



### **CURRICULUM VITAE**

PERSONAL INFORMATION	Vincenzo Flati PhD, Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila, Via Vetoio - Edificio "Angelo Camillo De Meis", L'Aquila, 67100, Italy Email (work): vincenzo.flati@univaq.it
CURRENT POSITION	Assistant Professor
EDUCATION	1989: Master of Science, Msc, in Biological Sciences, at University of
OTHER QUALIFICATIONS	L'Aquila, Biological Sciences Faculty, discussing a thesis on enzymology entitled "Action of natural and synthetic disulfides on the enzyme Pantetheinase"  1997: Doctoral degree (Ph.D.), in Experimental Medicine, at the University of L'Aquila discussing a thesis entitled "Studies on the signal transduction mechanisms involved in the biological response to Interferons alpha and beta"
ACADEMIC APPOINTMENTS	Assistant Professor
CLINIC APPOINTMENTS	none





### TEACHING EXPERIENCE

2000-2002: Subject Expert and Teaching Assistant of "Clinical Pathology and Immuno-hematology" for the 1st Cycle Degree "Laboratory Technician" of the Medical School, University of L'Aquila.

2005-2007: Assistant Professor "Biotechnologies applied to cancer diagnosis and therapy" teaching course at the Biotechnology Faculty, University of L'Aquila

2005-2011: Assistant Professor, "Laboratorio Integrato 4" teaching course of laboratory practice at the Biotechnology Faculty, University of L'Aquila 2006- to date: member of the Doctoral Program Committee of the Doctoral program "Experimental Medicine and Endocrinology", University of L'Aquila 2008-2012: Assistant Professor, "Medical Oncology" teaching course, Specialization School in "Health Physics", University of L'Aquila

2009-2022: Assistant Professor, "Pathological processes of human interest" integrated teaching course, Master's Degree in "Medical Biotechnologies", University of L'Aquila

2022-2023: Assistant Professor, "Medical Oncology" teaching course, 1st Cycle Degree in "Biomedical Laboratory Technician", University of L'Aquila 2023-to date: Assistant Professor, teaching course "Immunotherapy and Target therapy", Specialization School in "Medical Oncology", University of L'Aquila

2023-to date: Assistant Professor, "Advanced Biotechnological Therapy and Personalized Medicine" integrated teaching course, Master's Degree in "Medical and Pharmaceutical Biotechnologies", University of L'Aquila

#### RESEARCH ACTIVITIES

1986-1989: Intern student at the Biochemistry laboratory directed by Prof. Silvestro Dupre', Department of Biomedical Technologies and Biometry, University of L'Aquila.

During this period, I was involved in the purification from animal tissues of the enzyme Pantetheinase (Pantetheine idrolase E.C. 3.5.1.-.) and the biochemical characterization of its active site.

1989-1990: Research Fellow at the Institute of Biology and Genetics, Medical School, at the "G. D'Annunzio" University of Chieti, Italy.

I was involved in the biochemical characterization of the Glutathione Stransferase (E.C. 2.5.1.18) enzyme kinetics.

1990-1991: Research Fellow at the Department of Biomedical Technologies and Biometry, University of L'Aquila, Italy.

I was involved in the enzymatic synthesis of S-aminoethyl-L-cysteine (AEC) from Pantetheine.

1991-1992: Research Fellow at the laboratory of Molecular Biology, Department of Experimental Medicine, University of L'Aquila, Italy.

I was involved in studies on the Interferon-beta signal transduction in cancer cells and on the sequencing and molecular characterization of the ICAM1 gene.

1992: I worked as a Guest Researcher with Prof. Peter Lengyel at the Department of Molecular Biophysics and Biochemistry, YALE University, New Haven, Connecticut, USA.

I studied the modulation of the genic cluster 200 expression (inducible by Interferon-ß) by SV40.

1993-1996: as part of the Doctoral programme (Ph.D. course) I joined, as Research Fellow, the laboratory of Dr. Bryan R.G. Williams at the





Department of Cancer Biology, The Cleveland Clinic Foundation Research Institute, Cleveland, Ohio, USA.

I studied the role of cPLA2 in the signal transduction of Interferon-alpha.

