Curriculum vitae

Umberto Malapelle, Ph.D.

Associate Professor,
Department of Public Health,
University of Naples "Federico II",
via S. Pansini 5, 80131, Naples, Italy

Contact information

Date and Place of birth: 17/04/1985; Naples.

Business address: Department of Public Health, University of Naples "Federico II", via S. Pansini 5, 80131, Naples, Italy.

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Foreign Languages: Italian (mother tongue)
English (good reading, spoken and written)
Spanish (good reading, spoken and written)

Education

2009: Medical Biotechnology Degree, summa cum laude, University of Naples "Federico II", Naples, Italy.

2013: Ph.D. in Anatomic Pathology, "Title of Thesis: "Valutazione dello stato mutazionale degli oncogeni predittivi di risposta terapeutica al trattamento di EGFR: validazione analitica e clinica.", University of Naples "Federico II", Naples, Italy.

Licensure:

AA_074980, Naples. (from 24/02/2016)

National Academic Qualification as Associate Professor from 29/04/2019 to 29/04/2025 (art. 16, comma 1, law 240/10)

Member of the Scientific Comminssion, School of medicine, University of Naples "Federico II" (D.R. n. 3422 of 26/10/2020)

Member of "Tavolo Tecnico sulla Medicina di Precisione e Prescrittomica", AIFA.

Professional Experience

2008: Research Partnership Italy-Spain. Molecular Pathology Laboratory (Prof. M. A. Piris) Centro Nacional de Investigaciones Oncologicas (CNIO), Madrid, Spain.

2010: Training in "Laser capture microdissection with PALM MicroBeamsystem (Zeiss), Molecular Diagnostics Unit (Prof. Luis Lombardia), Centro Nacional de Investigaciones Oncologicas (CNIO), Madrid, Spain.

2013: Ion PGM Training at Life Technologies in Frankfurter Str. 129B, 64293 Darmstadt, Germany.

2015 - 2017 Research Partnership Molecular Predictive Pathology, Pangaea Inst/Dexeus University, Barcelona, Spain.

National and International Research Projects

- 2008-2010: Research group member, Italy-Spain Partnership (MIUR grant, IT1816). Role of akt kinase in growth control of haematological and solid neoplasms. In collaboration with Dr. Miguel Angel Piris del Programa de Patologia Molecular Centro Nacional de Investigaciones Oncologicas, Madrid, Spain.
- 2009-2012: Project PRIN Member: Histological and immunohistochemical effects of combined administration of rapamycin, tolvaptan, and AEZ-131 on the progression of polycystic disease in PCK rats, University of Naples "Federico II", Naples, Italy.
- 2015-present: Co-Investigator Research Project "Molecular Biology in indeterminate thyroid FNA" funded by Regione Campania (Legge Regionale n. 24 del 29/12/2005).
- 2016-present: Co-Investigator Research Project "Traslation in clinical practice of ctDNA analysis for EGFR mutation in NSCLC patients" Promoter: University of Naples "Federico II", Naples, Italy.

Academic Appointments:

- 2013 - present: Speaker at the theoretical-practical Master's degree in "Metodologie di Anatomia Patologica per lo studio dei biomarcatori predittivi di risposta terapeutica" (coordinator prof. Giancarlo troncone), Department of Publich Health, University of Naples "Federico II".

- 2016 – present: Professor for teaching activities in Anatomic Pathology, School of Medicine, University of Naples “Federico II”, Naples, Italy.
- 2016 – present: Professor for teaching activities in Anatomic Pathology, Neurophysiopathology Techniques degree, University of Naples “Federico II”, Naples, Italy.
- 2016 – present: Professor for teaching activities in Anatomic Pathology, audiometry and hearing aid degree, University of Naples “Federico II”, Naples, Italy.
- 2016 – present: Professor for teaching activities in Anatomic Pathology School, University of Naples “Federico II”, Naples, Italy.
- 2019-present: Chair of Young Investigators of International Society of Liquid Biopsy.
- 2020-present: Member of Revisors panel for Ph.D. students, University of Bologna, Bologna, Italy.
- 2020 – present: Member of "NETWORK ONCOLOGY AND PRECISION MEDICINE" Iinternational Ph.D. Program, University of Rome "La Sapienza", Rome, Italy.
- 2021 – present: Member of the Breast Unit, University of Naples “Federico II”, Naples, Italy.
- 2021 – present: Second Supervisor for the International PhD Course in Molecular Medicine, Curriculum in Experimental and clinical medicine, at the San Raffaele University in Milan, Italy
- 2021 – present: Second Supervisor for the Doctoral School in Life and Health Sciences PhD Program in Complex System for Life Sciences, at the University of Torino, Italy.
- 2021: UICC Virtual Fellowship. 18 May 2021. Clinical and Translational Research in Lung Cancer.
- 2021 - 2025: Scientific Secretary of International Society of Liquid Biopsy.
- 2023-present: Member of the ESMO Communication Committee.
- 2023-present: Member of the External Scientific Committee of the Instituto Valenciano de Oncologia (FIVO).
- 2024-present: Member of “Commissione paritetica docenti/allievi dottorali della Scuola Superiore Meridionale di Area Scientifico – Tecnologica” (delibera del Comitato Ordinatore della Scuola Superiore Meridionale, n.14 del 29/01/2024).
- 2024-present ESMO TAT - faculty - invited speaker.
- 2024: Internship Supervisor for the module Internship/project in the European MSc in Molecular Pathology during the 2023-2024 academic year.
- 2024: Faculty member of the College of the European School of Oncology.

