

ALLEGATO B

Decreto Rettore Università di Roma “Sapienza” n.1661/2024 del 09/07/2024. Procedura valutativa di chiamata per 1 posizione di prima fascia per il GSD 06/MEDS-02 (EX SC 06/A2) - settore scientifico disciplinare MEDS-02/A (EX SSD MED/04) presso il dipartimento di Medicina Molecolare-Facoltà di Farmacia e Medicina.

Curriculum Vitae

Rome, 19th July 2024

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
	2020	University/MIUR	Superamento dell’ abilitazione Scientifica Nazionale Prima Fascia. Settore concorsuale 06/A2- Patologia Generale e Patologia Clinica. Validita’ dal 10/07/2020 al 10/07/2031
	2021	University/MIUR	Superamento dell’ abilitazione Scientifica Nazionale Prima Fascia. Settore concorsuale 06/N1-Scienze delle Professioni Sanitarie e Tecnologie Mediche. Validita’ dal 31/05/2021 al 31/05/2032.
PhD	2001	“Sapienza” University	PhD in Immunology
Post-graduate studies	1994	“Sapienza” University	Licence in Biology
University graduation	1991	“Sapienza” University	Master degree in Biology, with honors

Part III – Appointments

IIIA – Academic Appointments [Years, Institutions, Positions]

Start	End	Institution	Position
2015	At present	“Sapienza” University Dept. of Molecular Medicine	Associate Professor (MEDS-26A EX SSD MED/46)
2007	2015	“Sapienza” University Dept. of Molecular Medicine	University Researcher in General Pathology (SSD MED/04)
2002	2007	“Sapienza” University Dept. Experimental Medicine	Researcher (“assegnista di ricerca”) (principal research investigator; teaching, training and supervision of students)
2002	At present	“Sapienza” University	Committee member for the evaluation of students (“Commissioni d’Esame di Profitto”) (see Teaching Activities for a list of the Courses)
2008	At present	“Sapienza” University	Committee member for the evaluation of PhD students (PhD school in Innovation in Immuno mediated and Hematological Disorders)

IIIB – Other Appointments (in Italy and abroad)

Start	End	Institution	Position
2000	2002	Microbiology and Immunology Department, University of California, San Francisco (UCSF, CA, USA)	Research fellow
1998	2000	“Sapienza” University Dept. Experimental Medicine	PhD student
1995	1998	“Regina Elena National Cancer Institute Laboratory of Physiopathology	Research Fellow/PhD student
1992	1995	ENEA Research Center, Laboratory of Molecular Biology	Research fellow
1990	1991	ENEA Research Center, Laboratory of Immunology.	Graduate student

Part IV – Teaching experience

Years	Institution	Lecture/Course
A.Y. 2007-2008 at present	“Sapienza” University	Course in <i>Immunology</i> (SSD MED/04) Degree in Biomedical Technician (Tecnico di Laboratorio Biomedico-Incardinamento: 2007). Faculty of Medicine and Psychology – Sant’Andrea Hospital.
A.Y. 2008-2009 at present	“Sapienza” University	Course in <i>Immunology</i> (SSD MED/04). Degree in Registered Nurse (Infermieristica). Faculty of Medicine and Psychology at Sant’Andrea Hospital.
A.Y. 2008-2009 at present	“Sapienza” University	Course in <i>Immunology</i> (SSD MED/04). Degree in Registered Nurse (Infermieristica). Faculty of Medicine and Psychology at San Pietro Hospital.
A.Y. 2016-2017 at present	“Sapienza” University	Course in <i>Immunology and Immunopathology</i> (SSD MED/04) School of Medicine , Faculty of Medicine and Psychology at Sant’Andrea Hospital.
A.Y. 2014-2015 at 2018-2019	“Sapienza” University	Course in <i>Immunology</i> (SSD MED/04). Degree in Registered Nurse (Infermieristica) Faculty of Medicine and Psychology at ASL RMB, Sandro Pertini Hospital.
A.Y. 2016-2017 at 2018-2019	“Sapienza” University	Course in <i>Immunology</i> (SSD MED/04). Degree in Registered Nurse (course in English) Faculty of Medicine and Psychology, at Sant’Andrea Hospital.
A.Y. 2018-2019 at present	“Sapienza” University	Course in <i>Technical Sciences Laboratory Medicine</i> (SSD MED/46). Degree in Registered Nurse (Infermieristica canale B), Faculty of Medicine and Dentistry, at Policlinico Umberto I.
A.Y. 2018-2019 at present	“Sapienza” University	Course in <i>Technical Sciences Laboratory Medicine</i> (SSD MED/46). Degree in Registered Nurse (Infermieristica canale D) Faculty of Medicine and Dentistry, at Policlinico Umberto I.
A.Y. 2018-2019 at present	“Sapienza” University	Course in <i>Technical Sciences Laboratory Medicine</i> (SSD MED/46). Degree in Registered Nurse (Infermieristica canale L), Faculty of Medicine and Dentistry, at San Giovanni Hospital.
A.Y. 2002-2003 at present	“Sapienza” University	Supervision and tutorship of several university and PhD students
A.Y. 2000-2002	Microbiology Department, University of California, San Francisco (USCF, CA, USA)	Supervision and of several university and PhD students