April 1997 to May 1998: Post-doctoral fellow at the Department of Experimental Medicine, University of L'Aquila (Italy) where I studied the promoter of the ICAM-1 gene and its inducibility by Interferon-gamma.

May 1998-2004: Staff position as Research Technologist at the Department of Experimental Medicine, University of L'Aquila, Italy.

I have been working on the role of ICAM-1 gene expression in cancer development.

2004: Research Staff position at the Department of Experimental Medicine, University of L'Aquila, Italy.

I have been working on the involvement of cPLA2 with the type I interferon signal transduction and on the molecular mechanism of action of anticancer drugs.

2005- to date: Assistant Professor at the Biotechnology courses, University of L'Aquila, Italy.

I have been working on the functional and metabolic adaptations of animal models to aminoacid supplementation with particular attention to the modulation of the autophagic process. I have also been working on the effects (proliferation, vitality, autophagy) of selected aminoacid mixtures on cancer cells.

2014-2018: Formal Agreement with the company Determinants of Metabolism Research Lab (headquarter in Castel San Giovanni, PC) for the development of in vitro and in vivo experimental protocols for the study of the metabolic effects of the supplementation of amino acid mixtures, made of essential and non-essential amino acids, to translate their use as a nutritional supplement for cancer patients.

2018-to date: I have been working on the molecular processes involved in the development of age-related macular degeneration (AMD) in rat models and the potential therapeutic approaches.

2022-to date: Formal Agreement with the Bone Physiopathology Research Unit, Translational Pediatrics and Clinical Genetics Research Division, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy, to study the role of the mitochondrial E3 ubiquitin protein ligase 1 (MUL1) in osteosarcoma.

## RESPONSIBILITY IN ACADEMIC ACTIVITIES

2004-2008: Member of the Budget Board of the Biotechnology Faculty, University of L'Aquila, Italy.

2008-2012: Elected as Assistant Professor's Representative at the Department Board "Giunta" of the Department of Experimental Medicine, University of L'Aquila, Italy.

2011-2012: Member of the panel (comma 5 art. 2 Legge n. 240/2010) for the revision of the Statute of the University of L'Aquila, Italy.

2012-2014: Elected as Assistant Professor's Representative at the Department Board "Giunta" of the Department of Biotechnological and Applied Clinical Sciences, University of L'Aquila, Italy.

2012- to date: Member of the Teaching Council "Consiglio di Area Didattica (CAD)" and Member of the Teaching Committee "Commissione Didattica" of the Biotechnology courses, University of L'Aquila, Italy.





2018-2023: Degree Program Coordinator, Master's Degree in Molecular and Cellular Biotechnologies, University of L'Aquila

2023-to date: member of the Quality Assurance Group of the Master's Degree in "Medical and Pharmaceutical Biotechnologies", University of L'Aquila

2023-2026: member of the Service Inspection Committee (Commissione per il Servizio Ispettivo di Ateneo per il personale docente e ricercatore) of the University of L'Aquila

### EDITORIAL BOARD, EDITORIAL ACTIVITIES,

2019-2021: Guest Associate Editor, Frontiers in Cell and Developmental Biology (for Signaling)

dal 2017: Review Editor, Frontiers in Cell and Developmental Biology (for Molecular and Cellular Pathology)

Reviewer, Molecular and Cellular Endocrinology

Reviewer, Journal of Cellular Physiology

Ad hoc Grant Reviewer per istituzioni italiane e straniere

Co-author "Textbook of Aging Skin" 2nd Edition, doi 10.1007/978-3-642-27814-3\_136-1, and doi: 10.1007/978-3-662-47398-6\_135, Springer-Verlag Berlin Heidelberg 2015

#### SOCIETY MEMBERSHIP

International Society for Interferon and Cytokine Research, ISICR (1992-1998)

International Cytokines Society, ICS (1995-2013)