- 2025: External Scientific Committee of the Fundación Instituto Valenciano de Oncologia (IVO).
- 2025-present: Presidenti fo the International Society of Liquid Biopsy.
- 2025-present Member of the Steering Committee of the Implementing Gender Equity in Lung Cancer Clinical Trials initiative (IASCL).
- 2025: Tutor for Veronesi Post-doctoral fellowship.
- 2025-present: Member of the Scientific Committee of Allenza Contro il Tumore Ovarico (ACTO) Italia.
- 2025-present: Member of the Ph.D. program "Network oncology and precision medicine", University of Rome "La Sapienza" (XLI cycle).
- 2025-present: Member of the Ph.D. program "Clinical and translational oncology", Scuola Superiore Meridionale" (XLI cycle).

Editorial appointments:

- 2020-present: Editorial Board Member of Frontiers in Oncology for "Thoracic Oncology" specialty section as Associate Editor.
- 2020-present: Editorial Board Member of Frontiers in Oncology for "Women's Cancer" specialty section as Associate Editor.
- 2020-present: Editorial Board Member of Critical Reviews in Oncology/Hematology as Deputy Editor.
- 2020-present: Editorial Board Member of Journal of Molecular Pathology as Associate Editor.
- 2020-present: Editorial Board Member of Cells as Associate Editor.
- 2023-present: Editor in Chief of The Journal of Liquid Biopsy.
- 2024-present: Editorial Board Member of Molecular Diagnosis & Therapy.

Technology transfer activities

- 2017 – present: Proposing member of the Spin – Off of the Department of Public Health, University of Naples "Federico II", GENEDIN s.r.l. (Via Giovanni Devoti 14, 00167, Rome, Italy).

- Developer and owner (50%) of SiRe® panel (CE – IVD), a pool of oligonucleotidic probes for the characterization of the molecular assessment of preditictive genes of response to target therapies in metastatic colo-rectal carcinoma, non small cell lung cancer, melanoma and gastrointestinal stromal tumors.

Reviewer for International Project

- participated in the review process of the Dutch Cancer Society (KWF)
- Health Research Board Peer Reviews.

Recognitions

- Heroes of Pathology. The Power List 2024. The Pathologist. https://thepathologist.com/power-list/2024/heroes-of-pathology/umberto-malapelle

Patent

"Medical device for performing a liquid biopsy and related manufacturing method". WO 2025/120530. PCT/IB2024/062196.

Grant

"NExt generation Omics per la diagnosi molecolare del carcinoma polmonare Non a piccole cellule – NEON" nell'ambito del bando a cascata Anthem - AdvaNced Technologies for Human-centrEd Medicine (D.D. 9 december 2022, prot. n. 0001983 - CUP B53C22006700001.

Expertise and My contribution to Molecular Predictive Pathology:

I graduated with a degree in biotechnology from the University of Naples "Federico II", Italy in 2009, then I studied at the Centro Nacional de Investigaciones Oncologicas (CNIO), Madrid, Spain as Research Partnership with the group of Prof. M. A. Pirirs. I obtained a PhD and Doctor Europaeus in Antomic Pathology from the University of Naples "Federico II", Italy in 2013 under the direction of Professor Stefania Montagnani, then I collaborated at Pangaea Inst/Dexeus University, Barcelona, Spain in 2016 under the direction of Professor Rosell. I worked as researcher in the University of Naples, Italy from 2015 to today.

From 2008 to 2010 I worked as Research group member, Italy-Spain Partnership (MIUR grant, IT1816). Role of akt kinase in growth control of hematological and solid neoplasms. In

collaboration with Dr. Miguel Angel Piris del Programa de Patologia Molecular Centro Nacional de Investigaciones Oncologicas Madrid, Spain.
In 2009 to 2012 I served as Project PRIN Member: Histological and immunohistochemical effects of combined administration of rapamycin, tolvaptan, and AEZ-131 on the progression of polycystic disease in PCK rats.
In 2015-in progress I am a Co-Investigator Research Project "Molecular Biology in indeterminate thyroid FNA" funded by Regione Campania (L.R. n. 24 del 29/12/2005).
From 2016 to today I am a Co-Investigator Research Project "Traslation in clinical practice of ctDNA analysis for EGFR mutation in NSCLC patients" Promoter: Università degli Studi di Napoli Federico II.

I am an expert member of the International Society of Liquid Biopsy (ISLB) and I also serve as a board committee member of Italian Group of Molecular Pathology and Predictive Medicine (PMMP).
I am currently the Chief Suepervisor of the Molecular Pathology laboratory of Department of Public Health of University of Naples "Federico II". My research is focused in molecular oncology and immunotherapy in thoracic oncology and in a pan-tumoral approach, using new genertion techniques in liquid biopsies, specifically in circulating free tumour DNA.
I am the developer of an NGS panel (Sire®) for the detection of clinical relevant mutations for NSCLC, GIST, mCRC and metastatic melanoma. I am the founder of University of Naples Spin – off (Genedin), involved in the developing of next generation procedure for detection and analysis of positive and negative biomarkers in the field of solid tumors.

