



Etienne Meunier – Section 29 - Collège A1

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| Last name, First name: | Date of birth: | ORCID ID: | Current position: |
| MEUNIER, Etienne | 03/01/1986 | org/0000- 0002-3651- 4877 | DR2-CNRS/Head of the team "Detection and Elimination of Pathogens"/IPBS-UMR5089 Toulouse, France |

EDUCATION

| INSTITUTION AND LOCATION | DEGREE | Completion date | FIELD OF STUDY |
|----------------------------------|--------|-----------------|----------------------------------|
| University of Toulouse/IPBS/CNRS | HDR | 03/2020 | Immunity and Infectious Diseases |
| University of Toulouse | PhD | 12/2012 | Immunity and Infectious Diseases |

1- Summary of the scientific background

After obtaining my Master degree in 2009, I started my PhD training in the laboratory of Dr. Bernard Pipy, Toulouse, France. There I described divergent roles for several membrane-bound receptors, namely the C-type lectin receptors MRC1, SignR3 and Dectin 1 in macrophage-mediated microbicidal response to the parasite *Leishmania infantum*.

Aiming to broaden my knowledge on innate immune sensing of pathogens, I joined as a postdoctoral fellow the group of Petr Broz in Basel, Switzerland in 2013. There I studied the molecular and cellular mechanisms that regulate activation of cytosolic inflammatory complexes, namely the inflammasomes. I discovered an unexpected link between host cytosolic anti-bacterial immunity and microbial sensing. Indeed, I demonstrated that upon induction by interferons, the GTPases Guanylate Binding Proteins (GBPs) bridge bacterial sensing to inflammasomes-forming receptors/sensors in the context of cell-autonomous immunity.

In 2017-2018, with a strong support from the CNRS, the University of Toulouse and the Fondation pour la Recherche Médicale, I moved to Toulouse and set up my own laboratory at the Institut de Pharmacologie et de Biologie Structurale (IPBS, CNRS UMR5089). The IPBS is a multidisciplinary research institute whose themes range from understanding the molecular mechanisms governing living organisms to physiopathological implications including cancer, infections, inflammation. Hence, our thematic embed in this amazing and transversal context by addressing the importance of immune signaling pathways and virulence from pathogens and cancer cells to circumvent those restricting processes developed by our cells at the molecular, cellular, tissue and whole organism level.

Building on previous achievements, I now aim to expand and strengthen the knowledge already developed in the group but also to tackle the challenges of tomorrow in the field of cell death, immunity, host pathogen interactions but also environmental exposure. Hence, based on recent studies and unpublished results, the group has developed a global program that embeds basic to translational research in order to better understand the Human physiology and virulence of respiratory viruses, bacteria and fungi, anti-microbial immunity as well as pathological environment-driven inflammation.

2- Positions and scientific appointments

2018-now - Head of the team "Immune detection and elimination of Pathogens"

Institute of Pharmacology & Structural Biology (IPBS) - UMR5089

2017-now - Researcher in Immunology- CNRS researcher

Institute of Pharmacology & Structural Biology (IPBS) - UMR5089

2013-2016 - Post-doctoral position Biozentrum

Basel University, Switzerland Focal area in infection biology, Petr Broz group, "The innate immune response against bacterial pathogens". 50/70 Klingenbergstrasse, 4056 Basel, CH.

2013 - Temporary position in teaching and research (ATER)/ Assistant professor.

Paul Sabatier University, Toulouse, France

2010-2013 - PhD Degree

UMR-152, Team Macrophages polarization and nuclear receptors in infection and inflammation (Mrn2i), Rangueil Hospital, 1 avenue Jean Poulhès, 31403 Toulouse Cedex4, France. Laboratory of Agnes Coste and Laurent Alric.

3- Honors and Awards

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|------|--|
| 2018 | Fonroga foundation Price for young investigators |
| 2022 | Médaille de Bronze Award from CNRS |

4- Supervision of students and postdoctoral fellows during the last 10 years

| Name/Year | Level | Articles |
|---------------------|----------|--|
| Elif Eren 2018-2021 | Post doc | (3) PMIDs: -34516571-33124769-29313961 |