International Cytokine and Interferon Society (formerly ISICR and ICS) dal 2013

# SCIENTIFIC ACHIEVEMENTS BIBLIOMETRIC INDICATORS

**Scopus Author ID:** 6603352760 https://orcid.org/0000-0003-1014-297X (data source: Scopus)

Hirsch (H) Index 22, i10-Hirsch (H) 36, Total number of quotes 1563

### SELECTED PUBLICATIONS

- Role of the Mitochondrial E3 Ubiquitin Ligases as Possible Therapeutic Targets in Cancer Therapy.
  - Di Gregorio J, Appignani M, Flati V.
  - (2023) Int J Mol Sci. 24(24):17176. doi: 10.3390/ijms242417176. Review.
- 2. Anti-Obesity and Anti-Inflammatory Effects of Novel Carvacrol Derivatives on 3T3-L1 and WJ-MSCs Cells.
  - Cacciatore I, Spalletta S, Di Rienzo A, **Flati V**, Fornasari E, Pierdomenico L, Del Boccio P, Valentinuzzi S, Costantini E, Toniato E, Martinotti S, Conte C, Di Stefano A, Robuffo I.
  - (2023) Pharmaceuticals (Basel). 16(3):340. doi: 10.3390/ph16030340.
- 3. New Insights into Dose-Dependent Effects of Curcumin on ARPE-19
  - Carozza G, Tisi A, Capozzo A, Cinque B, Giovannelli A, Feligioni M, **Flati V**, Maccarone R.
  - (2022) Int J Mol Sci. 23(23):14771. doi: 10.3390/ijms232314771.
- mTOR Signaling in BDNF-Treated Guinea Pigs after Ototoxic Deafening. Tisi A, Ramekers D, Flati V, Versnel H, Maccarone R. (2022) Biomedicines. 10(11):2935. doi: 10.3390/biomedicines10112935.
- 5. Antioxidant Properties of Cerium Oxide Nanoparticles Prevent Retinal





Neovascular Alterations In Vitro and In Vivo.

Tisi A, Pulcini F, Carozza G, Mattei V, Flati V, Passacantando M, Antognelli C, Maccarone R, Delle Monache S.

(2022) Antioxidants (Basel). 11(6):1133. doi: 10.3390/antiox11061133.

- 6. Mitochondrial and metabolic alterations in cancer cells. Di Gregorio J. Petricca S. Iorio R. Toniato E. Flati V. (2022) Eur J Cell Biol. 101(3):151225. doi: 10.1016/j.ejcb.2022.151225. Review.
- 7. Characterization of SARS-CoV-2 Entry Factors' Expression in Corneal and Limbal Tissues of Adult Human Donors Aged from 58 to 85. Tisi A, Zerti D, Genitti G, Vicentini MT, Baccante M, Flati V, Maccarone
  - (2022) J Ocul Pharmacol Ther. 38(1):56-65. doi: 10.1089/jop.2021.0085.
- 8. Editorial: The Dynamic Interplay Between Nutrition, Autophagy and Cell Metabolism.

Flati V, Corsetti G, Papa S.

(2021) Front Cell Dev Biol. 9:684049. doi: 10.3389/fcell.2021.684049.

- 9. How Can Malnutrition Affect Autophagy in Chronic Heart Failure? Focus and Perspectives.
  - Corsetti G, Pasini E, Romano C, Chen-Scarabelli C, Scarabelli TM, Flati V, Saravolatz L, Dioguardi FS.
  - (2021) Int J Mol Sci. 22(7):3332. doi: 10.3390/ijms22073332. Review.
- 10. The Epithelial-to-Mesenchymal Transition as a Possible Therapeutic Target in Fibrotic Disorders.
  - Di Gregorio J, Robuffo I, Spalletta S, Giambuzzi G, De Iuliis V, Toniato E, Martinotti S, Conti P, Flati V.
  - (2020) Front Cell Dev Biol. 21;8:607483. doi: 10.3389/fcell.2020.607483.
- 11. Up-regulation of pro-angiogenic pathways and induction of neovascularization by an acute retinal light damage.
  - Tisi A, Parete G, Flati V, Maccarone R.
  - (2020) Sci Rep. 14;10(1):6376. doi: 10.1038/s41598-020-63449-y
- 12. Influence of Diets with Varying Essential/Nonessential Amino Acid Ratios on Mouse Lifespan.
  - Romano C, Corsetti G, Flati V, Pasini E, Picca A, Calvani R, Marzetti E, Dioquardi FS.
  - (2019) Nutrients. 18;11(6). pii: E1367. doi: 10.3390/nu11061367.

L'AQUILA, 19/03/2024