

CURRICULUM VITAE

ALESSIA LAMOLINARA

Personal information

Place and date of birth: Atri (TE), October 1, 1984
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Current Professional Position

Since June 3, 2024 **Full-time Researcher** (ai sensi e per gli effetti di cui all'art. 24 co. 3 lett. a) della L. 240/2010), S.C. 06/N1 Scienze delle Professioni Sanitarie e delle Tecnologie Mediche Applicate S.S.D. MED/46 Scienze Tecniche di Medicina di Laboratorio, at the Department of Neurosciences, Imaging, and Clinical Sciences, "G. d'Annunzio" University of Chieti-Pescara. Project: PNRR-PNC Ministero della Salute (ECOSISTEMA INNOVATIVO DELLA SALUTE Codice PNC-E3-2022-23683269).

Scientific Database IDs

Scopus Author ID: 55258307700
ORCID ID: orcid.org/0000-0002-7421-4509
Scopus Research ID: AAB-8833-2019

Scientific Output

Summary of Bibliometric Indices (Source: Scopus/WoS)

Total number of publications	47
Research Period	2012-2024
Total number of citations	1293
Total Impact factor	409.04
Average Impact factor per publication	8.70
H-Index	23

Educational Qualifications

April 10, 2017 **PhD** in “**Translational Medicine**”, School of Medicine, "G. d'Annunzio" University of Chieti-Pescara. Thesis: "Biomarkers of Therapeutic Response in HER2 Positive Breast Cancer". Supervisor: Prof. Antonio Marchetti.

January 17, 2012 **Licensed Biologist**, University of L'Aquila.

- March 25, 2011 **Master Degree in Medical Biotechnology** (*110 cum laude*), University of L'Aquila. Thesis: "Host PGE2: Primary Tumor Ally, Metastasis Spectator". Supervisors: Prof. Piero Musiani and Prof. Francesca Zazzeroni.
- July 24, 2007 **Bachelor Degree in Biotechnology** (*110 cum laude*), University of L'Aquila. Thesis: "Vaccini antitumorali". Supervisor: Prof. Edoardo Alesse.

Research and Training Activities

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- 2024-Present **Full-time Researcher** (ai sensi e per gli effetti di cui all'art. 24 co. 3 lett. a) della L. 240/2010), S.C. 06/N1 Scienze delle Professioni Sanitarie e delle Tecnologie Mediche Applicate S.S.D. MED/46 Scienze Tecniche di Medicina di Laboratorio at the Department of Neurosciences, Imaging, and Clinical Sciences, "G. d'Annunzio" University of Chieti-Pescara. Project: PNRR-PNC Ministero della Salute (ECOSISTEMA INNOVATIVO DELLA SALUTE Codice PNC-E3-2022-23683269).
- 2022-2024 **Principal Investigator and Winner of the "Boost for Independence" Grant** (ID 6694/2022), funded by "G. d'Annunzio" University of Chieti-Pescara and supported by the European Union's NextGenerationEU Program (MUR-Fondo Promozione e Sviluppo – DM 737/202 intervento g) D.R. n. 2183/2021). Project title: "Testing repurposed drugs candidates in pancreatic ductal adenocarcinomas: a multilevel in vitro/in vivo approach for improved therapy". Total funding: €100,000; Duration: 2 years.
- 2021-2024 **Research Fellowship**, Project Title: "Innovative therapeutic approaches to pancreatic cancer (drug repositioning, tumor microenvironment modulation, immune system role)". Institution: Laboratory of Prof. Manuela Iezzi, Department of Neurosciences, Imaging, and Clinical Sciences, "G. d'Annunzio" University of Chieti-Pescara.
- 2020-2021 **Research Scholarship**, Project Title: "Innovative therapeutic approaches to pancreatic cancer (drug repositioning, tumor microenvironment modulation, immune system role)". Institution: Laboratory of Prof. Manuela Iezzi, Department of Neurosciences, Imaging, and Clinical Sciences, "G. d'Annunzio" University of Chieti-Pescara.
- 2017-2020 **Research Fellowship**, Project Title: "Role of delta 16HER2 splice variant in tumor progression and response to biodrugs targeting HER2 receptor". Institution: Laboratory of Prof. Manuela Iezzi, Department of Neurosciences, Imaging, and Clinical Sciences, "G. d'Annunzio" University of Chieti-Pescara.
- 2017 **Postdoctoral Scholarship**, Project Title: "Retinal morphofunctional analysis in patients with diabetic maculopathy". Institution: Ophthalmology Unit directed by Prof. Leonardo Mastropasqua,

Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti-Pescara.

- 2014-2016 **PhD Researcher** in “Translational Medicine”. Project Title: "Biomarkers of therapeutic response in HER2 positive breast cancer". Institution: Laboratory of Prof. Antonio Marchetti, Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti-Pescara.
- 2012-2013 **Postgraduate Research Scholarship**, Project Title: "Breast cancer in a transgenic mouse model: tumor cell dissemination - early or late event". Institution: Laboratory of Immuno-Oncology directed by Prof. Piero Musiani, Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti-Pescara.
- 2010-2011 **Professional Training Internship** for the experimental thesis "Host PGE2: primary tumor ally, metastasis spectator" in the laboratory of Immuno-Oncology, directed by Prof. Piero Musiani, "G. d'Annunzio" University of Chieti-Pescara.

Teaching activities

- May 31, 2024: **A.D.E. (Elective Educational Activity)** titled "Modelli animali per lo studio dei tumori umani e loro applicazione in ambito biomedico", in the Medical Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2023/2024 (0.5 CTS).
- 2023-2024 **Expert of Oncological Nursing Sciences - Anatomic Pathology** (SSD MED/08) for the Nursing Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2023/2024.
- 2023-2024 **Expert of Technical Sciences of Anatomic Pathology** (SSD MED/46) for the Biomedical Laboratory Techniques Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2023/2024.
- 2023-2024 **Expert of Technical Sciences of Clinic Pathology** (SSD MED/46) for the Biomedical Laboratory Techniques Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2023/2024.
- 2022-2023 **Expert of Oncological Infermieristic Sciences - Anatomic Pathology** (SSD MED/08) for the Nursing Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2022/2023.
- 2022-2023 **Expert of Technical Sciences of Anatomic Pathology** (SSD MED/46) for the Biomedical Laboratory Techniques Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2022/2023.
- 2021-2022 **Expert of Oncological Infermieristic Sciences - Anatomic Pathology** (SSD MED/08) for the Nursing Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2021/2022.

2021-2022 **Expert of Technical Sciences of Anatomic Pathology** (SSD MED/46) for the Biomedical Laboratory Techniques Degree Program, "G. d'Annunzio" University of Chieti-Pescara, Academic Year 2021/2022.

Thesis Supervision and Student Assistance

2023 **Co-supervisor** of a **Medical Degree thesis** titled "Approcci terapeutici innovativi per il tumore pancreatico" at "G. d'Annunzio" University of Chieti-Pescara. Student: Pierluca Nobile, Academic Year 2022/2023.

2023 **Co-supervisor** of a **Medical Degree thesis** titled "Validazione preclinica di un antelmintico come farmaco riposizionato nella terapia del tumore del pancreas" at "G. d'Annunzio" University of Chieti-Pescara. Student: Federica D'Alessio, Academic Year 2022/2023.

2022 **Co-supervisor** of a **Medical Degree thesis** titled "La proteina adattatrice p140Cap induce una risposta immunitaria protettiva nel microambiente tumorale inibendo l'attivazione della β -catenina nelle cellule staminali tumorali" at "G. d'Annunzio" University of Chieti-Pescara. Student: Marika Bagordo, Academic Year 2021/2022.

2022 **Co-supervisor** of a **Medical Degree thesis** titled "Ruolo dell'ADCC, CDC, CDCC nella protezione indotta dal vaccino nella carcinogenesi mammaria HER2 dipendente" at "G. d'Annunzio" University of Chieti-Pescara. Student: Marika Moriano, Academic Year 2021/2022.

2022 **Co-supervisor** of a **Medical Degree thesis** titled "La vaccinazione contro arginase-1 induce immunità antitumorale e sinergizza con il blocco del checkpoint immunitario anti-PD1" at "G. d'Annunzio" University of Chieti-Pescara. Student: Claudia Boromei, Academic Year 2021/2022.

2022 **Co-supervisor** of a **Medical Degree thesis** titled "Vaccinazione basata su fagi contro HER2 nel carcinoma mammario HER2+" at "G. d'Annunzio" University of Chieti-Pescara. Student: Fabiana Ranieri, Academic Year 2021/2022.

