

Section 29 : Relations hôte-pathogène, immunologie, inflammation

Collège A2

Name: Nicolas Bidère

Date of birth: 04/03/1977 (2 children)

Nationality: France

Current position: INSERM Research Director, class 2

Researcher unique identifier: ORCID 0000-0001-9177-0008

Biosketch

Nicolas Bidère earned his PhD from the University Paris 11, focusing on programmed cell death in human T lymphocytes. He then joined Mike Lenardo's laboratory at the NIH, where he delved into the molecular mechanisms underlying NF- κ B activation in lymphocytes and lymphoma. In 2008, he was appointed as a permanent researcher by INSERM. He has long-term experience exploring life-and-death decisions in normal and pathological conditions, with a large emphasis on NF- κ B signaling and reversible ubiquitination.

Education and degrees

1999: M.Sc. in Immunology, University Paris 11

2004: Ph.D. in Immunology, Advisor: Dr A Senik, University Paris 11

2012: HDR Accreditation to supervise research, University Paris 11

Scientific career

2004-2008: Post-doctoral fellow NIAID/NIH, Bethesda, USA, Advisor: Dr MJ Lenardo

2008-2020: Assistant Researcher, INSERM U1014, Villejuif; Institut Cochin, Paris; CRCINA, Nantes

2022-present: Co-Team Leader *Signaling in Oncogenesis, Angiogenesis, and Permeability*, CRCI²NA, Nantes

Academic responsibilities

2017-2022: Member of the Scientific Council of Nantes University Medical School, Nantes

2016-2025: Member of CNRS National Committee, section "Host-Pathogen, Immunology, Inflammation". Scientific Secretary since 2020

2023- : INSERM Representative, AG Cancéropôle Grand-Ouest

Supervision of graduate students and postdoctoral fellows

Since 2008: 5 post-docs from Belgium, Brazil, France, and the UK

7 Ph.D. Students from France and Greece

Teaching activities

2019-: Lecture in Cancer Cell Biology- Nantes University, France

Scientific production

51 research articles, 9 reviews and editorials, 2 book chapters, and 1 patent.

Contribution to Science

1. Discovery of new NF- κ B Transcription Factors Regulators in Lymphocytes and aggressive Lymphomas. These discoveries improve our understanding of the molecular mechanisms that orchestrate lymphocyte activation and lymphomagenesis and offer new strategies to jugulate this

signaling pathway (*iScience* 2021, *Journal of Cell Science* 2016, *Blood* 2014, *Science Signaling* 2013, *Journal of Cell Science* 2010, *Nature* 2009, *Current Biology* 2006, *Science* 2005).

2. Novel insights into the regulation and functions of Centriolar Satellites. Our results illustrate the crucial role of reversible ubiquitination and oxidation in maintaining centriolar satellites and provide means to modulate the formation of primary cilia and regulate cell death by apoptosis (*iScience* 2024, *Comm Biol* 2023, *Cell Reports* 2019).

3. Defining the role of Pannexin-1 Channels during Necroptosis. This work reveals an unexpected facet of a large-conductance channel in inflammation associated with cell death by necroptosis (*EMBO Reports* 2019).

Main Publications (selection)

1. Bidere N., (...), Senik A. 2003. *Journal of Biological Chemistry* 278, 33: 31401.
2. Su* H, Bidère* N, (...), Lenardo M. 2005 *Science* 307(5714):1465-8. *, equal contribution.
3. Bidère N, (...), Lenardo MJ. 2006 *Current Biology* 22;16(16):1666-71.
4. Bidere* N, Su* HC, Lenardo MJ. 2006. *Ann Rev Immunology* 24:321-52. *, equal contribution.
5. Bidère N*, Ngo VN*, (...), Lenardo MJ. 2009. *Nature*. 458(7234):92-6. *, equal contribution. *Research Highlights in Sci Signal.*, March 2009. Vol.2, Issue 61, p.ec91
6. Alexia C, (...), Bidere N. 2013 *Science Signaling* 6(291):ra79. *Research Highlights in Nature Reviews in Immunology*. Oct 2013, volume 13, 10
7. Dubois SM, (...), Bidere N. *Blood*. 2014. Apr 3;123(14):2199-203. *Comment by R. Beyaert in Blood* 2014 Apr 3;123(14):2131-3, Highlighted in *Faculty 1000*
8. Douanne T, Gavard J, Bidère N. 2016 *Journal of Cell Science* 129(9):1775-1780.
9. Douanne T, (...), Bidère N. 2019. *EMBO Reports* 20(10):e47840
10. Douanne T, (...), Bidère N. 2019. *Cell Reports* 27(6):e1657-65
11. Thys A, (...), Bidère N. 2021. *iScience* 24(1):101939
12. Renaud CCN, (...), Bidère N. 2023. *Commun Biol* 6 (1):1271
13. Renaud CCN, (...), Bidère N. 2024. *iScience* 27(4): 109580