Part V - Society memberships, Awards and Honours

Year	Title
2011	Award “Sapienza Ricerca”. Macroarea B. Research Title: “Killers and beyond: NK-cell-mediated control of adaptive immune response”
1995-1998	AIRC (Associazione Italiana Ricerca sul Cancro) Fellowship
2000-2002	AICF (American Italian Cancer Foundation) Fellowship
Since 2005	Member of the Italian Society of Immunology, Clinical Immunology and Allergology (SIICA)

Part Vc - - Invitation to Congresses/Courses

Year	Congress/Course	Role
2004	8 th Annual Meeting of the Society of Natural Immunity – NH Leeuwenhordt (The Netherlands)	Oral presentation
2005	Accademia Medica di Roma	Invited Speaker
2006	1 st Contributions to Transplantation (Barcellona, Spain)	Invited Speaker
2008	XXIX congress of the Italian Society of Pathology/American Society for Investigative Pathology – University of Rende - Italy	Oral presentation
2018	BD Workshop-Extracellular Vesicles Extreme Versatility- Auditorium della 1° Clinica Medica - Roma	Invited Speaker
2021	III International AICC Exosome Meeting – Cell to Cell delivery in cancer and therapy: a matter of carries and messages	Scientific and Organising Committee

Part Vd – Editorial activity

2020- at present	Frontiers in Immunology section NK and Innate Lymphoid Cell Biology	Associate Editor
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Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title, function [PI or I]	Funding Agency/Program	Grant value
2009-2013	Role of the lymphatic system in inflammatory bowel disease pathogenesis: a novel therapeutic target (PI) . GR-2007-683938.	MIUR	120.000€
2011-2015	Sviluppo di molecole capaci di modulare vie metaboliche intracellulari redox-sensibili per la prevenzione e cura di patologie infettive, tumorali e loro delivery attraverso piattaforme nanotecnologiche (I) . PON01_0182	PON	13.381.800€

2014-2017	Role of BM Microenvironment in shaping NK cell maturation and effector functions in Multiple Myeloma (I) .	AIRC	530.000€
2014-2019	Tecnologie convergenti per aumentare la sicurezza di farmaci e vaccini (Co-PI) . CTN01_00177_962865	MEDINTECH	180.000€
2014-2020	TITAN - Nanotecnologie per l'immunoterapia dei tumori (I) . PONARS01_00906	PON	470.000€
2018-2020	Immunotherapy and cancer-derived exosomes: interplay between damage associated patterns and Natural Killer cells (PI) . RM1181642771A58E	Sapienza University/Progetti Medi	10.000€
2019-2021	Strengthening the cGAS/STING pathway to promote Natural Killer cell-mediated clearance of multiple Myeloma cells (PI) . RG11916B7F06EC21	Sapienza University/Progetti Grandi	34.000€
2021-2023	Sviluppo di Lab-on-chip con nanoparticelle lipidiche per la quantificazione della carica virale di Sars-CoV-2 da tampone nasale (Sars-on-chip) (I) . A0375-2020-36604	POR FESR (Regione Lazio)	58.794€
2022-2024	Exploiting type I interferons-induced pathway to revert the immunosuppressive environment of multiple myeloma and boost NK cell-mediated immunosurveillance (PI) . RG12218166D295B0	Sapienza University/Progetto Grandi	73.890€
2022-2025	Targeting nucleotide/nucleosides and their receptors for immunotherapy responses against tumors -Spoke 5-WP2-TASK2.2. (PI)	European Union - NextGenerationEU through the Italian Ministry of University and Research under PNRR - M4C2-I1.3 Project PE_00000019 HEAL ITALIA	117.000 €
2023-2025	Development of a biophotonic instrumentation to detect and quantify different types of microplastics present in aquatic ecosystems and evaluation of risks to human health. P2022S9SLC (I)	MIUR/PRIN-PNRR	149.844€