2017-present **Supervisor** of Biomedical Laboratory Techniques Bachelor's degree internships, "G. d'Annunzio" University of Chieti-Pescara.

2016 **Tutorship** in the training and updating course for the use of animals at scientific and educational purposes, 2nd edition in IZSAM (Istituto Zooprofilattico G. Caporale Teramo).

National Awards for Research Activities

2022-2024 **First place** in the "Boost for Independence" competition, awarded by "G. d'Annunzio" University of Chieti-Pescara with support from the European Union's NextGenerationEU Program (MUR-Fund for Promotion and Development - DM 737/202). Project title: "Testing repurposed drug candidates in pancreatic ductal adenocarcinomas: a

multilevel in vitro/in vivo approach for improved therapy". Total funding: €100,000. The initiative evaluated young researchers with high scientific qualifications, aiming to promote innovative and ambitious research of international standard.

Professional Membership

2022-2024	Member of SipMet (Italian Society of Pathology and Translational Medicine)
2020	Member of SIC (Italian Society of Cancerology)
2017	Member of EACR (European Association for Cancer Research)

Editorial activities

2024-present	Topic Editor (Special Issue): - Frontiers in Oncology (Impact Factor 3.5). <i>Research Topic: ADC and CAR-T Cell-Based Advances in Neuroblastoma Therapy</i>
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Administrative, Organizational, and Service Responsibilities

2023-present	Scientific member of the OpBA (Animal Welfare Committee) at "G. d'Annunzio" University of Chieti-Pescara (Decree N. 1145/2023 – Protocol N. 0053795, July 31, 2023).
2019-2023	Scientific member of the OpBA (Animal Welfare Committee) at "G. d'Annunzio" University of Chieti-Pescara (Decree N. 886/2019 – Protocol N. 40722, June 10, 2019).

Participation in Training and Professional Courses

June 23, 2023	Event “La sperimentazione animale: tra ricerca e benessere”, organized by Asl 2 Abruzzo Lanciano Vasto Chieti at “G. d’Annunzio” University of Chieti-Pescara.
November 16, 2022	Course “PRATICHE AVANZATE DI ALLEVAMENTO, MODULO 23, DM 5 AGOSTO 2021 - 1 ^a Edizione”, IZLER.
November 11, 2022	Course “OPBA: FORMAZIONE PER I COMPITI, MODULI 25, 50, 51-1 ^a Edizione”, IZLER.
November 8, 2022	Course “ETICA E CONCEZIONE DEI PROGETTI, MODULI 9, 10, 11, DM 5 AGOSTO 2021 - Edizione Unica”, IZLER.
November 4, 2022	Course “BIOLOGIA E GESTIONE DEGLI ANIMALI DA LABORATORIO, MODULI 3.1, 4, 5, 6.1, 7. DM 5 AGOSTO 2021 RODITORI E LAGOMORFI - Edizione Unica”, IZLER.
October 21, 2022	Course “LEGISLAZIONE NAZIONALE ED ETICA LIVELLO 1, MODULI 1 E 2, DM 5 AGOSTO 2021 - Edizione Unica”, IZLER.

November 30, 2022	Course “Recognition of pain, suffering and distress and its application in the evaluation of severity of the procedures (species specific: mice and rats)”, IZSAM, Teramo.
July 13, 2022	Course “I bandi ERC: come scrivere una proposta progettuale di successo” organized by APRE, Agenzia per la Promozione della Ricerca Europea.
June 4, 2019	Course “L’ottimizzazione dell’organizzazione del disegno sperimentale: dai principi base della programmazione alla loro applicazione pratica”, IZSAM, Teramo.
April 20, 2018	Conference “Cancer Translational Research: from molecular biology to the real world setting”, Chieti organized by CINBO, Consorzio Interuniversitario Nazionale per la Bio-Oncologia.
March 22-23, 2018	The 1st International Workshop on Tumor evolution & heterogeneity of the cancer genome: challenges and opportunities for precision medicine, at Istituto Nazionale Tumori Regina Elena, Roma.
June 15, 2017	Conference “Breast Cancer from bench to bedside”, Chieti organized by CINBO, Consorzio Interuniversitario Nazionale per la Bio-Oncologia.
October 21-28, 2016	Course “Corso di formazione e aggiornamento in materia di impiego degli animali a fini scientifici ed educativi – I edizione”, IZSAM Teramo.
June 27, 2016	Conference “Breast Cancer Controversies This house believes that...”, Chieti organized by CINBO, Consorzio Interuniversitario Nazionale per la Bio-Oncologia and by Mediterranean school of oncology (direttori Prof. E. Cianchetti & C. Natoli).
May 27, 2016	Conference “Carcinoma del rene: controversie”, Chieti organized by CINBO, Consorzio Interuniversitario Nazionale per la Bio-Oncologia and by Mediterranean school of oncology (direttori Prof. L. Schips & C. Natoli).
December 2, 2015	Course “Utilizzo dell’azoto liquido in criobiologia” organized by Rivoira Pharma Srl at “G. d’Annunzio” University of Chieti-Pescara.

Organization and Participation in Public Engagement Events

September 27, 2024	Event “Notte Europea dei ricercatori”, at “G. d’Annunzio” University of Chieti-Pescara with a laboratory activity titled “We care: esplorare l’invisibile come strumento di cura e ricerca”.
September 29, 2023	Event “Notte Europea dei ricercatori”, at “G. d’Annunzio” University of Chieti-Pescara with a laboratory activity titled “Coloriamo insieme le cellule che costituiscono i nostri organi”.

- November 18, 2022 **Member of the organizing committee** for the public engagement event on pancreatic cancer awareness “Corri per la ricerca”. The event was part of the “Boost for Independence” project to support Fondazione “Nadia Valsecchi”.
- September 30, 2022 **Event** “Notte Europea dei ricercatori” at “G. d’Annunzio” University of Chieti-Pescara.
- September 21, 2021 **Event** “Notte Europea dei ricercatori” at “G. d’Annunzio” University of Chieti-Pescara.
- June 28, 2019 **Speaker** in the public event “Patologie onco-ematologiche: nuove strategie di cura” organized by AIL ONLUS PESCARA at Casa Ail “Giuseppe Ferrigni”, Pescara with an oral presentation titled “La riparazione del DNA: Dr. Jekyll & Mr. Hyde”.
- February 21, 2019 **Speaker** in the public event “Salute è donna” organized by Fondazione Abruzzese per le Scienze della Vita ONLUS, Associazione Culturale Donne «I Colori dell’Iride» of Lanciano, Dipartimento di Medicina e Scienze dell’Invecchiamento of “G. d’Annunzio” University of Chieti-Pescara, with an oral presentation titled “La riparazione del DNA: Dr. Jekyll & Mr. Hyde”.
- March 14, 2018 **Speaker** in the public event “L’AIL ONLUS Pescara-Teramo incontra l’Università” organized by AIL ONLUS PESCARA at Casa Ail “Giuseppe Ferrigni”, Pescara with an oral presentation on the project “Attività regolatoria dell’interleuchina 7 sui meccanismi di riparazione del DNA” financed by AIL ONLUS PESCARA.

Conference Participation and Presentation of Scientific Work

- 2024 **Co-author** of an abstract submitted to PIVAC (September 26-28, 2024, Prague), selected for an oral presentation titled "Synergistic Anti-Tumor Effects of Phage-Based Anti-HER2 Vaccination and Palbociclib Combination Therapy in a Hormone Receptor-Positive/HER2-Positive Breast Cancer Model". Junbiao Wang, Sunday Segun Alimi, **Alessia Lamolinara**, Fiorenza Orlando, Daniele Tomassoni, Barbara Bellett, Augusto Amici, Manuela Iezzi, and Cristina Marchini.
- 2024 **First author** of P155 poster presented at the national SIPMeT conference "Translational Pathophysiology" (September 19-21, 2024, Udine), titled "The Repurposed Drug Nitroxoline Enhances the Effectiveness of Gemcitabine in Reducing Tumor Growth and Lung Metastases in Mouse Models of Pancreatic Cancer". **A. Lamolinara**, R. Florio, F.D. Del Pizzo, A. Piro, L. De Lellis, M. Iezzi, A. Cama, S. Veschi.
- 2023 **Chair** of the session “Tricking the immune system” at the 13th EWCD international conference (June 2023, Fiuggi, Italy), together with Prof. Stephen Tait from The Beatson Institute, UK.

