: Dr Eric AGIUS and Dr Fabienne PITUELLO
funding: Ministerial Fellowship on contest
 - Fluorescent microscopy course (CBD)
- **2011/2012**: Master's degree (2nd year): Genes, Cells and Development; UPS, Toulouse: **15.33 / 20 (rank 2 / 8)** (first: 15.77/20)
- **2010/2011**: Master's degree (1st year): Biology and Health, UPS, Toulouse: **13.671 / 20 (rank 19 / 197)**
- **2007/2010**: Bachelor's degree: Cellular Biology and Physiology, UPS, Toulouse
- **2006/2007**: High school diploma, Scientific section, secondary school BARRAL, Castres (81)

Research Experience

Teaching

- **2017:** I taught new PhD students at MPI-CBG on basic concepts of microscopy
- **2012/2016:** As a PhD student, I was in charge of teaching at the University Paul Sabatier Toulouse III (64h / year). I lectured bachelor students about the development of amphibians and chicken models during practical work in order to introduce them to developmental biology. I also gave lessons in order to teach them the fundamental concepts of biology. (research, teaching, veterinary/agronomy contest preparation students)
- **2012/2016:** Supervision of students doing an internship in Dr F. PITUELLO's Lab. From high school to master students.
- **2012/2016:** Presentation of research work to school teachers and/or to their students.

Professional internship

- **September- june 2012** in Centre de Biologie du Développement at l'UPS under the direction of Dr F. PITUELLO and Dr E. AGIUS
« *Development of an embryo culture technique to analyze the cell cycle kinetics in neural progenitors in real time microscopy* »
- **June - April 2011** in Centre de Biologie du Développement at l'UPS under the direction of Dr F. PITUELLO
« *Validation of Fucci probes to study the cell cycle dynamics during chicken embryonic neurogenesis* »
- **June - July 2010** in Centre de Biologie du Développement at l'UPS under the direction of Dr F. PITUELLO
« *Subcellular localization of CDC25B phosphatase during embryonic neurogenesis in vertebrates* »
- **June - July 2009** in research lab of CUFR JF Champollion (Albi 81) under the direction of Dr A. VETILLARD
« *Cytokine secretion by murine lymphocytes (LB, LT) in the presence or absence of bee venom* »

Technical Skills

Microscopy: Epifluorescence, Confocal microscopy (Leica SP2/5, Zeiss LSM 880 Airy, Andor Spinning disk SD1) and Light Sheet Fluorescent Microscopy (Zeiss LZ1), mounting of slides in mowiol / vectashield, mounting of whole embryos in agarose for live or fixed imaging.

Image analysis: Leica, FIJI, Zen software

Cell Cycle analysis: EdU/BrdU Double staining, *in vivo* live-imaging of fluorescent probes (FUCCI / PCNA)

Manipulation of chicken and fish embryos: Electroporation *in ovo*, Microinjection in fish embryo, Microsurgery, Microdissection, tacking chicken embryos, Injection of DNA analogous (BrdU, EdU), vibratome sections, *ex-vivo* explants cultures and *in vivo* live-imaging.

Molecular analysis of tissues: Immunohistochemistry, in Situ Hybridization, Western Blot

Scientific Meetings

- **March 2018:** Trends in Microscopy, Düsseldorf
Workshops: Olympus: Microscope Performance Assessment as a Routine in Imaging Facilities and Olympus: Latest developments in confocal and laser scanning microscopy for live samples
- **May 2016:** Société Française de Biologie du développement: oral presentation «*Role of cell cycle and CDC25B phosphatase as regulators of cell fate in embryonic neurogenesis* », Marseille.
- **October 2014:** EMBO Workshop: poster «*Development and regeneration of the spinal cord*», Sitges, Spain.
- **February 2014:** Société Française de Biologie du développement / EFOR: poster «*A novel high resolution time-lapse imaging strategy to visualize the four cell cycle phases in neural progenitors* » Paris
- **November 2013:** Fédération de Recherche en Biologie de Toulouse day: poster «*A novel high resolution time-lapse imaging strategy to visualize the four cell cycle phases in neural progenitors* », Toulouse.

Scientific publications

- Bonnet *et al.*, Neurogenic decisions require a cell cycle independent function of the CDC25B phosphatase, *eLife* (under revision)
- Agius E, Bel-Vialar S, **Bonnet F** and Pituello F (2015): Cell cycle and cell fate in the developing nervous system: the role of CDC25B phosphatase. *Cell and Tissue Research* Volume 359, Issue 1, pp 201-213

Languages / Computer

- French: Native speaker
- English: fluent
- Spanish: scholar
- Office package (Power Point, Word, Excel), Metamorph, Graphpad Prism

References

- Dr Jan PEYCHL (Service Leader Of Light Microscopy Facility): peychl@mpi-cbg.de
- Dr Eric AGIUS (PhD director): eric.agius@univ-tlse3.fr
- Dr Caren NORDEN (Group Leader): norden@mpi-cbg.de