

# Khaled TIGHANIMINE

// Mail : [k-95@live.fr](mailto:k-95@live.fr) or [khaled.tighanimine@inserm.fr](mailto:khaled.tighanimine@inserm.fr) // Tel : +33-6-25-40-29-43

// Address : 100, rue d'Aubervilliers – 75019 – Paris

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## Education:

- **2023 - PhD in Molecular and Cellular Biology**  
Université Paris Cité, Supervisors: PENDE Mario & FUMAGALLI Stefano
- **2019 - Master in Molecular and Cellular Biology : Speciality Fundamental Microbiology**  
**Institut Pasteur course : Fundamental bacteriology**  
Sorbonne Université, Paris - Faculté des Sciences – With high honors
- **2017 - Bachelor in Sciences of Life, Biology**  
Sorbonne Université, Paris - Faculté des Sciences - With honors
- **Scientific Baccalauréat I Speciality Mathematics**  
Lycée International Alexandre Dumas , Algiers - With honors

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## Professional experience:

- Post-doc I Octobre 2024 -  
**Harvard T.H. Chan School of Public Health**, Boston I Equipe MANNING Brendan
- Post-doc I December 2023 - November 2024 I  
INSERM, **Institut Necker Enfants Malades**, Paris I PENDE Mario's team
- PhD student I 2019 – 2023 I  
INSERM, **Institut Necker Enfants Malades**, Paris I PENDE Mario's team  
Subject: « Metabolic adaptations of senescent cells »
- Research Internship I December 2018 - June 2019 I  
**Collège de France**, ESPELI Olivier's team « Cell cycle and Chromosome Dynamics »  
Supervisors: ESPELI Olivier & RIMSKY Sylvie  
Subject: « Role of non coding RNAs in *E.coli* nucleoid spatial conformation »

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## Publications

- A homeostatic switch causing glycerol-3-phosphate and phosphoethanolamine accumulation triggers senescence by rewiring lipid metabolism. **Tighanimine K.** et *al.*, **Nature Metabolism**, Vol.6, 323–342 (2024)
- Accumulation of G3P and pEtN drives cellular senescence via altered lipid metabolism. **Tighanimine K.** & Pende M., **Nature Metabolism**, Vol.6, 205–206 (2024)
- Invited for review: Lipid remodeling in context of cell size modulation (*in preparation*), **Tighanimine K.**, **Biochimie journal**: “Lipids: From Molecular Aspects to Human Diseases” special issue, (2024)
- Promitotic Action of *Oenothera biennis* on Senescent Human Dermal Fibroblasts, Ceccacci S, Roger K, Metatla I, Chhuon C, **Tighanimine K**, Fumagalli S, De Lucia A, Pranke I, Cordier C, Monti MC, Guerrera IC  
International Journal of Molecular Sciences, 2022

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## Patent

- Methods and compositions for treating senescence-related disease - 23315182.8  
**Tighanimine K**, Fumagalli S, Pende M  
INSERM Transfert, 2023

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## Fellowships

- 4<sup>th</sup> year thesis fellowship “Association Recherche contre le Cancer”: 37k euros – 2022
- 4<sup>th</sup> year thesis fellowship “Fondation de la Recherche Médicale”: 37k euros – 2022

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## Awards:

- Article of the month prize, Société Française de Biochimie et Biologie Moléculaire, May 2024
- 18<sup>th</sup> Lipidomics GERLI meeting, Oral presentation prize, 2023 (Invited for a review contribution in « Biochimie » special issue)
- INEM retreat, 1<sup>st</sup> Oral presentation prize, 2023
- 3<sup>rd</sup> Kerner prize of Scientific Communication, ARC foundation, 2022

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## Conferences & talks

- Invited speaker for a seminar at IBPS, Sorbonne Université, 2024 , Paris
- Invited speaker for Master 1 course in metabolism, Sorbonne Université, 2023 & 2024 , Paris
- « International Cellular Senescence Association », 2023, Minneapolis (Poster)
- « 18<sup>th</sup> GERLI Lipidomics », 2023, Paris (Oral presentation)
- « TOR de France », 2023, Nice (Oral presentation)
- « 27<sup>th</sup> ARC meeting for young researchers in cancerology » 2023, Paris (Oral presentation)
- « Growth and regeneration during development and aging », 2023, Bretagne (Poster)
- « TOR de France » 2021, Nice (Poster)
- INEM seminars, 2021 & 2022 (Oral presentations)
- « Integrative analysis of multi-omics data » symposium, EMBL - 2022 (Online)

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## Lab visits

- Farese & Walther's lab, Memorial Sloan Kettering Cancer Center, New York, May 2024
- Jessalyn Ubellacker's lab , Harvard, Boston, May 2024
- Howard Chen's lab, Tufts University, Boston, May 2024
- Nora Kory's lab, Harvard, Boston, May 2024
- Nika Danial's lab, Dana-Farber Cancer Institute, Boston, May 2024
- Nada Kalaany's lab , Boston Children Hospital, May 2024
- Brendan Manning's lab, Harvard, Boston, May 2024
- Kivanç Birsoy 's lab, Rockefeller University, New York, May 2024
- Rolando Perez-Lorenzo's lab, Columbia University, New York, May 2024
- Michele Pagano's lab, NYU Langone, New York, April 2024

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## Science communication

- Cercle FSER ambassador: Scientific communication for Parisians high school students | 2020-2023
- Science mediator : « Exposition Les Magnifiques », Cité des Sciences | January 2023
- Board member of the Young Researchers Life Sciences conference, Secretary | 2021-2022

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## Podcast

- « Une découverte pour contrer les maladies liées au vieillissement », Radio Zen , March 2024

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## Languages

- **English:** Full professional proficiency
- **French:** Bilingual proficiency
- **Arabic:** Native proficiency

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## Non-scientific interests

- Philosophy, Nanterre University Bachelor, 2 years
- Islamic law study, LaMadrassah, 5 years