- 2023 **First author** of P25 poster presented at the 13th EWCD international conference (June 2023, Fiuggi, Italy), titled “Testing a combination of the FDA-approved drugs Decitabine and Olaparib in pancreatic ductal adenocarcinomas: possible approaches to overcome therapeutic challenges”.
- 2023 **Co-author** of P175 poster titled “The Anthelmintic mebendazole is a promising candidate for repurposing in pancreatic cancer treatment”, R. Florio, V. Antonellis, S. Veschi, A. Piro, **A. Lamolinara**, S. Vespa, P. Lanuti, V. Di Giacomo, M. Iezzi, A. Cama, L. De Lellis, presented at the Young Scientists Meeting 2023 General pathology: the trunk of the tree of medicine, (September 22-23, 2023, Parma, Italy).
- 2022 **Speaker** at the Winter DNISC Retreat 2022 in the session "Data Blitz - Hot scientific results from your own Department", with a presentation titled "Testing repurposed drugs candidates in pancreatic ductal adenocarcinomas: a multilevel in vitro/in vivo approach for improved therapy".
- 2022 **First author** of P119 poster titled “The repurposed drug nitroxoline inhibits tumor growth and synergizes with gemcitabine in reducing lung metastases in mouse models of pancreatic cancer”, **A. Lamolinara**, R. Florio, L. De Lellis, S. Pagotto, D. Brocco, M. D'Ettorre, A. Piro, M. Iezzi, A. Cama, S. Veschi, presented at the national SIPMeT conference “Pathophysiology of diseases” (April 22-24, 2022, Ancona, Italy).
- 2019 **Co-author** of an abstract titled “The nitrosative stress modulation of pancreatic tumor microenvironment favors the immune attack of TERT specific cytotoxic T lymphocytes”, selected for an oral presentation (Chair: Francesco de Sanctis) at the XVII NIBIT Meeting - Oncology embraces immunology: the way forward (October 11-13, 2019, Verona, Italy).
- 2018 **Co-author** of a poster titled “EV20/MMAF displays potent and specific antitumor activity in drug resistant human cancer”, presented at the conference Antibody Engineering & Therapeutics (December 09-13, 2018, San Diego, CA).
- 2018 **Co-author** of P11 poster titled “Cellular and viral FLIP programs broad immune regulatory transcription in monocytes” presented at the 32nd Annual Conference of the European Macrophage and Dendritic Cell Society (EMDS) (September 27-29, 2018, Verona, Italy).
- 2018 **Co-author** of P9 poster titled “MiR-205-5p promotes invasion and metastasis in breast cancer stem cells”, De Cola, A; **Lamolinara, A**; Lanuti, P; Rossi, C; Iezzi, M; Todaro, M; De Laurenzi, V. presented at the EACR (European Association of Cancer Research): A Matter of Life or Death: From Basic Cell Death Mechanisms to Novel Cancer Treatments (February 01-03, 2018, Amsterdam). Meeting abstract published on Cell Death Discovery.
- 2017 **Co-author** of P41 poster titled “An Antibody Drug Conjugate targeting HER-3 demonstrates promising antitumor efficacy in a wide range of human cancer” Sala, G; Iezzi, M; **Lamolinara, A**; Capone, E; Iacobelli, S; Saunier, JF; Ponziani, S; Giansanti, F; Ippoliti, R, presented at the AACR Annual Meeting (April 01-05,

- 2017, Washington, DC). Meeting abstract published on Cancer Research (DOI: 10.1158/1538-7445.AM2017-41).
- 2016 **Co-author** of the following posters presented at the 58th Annual Meeting of the Italian Cancer Society (SIC), (September 05-08, 2016, Verona, Italy):
- U9 titled “Feasibility of telomerase-specific adoptive T-cell therapy for hematologic and solid malignancies”.
 - A7 titled “HER2 isoforms co-expression tunes mammary carcinogenesis”.
- 2016 **Co-author** of P1200 poster titled “HER2 isoform interaction in mammary carcinoma onset and progression”, Palladini, A; Dall’Ora, M; Balboni, T; Nicoletti, G; Lanzano, M; Laranga, R; Landuzzi, L; Giusti, V; **Lamolinara, A**; De Giovanni, C; Amici, A; Pupa, SM; Lezzi, M; Nanni, P; Lollini, presented at the 107th AACR Annual Meeting (April 16-20, 2016, New Orleans, LA). Meeting abstract published on Cancer Research (DOI: 10.1158/1538-7445.AM2016-1200).
- 2015 **First author** of a poster titled “Activated D16HER2 homodimers and SRC kinase: a signaling axis leading to Trastuzumab benefits” presented at the Open day organized by Dipartimento di Medicina e Scienze dell’Invecchiamento, (May 25, 2015) at “G. d’Annunzio” University of Chieti-Pescara.
- 2015 **Co-author** of P2314 poster titled “d16HER2 splice variant regulates the activity of HER2-positive breast cancer-initiating cells”, Castagnoli, L; Koschorke, A; Ghedini, GC; Galvani, L; Ciravolo, V; Ghirelli, C; Palladini, A; **Lamolinara, A**; Iezzi, M; Lollini, PL; Triulzi, T; Nanni, P; Tagliabue, E; Pupa, SM, presented at the 106th AACR Annual Meeting (April 18-22, 2015, Philadelphia, PA). Meeting abstract published on Cancer Research (DOI: 10.1158/1538-7445.AM2015-2314).
- 2014 **Co-author** of P2637 poster titled “Role of d16HER2 splice variant in HER2-positive breast cancer”, Ghedini, GC; Palladini, A; Ciravolo, V; Castagnoli, L; Marzano, G; Zappasodi, R; Santilli, G; Amici, A; **Lamolinara, A**; Iezzi, M; Nanni, P; Tagliabue, E; Pupa, SM, presented at the 105th AACR Annual Meeting (April 18-22, 2015, Philadelphia, PA). Meeting abstract published on Cancer Research (DOI: 10.1158/1538-7445.AM2014-2637).
- 2012 **Co-author** of the following posters presented at the 54th Annual Meeting of the Italian Cancer Society (SIC) (October 01-04, 2012, Bologna, Italy):
- “Δ16HER2 splice variant: a potential master regulator of HER2-driven mammary tumor aggressiveness”.
 - “New Experimental Models to Study Δ16HER2-Driven Carcinogenesis”.
- 2011 **Co-author** of the following posters presented at the 53th Annual Meeting of the Italian Cancer Society (SIC) (October 19-22, 2011, Torino, Italy):
- 7R titled “Intradermal and intramuscular administration routes for antiHer-2 electrovaccination: comparison of efficacy and analysis of the vaccinate site”.
 - 8R titled “Study of muscle microenvironment modification in response to DNA injection followed by electroporation”.
 - 16R titled “Improving the efficacy of DNA vaccination: could muscle microenvironment be exploited?”.

- 6R titled “A DNA vaccine targeting angiomin delays tumor growth in Tramp mice”.

2011 **First author** of the following posters presented at the First Ascoli Piceno Conference on “Gene Vaccination in Cancer” (September 15-17, 2011, Ascoli Piceno, Italy):

- W026 titled “Study of muscle microenvironment modification in response to DNA injection followed by electroporation”.

- W027 titled “Intradermal and intramuscular administration routes for anti-HER2 electrovaccination: comparison of efficacy and analysis of the vaccine site”.

2011 **Co-author** of the following posters presented at the First Ascoli Piceno Conference on “Gene Vaccination in Cancer” (September 15-17, 2011, Ascoli Piceno, Italy):

- W018 titled “Improving the efficacy of DNA vaccination: could muscle microenvironment be exploited?”.

- W040 titled “A DNA vaccine targeting angiomin delays tumor growth in Tramp mice”.

- W041 titled “Anti angiomin vaccination: antiangiogenic and antivascular approach for treatment of established tumors”.

- W017 titled “Vaccination with cutdown plasmids encoding decreasing portions of HER2 extracellular domain”.

- W016 titled “HER2 B-cell epitope-based DNA Vaccines”.

- W015 titled “Large fragment phage display (LFPD) mapping of conformational B-cell epitopes in HER2: implications for vaccines design”.

