

Curriculum



Nome Name:	Elena
Cognome Surname:	ADINOLFI

ORCID:	0000-0001-8129-9929
Scopus Author ID:	6603307194
WOS Author ID:	F-9169-2010
Sito WEB WEB site:	n.d.

POSIZIONE PROFESSIONALE ATTUALE / CURRENT PROFESSIONAL POSITION:

Posizione attuale Current position:	In servizio
Qualifica Qualification:	Professore Associato (L. 240/10)
Ateneo/Ente/Azienda University/Institution/Company:	Università degli Studi di FERRARA
Nazione Ateneo/Ente/Azienda University/Institution/Company Country:	ITA
Anno inizio Start Year:	2019
Anno fine End Year:	n.d.

PRECEDENTI ESPERIENZE LAVORATIVE (ULTIMI 10 ANNI) / PREVIOUS WORK EXPERIENCE (LAST 10 YEARS):

Qualifica Qualification:	Ricercatore confermato
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Ateneo/Ente/Azienda University/Institution/Company	Università degli Studi di FERRARA
Posizione Sede Lavorativi (indicare Nazione e Città) Workplace Location (specify Country and City):	Ferrara, FE, Italia
Anno inizio Start Year:	2011
Anno fine End Year:	2019
Descrizione Description:	Ricercatore confermato a tempo Pieno in patologia Clinica

LINGUE / LANGUAGES:

Lingua Language:	Inglese
Scrittura Writing:	C1
Comunicazione Communication:	C1

AREA/SETTORE SCIENTIFICO-DISCIPLINARE / AREA/SECTOR SCIENTIFIC-DISCIPLINARY

Area scientifico-disciplinare Area scientific-disciplinary:	Scienze mediche
Area scientifico-disciplinare codice Area scientific-disciplinary code:	06
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-Patologia clinica
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-MEDS-02/B

DESCRIZIONE DEI PRINCIPALI RISULTATI SCIENTIFICI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 PUBBLICAZIONI) / DESCRIPTION OF THE MAIN SCIENTIFIC RESULTS ACHIEVED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 PUBLICATIONS):

Descrizione Description:	<i>In the last ten years, I have been studying the role of extracellular ATP and its receptor P2X7 in cancer and immunity. I have been leading or participating in studies demonstrating a role for P2X7 and extracellular ATP in acute myeloid leukemia, neuroblastoma, melanoma, glioblastoma, and colon carcinoma. As the last author, I have published two highly influential review articles in the field, one in Nature Reviews Cancer and another in Oncogene, which the</i>
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	<p><i>journal's editors selected as one of the year's best papers. More recently, my research group has published a series of key studies demonstrating the crucial role of the P2X7 receptor in the crosstalk between tumor and immune cells, chemotherapy resistance, and the release of vesicles by tumor cells. These findings have been published in high-impact journals such as Cancer Research, Oncogene, and Cell Death & Disease. My research group was the first to discover and characterize extracellular vesicles and exosomes released upon P2X7 stimulation, demonstrating, by next-generation sequencing experiments, that receptor activation causes a substantial pro-metastatic shift in the miRNA content of cancer-derived EV. I have published 86 studies in peer-reviewed international journals, with an H index of 41 and 6724 citations, according to Scopus, on 13-5-25. In 2022, colleagues elected me as the Action Leader of a European Cooperation in Science and Technology (COST) Action titled "P2X Receptors as Therapeutic Opportunity" (PRESTO) funded by the European Union. Since 2023, I have been the Coordinator of an ERA-NET TRANSCAN-3 project titled "New immunotherapies targeting the key purinergic checkpoints in the tumor microenvironment." I lead a National PRIN project focused on studying P2X receptors in inflammatory bowel diseases, and I am a member of two PNRR-funded Consortia: ETERNA and TINY. Over the last ten years, I have been responsible for international and national project grants totaling about 3 million euros. The central contribution of my studies on purinergic signaling was recognized by colleagues of the French, Brazilian, and Chinese Purine Club Scientific Societies, who invited me to give plenary lectures on the subject in the last two years, and by COST Association that asked me to present our findings in an event dedicated to all COST Actions working in cancer.</i></p>
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PUBBLICAZIONI / PUBLICATIONS:

Anno della pubblicazione Year of publication:	2021
Citazione Citation:	Pegoraro A., De Marchi E., Ferracin M., Orioli E., Zanoni M., Bassi C., Tesei A., Capece M., Dika E., Negrini M., Di Virgilio F., Adinolfi E. (2021). P2X7 promotes metastatic spreading and triggers release of miRNA-containing exosomes and microvesicles from melanoma cells. CELL DEATH & DISEASE, vol. 12, p. 1088-1-1088-12, ISSN: 2041-4889, doi: 10.1038/s41419-021-04378-0

Anno della pubblicazione Year of publication:	2020
Citazione Citation:	Pegoraro A., Orioli E., De Marchi E., Salvestrini V., Milani A., Di Virgilio F., Curti A., Adinolfi E. (2020). Differential sensitivity of acute myeloid leukemia cells to daunorubicin depends on P2X7A versus P2X7B receptor expression. CELL DEATH & DISEASE, vol. 11, p. 876-1-876-12,

	ISSN: 2041-4889, doi: 10.1038/s41419-020-03058-9
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Anno della pubblicazione Year of publication:	2018
Citazione Citation:	Di Virgilio, Francesco, SARTI, Alba Clara, Falzoni, Simonetta, de Marchi, Elena, Adinolfi, Elena (2018). Extracellular ATP and P2 purinergic signalling in the tumour microenvironment. NATURE REVIEWS CANCER, vol. 18, p. 601-618, ISSN: 1474-175X, doi: 10.1038/s41568-018-0037-0

Anno della pubblicazione Year of publication:	2019
Citazione Citation:	De Marchi, Elena, Orioli, Elisa, Pegoraro, Anna, Sangaletti, Sabina, Portararo, Paola, Curti, Antonio, Colombo, Mario Paolo, Di Virgilio, Francesco, Adinolfi, Elena (2019). The P2X7 receptor modulates immune cells infiltration, ectonucleotidases expression and extracellular ATP levels in the tumor microenvironment. ONCOGENE, vol. 38, p. 3636-3650, ISSN: 0950-9232, doi: 10.1038/s41388-019-0684-y

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	De Marchi, Elena, Pegoraro, Anna, Turiello, Roberta, Di Virgilio, Francesco, Morello, Silvana, Adinolfi, Elena (2022). A2A Receptor Contributes to Tumor Progression in P2X7 Null Mice. FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol. 10, p. 876510-1-876510-10, ISSN: 2296-634X, doi: 10.3389/fcell.2022.876510

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	Vultaggio-Poma V., Falzoni S., Chiozzi P., Sarti A. C., Adinolfi E., Giuliani A. L., Sanchez-Melgar A., Boldrini P., Zanoni M., Tesi A., Pinton P., Di Virgilio F. (2022). Extracellular ATP is increased by release of ATP-loaded microparticles triggered by nutrient deprivation. THERANOSTICS, vol. 12, p. 859-874, ISSN: 1838-7640, doi: 10.7150/thno.66274

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Longo Y., Mascaraque S. M., Andreacchio G., Werner J., Katahira I., De Marchi E., Pegoraro A., Lebbink R. J., Kohrer K., Petzsch P., Tao R., Di Virgilio F., Adinolfi E., Drexler I. (2024). The purinergic receptor P2X7 as a modulator of viral vector-mediated antigen cross-presentation. FRONTIERS IN IMMUNOLOGY, vol. 15, p. 1360140-1-1360140-18, ISSN: 1664-3224, doi: 10.3389/fimmu.2024.1360140

Anno della pubblicazione	2015
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Year of publication:	
Citazione Citation:	ADINOLFI, Elena, CAPECE, Marina, FRANCESCHINI, Alessia, FALZONI, Simonetta, GIULIANI, Anna Lisa, Rotondo A, SARTI, Alba Clara, BONORA, Massimo, Syberg S, Corigliano D, PINTON, Paolo, Jorgensen NR, ABELLI, Luigi, Emionite L, Raffaghello L, Pistoia V, DI VIRGILIO, Francesco (2015). Accelerated Tumor Progression in Mice Lacking the ATP Receptor P2X7. CANCER RESEARCH, vol. 75, p. 635-644, ISSN: 0008-5472, doi: 10.1158/0008-5472.CAN-14-1259