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|---|---------------|---|
| Remi Planes 2018-2022 | Post doc | (9) PMIDs:-36362409-35899491-35849616-35759203-35594856-35311462-34516571-33124769-30581112 |
| Stephen Adonai 2019-2024 | PhD/ Post doc | (6) PMIDs:-36362409-35849616-35594856-35332201-34605588-34516571 |
| Caio Bonfim 2024- | Post doc | 0 |
| Karin Santoni 2019-2023 (100%) | PhD training | (6) PMIDs:-35899491- 35849616- 35759203- 35594856- 34516571- 33124769 |
| Salimata Bagayoko 2018-2021 (100%) | PhD training | (6) PMIDs:- 35849616- 35594856- 35311462- 34670020- 34516571- 33124769 |
| Miriam Pinilla 2020- (100%) | PhD training | (4) PMIDs:- 35849616- 35594856- 34516571- 33124769 |
| Lea Fromont 2022- (50%) | PhD training | (2) PMID: 36988579- 36524131 |
| Leana Gorse 2022- (100%) | PhD training | (1) PMIDs:- 35849616 |
| Ron Ortega 2022- (50%) | PhD training | 0 |
| Léa Ravon-Katossky 2024- (100%) | PhD training | (1) PMID: 39840902 |
| Margaux Paradis2023- (100%) | PhD training | (1) PMID: 37642996 |

5- Major grants obtained over the last 10 years

| Year | Grant | Purpose | Amount | Lab funds | Position |
|------------------|-------------------------------------|---|--------|-----------|-----------------------------|
| 2024-2027 | ANR "COMETH-" | Inflammasomes in skin diseases | 850k€ | 350k€ | Leader |
| 2023-2026 | Horizons (EU) « Ithemys » | Novel anti microbial compounds | 3M€ | 300k€ | Partner lab |
| 2023 | Fondation CNRS | microscope acquisition | 100k€ | 100k€ | Leader |
| 2023-2026 | JPIAMR "AcoMA" (ANR-EU Horizons) | Antibiotic resistance | 1M€ | 230k€ | Partner/WP co-leader |
| 2022-2026 | TBVI/Bill & Melinda Gates Fondation | Novel systems of innate immunity to infections | 6M€ | 400k€ | Partner/WP member |
| 2022-2026 | ANR "Psicopak" | Inflammasomes in Psoriasis | 600k€ | 190k€ | Partner/WP leader |
| 2022-2026 | Air Liquide Fondation | Novel drug targets against respiratory infections | 150k€ | 150k€ | Leader |
| 2022-2024 | Region Occitanie | Anti-infectious compounds | 120k€ | 120k€ | Partner/WP member |
| 2023-2027 | Invivogen | CIFRE | 170k€ | 170k | Leader |
| 2021-2023 | VLM Fondation | Organoids and infections | 65k€ | 65k€ | Partner lab |
| 2021-2023 | Invivogen | Inflammasomes in Covid19 | 120k€ | 120k€ | Leader |
| 2019-2022 | Invivogen | CIFRE | 170k€ | 170k€ | Leader |
| 2018-2023 | ERC StG | Novels concepts in inflammasome biology | 1.5M€ | 1.5M€ | Leader |
| 2018-2022 | ANR "Endiabad" | Metabolism and inflammation | 400k€ | 100k€ | Partner/WP leader |
| 2017-2020 | FRM "Amorçage" | Starting the lab | 300k€ | 300k€ | Leader |
| 2017-2022 | ATIP-Avenir | Starting the lab | 180k€ | 180k€ | Leader |

6- Major invited conferences over the last 2 years

2025 – Invited speaker: British Society of Immunology congress, Liverpool
2025 – Invited speaker: ISSAID 2025, Paris
2025 – Invited speaker: Bacterial Pathogens and Host Cell Interactions, Viet Nam
2023 – Organizing committee of the InnasCO congress
2023 – "Cells & Inflammation: Live and Let Die!" - GREMI/Paris/Keynote

7- Other activities

- Member of the ANR evaluation panel, section Physiopathology (CE14, since **2022**)
- HCERES committee (**2023-2024**)
- Editor of FEMS Pathogens (since **2023**)
- Reviewer for Nature, Nature Microbiology/immunology, PNAS, Cell Host & Microbes, FEBS, Cellular Microbiology, JEM, AMJPathol...
- Reviewing of ANR, Poland National Funding Agency (**2020**), University grants (Grenoble, France, Basel, Switzerland), ANSES
- Memberships : Société Française d'Immunologie/ Société Française de Microbiologie/ECCMID
- **2017** Co-founder of the startup Enterosys
- Scientific advisory board of Vibiosphen company