Organization, Direction, and Coordination of National and International Research Groups

2020-present Collaboration with the research group directed by **Prof. Cristina Marchini and Prof. Augusto Amici, School of Biosciences and Veterinary Medicine, University of Camerino**. Paper published:

- *Wang J., *Lamolinara A., et al., Cancers 2022 *co-first authors

2020-present Collaboration with the research group directed by **Prof. Paola Patrignani, Department of Neurosciences, Imaging, and Clinical Sciences, “G. d'Annunzio” University of Chieti-Pescara**. Paper published:

- Bruno A., et al., Pharmacological Research 2022

2020-present Collaboration with the research group directed by **Prof. Francesca Bianca Aiello, Department of Medicine and Aging Sciences, “G. d'Annunzio” University of Chieti-Pescara**. Paper published:

- Aiello FB, et al., J Pers Med. 2023

2019-2021 Collaboration with the research group directed by **Prof. Natali and Prof. Piantelli together with Urology and Kidney Transplant Unit, University of Foggia**. Paper published:

- Cormio L. et al., Journal of Translational Medicine 2021

2019-present Collaboration with the research group directed by **Prof. Elena Quaglini and Prof. Federica Cavallo, Department of Molecular Biotechnology and**

Health Sciences, Center for Molecular Biotechnology, University of Turin.
Papers published:

- Rolih V. et al., Cancers 2020
- Macagno M. et al., Biomedicines 2022

2018-present Collaboration with the research group directed by **Prof. Lucia De Franceschi, Department of Medicine, University of Verona.** Papers published:

- Matte A. et al., Blood 2019
- Federti E. et al, Haematologica 2023

2018-present Collaboration with the research group directed by **Prof. Luca Cardone, Institute of Biochemistry and Cellular Biology, CNR, Rome.** Papers published:

- Mottini C. et al., Cancer Research 2019
- Dattilo R. et al., Cancer Research 2020

2017-present Collaboration with the research group directed by **Prof. Vincenzo De Laurenzi, Department of Innovative Technologies in Medicine & Dentistry, "G. d'Annunzio" University of Chieti-Pescara.** Papers published:

- De Cola A., **Lamolinara A.** et al., Cell Death & Disease 2018
- Basile A. et al., Molecular Oncology 2019
- Damiani V., **Lamolinara A.** et al., Molecular Metabolism 2023

2016-2018 Collaboration with the research group directed by **Prof. Eleonora Aricò, Department of Molecular Medicine and Oncology, Istituto Superiore di Sanità, Rome.** Paper published:

- Castiello L. et al., Cancer Immunology Research 2018

2016-present Collaboration with the research group directed by **Prof. Paola De Filippi, Department of Molecular Biotechnology and Health Sciences, University of Turin.** Papers published:

- Grasso S. et al., Nature Communications 2017
- Grasso S. et al., Cell Death and Differentiation 2020
- Salemm V. et al., Nature Communications 2023

2016-present Collaboration with the research group directed by **Prof. Gianluca Sala, Department of Innovative Technologies in Medicine & Dentistry, "G. d'Annunzio" University of Chieti-Pescara.** Papers published:

- Capone E. et al., Oncotarget 2017
- Capone E., **Lamolinara A.** et al., Journal of Controlled Release 2018
- Giansanti F. et al., Journal of Controlled Release 2019
- Capone E., **Lamolinara A.** et al., Cancers 2020
- Bibbò S. et al., Journal of Controlled Release 2024

2016-present Collaboration with the research group directed by **Prof. Mario Romano and Dott. Antonio Recchiuti, Department of Oral Medical and Biotechnological Sciences, "G. d'Annunzio" University of Chieti-Pescara.** Papers published:

- Codagnone M., Cianci E., **Lamolinara A.** et al., Mucosal Immunology 2018
- Isopi E. et al., Frontiers in Immunology 2020

- Mattoscio D., Isopi E., **Lamolinara A.** et al., Journal of Experimental & Clinical Cancer Research 2021
 - Recchiuti A. et al., The Faseb Journal 2021
- 2016-present Collaboration with the international research group directed **Prof. Arturo Sala, College of Health and Life Sciences, Brunel University, London.** Papers published:
- Corda G. et al., Journal of Pathology 2017
 - Bibbò S., **Lamolinara A.** et al., Oncogenesis 2020
- 2015-present Collaboration with the research group directed by **Prof. Vincenzo Bronte and Prof. Stefano Ugel, Department of Medicine, Immunology Section, University of Verona.** Papers published:
- Sandri S. et al., Cancer Research 2016
 - Sandri S., De Sanctis F. **Lamolinara A.** et al., Oncotarget 2017
 - Fiore A. et al., Nature Communications 2018
 - Marigo I. et al., Cancer Discovery 2020
 - Musiu C. et al., Cell Death and Differentiation 2021
 - Bost P. et al., Nature Communications 2021
 - De Sanctis F., **Lamolinara A.** et al., Journal of Immunotherapy of Cancer 2022
- 2014-2018 Collaboration with the research group directed by **Prof. Leonardo Mastropasqua, Ophthalmology Clinic, Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti-Pescara.** Papers published:
- Carpineto P. et al., Investigative Ophthalmology & Visual Science 2016
 - Mastropasqua R. et al., Scientific Reports 2018
 - Di Antonio L. et al., Scientific Reports 2018
- 2014-2016 Collaboration with the research group directed by **Prof. Mario Di Gioacchino, Allergy and Immunotoxicology Unit, Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti-Pescara.** Papers published:
- Petrarca C. et al., Clinical and Molecular Allergy 2016
- 2012-2019 Collaboration with the research group directed by **Prof. Serenella Pupa, Molecular Targeting Unit, IRCCS, Istituto Nazionale dei Tumori di Milano.** Papers published:
- Castagnoli L. et al., Cancer Research 2014
 - Castagnoli L. et al., Oncogene 2017
 - Koschorke A. et al., Cellular Oncology 2019
- 2011-2017 Collaboration with the research group directed by **Prof. Lollini, Department of Diagnostic and Experimental Specialized Medicine, University of Bologna.** Papers published:
- Nanni P. et al., Plos One 2012
 - Croci S. et al., Breast Cancer Research 2015
 - *Palladini A., *Nicoletti G., ***Lamolinara A.** et al., Oncotarget 2017 *co-primi autori

- 2011-2013 Collaboration with the international research group directed by **Prof. Barbara Seliger, Institute of Medical Immunology and Pathology, Center for Basic Medical Research, Martin Luther University of Halle-Wittenberg.** Paper published:
- Steven A. et al., Molecular Cancer Research 2013.

Scientific Responsibility for International and National Research Projects

- 2022-2024 **Principal investigator** of the project titled "Testing repurposed drug candidates in pancreatic ductal adenocarcinomas: a multilevel in vitro/in vivo approach for improved therapy" (ID: 6694/2022), funded by the "BOOST FOR INDEPENDENCE" call available from the "G. d'Annunzio" University of Chieti-Pescara with support from the European Union's NextGenerationEU Program ("MUR-Fund for Promotion and Development - DM 737/202). Total Funding: €100,000. Duration: 2 years. This competitive call required the submission of a research project subjected to peer review.
- 2021 **Responsible** for the preclinical studies of the research project titled "Developing new antibody-drug conjugates (ADC)s for neuroblastoma and glioblastoma", funded by AIRC in 2021. Project Manager: Prof. Gianluca Sala, Department of Oral Medical and Biotechnological Sciences, "G. d'Annunzio" University of Chieti-Pescara. Total Funding: €119,000. Duration: 5 years.
- 2020 **Responsible** for the histopathological analyses of the research project titled "Terapie prorisolutive per la fibrosi cistica mediante resolvina D1 e nanotecnologie: studi preclinici per la consegna alla clinica di formulazioni innovative", funded by the Cystic Fibrosis Foundation (FFC#19/2020) in 2020. Project Manager: Dr. Antonio Recchiuti, Department of Oral Medical and Biotechnological Sciences, "G. d'Annunzio" University of Chieti-Pescara; Partner: Prof.ssa Alessandra Aloisi, CNR Institute for Microelectronics and Microsystems, Lecce.
- 2016-2017 **Responsible** for the histopathological analyses of the research project titled "Ruoli e meccanismi della Resolvina D1 per il trattamento dell'inflammatione, dell'infezione cronica e del danno polmonare in fibrosi cistica", funded by the Cystic Fibrosis Foundation (FFC#19/2016) in 2016. Project Manager: Dr. Antonio Recchiuti, Department of Oral Medical and Biotechnological Sciences, "G. d'Annunzio" University of Chieti-Pescara. Total Funding: €100,000. Duration: 2 years. Related publications:
- Codagnone M., Cianci E., **Lamolinara A.** et al., Mucosal Immunology 2018;
 - Isopi E. et al., Frontiers in Immunology 2020
- 2016-2018 **Responsible** for the preclinical studies of the research project titled "Development and preclinical evaluation of a novel antibody-drug conjugate (ADC) targeting HER3", funded by AIRC (IG: 18467) in 2016. Project Manager: Dr. Gianluca Sala, Department of Oral Medical and Biotechnological Sciences, "G. d'Annunzio" University of Chieti-Pescara. Total Funding: €287,000. Duration: 3 years. Related publications:

- Capone E. et al., Oncotarget 2017
- Capone E., **Lamolinara A.** et al., Journal of Controlled Release 2018

List of papers published on International Journals

- 1) Bibbò S, Capone E, Lovato G, Ponziani S, **Lamolinara A**, Iezzi M, Lattanzio R, Mazzocco K, Morini M, Giansanti F, De Laurenzi V, Whitfield J, Iacobelli S, Ippoliti R, Beaulieu ME, Soucek L, Sala A, Sala G. “*EV20/Omomyc: A novel dual MYC/HER3 targeting immunoconjugate*”. J Control Release. **2024** Oct;374:171-180. doi: 10.1016/j.jconrel.2024.08.009. Epub 2024 Aug 14. PubMed PMID: 39128771. ISSN: 01683659.
Impact factor 2023: 10.5
- 2) Recinella L, Libero ML, Veschi S, Piro A, Marconi GD, Diomede F, Chiavaroli A, Orlando G, Ferrante C, Florio R, **Lamolinara A**, Cai R, Sha W, Schally AV, Salvatori R, Brunetti L, Leone S. “*Effects of GHRH Deficiency and GHRH Antagonism on Emotional Disorders in Mice*”. Cells. **2023** Nov 12;12(22):2615. doi: 10.3390/cells12222615. PubMed PMID: 37998350. ISSN: 20734409.
Impact Factor 2023: 5.1
- 3) Damiani V, **Lamolinara A**, Cicalini I, Cufaro MC, Del Pizzo F, Di Marco F, Del Boccio P, Dufrusine B, Hahne M, Lattanzio R, Pieragostino D, Iezzi M, Federici M, Turco MC, Maiorana A, Dionisi-Vici C, De Laurenzi V. “*Pancreatic beta-cell specific BAG3 knockout results in chronic hyperinsulinemia inducing insulin resistance*”. Mol Metab. **2023** Jun 10:101752. doi: 10.1016/j.molmet.2023.101752. PubMed PMID: 37308077. ISSN: 22128778.
Impact Factor 2023: 7
- 4) Aiello FB, Ranelletti FO, Liberatore M, Felaco P, De Luca G, **Lamolinara A**, Schena FP, Bonomini M. “*Independent Prognostic and Predictive Role of Interstitial Macrophages in Kidney Biopsies of IgA Nephropathy Patients*”. J Pers Med. **2023** May 31;13(6):935. doi: 10.3390/jpm13060935. PubMed PMID: 37373924. ISSN: 20754426.
Impact Factor 2023: 3
- 5) Salemme V, Vedelago M, Sarcinella A, Moietta F, Piccolantonio A, Moiso E, Centonze G, Manco M, Guala A, **Lamolinara A**, Angelini C, Morellato A, Natalini D, Calogero R, Incarnato D, Oliviero S, Conti L, Iezzi M, Tosoni D, Bertalot G, Freddi S, Tucci FA, De Sanctis F, Frusteri C, Ugel S, Bronte V, Cavallo F, Provero P, Gai M, Taverna D, Turco E, Pece S, Defilippi P. “*p140Cap inhibits β -Catenin in the breast cancer stem cell compartment instructing a protective anti-tumor immune response*”. Nat Commun. **2023** May 11;14(1):2350. doi: 10.1038/s41467-023-37824-y. PubMed PMID: 37169737. ISSN: 20411723.
Impact Factor 2023: 14.7
- 6) Federti E, Vinchi F, Iatcenko I, Ghigo A, Matte A, Toya SCM, Siciliano A, Chiabrando D, Tolosano E, Vance SZ, Riccardi V, Andolfo I, Iezzi M, **Lamolinara A**, Iolascon A, De Franceschi L. “*Duality of Nrf2 in iron-overload cardiomyopathy*”. Haematologica. **2023** Jan 26. doi: 10.3324/haematol.2022.281995. PubMed PMID: 36700398. ISSN: 03906078.

Impact Factor 2023: 8.2

- 7) Bruno A, Contursi A, Tacconelli S, Sacco A, Hofling U, Mucci M, **Lamolinara A**, Del Pizzo F, Ballerini P, Di Gregorio P, Yu Y, Patrignani P. “*The specific deletion of cyclooxygenase-1 in megakaryocytes/platelets reduces intestinal polyposis in ApcMin/+ mice*”. Pharmacol Res. **2022** Nov;185:106506. doi: 10.1016/j.phrs.2022.106506. PubMed PMID: 36241001. ISSN: 10436618.

Impact Factor 2022: 9.3

- 8) Wang J*, **Lamolinara A***, Conti L, Giangrossi M, Cui L, Morelli MB, Amantini C, Falconi M, Bartolacci C, Andreani C, Orlando F, Provinciali M, Del Pizzo FD, Russo F, Belletti B, Riccardo F, Bolli E, Quaglino E, Cavallo F, Amici A, Iezzi M, Marchini C. “*HER2-Displaying M13 Bacteriophages induce Therapeutic Immunity against Breast Cancer*”. Cancers (Basel). **2022** Aug 22;14(16):4054. doi: 10.3390/cancers14164054. PubMed PMID: 36011047. ISSN: 20726694. ***First two authors equally contributed to the work.**

Impact Factor 2022: 5.2

- 9) Musiu C, Caligola S, Fiore A, **Lamolinara A**, Frusteri C, Del Pizzo FD, De Sanctis F, Canè S, Adamo A, Hofer F, Barouni RM, Grilli A, Zilio S, Serafini P, Tacconelli E, Donadello K, Gottin L, Polati E, Girelli D, Polidoro I, Iezzi PA, Angelucci D, Capece A, Chen Y, Shi ZL, Murray PJ, Chilosì M, Amit I, Bicciato S, Iezzi M, Bronte V, Ugel S. “*Fatal cytokine release syndrome by an aberrant FLIP/STAT3 axis*”. Cell Death Differ. **2022** Feb;29(2):420-438. doi: 10.1038/s41418-021-00866-0 PubMed PMID: 34518653. ISSN: 13509047.

Impact Factor 2022: 12.4

- 10) Macagno M, Bandini S, Bolli E, Bello A, Riccardo F, Barutello G, Merighi IF, Forni G, **Lamolinara A**, Del Pizzo F, Iezzi M, Cavallo F. “*Role of ADCC, CDC, and CDCC in Vaccine-Mediated Protection against Her2 Mammary Carcinogenesis*”. Biomedicines. **2022** Jan 21;10(2):230. doi: 10.3390/biomedicines10020230. PubMed PMID: 35203439. ISSN: 22279059.

Impact Factor 2022: 4.7

- 11) De Sanctis F, **Lamolinara A**, Boschi F, Musiu C, Caligola S, Trovato R, Fiore A, Frusteri C, Anselmi C, Poffe O, Cestari T, Canè S, Sartoris S, Giugno R, Del Rosario G, Zappacosta B, Del Pizzo F, Fassan M, Dugnani E, Piemonti L, Bottani E, Decimo I, Paiella S, Salvia R, Lawlor RT, Corbo V, Park Y, Tuveson DA, Bassi C, Scarpa A, Iezzi M, Ugel S, Bronte V. “*Interrupting the nitrosative stress fuels tumor-specific cytotoxic T lymphocytes in pancreatic cancer*”. J Immunother Cancer. **2022** Jan;10(1):e003549. doi: 10.1136/jitc-2021-003549. PubMed PMID: 35022194. ISSN: 20511426.

Impact Factor 2022: 12.485

- 12) Mattoscio D, Isopi E, **Lamolinara A**, Patruno S, Medda A, De Cecco F, Chiocca S, Iezzi M, Romano M, Recchiuti A. “*Resolvin D1 reduces cancer growth stimulating a protective neutrophil-dependent recruitment of anti-tumor monocytes*”. J Exp Clin Cancer Res. **2021** Apr 12;40(1):129. doi: 10.1186/s13046-021-01937-3. PubMed PMID: 33845864. ISSN: 17569966.