Drafting Member of the Italian guidelines

2019 - present: AIOM – Lung neoplasms;
2020 - present: SIAPEC - Melanoma;
2020 - present: AIOM, SIAPEC, SIF, SIBICO – Molecular Predictive Pathology in cancer patients
2022 - present: AIOM, SIAPEC, SIF, SIBICO – Heredito-familiar tumors

Drafting Member of the International guidelines

2019 - present: International Association for the Study of Lung Cancer (IASLC) – Liquid biopsy in lung cancer

Member of:

- **Second Level Master's Degree in "Immuno-Oncology and Cellular Therapies"** *(La Sapienza University)*

- **Multidisciplinary Innovation Group (GMI)** focused on analyses of management and economic issues in Precision Oncology *(Health Economics)*

- **Member of the Scientific Committee and Coordinator** within the Computational Precision Medicine workshop

- **Steering Committee of the "Lung Cancer Canvas" Project – AstraZeneca Study**

- **Advanced Studies in Thoracic Malignancies (CAS-TM)** – Program of the **European School of Oncology (ESO)** *(Rome)*

- **Patient Registry** collecting clinical and molecular data of patients with:

  - locally advanced and/or metastatic, unresectable non-small cell lung cancer (NSCLC) at stages IIIB/C or IV,
  - who have not previously received treatment for this advanced disease,
  - and are therefore considered candidates for first-line therapy *(HEDERA)*

- **Campania Regional Table – Liquid Biopsy Project in Metastatic Breast Cancer** *(Campania Region)*

  - Committe for the evaluation of FIL B projects, University of Parma.
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Papers:

1. Troncone G, Russo M, **Malapelle U**, Accardo M, Ferraro A, Cozzolino I, Palombini L. Cytological and molecular diagnosis of solid variant of papillary thyroid carcinoma: a case report. Cytojournal. 2008 Mar 19;5:2. doi: 10.1186/1742-6413-5-2. PMID: 18353179; PMCID: PMC2278161.

2. Troncone G, Cozzolino I, Fedele M, **Malapelle U**, Palombini L. Preparation of thyroid FNA material for routine cytology and BRAF testing: a validation study. Diagn Cytopathol. 2010 Mar;38(3):172-6. doi: 10.1002/dc.21166. PMID: 19693938.

3. Troncone G, Volante M, Iaccarino A, Zeppa P, Cozzolino I, **Malapelle U**, Palmieri EA, Conzo G, Papotti M, Palombini L. Cyclin D1 and D3 overexpression predicts malignant behavior in thyroid fine-needle aspirates suspicious for Hurthle cell neoplasms. Cancer. 2009 Dec 25;117(6):522-9. doi: 10.1002/cncy.20050. PMID: 19787802.

4. Troncone G, **Malapelle U**, Cozzolino I, Palombini L. KRAS mutation analysis on cytological specimens of metastatic colo-rectal cancer. Diagn Cytopathol. 2010 Dec;38(12):869-73. doi: 10.1002/dc.21302. PMID: 20049979.

5. Cozzolino I, **Malapelle U**, Carlomagno C, Palombini L, Troncone G. Metastasis of colon cancer to the thyroid gland: a case diagnosed on fine-needle aspirate by a combined cytological, immunocytochemical, and molecular approach. Diagn Cytopathol. 2010 Dec;38(12):932-5. doi: 10.1002/dc.21346. PMID: 20213843.

6. **Malapelle U**, Bellevicine C, Russo A, Salatiello M, Palombini L, Troncone G. KRAS testing on colo-rectal carcinoma cytological imprints. Diagn Cytopathol. 2011 Apr;39(4):274-7. doi: 10.1002/dc.21417. PMID: 20607679.

7. **Malapelle U**, Bellevicine C, Zeppa P, Palombini L, Troncone G. Cytology-based gene mutation tests to predict response to anti-epidermal growth factor receptor therapy: a review. Diagn Cytopathol. 2011 Sep;39(9):703-10. doi: 10.1002/dc.21512. Epub 2010 Nov 9. PMID: 21837660.

8. **Malapelle U**, de Rosa N, Rocco D, Bellevicine C, Crispino C, Illiano A, Piantedosi FV, Nappi O, Troncone G. EGFR and KRAS mutations detection on lung cancer liquid-based cytology: a pilot study. J Clin Pathol. 2012 Jan;65(1):87-91. doi: 10.1136/jclinpath-2011-200296. Epub 2011 Sep 22. PMID: 21945923.

9. Bellevicine C, **Malapelle U**, Docimo G, Ciancia G, Mossetti G, Pettinato G, Troncone G. Multicentric encapsulated papillary oncocytic neoplasm of the thyroid: A case diagnosed by a combined cytological, histological, immunohistochemical, and molecular approach. Diagn Cytopathol. 2012 May;40(5):450-4. doi: 10.1002/dc.21828. Epub 2011 Sep 30. PMID: 21965084.

10. Forzati F, Federico A, Pallante P, Abbate A, Esposito F, **Malapelle U**, Sepe R, Palma G, Troncone G, Scarfò M, Arra C, Fedele M, Fusco A. CBX7 is a tumor suppressor in mice and humans. J Clin Invest. 2012 Feb;122(2):612-23. doi: 10.1172/JCI58620. Epub 2012 Jan 3. Erratum in: J Clin Invest. 2013 Feb 1;123(2):934. PMID: 22214847; PMCID: PMC3266782.

11. **Malapelle U**, de Rosa N, Bellevicine C, Rocco D, Vitiello F, Piantedosi FV, Illiano A, Nappi O, Troncone G. EGFR mutations detection on liquid-based cytology: is microscopy still necessary? J Clin Pathol. 2012 Jun;65(6):561-4. doi: 10.1136/jclinpath-2011-200659. Epub 2012 Apr 1. PMID: 22466414.

12. Zeppa P, Sosa Fernandez LV, Cozzolino I, Ronga V, Genesio R, Salatiello M, Picardi M, **Malapelle U**, Troncone G, Vigliar E. Immunoglobulin heavy-chain fluorescence in situ hybridization-chromogenic in situ hybridization DNA probe split signal in the clonality assessment of lymphoproliferative processes on cytological samples. Cancer Cytopathol. 2012 Dec 25;120(6):390-400. doi: 10.1002/cncy.21203. Epub 2012 Apr 19. PMID: 22517675.

