

## **Patricia BASSEREAU**

<https://science.institut-curie.org/team-bassereau>

Age: 60 (07-03-1959) French  
Directrice de Recherche C.N.R.S 1<sup>ère</sup> Classe (Equivalent Full Professor)  
Group leader "Membranes and Cell Functions"

### **Adress:**

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### **University Education and Diploma**

**1980-1983** : Master in Solid State Physics, Université de Montpellier II.  
**1983-1985**: Thèse de 3ème cycle (former PhD type in France), GDPC Montpellier: "Structure of micelle phases" (Supervisor: J. Marignan)  
**1990**: PhD, Montpellier II University: "A fluid membrane lamellar phase: the swollen lamellar phase  $L\alpha$ " (Supervisor: G. Porte)  
**1999**: Habilitation à Diriger des Recherches en Sciences, University Paris VII

### **Professional Career:**

- **Paris** (Institut Curie)
  - 2003 – Present**: Group leader "Membrane and cell functions", Institut Curie (PCC)
  - 1993- 2003**: DR CNRS, Institut Curie (PCC)
- **San Jose, USA** (IBM Reasearch Center Almaden)
  - 1992-1993** : Visiting scientist
- **Montpellier** (Groupe de Dynamique des Phases Condensées (GDPC))
  - 1986-1991**: CNRS Research Scientist:
  - 1985-1986**: Contract with D.R.E.T. (Department of Defense), GDPC Montpellier

### **Research expertise**

**Past**: Structure of self-assembled systems (surfactants, copolymer films)  
Structure of polymer brushes – interaction with soluble proteins

**Current**: Physics of biomembranes: Non-equilibrium membranes, membrane nanotubes, molecular motors, biomimetic systems for intracellular trafficking, diffusion and transport in membranes, protrusions (filopodia, TNT) generation and mechanics.

### **Scientific production:** ORCID ID: 0000-0002-8544-6778

121 publications in peer review journals, 5 book chapters, H=44, tot. citations: 6214 (WoS)  
170 invited conferences, 99 invited seminars

### **Awards:**

2007: Associated with C. Sykes to the "Grand Prix Del Duca" of J. Prost and J.F. Joanny (European award of the French Science Academy)  
2011-2014, 2015-2019: Prime d'Excellence Scientifique (PES) from the CNRS  
2014-2019: ERC (advanced grant) MYODYN (Partner, Coord. B. Goud, common project)  
2015: Suffrage Science Award (Royal Society, Medical Research Council and L'Oréal)  
2017: Emmy Noether Distinction for Women in Physics (European Physical Society)  
2018: Fellow of the Biophysical Society

### **Research administration and coordination:**

**Supervision**: 22 PhDs (2 currently), 23 Post-docs (3 currently)

**Alumni current positions**: 11 PhDs, 9 post-docs: academic positions (6 group leaders)  
6 PhDs, 6 post-docs: industrial and start-up positions (4 heads of groups/units, 2 head Dept)  
1 high school teacher  
5 in post-doc

**Jurys:** 43 PhD (referee: 27, president: 9), 18 HDR (referee: 9, president:3), 11 PhD abroad (referee)

**Funding record:** 2 EU collaborative projects + coordinator of area "Self-assembling and Biomimetic Systems" of the Network of Excellence SoftComp (+ member of the network coordination committee)

1 ERC advanced grant, co-PI with B. Goud as a coordinator

10 French ANR Research projects (3 as a coordinator)

3 HFSP contracts (1 as a coordinator)

and many other contracts with CNRS, French research ministry and foundations.

#### **Scientific committees**

- Paris XI ((1998-2001), Paris V (2001-2002, 2009), Paris VI (2007-2011), Montpellier II (2009, 2015, 2018), Aix-Marseille (2013), ENS (2015): Junior and senior faculty selection committee - Paris VII: GET (Groupes d'Experts Thématiques) (2014- ), evaluation committee for assistant professor promotion (2015)
- Abroad: Junior and senior faculty selection committee: Copenhagen (DK) (2011), Cologne (DE) (2012), BIOSO Freiburg (DE) (2013), SDU, Odense (DK) (2016), International Research Training Group: Freiburg (DE) (2012)
- ILL: Program committee (2001-2003)
- CNRS: National committee, section 11 (2005-2008)
- AERES, evaluation committees: Laboratoire J. Perrin (UPMC) (2008), Ingénierie des Matériaux Polymères (Lyon)(2010), Institut de Physique de Rennes (2010), Laboratoire de Physique de l'ENS Lyon (2015)
- CNR (Italy): evaluation panel "Physics" of the CNR (2009)
- ERC (EU): Consolidator Grants panel (2016-20)

#### **Administration**

- Coordination board of the Physics faculty (#925) de Paris VI (Paris) (2005- 2012)
- Member of the executive committee Physico Chemistry Lab. (I. Curie) (2011-2012)
- CAPITALS (EPSRC, UK): Scientific advisory board (2012-2017)
- MaxSynBio (MPI, DE): Scientific advisory board (2015- )
- Labex CelTisPhyBio (Institut Curie, FR): Co-chair (2019- )
- DESIGN (Gravitation program, NL): Scientific advisory board (2019- )

#### **Scientific societies**

- Board of the Chemical-Physics section of Société Française de Chimie (2001- 2004)
- Board of the Condensed Matter section of Société Française de Physique (2002-2007)
- Committee for young researcher awards of the SFP (2003- )
- General board of the SFP (2009-2012)
- Chairperson of the SFP group: "Physics and living matter" (2010- )

#### **Editorial committees**

- Molecular BioSystem (2005- 2007), Bulletin de la SFP (Reflets de la Physique) (2006-2013), Soft Matter (2008-2010), Journal of Physics: Condensed Matter (2010-2013), European Biophysics Journal (2017- )

#### **Associate editor**

- Molecular Biology of the Cell (Oct. 2014 - ): Associate Editor
- eLife (Nov. 2016- ): Board of Reviewing Editors
- Europhysics Letters (Apr. 2019- ): Co-editor

#### **Editing**

- Co-editor of the special issue "Focus on the Physics of the Cell Membrane" of New Journal of Physics (with R. Philipps et P. Schwille) (2012)
- Co-editor with P. Sens of the book: "Physics of Biological Membranes", Springer (2018)

#### **Organisation of scientific meetings**

- 9 national workshops and conferences
- 11 international workshops and conferences (including co-chair of the Biophysical Soc. Meeting in 2011 in Boston)
- 12: Scientific committee member