Impact Factor 2021: 12.658

- 13) Recchiuti A, Patruno S, Mattoscio D, Isopi E, Pomilio A, **Lamolinara A**, Iezzi M, Pecce R, Romano M. “*Resolvin D1 and D2 reduce SARS-CoV-2-induced inflammatory responses in cystic fibrosis macrophages*”. *FASEB J.* **2021** Apr;35(4):e21441. doi: 10.1096/fj.202001952R. PubMed PMID: 33749902. ISSN: 08926638.
Impact Factor 2021: 5.834

- 14) Bost P, De Sanctis F, Canè S, Ugel S, Donadello K, Castellucci M, Eyal D, Fiore A, Anselmi C, Barouni RM, Trovato R, Caligola S, **Lamolinara A**, Iezzi M, Facciotti F, Mazzariol A, Gibellini D, De Nardo P, Tacconelli E, Gottin L, Polati E, Schwikowski B, Amit I, Bronte V. “*Deciphering the state of immune silence in fatal COVID-19 patients*”. *Nat Commun.* **2021** Mar 5;12(1):1428. doi: 10.1038/s41467-021-21702-6. PubMed PMID: 33674591. ISSN: 20411723.
Impact Factor 2021: 17.694

- 15) Cormio L, Calò B, Falagario U, Iezzi M, **Lamolinara A**, Vitaglione P, Silecchia G, Carrieri G, Fogliano V, Iacobelli S, Natali PG, Piantelli M. “*Improvement of urinary tract symptoms and quality of life in benign prostate hyperplasia patients associated with consumption of a newly developed whole tomato-based food supplement: a phase II prospective, randomized double-blinded, placebo-controlled study*”. *J Transl Med.* **2021** Jan 6;19(1):24. doi: 10.1186/s12967-020-02684-3. PubMed PMID: 33407599. ISSN: 14795876.
Impact Factor 2021: 8.440

- 16) Marigo I, Trovato R, Hofer F, Ingangi V, DE Sanctis F, Ugel S, Cane S, Simonelli A, **Lamolinara A**, Iezzi M, Fassan M, Rugge M, Boschi F, Borile G, Eisenhaure T, Sarkizova S, Lieb D, Hachon N, Azzolin L, Piccolo S, Lawlor R, Scarpa A, Carbognin L, Bria E, Biciato S, Murray PJ, Bronte V. “*Disabled homolog 2 controls pro-metastatic activity of tumor-associated macrophages*”. *Cancer Discov.* **2020** Nov;10(11):1758-1773. doi: 10.1158/2159-8290.CD-20-0036. Epub 2020 Jul 10. PubMed PMID: 32651166. ISSN: 21598274.
Impact Factor 2020: 39.397

- 17) Capone E, **Lamolinara A**, Pastorino F, Gentile R, Ponziani S, Di Vittorio G, D'Agostino D, Bibbò S, Rossi C, Piccolo E, Iacobelli V, Lattanzio R, Panella V, Sallese M, De Laurenzi V, Giansanti F, Sala A, Iezzi M, Ponzoni M, Ippoliti R, Iacobelli S, Sala G. “*Targeting Vesicular LGALS3BP by an Antibody-Drug Conjugate as Novel Therapeutic Strategy for Neuroblastoma*”. *Cancers (Basel).* **2020** Oct 15;12(10):E2989. doi: 10.3390/cancers12102989. PubMed PMID: 33076448. ISSN: 20726694.
Impact Factor 2020: 6.639

- 18) Dattilo R, Mottini C, Camera E, **Lamolinara A**, Auslander N, Doglioni G, Muscolini M, Tang W, Planque M, Ercolani C, Buglioni S, Manni I, Trisciuglio D, Boe A, Grande S, Luciani AM, Iezzi M, Ciliberto G, Ambs S, De Maria R, Fendt SM, Ruppini E, Cardone L. “*Pyrvinium pamoate induces death of triple-negative breast cancer stem-like cells and reduces metastases through effects on lipid anabolism*”. *Cancer Res.* **2020** Oct 1;80(19):4087-4102. doi: 10.1158/0008-5472.CAN-19-1184. Epub 2020 Jul 23. PubMed PMID: 32718996. ISSN: 00085472.
Impact Factor 2020: 12.701

- 19) Rolih V, Caldeira J, Bolli E, Salameh A, Conti L, Barutello G, Riccardo F, Magri J, **Lamolinara A**, Parra K, Valenzuela P, Francia G, Iezzi M, Pericle F, Cavallo F. “Development of a VLP-Based Vaccine Displaying an xCT Extracellular Domain for the Treatment of Metastatic Breast Cancer”. *Cancers (Basel)*. **2020** Jun 8;12(6):E1492. doi: 10.3390/cancers12061492. PubMed PMID: 32521631. ISSN: 20726694.
Impact Factor 2020: 6.639

- 20) Isopi E, Mattoscio D, Codagnone M, Mari VC, **Lamolinara A**, D'Aurora M, Cianci E, Nespoli A, Franchi S, Gatta V, Dubourdeau M, Moretti P, Di Sabatino M, Iezzi M, Romano M, Recchiuti A. “Resolvin D1 reduces lung infection and inflammation activating resolution in cystic fibrosis. *Frontiers in Immunology*”. *Front Immunol*. **2020** Apr 28;11:581. doi: 10.3389/fimmu.2020.00581. eCollection 2020. PubMed PMID: 32528461. ISSN: 16643224.
Impact Factor 2020: 7.561

- 21) Grasso S, Cangelosi D, Chapelle J, Alzona M, Centonze G, **Lamolinara A**, Salemm V, Angelini C, Morellato A, Saglietto A, Bianchi FT, Cabodi S, Salaroglio IC, Fusella F, Ognibene M, Iezzi M, Pezzolo A, Poli V, Di Cunto F, Eva A, Riganti C, Varesio L, Turco E, Defilippi P. “The SRCIN1/p140Cap adaptor protein negatively regulates the aggressiveness of neuroblastoma”. *Cell Death Differ*. **2020** Apr;27(4):1448. doi: 10.1038/s41418-019-0405-7. PubMed PMID: 31488891. ISSN: 13509047.
Impact Factor 2020: 15.828

- 22) Bibbo' S, **Lamolinara A**, Capone E, Purgato S, Tsakaneli A, Panella V, Sallese M, Rossi C, Ciufici P, Nieddu V, De Laurenzi V, Iezzi M, Perini G, Sala G, Sala A. “Repurposing a psychoactive drug for children with cancer: p27Kip1-dependent inhibition of metastatic neuroblastomas by Prozac”. *Oncogenesis*. **2020** Jan 2;9(1):3. doi: 10.1038/s41389-019-0186-3. PubMed PMID: 31900399. ISSN: 21579024.
Impact Factor 2020: 7.485

- 23) Mottini C, Tomihara H, Carrella D, **Lamolinara A**, Iezzi M, Huang JK, Amoreo CA, Buglioni S, Manni I, Robinson FS, Minelli R, Kang Y, Fleming JB, Kim MP, Bristow CA, Trisciuglio D, Iuliano A, Del Bufalo D, di Bernardo D, Melisi D, Draetta GF, Ciliberto G, Carugo A, Cardone L. “Predictive signatures inform the effective repurposing of Decitabine to treat K-RAS-dependent Pancreatic Ductal Adenocarcinoma”. *Cancer Res*. **2019** Nov 1;79(21):5612-5625. doi: 10.1158/0008-5472.CAN-19-0187. Epub 2019 Sep 5. PubMed PMID: 31492820. ISSN: 00085472.
Impact Factor 2019: 9.727

- 24) Koschorke A, Faraci S, Giani D, Chiodoni C, Iorio E, Canese R, Colombo MP, **Lamolinara A**, Iezzi M, Ladomery M, Vernieri C, de Braud F, Di Nicola M, Tagliabue E, Castagnoli L, Pupa SM. “Phenethyl isothiocyanate hampers growth and progression of HER2-positive breast and ovarian carcinoma by targeting their stem cell compartment”. *Cell Oncol (Dordr)*. **2019** Aug 2. doi: 10.1007/s13402-019-00464-w. Epub 2019 Aug 2. PubMed PMID: 31376137. ISSN: 22113428.
Impact Factor 2019: 5.304

- 25) Basile A, De Marco M, Festa M, Falco A, Iorio V, Guerriero L, Eletto D, Rea D, Arra C, **Lamolinara A**, Ballerini P, Damiani V, Rosati A, Sala G, Turco MC, Marzullo L, De Laurenzi V. “Development of an anti-BAG3 humanized antibody for treatment of

pancreatic cancer". Mol Oncol. **2019** Jun;13(6):1388-1399. doi: 10.1002/1878-0261.12492. Epub 2019 May 17. PubMed PMID: 30973679. ISSN: 15747891.