Anno della pubblicazione Year of publication:	2015
Citazione Citation:	AMOROSO, Francesca Saveria, CAPECE, Marina, ROTONDO, Alessandra, Cangelosi D, FERRACIN, Manuela, FRANCESCHINI, Alessia, Raffaghello L, Pistoia V, Varesio L, ADINOLFI, Elena (2015). The P2X7 receptor is a key modulator of the PI3K/GSK3 β /VEGF signaling network: evidence in experimental neuroblastoma. ONCOGENE, vol. 34, p. 5240-5251, ISSN: 0950-9232, doi: 10.1038/onc.2014.444

Anno della pubblicazione Year of publication:	2017
Citazione Citation:	Anna Pegoraro, Daria Bortolotti, Mariangela Sicolo, Elisabetta Caselli, Dario Di Luca, Francesco Di Virgilio, Roberto Marci, Roberta Rizzo, Elena Adinolfi (2017). Role of P2X7 polymorphisms in idiopathic infertility and HHV-6A infection. PURINERGIC SIGNALLING, vol. 13, p. 676, ISSN: 1573-9538

DESCRIZIONE DEI PRINCIPALI PROGETTI DI RICERCA E PREMI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PRINCIPAL INVESTIGATOR O COORDINATORE LOCALE DI PROGETTI DI RICERCA COMPETITIVI NAZIONALI O INTERNAZIONALI, SIGNIFICATIVI PREMI CONSEGUITI PER LA PROPRIA ATTIVITÀ DI RICERCA)/ DESCRIPTION OF THE MAIN RESEARCH PROJECTS AND AWARDS AWARDED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 ACHIEVEMENTS, INCLUDING, FOR EXAMPLE, PRINCIPAL INVESTIGATOR OR LOCAL COORDINATOR OF NATIONAL OR INTERNATIONAL COMPETITIVE RESEARCH PROJECTS, SIGNIFICANT AWARDS AWARDED FOR YOUR RESEARCH ACTIVITY):

Descrizione Description:	<i>Ho coordinato diversi progetti di ricerca Internazionali e Nazionali conseguiti sulla base di bandi peer reviewed competitivi. i principali sono indicati in seguito</i>
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Descrizione Description:	2023-current. Project Coordinator for the TRANSCAN-ERA-NET Pur-Ther Consortium" New immunotherapies targeting the key purinergic checkpoints in the tumor microenvironment".
Descrizione Description:	2022-current. Action Leader of a European cooperation in science and Technology 21130 "P2X receptors as a therapeutic opportunity (PRESTO). Involving Scientists from around 40 different Countries.
Descrizione Description:	2020-current. Principal Investigator of an Italian Association for Cancer Research Grant (AIRC, 22837):" Targeting the P2X7 receptor and adenosinergic axis to cure and prevent colon cancer via inhibition of inflammationRole of extracellular ATP and its receptor P2X7 in melanoma cell to cell communication and progression"
Descrizione Description:	2023-current. Project Coordinator of a PRIN (Progetti di Rilevante interesse Nazionale) Project 2022 "Development of a COmbined P2X4/P2X7 targeting strategy to manage Inflammatory Bowel Diseases: a translational study (COPe-IBD)
Descrizione Description:	2016-2019. Principal Investigator of an Italian Association for Cancer Research Grant (AIRC, 16812): "Role of extracellular ATP and its receptor P2X7 in melanoma cell to cell communication and progression".
Descrizione Description:	2013-2016. Unit Coordinator of a Young Researchers Grant "Alessandro Liberati" of the Region Emilia Romagna "Development of new therapies for acute leukemias: biological aspects and clinical implications of immunogenic cancer cell death".