13. **Malapelle U**, Carlomagno C, Salatiello M, De Stefano A, De Luca C, Bianco R, Marciano R, Cimminiello C, Bellevicine C, De Placido S, Troncone G. KRAS mutation detection by high-resolution melting analysis significantly predicts clinical benefit of cetuximab in metastatic

colorectal cancer. Br J Cancer. 2012 Aug 7;107(4):626-31. doi: 10.1038/bjc.2012.275. Epub 2012 Jul 17. PMID: 22805329; PMCID: PMC3419946.

14. **Malapelle U**, Bellevicine C, Salatiello M, de Luca C, Rispo E, Riccio P, Sparano L, De Stefano A, Carlomagno C, Maiello FM, Vita G, Nappi O, Troncone G. Sanger sequencing in routine KRAS testing: a review of 1720 cases from a pathologist's perspective. J Clin Pathol. 2012 Oct;65(10):940-4. doi: 10.1136/jclinpath-2012-200773. Epub 2012 Aug 7. PMID: 22872705; PMCID: PMC3461636.

15. Bellevicine C, **Malapelle U**, Iaccarino A, Schettino P, Napolitano V, Zeppa P, Troncone G. Foamy gland pancreatic ductal adenocarcinoma diagnosed on EUS-FNA: a histochemical, immunohistochemical, and molecular report. Diagn Cytopathol. 2013 Jan;41(1):77-80. doi: 10.1002/dc.22923. Epub 2012 Sep 25. PMID: 23008087.

16. Bellevicine C, Cozzolino I, **Malapelle U**, Zeppa P, Troncone G. Cytological and molecular features of papillary thyroid carcinoma with prominent hobnail features: a case report. Acta Cytol. 2012;56(5):560-4. doi: 10.1159/000338395. Epub 2012 Sep 27. PMID: 23075900.

17. Pallante P, **Malapelle U**, Berlingieri MT, Bellevicine C, Sepe R, Federico A, Rocco D, Galgani M, Chiariotti L, Sanchez-Cespedes M, Fusco A, Troncone G. UbcH10 overexpression in human lung carcinomas and its correlation with EGFR and p53 mutational status. Eur J Cancer. 2013 Mar;49(5):1117-26. doi: 10.1016/j.ejca.2012.09.033. Epub 2012 Oct 24. PMID: 23102841.

18. Rosa R, Marciano R, **Malapelle U**, Formisano L, Nappi L, D'Amato C, D'Amato V, Damiano V, Marfè G, Del Vecchio S, Zannetti A, Greco A, De Stefano A, Carlomagno C, Veneziani BM, Troncone G, De Placido S, Bianco R. Sphingosine kinase 1 overexpression contributes to cetuximab resistance in human colorectal cancer models. Clin Cancer Res. 2013 Jan 1;19(1):138-47. doi: 10.1158/1078-0432.CCR-12-1050. Epub 2012 Nov 19. PMID: 23166225.

19. Bellevicine C, Zabatta A, **Malapelle U**, Vetrani A, Troncone G. Diffuse large B-cell extranodal lymphoma of the uterine cervix: an incidental pap smear finding with histological and immunohistochemical correlation. Diagn Cytopathol. 2014 Jul;42(7):644-6. doi: 10.1002/dc.22966. Epub 2013 Feb 26. PMID: 23441015.

20. Bellevicine C, Iaccarino A, **Malapelle U**, Troncone G. Warthin tumor with signet-ring cell features as a pitfall in salivary gland cytopathology. Acta Cytol. 2013;57(3):309-12. doi: 10.1159/000348248. Epub 2013 Apr 25. PMID: 23635480.

21. **Malapelle U**, Bellevicine C, De Luca C, Salatiello M, De Stefano A, Rocco D, de Rosa N, Vitiello F, Russo S, Pepe F, Iaccarino A, Micheli P, Illiano A, Carlomagno C, Piantedosi FV, Troncone G. EGFR mutations detected on cytology samples by a centralized laboratory reliably

predict response to gefitinib in non-small cell lung carcinoma patients. Cancer Cytopathol. 2013 Oct;121(10):552-60. doi: 10.1002/cncy.21322. Epub 2013 Jun 18. PMID: 23780873.

22. **Malapelle U**, Russo S, Pepe F, Sgariglia R, De Luca C, Bellevicine C, Pallante P, Troncone G. EGFR mutation detection by microfluidic technology: a validation study. J Clin Pathol. 2013 Nov;66(11):982-4. doi: 10.1136/jclinpath-2013-201730. Epub 2013 Jun 21. PMID: 23794480.

23. Bellevicine C, Iaccarino A, **Malapelle U**, Sasso FC, Biondi B, Troncone G. PAX8 is expressed in anaplastic thyroid carcinoma diagnosed by fine-needle aspiration: a study of three cases with histological correlates. Eur J Endocrinol. 2013 Jul 29;169(3):307-11. doi: 10.1530/EJE-13-0150. PMID: 23811186.

24. **Malapelle U**, Carlomagno C, de Luca C, Bellevicine C, Troncone G. KRAS testing in metastatic colorectal carcinoma: challenges, controversies, breakthroughs and beyond. J Clin Pathol. 2014 Jan;67(1):1-9. doi: 10.1136/jclinpath-2013-201835. Epub 2013 Sep 10. PMID: 24022727.

25. Bellevicine C, Vita GD, **Malapelle U**, Troncone G. Applications and limitations of oncogene mutation testing in clinical cytopathology. Semin Diagn Pathol. 2013 Nov;30(4):284-97. doi: 10.1053/j.semdp.2013.11.008. Epub 2013 Nov 12. PMID: 24342285.