Impact Factor 2019: 6.574

- 26) Giansanti F, Capone E, Ponziani S, Piccolo E, Gentile R, **Lamolinara A**, Di Campli A, Salles M, Iacobelli V, Cimini A, De Laurenzi V, Lattanzio R, Piantelli M, Ippoliti R, Sala G, Iacobelli S. "*Secreted Gal-3BP is a novel promising target for non-internalizing Antibody-Drug Conjugates*". J Control Release. **2019** Jan 28;294:176-184. doi: 10.1016/j.jconrel.2018.12.018. Epub 2018 Dec 13. PubMed PMID: 30553852. ISSN: 01683659.

Impact Factor 2019: 7.727

- 27) Matte A, Recchiuti A, Federti E, Koehl B, Mintz T, El Nemer W, Tharaux PL, Brousse V, Andolfo I, **Lamolinara A**, Weinberg O, Siciliano A, Norris PC, Riley IR, Iolascon A, Serhan CN, Brugnara C, De Franceschi L. "*Resolution of sickle cell disease-associated inflammation and tissue damage with 17R-resolvin D1*". Blood. **2019** Jan 17;133(3):252-265. doi: 10.1182/blood-2018-07-865378. Epub 2018 Nov 7. PubMed PMID: 30404812. ISSN: 00064971.

Impact Factor 2019: 17.543

- 28) Fiore A, Ugel S, De Sanctis F, Sandri S, Fracasso G, Trovato R, Sartoris S, Solito S, Mandruzzato S, Vascotto F, Hippen KL, Mondanelli G, Grohmann U, Piro G, Carbone C, Melisi D, Lawlor RT, Scarpa A, **Lamolinara A**, Iezzi M, Fassan M, Biciato S, Blazar BR, Sahin U, Murray PJ, Bronte V. "*Induction of immunosuppressive functions and NF- κ B by FLIP in monocytes*". Nat Commun. **2018** Dec 5;9(1):5193. doi: 10.1038/s41467-018-07654-4. PubMed PMID: 30518925. ISSN: 20411723.

Impact Factor 2018: 11.878

- 29) Mastropasqua R, D'Aloisio R, Di Nicola M, Di Martino G, **Lamolinara A**, Di Antonio L, Tognetto D, Toto L. "*Relationship between aqueous humor cytokine level changes and retinal vascular changes after intravitreal aflibercept for diabetic macular edema*". Sci Rep. **2018** Nov 8;8(1):16548. doi: 10.1038/s41598-018-35036-9. PubMed PMID: 30410092. ISSN: 20452322.

Impact Factor 2018: 4.011

- 30) Di Antonio L, Toto L, Mastropasqua A, Brescia L, Erroi E, **Lamolinara A**, Di Nicola M, Mastropasqua L. "*Retinal vascular changes and aqueous humor cytokines changes after aflibercept intravitreal injection in treatment-naïve myopic choroidal neovascularization*". Sci Rep. **2018** Oct 23;8(1):15631. doi: 10.1038/s41598-018-33926-6. PubMed PMID: 30353107. ISSN: 20452322.

Impact Factor 2018: 4.011

- 31) De Cola A, **Lamolinara A**, Lanuti P, Rossi C, Iezzi M, Marchisio M, Todaro M, De Laurenzi V. "*MiR-205-5p inhibition by locked nucleic acids impairs metastatic potential of breast cancer cells*". Cell Death Dis. **2018** Jul 26;9(8):821. doi: 10.1038/s41419-018-0854-9. PubMed PMID: 30050081. ISSN: 20414889.

Impact Factor 2018: 5.959

- 32) Castiello L, Sestili P, Schiavoni G, Dattilo R, Monque DM, Ciaffoni F, Iezzi M, **Lamolinara A**, Sistigu A, Moschella F, Pacca AM, Macchia D, Ferrantini M, Zeuner A,

- Biffoni M, Proietti E, Belardelli F, Aricò E. “*Disruption of IFN-I Signaling Promotes HER2/Neu Tumor Progression and Breast Cancer Stem Cells*”. *Cancer Immunol Res.* **2018** Jun;6(6):658-670. doi: 10.1158/2326-6066.CIR-17-0675. Epub 2018 Apr 5. PubMed PMID: 29622580. ISSN: 23266066.
Impact Factor 2018: 8.619
- 33) Capone E, **Lamolinara A**, D'Agostino D, Rossi C, De Laurenzi V, Iezzi M, Iacobelli S, Sala G. “*EV20-mediated delivery of cytotoxic auristatin MMAF exhibits potent therapeutic efficacy in cutaneous melanoma*”. *J Control Release.* **2018** May 10;277:48-56. doi: 10.1016/j.jconrel.2018.03.016. Epub 2018 Mar 14. PubMed PMID: 29550398. ISSN: 01683659.
Impact Factor 2018: 7.901
- 34) Codagnone M, Cianci E, **Lamolinara A**, Mari VC, Nespoli A, Isopi E, Mattoscio D, Arita M, Bragonzi A, Iezzi M, Romano M, Recchiuti A. “*Resolvin D1 enhances the resolution of lung inflammation caused by long-term Pseudomonas aeruginosa infection*”. *Mucosal Immunol.* **2018** Jan;11(1):35-49. doi: 10.1038/mi.2017.36. Epub 2017 Apr 19. PubMed PMID: 28422188. ISSN: 19330219.
Impact Factor 2018: 7.352
- 35) Capone E, Giansanti F, Ponziani S, **Lamolinara A**, Iezzi M, Cimini A, Angelucci F, Sorda R, Laurenzi V, Natali PG, Ippoliti R, Iacobelli S, Sala G. “*EV20-Sap, a novel anti-HER-3 antibody-drug conjugate, displays promising antitumor activity in melanoma*”. *Oncotarget.* **2017** Sep 8;8(56):95412-95424. doi: 10.18632/oncotarget.20728. eCollection 2017 Nov 10. PubMed PMID: 29221137. ISSN: 19492553.
Impact Factor 2016: 5.168
- 36) Sandri S, De Sanctis F, **Lamolinara A**, Boschi F, Poffe O, Trovato R, Fiore A, Sartori S, Sbarbati A, Bondanza A, Cesaro S, Krampera M, Scupoli MT, Nishimura MI, Iezzi M, Sartoris S, Bronte V, Ugel S. “*Effective control of acute myeloid leukaemia and acute lymphoblastic leukaemia progression by telomerase specific adoptive T-cell therapy*”. *Oncotarget.* **2017** May 23;8(50):86987-87001. doi: 10.18632/oncotarget.18115. eCollection 2017 Oct 20. PubMed PMID: 29152058. ISSN: 19492553.
Impact Factor 2016: 5.168
- 37) Palladini A*, Nicoletti G*, **Lamolinara A***, Dall'Ora M, Balboni T, Ianzano ML, Laranga R, Landuzzi L, Giusti V, Ceccarelli C, Santini D, Taffurelli M, Di Oto E, Asioli S, Amici A, Pupa SM, De Giovanni C, Tagliabue E, Iezzi M, Nanni P, Lollini PL. “*HER2 isoforms co-expression differently tunes mammary tumor phenotypes affecting onset, vasculature and therapeutic response*”. *Oncotarget.* **2017** Apr 13;8(33):54444-54458. doi: 10.18632/oncotarget.17088. eCollection 2017 Aug 15. PubMed PMID: 28903354. ISSN: 19492553. ***First three authors equally contributed to the work.**
Impact Factor 2016: 5.168
- 38) Castagnoli L, Ghedini GC, Koschorke A, Triulzi T, Dugo M, Gasparini P, Casalini P, Palladini A, Iezzi M, **Lamolinara A**, Lollini PL, Nanni P, Chiodoni C, Tagliabue E, Pupa SM. “*Pathobiological implications of the d16HER2 splice variant for stemness and aggressiveness of HER2-positive breast cancer*”. *Oncogene.* **2017** Mar 23;36(12):1721-1732. doi: 10.1038/onc.2016.338. Epub 2016 Sep 19. PubMed PMID: 27641338. ISSN: 09509232.

Impact Factor 2017: 6.854

- 39) Grasso S, Chapelle J, Salemme V, Aramu S, Russo I, Vitale N, Verdun di Cantogno L, Dallaglio K, Castellano I, Amici A, Centonze G, Sharma N, Lunardi S, Cabodi S, Cavallo F, **Lamolinara A**, Stramucci L, Moiso E, Provero P, Albin A, Sapino A, Staaf J, Di Fiore PP, Bertalot G, Pece S, Tosoni D, Confalonieri S, Iezzi M, Di Stefano P, Turco E, Defilippi P. “*The scaffold protein p140Cap limits ERBB2-mediated breast cancer progression interfering with Rac GTPase-controlled circuitries*”. Nat Commun. **2017** Mar 16;8:14797. doi: 10.1038/ncomms14797. PubMed PMID: 28300085. ISSN: 20411723.