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SVILUPPO DI RETI E RELAZIONI SCIENTIFICHE NAZIONALI E INTERNAZIONALI (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PARTECIPAZIONE O ORGANIZZAZIONE DI CONVEGNI NAZIONALI E INTERNAZIONALI; CONTRIBUTI A CONSORZI DI RICERCA) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF DEVELOPMENT OF NATIONAL AND INTERNATIONAL SCIENTIFIC NETWORKS AND RELATIONS (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, PARTICIPATION OR ORGANIZATION OF NATIONAL AND INTERNATIONAL CONFERENCES; CONTRIBUTIONS TO RESEARCH CONSORTIA):

<p>Descrizione Description:</p>	<p><i>In 2022, colleagues elected me as the Action Leader of a European Cooperation in Science and Technology (COST) Action titled "P2X Receptors as Therapeutic Opportunity" (PRESTO) funded by the European Union. This network includes more than 350 scientists from European and extra-European Countries, including the USA, Australia, Brazil, China, and UK. Since 2023, I have been the Coordinator of an ERA-NET TRANSCAN-3 project in collaboration with colleagues from the Hamburg Eppendorf University in Germany, the Universities of Rouen and Nice in France, and the IRCSS Meldola in Italy. Additionally, I lead a National PRIN project focused on studying P2X receptors in inflammatory bowel diseases, and I am a member of two PNRR-funded Consortia: ETERNA and TINY. Over the last ten years, I have been responsible for international and national project grants totaling about 3 million euros. I owe much of my scientific career to the Italian Association for Cancer Research (AIRC), as I received my first funding as a young researcher in 2012, followed by two Investigator Grants in 2015 and 2019. As part of the PRESTO COST Action, I have organized five conferences and three training schools. I have also recently hosted the Second European Purine meeting held in Ferrara from 4-6 September 2024. My main collaborators include: Prof. Dariusz C. Gorecki MD, PhD, Professor of Molecular Medicine, Fulbright Alumnus, School of Pharmacy and Biomedical Sciences, University of Portsmouth, UK. Dr Sabina Sangaletti, PhD, Department of Experimental Oncology, Molecular Immunology Unit, Istituto Nazionale dei Tumori (IRCCS), Milan, Italy. Dr Valérie Vouret-Craviari, PhD, CNRS, Institute for Research on Cancer and Ageing (IRCAN) Nice, France Dr. Antonio Curti, MD Department of Experimental, Diagnostic and Specialty Medicine, Institute of Hematology L. and A. Seràgnoli, S. Orsola-Malpighi Hospital, University of Bologna, Italy Professor Sahil Adriouch, University of Rouen Normandy (URN), Department of Medicine and Pharmacy, Laboratory of Immunology and Biotherapies, Rouen, France Professor Pablo Pelegrin, PhD Scientific Deputy Director & Principal Investigator, BioMedical Research Institute of Murcia (IMIB-Arrixaca), University of Murcia, Hospital Virgen de la Arrixaca, E-30120 Murcia, Spain. Professor Katja Christina Weisel, MD University Medical Center Hamburg-Eppendorf, Center of Oncology, Hamburg, Germany Professor Peter Bannas, PhD, University Medical Center Hamburg-Eppendorf, Department of Diagnostic and Interventional Radiology and Nuclear Medicine Hamburg, Germany Professor Luca Antonioli, PhD, Unit of Pharmacology and Pharmacovigilance, Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy. Professor Diego Dal Ben, PhD, School of Pharmacy, Medicinal Chemistry Unit, University of Camerino, Camerino, Italy.</i></p>
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<p>Descrizione</p>	<p>Host of the Second European Purine Meeting "The purinergic paradigm: pushing the frontiers"</p>
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Description:	of Science", 4-6 September, 2024 Ferrara, Italy
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Descrizione Description:	Host of the First PRESTO COST Action meeting" P2X receptors as therapeutic targets" 8-9 February, 2023, Ferrara, Italy
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Descrizione Description:	Invited Plenary Speaker at the XIII, Meeting of the Brazilian Purine Club, Santos Brasil 5-8 November 2024
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Descrizione Description:	Member of the organizing Committee and Chair of a symposium entitled "Purinergic receptors and cancer" for the "First European Purine Meeting", 4-6 September, 2019, Santiago de Compostela, Spain
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Descrizione Description:	Chairman of a session and invited speaker at the International conference "Purines 2018 International - Basic and translational science on purinergic signaling and its components for a healthy and better world", 19-22 June 2018 Foz Do Iguacu, Brasil
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DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SUPPORTO ALLA COMUNITÀ SCIENTIFICA (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, RESPONSABILITÀ DI DIREZIONE DI COMITATI EDITORIALI; INCARICHI DI VALUTAZIONE DELLA RICERCA PRESSO ISTITUZIONI NAZIONALI O INTERNAZIONALI; RESPONSABILITÀ ISTITUZIONALI ALL'INTERNO DELL'ISTITUZIONE DI APPARTENENZA O DI ALTRE ISTITUZIONI) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF SUPPORT TO THE SCIENTIFIC COMMUNITY (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, MANAGEMENT RESPONSIBILITIES OF EDITORIAL COMMITTEES; RESEARCH EVALUATION ROLES AT NATIONAL OR INTERNATIONAL INSTITUTIONS; INSTITUTIONAL RESPONSIBILITIES WITHIN THE INSTITUTION OF AFFILIATION OR OTHER INSTITUTIONS):