Part VII – Research Activities

Keywords

Short Description

Innate immunity	In the last 10 years, Alessandra Zingoni's research activity has been mainly focused on tumor immunology and pointed to understand the complex interactions between immune NK cells and Multiple Myeloma cancer cells in order to design more tailored and effective immunotherapies and these studies have been mostly performed using <i>ex vivo</i> multiple myeloma patient's samples. In particular She has been studying the mechanisms responsible of anti-tumor NK cell activity in response to chemotherapy. Furthermore, She is currently investigating the immunomodulatory action of multiple myeloma-derived exosomes and their potential role as biomarkers associated to multiple myeloma progression. She is collaborating with several groups in order to study the immunoregulatory role of exosome and microvesicles in different pathological conditions including autoimmunity, infections and allergic reactions. She is also studying the role of artificial liposome nanoparticle as vectors to deliver DNA/RNA or drugs in cancer patients and their impact on immune cells. Some of the activities were done in collaboration with many groups in Italy and abroad: M.T. Petrucci (University of Rome "Sapienza"), G. Caracciolo (University of Rome "Sapienza"); L. Masuelli (University of Rome "Sapienza"); D.Fuerst (University of Ulm, Germany); A. Ludwig (University of Ulm, Germany); L.L. Lanier (University of San Francisco, CA); M.Tripodi (University of Rome, Sapienza); J.Hiscott (Pasteur Institute Italia-Cenci Bolognetti Foundation); M. Ardolino (University of Ottawa, Canada); A. Achour (Karolinska Institutet, Stockholm, Sweden).
NK cells	
Activating receptors and ligands	
Multiple Myeloma	
Immunotherapy	
Extracellular vesicles	
Nanoparticles	

Part VIII – Summary of Scientific Achievements

Number of citations and *h*-index were derived from the website <http://www.scopus.com>

VIII.1 (TOTAL)

Product type	Number	Data Base	Year/Start	End
Papers [international]	78	http://www.scopus.com/	1995	2024
Papers [national]	-	-	-	-
Books [scientific]	1	http://www.scopus.com/	2010	-
Books [teaching]	-	-	-	-

VIII.1a (TOTAL)

Total Impact factor	543,1848
Average impact factor per product	6,96
Total Citations	4582
Average Citations per Product	58,7
Hirsch (H) index	38
Normalized H index*	1,31

*H index versus/divided by the academic seniority (calculated from the first publication date)

VIII.2 (Last ten years)

Product type	Number	Data Base	Year/Start	End
Papers [international]	55	http://www.scopus.com/	2014	2024
Papers [national]	-	-	-	-
Books [scientific]	.		-	-
Books [teaching]	-	-	-	-

VIII.2b (Last ten years)

Total Impact factor	398,1638
Average Impact Factor per product	7,23
Total Citations	1922
Average Citations per Product	34,9
Hirsch (H) index	27
Normalized H index*	0,93

*H index versus/divided by the academic seniority (calculated from the first publication date)

VIII.3 Parametri ANVUR per Professore prima fascia (dati ricavati dalla piattaforma IRIS)

Pubblications last 10 years (2014-2024)	55 (soglia 24)
Citations last 15 years (2009-2024)	2705 (soglia 750)
H-index last 15 years (2009-2024)	29 (soglia 15)

Part IX – Selected Publications

List of the publications selected for the evaluation (maximum No. 16). For each publication report: authors, title, reference data (journal, year, volume, pages), journal IF (if applicable), citations and press/media release (if any).

