



GOUVERNEMENT

*Liberté
Égalité
Fraternité*



Mitochondrial function Program

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Hypothesis

- Dysregulated energy metabolism is an early marker of functional decline
- Mitochondrial factors driving functional decline are therapeutic targets

Three research Axes

- Main goal is to achieve a personalized mitochondrial-targeted medicine of aging

1. Biomarker discovery

Develop assays of mitochondrial energy metabolism as predictive markers of functional decline
(Inspire-T cohort and ICOPE-based RCT)

2. Target validation

Assess the causal role of mitochondrial factors in functional decline using preclinical models
(Cellular and animal models)

3. Drug candidate

Conduct preclinical testing of molecules targeting mitochondrial energy metabolism
(GeroScience trial platform)

Achievements in 2025

Articles

1. Jabrane-Ferrat N. et al. *J Gerontol A Biol Sci Med Sci*. 2025
2. Torossian A. et al. *Atherosclerosis Plus*. 2025
3. Cai Z. et al. *Lipids in Health and Disease*. 2025

Patents

EP24315476 Title: Method for determining the risk of age-related functional decline

Funding

1. **TIRIS** (Université de Toulouse)
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2. **Inserm Transfert** POC project