

Prof. **Stefano Salvioli**

Lab di Immunologia e biologia dell'invecchiamento

Via S. Giacomo 12



Research Themes

- Role and expression of **perilipins** in aging and age-associated diseases
- Study of **GDF15** and other mitokines in cell models
- Study of **Volatile Organic Compounds (VOCs)** and other markers of aging
- Available Internship Positions: 1-2 max from March 2021



GDF15 Plasma Level Is Inversely Associated With Level of Physical Activity and Correlates With Markers of Inflammation and Muscle Weakness

Maria Conte^{1*}, Morena Martucci¹, Giovanni Mosconi¹, Antonio Chiariello², Maria Cappuccilli¹, Valentina Totti³, Aurelia Santoro¹, Claudio Franceschi⁴ and Stefano Salvioli¹

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OPEN ACCESS

Some recent papers of the lab (the highlighted name is a student from Cellular and Molecular Biology Course)



The smell of longevity: a combination of Volatile Organic Compounds (VOCs) can discriminate centenarians and their offspring from age-matched subjects and young controls

Maria Conte^{1*}, Giuseppe Conte¹, Morena Martucci¹, Daniela Monti¹, Laura Casarosa¹, Andrea Serra¹, Marcello Mele¹, Claudio Franceschi¹, Stefano Salvioli¹

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ORIGINAL ARTICLE

Muscle-specific Perilipin2 down-regulation affects lipid metabolism and induces myofiber hypertrophy

Maria Conte^{1,2*}, Andrea Armani^{3*}, Giuseppe Conte^{4†}, Andrea Serra^{4,5}, Claudio Franceschi⁶, Marcello Mele^{4,5}, Marco Sandri^{3,7} & Stefano Salvioli^{1,2}

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www.aging-us.com

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Research Paper

Both objective and paradoxical insomnia elicit a stress response involving mitokine production

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OXFORD

Original Article

Human Aging and Longevity Are Characterized by High Levels of Mitokines

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Elective course: Advanced Immunology (3 CFU)

Course contents

- **Receptors of the natural Immunity** and connection with inflammation. Regional Immunity. Interactions between immune cells and gut microbiota.
- **NK cells:** roles and receptors.
- **Memory of the innate immunity:** trained immunity.
- **Generation of receptor repertoire:** somatic recombination and isotypic switch.
- **Synthesis and applications of monoclonal antibodies.**
- **DNA methylation** as a mechanism of gene regulation.
- **MHC molecules and antigen presentation.**
- **Single cell analysis.**
- **Tolerance breakdown:** Autoimmunity and Immunopathology.
- **Congenital and acquired immunodeficiencies.**
- **Cancer Immunology and immunotherapy:** monoclonal Abs. Anti-PD-1 and PD-L1; CAR-T cells.
- **Aging of the immune system:** immunosenescence and inflammaging.
- **Cytokine Release Storm and Covid19.**
- **Cell senescence and SASP:** the role in human aging and age-related diseases.