26. de Biase D, Visani M, **Malapelle U**, Simonato F, Cesari V, Bellevicine C, Pession A, Troncone G, Fassina A, Tallini G. Next-generation sequencing of lung cancer EGFR exons 18-21 allows effective molecular diagnosis of small routine samples (cytology and biopsy). PLoS One. 2013 Dec 23;8(12):e83607. doi: 10.1371/journal.pone.0083607. PMID: 24376723; PMCID: PMC3871524.

27. Bellevicine C, **Malapelle U**, de Luca C, Iaccarino A, Troncone G. EGFR analysis: current evidence and future directions. Diagn Cytopathol. 2014 Nov;42(11):984-92. doi: 10.1002/dc.23142. Epub 2014 Mar 12. PMID: 24619906.

28. Bellevicine C, Bianco A, **Malapelle U**, De Luca C, Vigliar E, Cacciola NA, Pallante P, Troncone G. Performance of EGFR mutant-specific antibodies in different cytological preparations: a validation study. Cytopathology. 2015 Apr;26(2):99-105. doi: 10.1111/cyt.12155. Epub 2014 May 15. PMID: 24831172.

29. Della Vittoria Scarpati G, Calura E, Di Marino M, Romualdi C, Beltrame L, **Malapelle U**, Troncone G, De Stefano A, Pepe S, De Placido S, D'Incalci M, Marchini S, Carlomagno C. Analysis of differential miRNA expression in primary tumor and stroma of colorectal cancer patients. Biomed Res Int. 2014;2014:840921. doi: 10.1155/2014/840921. Epub 2014 Jul 10. PMID: 25143946; PMCID: PMC4128171.

30. Vigliar E, **Malapelle U**, Bellevicine C, de Luca C, Troncone G. Outsourcing cytological samples to a referral laboratory for EGFR testing in non-small cell lung cancer: does theory meet

practice? Cytopathology. 2015 Oct;26(5):312-7. doi: 10.1111/cyt.12221. Epub 2014 Nov 7. PMID: 25376259.

31. **Malapelle U**, Vigliar E, Sgariglia R, Bellevicine C, Colarossi L, Vitale D, Pallante P, Troncone G. Ion Torrent next-generation sequencing for routine identification of clinically relevant mutations in colorectal cancer patients. J Clin Pathol. 2015 Jan;68(1):64-8. doi: 10.1136/jclinpath-2014-202691. Epub 2014 Nov 5. PMID: 25378536.

32. Bellevicine C, **Malapelle U**, Vigliar E, de Luca C, Troncone G. Epidermal growth factor receptor test performed on liquid-based cytology lung samples: experience of an academic referral center. Acta Cytol. 2014;58(6):589-94. doi: 10.1159/000369756. Epub 2014 Nov 22. PMID: 25428205.

33. **Malapelle U**, Sgariglia R, De Stefano A, Bellevicine C, Vigliar E, de Biase D, Sepe R, Pallante P, Carlomagno C, Tallini G, Troncone G. KRAS mutant allele-specific imbalance (MASI) assessment in routine samples of patients with metastatic colorectal cancer. J Clin Pathol. 2015 Apr;68(4):265-9. doi: 10.1136/jclinpath-2014-202761. Epub 2015 Jan 21. PMID: 25609577.

34. Bellevicine C, Vigliar E, **Malapelle U**, Pisapia P, Conzo G, Biondi B, Vetrani A, Troncone G. Cytopathologists can reliably perform ultrasound-guided thyroid fine needle aspiration: a 1-year audit on 3715 consecutive cases. Cytopathology. 2016 Apr;27(2):115-21. doi: 10.1111/cyt.12243. Epub 2015 Mar 21. PMID: 25810099.

35. Bellevicine C, Vigliar E, **Malapelle U**, Carelli E, Fiorelli A, Vicidomini G, Cappabianca S, Santini M, Troncone G. Lung adenocarcinoma and its thyroid metastasis characterized on fine-needle aspirates by cytomorphology, immunocytochemistry, and next-generation sequencing. Diagn Cytopathol. 2015 Jul;43(7):585-9. doi: 10.1002/dc.23264. Epub 2015 Apr 21. PMID: 25900221.

36. Cacciola NA, Calabrese C, **Malapelle U**, Pellino G, De Stefano A, Sepe R, Sgariglia R, Quintavalle C, Federico A, Bianco A, Uchimura Bastos A, Milone M, Bellevicine C, Milone F, Carlomagno C, Selvaggi F, Troncone G, Fusco A, Pallante P. UbcH10 expression can predict prognosis and sensitivity to the antineoplastic treatment for colorectal cancer patients. Mol Carcinog. 2016 May;55(5):793-807. doi: 10.1002/mc.22322. Epub 2015 Apr 27. PMID: 25917796.

37. **Malapelle U**, Vatrano S, Russo S, Bellevicine C, de Luca C, Sgariglia R, Rocco D, de Pietro L, Riccardi F, Gobbini E, Righi L, Troncone G. EGFR mutant allelic-specific imbalance assessment in routine samples of non-small cell lung cancer. J Clin Pathol. 2015 Sep;68(9):739-41. doi: 10.1136/jclinpath-2015-203101. Epub 2015 Jun 5. PMID: 26047622.

38. Della Corte CM, Bellevicine C, Vicidomini G, Vitagliano D, **Malapelle U**, Accardo M, Fabozzi A, Fiorelli A, Fasano M, Papaccio F, Martinelli E, Troiani T, Troncone G, Santini M, Bianco R, Ciardiello F, Morgillo F. SMO Gene Amplification and Activation of the Hedgehog Pathway as

Novel Mechanisms of Resistance to Anti-Epidermal Growth Factor Receptor Drugs in Human Lung Cancer. Clin Cancer Res. 2015 Oct 15;21(20):4686-97. doi: 10.1158/1078-0432.CCR-14-3319. Epub 2015 Jun 29. PMID: 26124204.