Journal IF for each publication was calculated based on the publication date.

Number of citations were derived from the website <http://www.scopus.com>.

1. **Zingoni A**, Antonangeli F, Sozzani S, Santoni A, Cippitelli M, Soriani A. The senescence journey in cancer immunoediting. *Molecular Cancer*, 2024; 23(1):68. doi:10.1186/s12943-024-01973-5. **IF: 27.7; Citations:1.**
2. Vulpis, E., Loconte, L., Cassone, C., Antonangeli F, Caracciolo G, Masuelli L, Fazio F, Petrucci MT, Fionda C, Soriani A, Cerboni C, Cippitelli M, Santoni, A., **Zingoni, A.** Cross-Dressing of Multiple Myeloma Cells Mediated by Extracellular Vesicles Conveying MIC and ULBP Ligands Promotes NK Cell Killing. *International Journal of Molecular Sciences*, 2023; 24(11):9467. doi: 10.3390/ijms24119467. **IF= 4.9; Citations:2.**
3. Vulpis E, Loconte L, Peri A, Molfetta R, Caracciolo G, Masuelli L, Tomaipitnca L, Peruzzi G, Petillo S, Petrucci MT, Fazio F., Simonelli L, Fionda C, Soriani A, Cerboni C, Cippitelli M, Paolini R, Bernardini G, Palmieri G, Santoni A, **Zingoni A.** Impact on NK cell functions of acute versus chronic exposure to extracellular vesicle-associated MICA: Dual role in cancer immunosurveillance. *Journal of Extracellular Vesicles*, 2022; e12176. doi: 10.1002/jev2.12176. **IF: 16; Citations:27.**
4. **Zingoni A.**, Banales J. PIGR-enriched circulating vesicles contributes to hepatocellular carcinoma aggressiveness. *Journal of Hepatology*, 2022; 76:768-770. doi:10.1016/j.jhep.2022.02.001; **IF: 25.7; citations: 1.**
5. Hasim MS, Marotel M, Hodgins JJ, Vulpis E, Makinson OJ, Asif S, Shih HY, Scheer AK, MacMillan O, Alonso FG, Burke KP, Cook DP, Li R, Petrucci MT, Santoni A, Fallon PG, Sharpe AH, Sciumè G, Veillette A, **Zingoni A**, Gray DA, McCurdy A, Ardolino M. When killers become thieves: Trogocytosed PD-1 inhibits NK cells in cancer. *Science Advance*, 2022; 8(15):eabj3286. doi: 10.1126/sciadv.abj3286. **IF:13.6; Citations:38.**
6. Giulimondi F, Vulpis E, Digiacomo L, Giuli MV, Mancusi A, Capriotti AL, Laganà A, Cerrato A, Zenezini Chiozzi R, Nicoletti C, Amenitsch H, Cardarelli F, Masuelli L, Bei R, Screpanti I, Pozzi D, **Zingoni A**, Checquolo S, Caracciolo G. Opsonin-Deficient Nucleoproteic Corona Endows UnPEGylated Liposomes with Stealth Properties In Vivo. *ACS Nano*, 2022;16(2):2088-2100. doi: 10.1021/acsnano.1c07687. **IF:17.1 Citations. 35**
7. Soriani A, Vulpis E, Cuollo L, Santoni A, **Zingoni A.** Cancer extracellular vesicles as novel regulators of NK cell response. *Cytokine Growth Factor Rev.* 2020;51:19-26. doi: 10.1016/j.cytogfr.2019.11.007. **IF: 7.638 Citations:14.**
8. Giulimondi F, Digiacomo L, Pozzi D, Palchetti S, Vulpis E, Capriotti AL, Chiozzi RZ, Laganà A, Amenitsch H, Masuelli L, Peruzzi G, Mahmoudi M, Screpanti I, **Zingoni A**, Caracciolo G. Interplay of protein corona and immune cells controls blood residency of liposomes. *Nat Commun.* 2019; 10(1):3686. doi: 10.1038/s41467-019-11642-7. **IF: 12.121 Citations:162.**
9. **Zingoni A**, Molfetta R, Fionda C, Soriani A, Paolini R, Cippitelli M, Cerboni C, Santoni A. NKG2D and Its Ligands: "One for All, All for One". *Front Immunol.* 2018; DOI:10.3389/fimmu.2018.00476. **IF:4.76; Citations:166.**
10. Vulpis E, Stabile H, Soriani A, Fionda C, Petrucci MT, Mariggio' E, Ricciardi MR, Cippitelli M, Gismondi A, Santoni A, **Zingoni A.** Key Role of the CD56_{low}CD16_{low} Natural Killer Cell Subset in the Recognition and Killing of Multiple Myeloma Cells. *Cancers (Basel).* 2018; 10(12). pii: E473. doi: 10.3390/cancers10120473. **IF:6.162 Citations: 27.**
11. **Zingoni A.**, Vulpis E., Cecere F, Amendola M.G., Fuerst D., Saribekyan T., Achour A., Sandalova T., Nardone I., Peri A, Soriani A., Fionda C., Mariggio' E., Petrucci M.T., Ricciardi M.R., Mytilineos J., Cippitelli M., Cerboni C., Santoni A. MICA-129 dimorphism and soluble MICA are associated with the progression of Multiple Myeloma. *Front. Immunol.* 2018; 9:926. doi: 10.3389/fimmu.2018.00926. **IF:4.76 Citations: 35.**