Impact Factor 2017: 12.353

- 40) Corda G, Sala G, Lattanzio R, Iezzi M, Sallese M, Fragassi G, **Lamolinara A**, Mirza H, Barcaroli D, Ermler S, Silva E, Yasaei H, Newbold RF, Vagnarelli P, Mottolese M, Natali PG, Perracchio L, Quist J, Grigoriadis A, Marra P, Tutt AN, Piantelli M, Iacobelli S, De Laurenzi V, Sala A. “*Functional and prognostic significance of the genomic amplification of frizzled 6 (FZD6) in breast cancer*”. J Pathol. **2017** Feb;241(3):350-361. doi: 10.1002/path.4841. Epub 2016 Dec 29. PubMed PMID: 27859262. ISSN: 00223417.

Impact Factor 2017: 6.253

- 41) Carpineto P, Aharrh-Gnama A, Ciciarelli V, Borrelli E, Petti F, Aloia R, **Lamolinara A**, Di Nicola M, Mastropasqua L. “*Subretinal Fluid Levels of Signal-Transduction Proteins and Apoptosis Molecules in Macula-Off Retinal Detachment Undergoing Scleral Buckle Surgery*”. Invest Ophthalmol Vis Sci. **2016** Dec 1;57(15):6895-6901. doi: 10.1167/iovs.16-20372. PubMed PMID: 28002564. ISSN: 01460404.

Impact Factor 2016: 3.303

- 42) Sandri S, Bobisse S, Moxley K, **Lamolinara A**, De Sanctis F, Boschi F, Sbarbati A, Fracasso G, Ferrarini G, Hendriks RW, Cavallini C, Scupoli MT, Sartoris S, Iezzi M, Nishimura MI, Bronte V, Ugel S. “*Feasibility of Telomerase-Specific Adoptive T-cell Therapy for B-cell Chronic Lymphocytic Leukemia and Solid Malignancies*”. Cancer Res. **2016** May 1;76(9):2540-51. doi: 10.1158/0008-5472.CAN-15-2318. PubMed PMID: 27197263. ISSN: 00085472.

Impact Factor 2016: 9.122

- 43) **Lamolinara A***, Stramucci L*, Hysi A, Iezzi M, Marchini C, Mariotti M, Amici A, Curcio C. “*Intradermal DNA Electroporation Induces Cellular and Humoral Immune Response and Confers Protection against HER2/neu Tumor*”. J Immunol Res. **2015**;2015:159145. doi: 10.1155/2015/159145. Epub 2015 Jul 13. PubMed PMID: 26247038. ISSN: 23148861. ***First two authors equally contributed to the work.**

Impact Factor 2015: 2.812

- 44) Croci S, Nanni P, Palladini A, Nicoletti G, Grosso V, Benegiamo G, Landuzzi L, **Lamolinara A**, Ianzano ML, Ranieri D, Dall'Ora M, Iezzi M, De Giovanni C, Lollini PL. “*Interleukin-15 is required for immunosurveillance and immunoprevention of HER2/neu-driven mammary carcinogenesis*”. Breast Cancer Res. **2015** May 22;17:70. doi: 10.1186/s13058-015-0588-x. PubMed PMID: 25997501. ISSN: 14655411.

Impact Factor 2015: 5.211

- 45) Castagnoli L, Iezzi M, Ghedini GC, Ciravolo V, Marzano G, **Lamolinara A**, Zappasodi R, Gasparini P, Campiglio M, Amici A, Chiodoni C, Palladini A, Lollini PL, Triulzi T, Menard S, Nanni P, Tagliabue E, Pupa SM. “*Activated d16HER2 homodimers and SRC kinase mediate optimal efficacy for trastuzumab*”. *Cancer Res.* **2014** Nov 1;74(21):6248-59. doi: 10.1158/0008-5472.CAN-14-0983. Epub 2014 Aug 27. PubMed PMID: 25164009. ISSN: 00085472.
Impact Factor 2014: 9.329
- 46) Steven A, Leisz S, Massa C, Iezzi M, Lattanzio R, **Lamolinara A**, Bukur J, Muller A, Hiebl B, Holzhausen HJ, Seliger B. “*HER-2/neu mediates oncogenic transformation via altered CREB expression and function*”. *Mol Cancer Res.* **2013** Nov;11(11):1462-77. doi: 10.1158/1541-7786.MCR-13-0125. Epub 2013 Sep 11. PubMed PMID: 24025972. ISSN: 15573125.
Impact Factor 2013: 4.502
- 47) Nanni P, Nicoletti G, Palladini A, Croci S, Murgo A, Ianzano ML, Grosso V, Stivani V, Antognoli A, **Lamolinara A**, Landuzzi L, di Tomaso E, Iezzi M, De Giovanni C, Lollini PL. “*Multiorgan Metastasis of Human HER-2(+) Breast Cancer in Rag2(-/-);Il2rg(-/-) Mice and Treatment with PI3K Inhibitor*”. *PLoS One.* **2012**;7(6):e39626. doi: 10.1371/journal.pone.0039626. Epub 2012 Jun 21. PubMed PMID: 22737248. ISSN: 19326203.
Impact Factor 2012: 3.730

Chapters published on books

- 48) Rossano Lattanzio, **Alessia Lamolinara**, Mauro Piantelli and Manuela Iezzi. "Natural compounds, antioxidant, and antiandrogens in the prevention of prostate cancer: in vivo evidences from murine models and human clinical studies". Book "Prostate Cancer", ISBN 980-953-307-719-7.

Summary of Research Activities

My research activity began in 2012 with a two-year fellowship at the Immuno-Oncology Laboratory directed by Prof. Piero Musiani at "G. d'Annunzio" University of Chieti-Pescara. During this period and throughout the subsequent three years of my PhD in “Translational Medicine”, I specialized in the use of experimental models to study various cancer, including breast, uterine, pancreatic, and skin carcinomas. My work primarily focused on investigating the cellular and molecular biology of tumors, mechanisms of metastatic dissemination, and the development of immunotherapeutic strategies in oncology. The expertise I acquired in immunopathology enabled me to collaborate with prominent research groups both nationally and internationally. Following my PhD, I continued my research activity as a postdoctoral fellow in the laboratory of Prof. Manuela Iezzi, where I worked on drug repurposing projects and preclinical validation of novel therapeutic targets across several tumor types. Throughout my career, I have contributed to numerous multidisciplinary research projects, focusing on the molecular characterization of tumors, therapeutic biomarker identification, and the exploration of innovative therapeutic approaches, such as immune modulation and drug repositioning, in challenging cancers like pancreatic ductal adenocarcinoma.

Language Skills

Italian (Native)

English (Proficient in reading, writing and speaking)

Completed the Advanced English course "Academic writing and speaking", by Prof. Maria Rosaria Vitti Alexander from Nazareth Collage, Rochester (USA), June 20-27, 2016 (40 hours).

Computer Skills

Operating Systems: Windows and Macintosh

Microsoft Office Suite

Graphic Design and Statistical Softwares

Network Resources

Technical Skills and competence

Immunological Techniques: Flow Cytometry, ELISA, Experience with Luminex 200 multiplex analysis, Confocal Laser Microscope, immunofluorescence and immunohistochemistry.

Molecular Biology: extraction and purification of nucleic acids. Conventional PCR.

Cell culture: great experience in cell culture.

Experience with mice: manipulation, breeding, administration by gavage, intramuscular, subcutaneous, intraperitoneal and intravenous injections, basic surgical procedures (castration, intra mammary fat pad injection, intra pancreatic injection, subcutaneous tumor excision), acquired at the Immuno-Oncology Unit of "G. d'Annunzio" University of Chieti-Pescara, since 2010.

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE

(art. 46 D.P.R. n. 445/2000)

DICHIARAZIONE SOSTITUTIVA DELL'ATTO DI NOTORIETÀ'

(artt. 19 e 47 D.P.R. n. 445/2000)

La sottoscritta, **LAMOLINARA ALESSIA**, codice fiscale: LMLLSS84R41A488C, nata ad Atri Provincia di Teramo il 01/10/1984 e attualmente residente a San Giovanni Teatino (CH), in Via d'Ilio 34, C.A.P. 66020, telefono: 328-9276750,

consapevole che le dichiarazioni mendaci sono punite ai sensi degli artt. 483, 495, 496 del Codice penale e delle leggi speciali in materia,

DICHIARA

che le notizie riportate nel presente CV corrispondono al vero.

CHIETI, 01-10-2024

In fede,
Dott.ssa Alessia Lamolinara