39. **Malapelle U**, De Stefano A, Carlomagno C, Bellevicine C, Troncone G. Next-generation sequencing in the genomic profiling of synchronous colonic carcinomas: comment on Li et al (2015). J Clin Pathol. 2015 Nov;68(11):946-7. doi: 10.1136/jclinpath-2015-203205. Epub 2015 Jul 2. PMID: 26139632.

40. Lucci R, Vigliar E, **Malapelle U**, Cigliano B, Troncone G, Bellevicine C. Fine-needle aspiration findings in focal (nodular) myositis of a newborn: A case report. Diagn Cytopathol. 2015 Nov;43(11):920-3. doi: 10.1002/dc.23309. Epub 2015 Jul 14. PMID: 26173198.

41. Vigliar E, **Malapelle U**, Troncone G. Cytopathology meets basic science. Cancer Cytopathol. 2015 Oct;123(10):571-2. doi: 10.1002/cncy.21578. Epub 2015 Jul 20. PMID: 26194340.

42. Cacciola NA, Sepe R, Forzati F, Federico A, Pellecchia S, **Malapelle U**, De Stefano A, Rocco D, Fusco A, Pallante P. Restoration of CBX7 expression increases the susceptibility of human lung carcinoma cells to irinotecan treatment. Naunyn Schmiedebergs Arch Pharmacol. 2015 Nov;388(11):1179-86. doi: 10.1007/s00210-015-1153-y. Epub 2015 Jul 28. PMID: 26216446.

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Curigliano G, Venetis K, Guerini-Rocco E, Fusco N. Artificial Intelligence in Thyroid Cytopathology: Diagnostic and Technical Insights. Cancers (Basel). 2025 Oct 31;17(21):3525. doi: 10.3390/cancers17213525. PMID: 41228318; PMCID: PMC12610226.

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Book chapters:

1. Pisapia P, **Malapelle U**, Troncone G. (2017). Clinical Practice Implications: Monitoring Drug Response and Resistance. Liquid Biopsy in Cancer Patients, pp 201-202, Springer.

2. Bellevicine C, **Malapelle U**, Vigliar E, Pisapia P, Ruosi C, Troncone G. (2018). How to Prepare Cytological Samples for Molecular Testing. Molecular Applications in Cytology, pp 11-28, Springer.

3. **Malapelle U**, Ricciuti B, Baglivo S, Pepe F, Pisapia P, Anastasi P, Tazza M, Sidoni A, Liberati AM, Bellezza G, Chiari R, Metro G. (2018). Osimertinib. Small Molecules in Oncology, Third Edition, pp 257-276. Springer.

4. **Malapelle U**, Pisapia P, Passiglia F, Dendooven A, Pauwels P, Salgado R, Rolfo C. (2019). Next-Generation Sequencing in Clinical Practice. Oncogenomics, pp 57-64. Academic Press.

5. **Malapelle U**, Pisapia P, Cieri M, Pepe F, Troncone G. (2019). RNA-Based Assays. Molecular Diagnostics in Cytopathology, pp 99-119. Springer, Cham.

6. Pisapia P, Cieri M, Pepe F, **Malapelle U**, Troncone G. (2019). DNA-Based Sequencing Assays. Molecular Diagnostics in Cytopathology, pp 83-97. Springer, Cham.

Patent

PCT/IB2024/062196

Major Invited Speeches:

- 1: “Congresso Annuale di Anatomia Patologica SIAPEC-IAP”, 25-27 September 2008, Bari, Italy
- 2: “22nd European Congress of Pathology”, 04-09 September 2009, Florence, Italy.
- 3: “Congresso Annuale di Anatomia Patologica SIAPEC-IAP”, 21-25 September 2010, Bologna, Italy.
- 4: “Molecular Cytopathology”, 04 October 2010, Naples, Italy.
- 5: "Il ruolo della targeted therapy nelle neoplasie che iperesprimono EGFR", 14 October 2011, IRCCS-CROB, Rionero in Vulture, Italy.
- 6: "Congresso Annuale di Anatomia Patologica SIAPEC - IAP", 27-29 October 2011, Palermo, Italy.
- 7: "I Congresso nazionale di Citopatologia SIAPEC - IAP", 30 June 2012, Trieste, Italy.
- 8: "III Molecular Cytopathology", 27 September 2012, Naples, Italy.
- 9: "GIST & TUMORI RARI", 28 February 2014, Naples, Italy.
- 10: "IV Corso Nazionale AIOM - SIAPEC, Percorso e metodologia nella diagnostica molecolare in oncologia", 26 March 2014, Rome, Italy.

