

EDUCATION

- Ph.D. in Cell Biology and Biophysics**, University of Paris VII
European Interdisciplinary Ph.D. Graduate School "Frontiers in Life Sciences" **Oct. 2008 – Feb. 2012**
Paris, France
- Master of Science in Cellular and Molecular Biophysics**, University of Paris VI
Major in Cell and Molecular Biology and Biophysical experimental techniques. **Sept. 2007 – Sept. 2008**
Paris, France
- Master of Science in Physics**, University of Paris VII
Major in Cosmology, Particle Physics and Biophysical methods in Biology. **Sept. 2005 – Sept. 2008**
Paris, France

RESEARCH EXPERIENCE

- Postdoctoral researcher in Cell Biology** **Apr. 2013 – August 2017**
European Molecular Biology Laboratory, Cell Biology and Biophysics unit
Heidelberg, Germany
- Led a collaborative project combining advanced light microscopy techniques, biochemical tools and mathematical modeling
- Staff scientist in Advanced Light Microscopy** **Mar. 2012 – Mar. 2013**
ImagoSeine Imaging Facility, France BioImaging, Institut Jacques Monod
Paris, France
- Provided support for in-house users in using advanced light microscopy techniques (FRAP, PALM, SIM)
 - Surveyed the latest state-of-the-art development in quantitative light microscopy techniques
 - Streamlined the use of fluorescence fluctuation techniques (ICS) to measure the dynamic property of proteins involved in cell adhesion
- Doctoral researcher in Cell Biophysics** **Oct. 2008 – Feb. 2012**
Institut Jacques Monod, Cell Biology Unit
Paris, France
- Led a biophysical project combining optical nanomanipulation and cell biology techniques.
 - Designed, built and adapted an optical tweezers setup on a commercial confocal microscope
 - Initiated and lead collaborations with optical physicists and neuroscientists for the publication of two international peer-reviewed research articles. Mentored 4 Biology and Physics Master's students and 2 undergraduate students

LEADERSHIP EXPERIENCE

- Paris Interdisciplinary PhD Symposium**, "Frontiers in Life Sciences" program **Dec. 2009**
Co-organiser and facilitator of the inaugural symposium: "Numbers in living systems" Paris, France
- Scientific Committee of the Graduate School** "Frontiers in Life Sciences" **June 2010 – Sept. 2011**
Elected as a Graduate Student Representative Paris, France

TEACHING EXPERIENCE AND SCIENTIFIC COMMUNICATION

Teaching

- Teaching Assistant**, European Molecular Biology Laboratory **Nov. 2013 and Oct. 2014**
Heidelberg, Germany
- Led a collaborative project with a group of 2-3 students, employing techniques and devices related to live oocyte imaging
- Teaching Assistant** at European Molecular Biology Organization **Autumn 2013, 2014, 2015**

- Facilitated practical sessions to handle marine biology samples and confocal microscopy training

Teaching Assistant, French National Center for Scientific Research

Oct. 2011

Workshop: Emerging tools in quantitative fluorescence microscopy for Systems Biology

Paris, France

- Facilitated hands-on sessions to weight the pros and cons while using fluorescence fluctuation tools, including biological sample preparation, microscopy parameter settings and image processing scripts

Teaching Assistant, University of Paris VII

2008 - 2011

Practical courses on *Cell and Tissue Imaging* (3 months from Oct. to Dec.)

Paris, France

- Instructed twice weekly a 2 hour-long interactive tutorial on fluorescent image analyses in Biology

Lecturer, French National Center for Scientific Research

June 2010 and Dec. 2012

Introduction to Optical tweezers (90 minutes)

Paris, France

Oral communication

Selected speakers and Poster presentations in many international conferences
(ASCB talk highlighted [here](#))

Various dates

Festival of Populat Science through screening of short movies for a general audience

Dec. 2009

Short movie: Chronotherapy in Cancer treatment

Paris, France

Publications

- **Bun P**, Dmitrieff S, Belmonte J, Nedelec F and Lenart P. Disassembly-driven contraction of an F-actin network transports chromosomes in starfish oocytes. (In revision)
- Liu Z, **Bun P**, Auduge N, Coppey-Moisan M, Borghi N. (2016) Vinculin head-tail interaction defines multiple early mechanisms for cell substrate rigidity sensing. *Integrative Biology* 8(6):693-703.
- **Bun P**, Liu J, Turlier H, Liu Z, Uriot K, Joanny J-F and Coppey-Moisan M. (2014) Mechanical checkpoint for persistent cell polarization in adhesion-naive fibroblasts. *Biophysical journal* 107(2):324-335.
- Burgo A, Proux-Gillardeaux V, Sotirakis E, **Bun P**, Casano A, Verraes A, Liem RK, Formstecher E, Coppey-Moisan M and Galli T. (2012) A molecular network for the transport of the TI-VAMP/VAMP7 vesicles from cell center to periphery. *Developmental cell* 23(1):166-180.
- Warnasooriya N, Joud F, **Bun P**, Tessier G, Coppey-Moisan M, Desbiolles P, Atlan M, Abboud M and Gross M. (2010) Imaging gold nanoparticles in living cell environments using heterodyne digital holographic microscopy. *Optics express* 18(4):3264-3273.

OTHERS

Scientific skills

Biology	Molecular (cloning) and Cellular (cell culture, transfection...) biology Marine biology (oocyte extraction, microinjection)
Microscopy, Spectroscopy	- Confocal microscopes (Zeiss, Leica, Olympus) - Advanced light microscopy techniques such as PALM (Zeiss), STED (Leica) and Light Sheet Microscopy (Zeiss, in-house system) - Family of Image Correlation spectroscopy such as STICS, RICS - Techniques such as FRAP, Laser ablation - Built-in system such as Magnetic and Optical tweezers.
Image/Data analysis	FiJi, Matlab, Imaris, Huygens

Languages

FRENCH (Native proficiency)

ENGLISH (Professional proficiency)

ITALIAN (Limited working proficiency)

GERMAN (Elementary proficiency)

Hobbies

Fooding, Bouldering, theater, DJ mixing.