MIGNOTTE Bernard

Professor at UVSQ/Université Paris-Saclay Director of studies at EPHE/Université PSL

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EDUCATION

1987: Ph.D. (Doctorat d'état) in Life Science

1981: 3rd cycle thesis in Cellular and Molecular Genetics

1978: Master in Cellular and Molecular Genetics

RESEARCH ACTIVITIES

1999:	Installation of a laboratory working on cell proliferation and apoptosis at the Université de
	Versailles/Saint Quentin (France).

- **1990 1999**: Group leader of a team working on apoptosis and mitochondria at the *Centre de Génétique Moléculaire du CNRS* (Gif sur Yvette France).
- **1988 1990**: Post-Doctoral position in Professor J. Feunteun's laboratory (Professor R. Monier's group) at the *Institut Gustave Roussy*, Villejuif France: "Study of the SV40-induced cell immortalization by the mean of conditionally immortalized rat embryo fibroblasts".
- **1981 1988**: Doctoral thesis (*Doctorat d'état*) in Professor J.C. Mounolou's laboratory (*Université Paris XI*, Orsay France): "Study of proteins and DNA sequences involved in the replication of the mitochondrial genome of *Xenopus laevis*".
- **1979 1981**: 3rd cycle thesis in Professor J.C. Mounolou's laboratory: "DNA-binding proteins from *Xenopus laevis* oocyte mitochondria".

MAIN RESPONSIBILITIES

- Since 2021: Member of the editorial board of *Foundations*
- Since 2020: Member of the editorial board of *Biology (Basel)*
- Since 2016: President of the "Réseau francophone de la mort cellulaire" (Francophone cell death network)
- Since 2015: Deputy-director of the Doctoral School "Structure and dynamics of living systems" at the University Paris-Saclay (UPSaclay)
- **Since 2015:** Member of the board of the "Biology-health" Master's programme (UPSaclay)
- Since 2015: Referent for UPSaclay in the "Biology of aging" Master's programme
- 2012 2021: Member of the UVSQ faculty of Sciences council
- **1998 2020:** Deputy director of the Biology Department at UVSQ
- **2017- 2020:** Head of the "Biology, Medicine, Pharmacy" school (UPSaclay)
- 2011 2019: Member of the National University Council (CNU 65)
- 2011 2019: Member of the Academic Council of the UPSaclay and board
- **2001 2019:** Director of the Laboratory of Genetics and Biology (UR4589)
- 2006 2010: Member of the Scientific council of EPHE
- 2004 2009: Member of the 22 section of the National Scientific Research Comitee (CoNRS)
- **2005 2008:** Member of the scientific council of UVSQ and board
- 2001 2004: Member of the executive board of UVSQ
- **1996 1999:** Member of the National University Council (CNU 65)

RESEARCH INTERESTS

My main research interests have concerned mitochondrial biogenesis and cell death. During my thesis, I identified and characterized proteins involved in mitochondrial DNA replication. Then, I moved to the field of cell death. Notably, my team contributed to the discovery of the central role of mitochondria in apoptosis, in both mammals and *Drosophila*. Today, my main research interests concern the role of mitochondria in stress responses and cell death regulation and modalities, in particular at the mitochondrial level. For this purpose, we use mammalian cellular models and *Drosophila*.

TUTORING

Supervisor or co-supervisor of 9 defended PhD.

AWARDS

- 2016: Academic awards ("Palmes académiques")
- 2004: Prize of the Yvelines Council, awarded by the Scientific Council of the National League against Cancer
- 1982: Dina-Surdin Foundation Prize

BIBLIOMETRICS

- 62 Original articles in international peer-reviewed journal
- 13 Review articles in international peer-reviewed journal
- 4 Book chapters
- 8 Book chapters and articles in French
- H-index: 30 Sum of Times Cited >: 8000 (Source: Web of Science)
- ResearcherID: A-3499-2009
- Orcid iD: 0000-0002-8512-8518
- IdHal: bernard-mignotte https://cv.archives-ouvertes.fr/bernard-mignotte

SELECTION OF PUBLICATIONS

B. Mignotte, M. Barat and J.C. Mounolou (1985) "Characterization of a mitochondrial protein that bind to single-stranded DNA". *Nucleic Acids Res.* **13** (5), 1703-1716.

B. Mignotte and M. Barat (1986) "Characterization of a *Xenopus laevis* mitochondrial protein with a high affinity for supercoiled DNA". *Nucleic Acids Res.* **14** (15), 5969-5980.

B. Mignotte, E. Delain, D. Rickwood and M. Barat-Guéride (1988) "The *Xenopus laevis* mitochondrial protein mtDBP-C cooperatively folds the DNA *in vitro*". *EMBO J.* **7** (12), 3873-3879.

J.L. Vayssière, P.X. Petit, Y. Risler and **B. Mignotte** (1994) "Commitment to apoptosis is associated with changes in mitochondrial biogenesis and activity in cell lines conditionally immortalized with Simian Virus 40". *Proc. Natl. Acad. Sci. (USA)* **91**, 11752-11756.