- 11: "ESHO 2014 International Conference", 11-14 June 2014, Turin, Italy.
- 12: “III Congresso Associazione Giovani Oncologi Campani - Update sul trattamento del tumore del colon e del retto", 10 October 2014, Naples, Italy.
- 13: “Congresso Annuale di Anatomia Patologica SIAPEC-IAP”, 22-25 October 2014, Florence, Italy.
- 14: "Nuove evidenze nella gestione del carcinoma del colon metastatico", 17 December 2014, Pozzuoli, Italy.
- 15: "Principali evidenze e punti aperti nel trattamento di II linea dell'adenocarcinoma in stadio avanzato", 23 January 2015, Milan, Italy.
- 16: "Il confine tra benigno e maligno: il percorso diagnostico dalla morfologia alla biologia molecolare", 28-30 January 2015, Naples, Italy.
- 17: "Il laboratorio di Patologia Molecolare: quale presente e quale futuro", 26-27 February 2015, Naples, Italy.
- 18: "Metodologie di Anatomia Patologica per lo studio di Biomarcatori predittivi di risposta terapeutica", 9 April 2015, Naples, Italy.
- 19: "Strategie terapeutiche nel carcinoma del colon - retto metastatico", 28 April 2015, Naples, Italy.
- 20: "Primo incontro nazionale del gruppo di Patologia Molecolare e Medicina Predittiva (PMMP)", 20 June 2015, Rome, Italy.
- 21: "Il patologo ed i test diagnostici di laboratorio: l'importanza della preclinica", 23 June 2015, Naples, Italy.
- 22: "Campus in Oncologia", 25-26 June 2015, Bologna, Italy.
- 23: "Strategie terapeutiche in prima e seconda linea per i pazienti con NSCLC EGFR+ e EGFR WT", 11 September 2015, Avellino, Italy.
- 24: "39th European Congress of Cytology", 20-23 September 2015, Milan, Italy.
- 25: "Dalla Diagnosi morfologica alla biopsia liquida: la base per l'impostazione del percorso terapeutico", Congresso Nazionale AIOM, 23-25 October 2015, Rome, Italy.
- 26: "L'approccio terapeutico al paziente con NSCLC tra esperienze acquisite e prospettive future", 2 Novermber 2015, Milan, Italy.
- 27: "Dalle evidenze del IASLC al dibattito aperto sulle attuali opzioni terapeutiche disponibili", 4 November 2015, Aci Castello, Italy.
- 28: "Detectin Acquired Resistance on Liquid Biopsy", 10 November 2015, Naples, Italy.
- 29: "RAS master program", 11 November 2015, Naples, Italy.

- 30: "L'approccio terapeutico al paziente con NSCLC tra esperienze acquisite e prospettive future", 12 November 2015, Rome, Italy.
- 31: "L'approccio terapeutico al paziente con NSCLC tra esperienze acquisite e prospettive future", 23 November 2015, Naples, Italy.
- 32: "Scientific Exchange meeting oncology on lung cancer", 1-2 December 2015, Milan, Italy.
- 33: "ALKUANTO: dall'importanza della determinazione di ALK all'importanza della gestione terapeutica appropriata", 18 March 2016, Naples, Italy.
- 34: "Marcatori Molecolari in Anatomia Patologica: quando, come e perchè", 8 April 2016, University Maggiore della Carità, Novara, Italy.
- 35: “NSCLC: what has changed?", 6 May 2016, Forte dei Marmi, Italy.
- 36: "La chemioterapia e le terapie target nell'era dell'immunoterapia", 20 May 2016, Serravalle Scrivia, Italy.
- 37: "Terapie a bersaglio molecolare nel carcinoma del polmone. Monitoraggio molecolare: come, quando e perchè?, 26 May 2016, Spedali Civili di Brescia, Brescia, Italy.
- 38: "II Incontro Nazionale del gruppo italiano di Patologia Molcolare e Medicina Predittiva", 31 May 2016, Bologna, Italy.
- 39: “Privat meet. ASCO annual meeting 2016", 3-7 June 2016, Chicago, IL, USA.
- 40: "Il carcinoma del colon-retto metastatico: strategie di trattamento attuali e future.”, 22 June 2016, Naples, Italy.
- 41: "I congresso regionale FONICAP", 1 July 2016, Cagliari, Italy.
- 42: "Next generation network: from the knoledge to know – how. focus on liquid biopsy”, 29 September 2016, Rome, Italy.
- 43: "Liquid biopsy in NSCLC clinical practice", 30 September 2016, Università Piemonte Orientale, Novara, Italy.
- 44: “Private meet on NSCLC. ESMO 2016”, 7-11 October 2016, Copenhagen, Denmark.
- 45: "Microambiente tumorale. Antiangiogenici e immunoterapia: miti e realtà", 11 October 2016, Milan, Italy.
- 46: "V Molecular Cytopathology", 18 October 2016, Naples, Italy.
- 47: "FOCUS on Neoplasie e nuove terapie", 20 October 2016, Lucca, Italy.
- 48: "Strategie di trattamento nel NSCLC in stadio avanzato", 21 October 2016, Bologna, Italy.
- 49: "Oncologia molecolare del polmone - consenso informato e responsabilità professionale", 8 November 2016, Naples, Italy.

- 50: "Il carcinoma del colon retto metastatico: strategie di trattamento attuali e future", 9 November 2016, Naples, Italy.
- 51: "Nuove frontiere diagnostico terapeutiche nelle neoplasie polmonari, renali e nel melanoma", 12 November 2016, Novara, Italy.
- 52: "Ulisse: finding the way in lung cancer", 22-23 November 2016, Rome, Italy.
- 53: "Higliths in oncologia: il trattamento del carcinoma colorettale metastatico ras wild - type", 26 November 2016, Rende, Italy.
- 54: "Ulisse: finding the way in lung cancer", 29 November 2016, Naples, Italy.
- 55: "Novità nei tumori polmonari", 30 November 2016, Bolzano, Italy.
- 56: "PD-L1 un riferimento emergente nelle strategie dell'immunoncologia", 6 December 2016, Naples, Italy.
- 57: "BEST OF WLCC 2016", Florence, Italy, after "World Lung Cancer Conference 2016", 13 December 2016, Wien, Austria.
- 58: "Le patologie emergenti, confronto interdisciplinare NSCLC EGFR+ VE: how the multidisciplinary approach wins the game", 16 December 2016, Monza, Italy.
- 59: "Master class mCRC2 2017", 7-8 April 2017, Baveno, Italy.
- 60: "Stand Alone Scientific Symposium CTIO: Focus on Lung Cancer", 18-19 April 2017, Rome, Italy.
- 61: "IO YOUNG: una nuova prospettiva per l'immunoterapia", 12-13 May 2017, Milan, Italy.
- 62: "PD-L1: un riferimento emergente nell'immuno - oncologia", 15 May 2017, Turin, Italy.
- 63: "Next Generation Technologies – simultaneous biomarkers evaluation in clinical practice", 31 May 2015, Naples, Italy.
- 64: "III Incontro Nazionale del gruppo italiano di Patologia Molcolare e Medicina Predittiva", 6 June 2017, Bologna, Italy.
- 65: "Congresso Nazionale dell'Associazione Italiana di Pneumologia Oncologica – AIPO – 2017", 10-11 June 2017, Florence, Italy.
- 66: "La selezione del paziente NSCLC", 16 June 2017, Agrigento, Italy.
- 67: "Tavola rotonda sul trattamento del paziente con NSCLC.", 22 June 2017, Cagliari, Italy.
- 68: "Win symposium + meet the expert", 25-27 June 2017, Paris, France.
- 69: "European Thoracic Oncology Platform", 5-8 October 2017, Amsterdam, Netherlands.
- 70: "Congresso Annuale di Anatomia Patologica SIAPEC-IAP", 12-14 October 2017, Naples, Italy.