Descrizione Description:	<i>I have been acting as a reviewer of numerous International and National Grants and PhDs, including: The Austrian Science Fund, Danish Center for Independent Research; The Wellcome Trust/DBT India Alliance Fellowship, National Science Center Poland, Estonian Research Council, Italian Ministry of Research FISR 2020 COVID-19, Italian Ministry of Education and Research, FIRB program for Young researchers; French Prestige PhD program, co-financed by the</i>
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	<i>EU Marie Curie Actions. PhD theses and candidates evaluator for Wollongong University, Australia, Scuola Internazionale Superiore di Studi Avanzati (SISSA) Trieste, Italy, Universities of Chieti, Salerno and Bologna, Italy. Italian Agency for the Evaluation of Universities and Research (ANVUR, VQR 2004-2010, 2011-2014, 2015-2019). POR FSE program of th Region Friuli Venezia Gulia, Italy. FAR projects University of Camerino, Italy.</i>
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Descrizione Description:	Associate Editor Frontiers in Cancer Cell Signalling a Section of Frontiers in Cell and Developmental Biology and Frontiers in Oncology
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Descrizione Description:	Associate Editor Frontiers in Pharmacology Experimental Pharmacology and Drug Discovery
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Descrizione Description:	Member of the Editorial boards of Purinergic Signalling, Frontiers in Immunology, Frontiers in Endocrinology, Frontiers in Molecular Neuroscience, Frontiers in Pharmacology of Ion Channels and Channelopathies, Medicinal Chemistry, Cancer Cell International
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Descrizione Description:	2022-2023. Editor of a Research Topic entitled "Therapy Resistance in Tumor Microenvironment: Metabolic Reprogramming and Purinergic Signaling" For Frontiers in Oncology
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Descrizione Description:	2019-2020. Editor of a Research Topic entitled "Emerging mechanism in purinergic signaling: from cell biology to therapeutic perspectives" for Frontiers in Pharmacology
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Descrizione Description:	2023-2024. Editor of a Special Issue entitled "The Role of P2X7 Receptor in Human Health and Diseases" for the International Journal of Molecular Sciences
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DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI VALORIZZAZIONE DELLE CONOSCENZE (CON ANNESSO ELENCO DI MASSIMO 3 RISULTATI, RELATIVI ALLA PARTECIPAZIONE DEL CANDIDATO ALLE ATTIVITÀ DI VALORIZZAZIONE DELLE CONOSCENZE) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF KNOWLEDGE VALORIZATION (WITH ATTACHED LIST OF MAXIMUM 3 RESULTS, RELATING TO THE CANDIDATE'S PARTICIPATION IN KNOWLEDGE VALORIZATION ACTIVITIES):

Descrizione Description:	<i>In 2021, I served as the national ambassador for AIRC's "Le Arance della Salute" campaign and was one of the faces of the association's most recent colorectal cancer prevention campaign in 2025. Since my early funding years, I have actively participated in various AIRC initiatives, including meetings with school groups and local organizations. I took part in the Festival Salute of one of the main Italian newspapers, La Repubblica.</i>
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Informazioni aggiornate alla data di candidatura 13-05-2025

Elena ADINOLFI

Il presente curriculum costituisce allegato e parte integrante dell'incarico sottoscritto