12. Vulpis E, Cecere F, Molfetta R, Soriani A, Fionda C, Peruzzi G, Caracciolo G, Palchetti S, Masuelli L, Simonelli L, D'Oro U, Abruzzese MP, Petrucci MT, Ricciardi MR, Paolini R, Cippitelli M, Santoni A, **Zingoni A**. Genotoxic stress modulates the release of exosomes from multiple myeloma cells capable of activating NK cell cytokine production: role of HSP70/TLR2/NF-kB axis. *Oncoimmunology*. 2017; 6(3):e1279372. doi: 10.1080/2162402X.2017.1279372. **IF: 5.963 Citations: 100.**
13. Bernardini G, Vulpis E, Bonanni V, Stabile H, Petrucci MT, Ricciardi MR, Gismondi A, Santoni A, **Zingoni A**. High expression levels of IP10/CXCL10 are associated with modulation of the natural killer cell compartment in multiple myeloma. *Leukemia and Lymphoma*. 2017; 58(10):2493-2496. Doi:10.1080/10428194.2017.1295144. **IF 2.644;Citations:7.**
14. **Zingoni A**, Fionda C, Borrelli C, Cippitelli M, Santoni A, Soriani A. Natural Killer Cell Response to Chemotherapy-Stressed Cancer Cells: Role in Tumor Immunosurveillance. *Front Immunol*. 2017; 8 :1194. doi: 10.3389/fimmu.2017.01194. **IF: 5.511 Citations: 100.**
15. **Zingoni A**, Cecere F, Vulpis E, Fionda C, Molfetta R, Soriani A, Petrucci MT, Ricciardi MR, Fuerst D, Amendola MG, Mytilineos J, Cerboni C, Paolini R, Cippitelli M, Santoni A. Genotoxic Stress Induces Senescence-Associated ADAM10-Dependent Release of NKG2D MIC Ligands in Multiple Myeloma Cells. *J Immunol*. 2015; 195:736-48. Doi: 10.4049/jimmunol.1402643. **IF. 4.985; Citations: 86.**
16. Ponzetta A, Benigni G, Antonangeli F, Sciumè G, Sanseviero E, **Zingoni A**, Ricciardi MR, Petrucci MT, Santoni A, Bernardini G. Multiple Myeloma Impairs Bone Marrow Localization of Effector Natural Killer Cells by Altering the Chemokine Microenvironment. *Cancer Res*. 2015;75:4766-77. **IF. 8.556;Citations:87.**

Rome, 19th July 2024

Sincerely,

Alessandra Zingoni