- 71: “Congresso Nazionale della Associazione Italiana di Oncologia Medica – AIOM”, 27-29 October 2017, Rome, Italy.
- 72: “Next Generation Sequencing to Next Generation Oncologist”, 20 November 2017, Istituto Mario Negri, Milan, Italy.
- 73: “VI Molecular Cytopathology”, 4 December 2017, Naples, Italy.
- 74: "Next generation network: from the knoledge to know – how. focus on liquid biopsy”, 11 December 2017, Naples, Italy.
- 75: “Oltre la 1^ linea: il percorso terapeutico del paziente con mRCC”, 19 December 2017, Naples, Italy.
- 76: “IPF Connect 2.0”, 1 February 2018, Catania, Italy.
- 77: “IX Molecular Cytopathology”, 4 December 2020, Naples, Italy.
- 78: Hot Topic Liquid Biopsy IASLC, Worldwide wirtual event, 2 -3 October 2020.
- 79: 16º CONGRESO URUGUAYO DE ONCOLOGIA, 18 November 2020 (web – based congress), Montevideo, Uruguay.
- SOHC 2020, National Switzerland Congress of Oncology and Hematology, (we – based congress) Geneva, Switzerland.
- European Congress of Pathology 2020, Thermo Fisher Scientific – Symposium, web based congress, 7 December 2020.
- Focus on uncommon EGFR mutations in NSCLC: for pathologists. 16 and 23 March 2021.
- Track Member for Liquid Biopsy and other non invasive biomarkers and Discussant. WCLC 2021.
- WCLC 2025 Conference Co-Chair. 6 – 9 September 2025, Barcelona, Spain.
- Organizer committee and speaker at https://www.hkiof.org/HKIOF2025-e-programme.pdf
- From Bench to Clinical Practice – 15-16/09 – Caserta – Scientific Coordinator
- Predictive Biomarkers in Solid Tumors: From Molecular Pathology to Therapeutic Personalization – 11/07/2025 – Pompeii – Scientific Coordinator
- Liquid Biopsy in Breast Cancer: Synergy Between Nurse, Molecular Pathologist, and Oncologist – 19/08 and 15/12 – Webinar – Scientific Coordinator
- Bridge the Gap in Cholangiocarcinoma – 09/07/2025 – Naples – Scientific Coordinator
- Harmonization of Diagnostic Procedures for Accurate Treatment Selection: A Focus on Breast Cancer – 19/06–23/09 – Naples – Scientific Coordinator
- YMP (Young Molecular Pathologists) – 9-10/05/2025 – Rome – Scientific Coordinator
- The Role of Liquid Biopsy in Prostate Cancer – 06/06/2025 – Naples – Scientific Coordinator

- Breast Cancer in the Era of Molecular Pathology – 28/05/2025 – Webinar – Scientific Coordinator
- Predictive Biomarkers in Solid Tumors: From Molecular Pathology to Therapeutic Personalization – 4-5/04/2025 – Naples – Scientific Coordinator
- hyperAKTion 2.0 – The Pathway of HR+ HER2- Breast Cancer Patients with AKT Pathway Mutations – 7-8/04/2025 – Naples – Scientific Coordinator
- Liquid Biopsy in Breast Cancer: Synergy Between Nurse, Molecular Pathologist, and Oncologist – 16/04/2025 – Naples – Scientific Coordinator
- Oncogynecology Diagnostics Summit – 3rd Edition – 20-21 March 2025 – Turin – Scientific Coordinator
- Coffee with the Expert – 22nd Ed. FOCUS ON BREAST CANCER – 21/02/2025 – Webinar – Scientific Coordinator
- Morpho-Molecular Characterization in Gynecologic Tumors – 02/12/2025 – Webinar – Scientific Coordinator
- World Conference on Lung Cancer (WCLC) 2025 – 6-9/09/2025 – Barcelona – Scientific Coordinator
- 11th Meeting of the Italian Group of Molecular Pathology and Precision Medicine – 11-12/04/2025 – Florence – Scientific Coordinator

Awards:

2009: Best Cytopathology Study Award, 22nd European Congress of Pathology, Florence, Italy.

2021: Frontiers in Oncology - GYN Associate Editorial Recognition Award.

2025: SIUrO-Società Italiana di Urologia Oncologica -Traslational research Award.

Scopus

Number of citations: 8499.

H-index: 51.

Google Scholar

Number of citations: 10613.

H-index: 58.

I authorize the processing of personal data contained in my curriculum vitae on the basis of art. 13 of Legislative Decree 196/2003 and art. 13 GDPR 679/16 "European regulation on the protection of personal data".

09 April 2026

Umberto Malapelle