P.X. Petit, H. Lecoeur, E. Zorn, C. Dauguet, **B. Mignotte** and M.L. Gougeon (1995) "Alterations in mitochondrial structure and function are early events of dexamethasone-induced thymocytes apoptosis". *J. Cell. Biol.* **130**, 157-167.

N. Zamzami, P. Marchetti, M. Castedo, D. Decaudin, A. Macho, P.X. Petit, **B. Mignotte** and G. Kroemer (1995) "Sequential reduction of mitochondrial transmembrane potential and generation of reactive oxygen species in early programmed cell death" *J. Exp. Med.* **182**, 367-377.

I. Guénal, C. Sidoti-deFraisse, S. Gaumer and **B. Mignotte** (1997) "Bcl-2 and Hsp27 act at different levels to suppress programmed cell death" *Oncogene* **15**, 347-360.

S. Gaumer, I. Guénal, S. Brun, L. Théodore and **B. Mignotte** (2000) "Bcl-2 and Bax mammalian regulators of apoptosis are functional in *Drosophila*" *Cell Death Differ.* **7**, 804-814.

S. Brun, V. Rincheval, S. Gaumer, **B. Mignotte** and I. Guénal (2002) "*rpr* and *bax* initiate two different apoptotic pathways affecting mitochondria and antagonized by *bcl-2* in *Drosophila*". *Oncogene* **21**, 6458-6470. (In F1000Prime, 19 Sep 2002; DOI: 10.3410/f.1009391.125508)

N. Godefroy, S. Bouleau, G. Gruel., F. Renaud., V. Rincheval, **B. Mignotte**., D. Tronik-Le Roux and J.L. Vayssière (2004) "Transcriptional repression by p53 promotes a Bcl-2-insensitive and mitochondria-independent pathway of apoptosis". *Nucleic Acids Res.* **32**, 4480-4490

S. Brun, A. Rincheval-Arnold, J. Colin, Y. Risler, **B. Mignotte** and I. Guénal (2006) "The myb-related gene *stonewall* induces both hyperplasia and cell death in *Drosophila*: rescue of fly lethality by coexpression of apoptosis inducers". *Cell Death Differ.* **13**, 1752–1762.

M. Bergeaud, L. Mathieu, A. Guillaume, U.M. Moll, **B. Mignotte**, N. Le Floch, J.L. Vayssière and V. Rincheval (2013) " Mitochondrial p53 mediates a transcriptionindependent regulation of cell respiration and interacts with the mitochondrial F_1F_0 -ATP synthase". *Cell Cycle* **12**(17), 2781-2793.

J. Colin, J. Garibal, A. Clavier, A. Rincheval-Arnold, S. Gaumer, **B. Mignotte** and I. Guénal (2014) " The *Drosophila* Bcl 2 family protein Debcl is targeted to the proteasome by the β TrCP homologue Slimb". *Apoptosis* **19**(10):1444-1456. doi: 10.1007/s10495-014-1034-8.

Y. Demay, J. Perochon, S. Szuplewski, **B. Mignotte**, D. Contamine and S. Gaumer (2014) "The PERK pathway independently triggers apoptosis and a Rac1/Slpr/JNK/Dilp8-signaling favoring tissue homeostasis in an ER stress *Drosophila* model". *Cell Death Dis.* **5**:e1452.

J. Colin, J. Garibal, A. Clavier, S. Szuplewski, Y. Risler, C. Milet, S. Gaumer, I. Guénal and B. Mignotte (2015) "Screening of suppressors of bax-induced cell death identifies glycerophosphate oxidase 1 as a mediator of debcl-induced apoptosis in Drosophila". Genes & Cancer. 6 (5-6), 241-253.

A. Clavier, V. Ruby, A. Rincheval-Arnold, **B. Mignotte**, I. Guénal (2015) "The *Drosophila* retinoblastoma protein, Rbf1, induces a *debcl* and *drp1*-dependent mitochondrial apoptosis". *J. Cell Sci.* **128**, 3239-3249. (Highlighted Article:

jcs.biologists.org/content/128/17/e1704).

S. Manousakidi, A. Guillaume, C. Pirou, S. Bouleau, **B. Mignotte,** F. Renaud and N. Le Floch (2018) "FGF1 induces resistance to chemotherapy in ovarian granulosa tumor cells through regulation of p53 mitochondrial localization". *Oncogenesis* **7**:18 doi: 10.1038/s41389-018-0033-y.

J. Perochon, B. Grandon, D. Roche, C. Wintz, Y. Demay, **B. Mignotte**, S. Szuplewski* and S. Gaumer* (2019) "The endoplasmic reticulum unfolded protein response varies depending on the affected region of the tissue but independently from the source of stress". *Cell Stress & Chaperones* **24**, 817-824. doi:10.1007/s12192-019-010