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William and Ellen Melohn Chair in Cancer Biology,
University of Hawaii Cancer Center
Professor (tenured) and Director Thoracic Oncology Program
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University of Hawaii, Honolulu, HI



I. Personal Data

Date of Birth: 24 April 1960, Roma, Italy

Citizenship: U.S.A. (became US Citizen Dec 9, 1999)

Languages: Italian (Mother tongue); Spanish (Mother tongue); English (Fluently).

Work:

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Biographical sketch:

h-index: 76 (<https://scholar.google.pl/citations?user=3CM8k84AAAAJ&hl=en>)

Administrative: From December 2008 through December 2014, I was Director of the NCI designated Cancer Center at the University of Hawaii (UH). The University of Hawaii Cancer Center (UHCC) is an independent unit within UH with its own lines of tenure, and an independent budget. As Director, I was responsible for faculty recruitment, the overall budget and space allocation at UHCC. I led the construction of a new cancer center building, and formation of the new Hawaii Cancer Consortium (HCC) with the main hospitals in Hawaii, which was finalized under a new 501c3 to increase access to resources for translational cancer research. Previously, I was Chair of Pathology at the University of Hawaii, and before coming to Hawaii the Director of Thoracic Oncology Program at Loyola University Chicago. Since Jan 2015 I relinquished all administrative duties, except for directing Thoracic Oncology, and I focus on my research.

Leadership Positions:

2018-present. William and Ellen Melohn Chair in Cancer Biology, University of Hawaii Cancer Center

2006-present. Professor (tenured) and Director Thoracic Oncology Program University of Hawaii Cancer Center

2018-2021: Senior Advisor on Health Sciences to Vice Chancellor for Research U Hawaii

12/2008 -12/2014. Director, University of Hawaii Cancer Center. As Director of UHCC, I applied the teamwork and collaborative strategy that made me successful in research to turn around a failing cancer center. Key achievements:

- Obtained National Cancer Institute (NCI) P30 renewal in 2012 for the Cancer Center, which had failed to meet minimum NCI requirements before I was asked to take a leadership role
- Received following ratings from the NCI's P30 site review board:
 - Overall Cancer Center - "Excellent"
 - My job as Director - "Outstanding"
 - Ratings from the NCI improved across virtually all categories from 2005 and 2012
- Oversaw the process to build a new, state-of-the-art Cancer Center, completing the building 4 months ahead of schedule and \$17M under budget
- Increased fund raising from \$ 0.3 M year/average during the period 2004-2008 (before I was Director), to \$5M year/average during the period 2009-2014
- Secured a Hawaii State Cigarette Tax for the Cancer Center, bringing approximately \$15M - \$19M in funding per year to the Cancer Center since 2009 to present.

- Established the Hawaii Cancer Center Consortium (HCC) and a supporting 501c3 with the major hospitals in Honolulu – The Queens Medical Center, Hawaii Pacific Health and Kuakini
 - This provided a clinical arm for the Cancer Center
 - \$2.2M cash/year since 2009 being allocated to the Cancer Center from the HCC
- Tripled the number of funded investigators through recruitment, mentoring, and investing in the most promising post-Doctoral fellows
- Created a new culture based on excellence in research

2010 through 2014. CEO of the Hawaii Cancer Center Consortium and President of the supporting 501c3 Advisory Board. This cross-functional advisory board for the Cancer Center Consortium included the President of UH, the Chancellor and Vice Chancellor for Research of UH at Manoa, the Dean of the Medical School, and the CEOs of the three participating hospitals.

January, 2008 – April, 2010. Chair of Pathology, University of Hawaii John A. Burns Medical School.

May, 2006 – June, 2008. Director of the Thoracic Oncology Program at Loyola University Chicago.

Research: I apply my combined basic science and pathology training to my research. The experience and reagents I have accumulated over the years, and a terrific team of collaborators, allow me to move my fieldwork directly to the laboratory, and to design and implement measures to help those affected by, or at risk of, cancer. My research is a combination of the fieldwork that I conducted over the course of ~12 years in 3 villages in Cappadocia, Turkey, and later in remote areas of the US, with molecular genetic work in my laboratory at UHCC, and with clinical diagnostic work.

In order to accomplish all of this, I assemble multi-ethnic and multidisciplinary teams. Therefore, while I direct this research, and I was and I am the one conducting the field-work in Cappadocia, WI, LO, ND, and recently in NV, the success of my research is largely the result of team-work. Dr. Haining Yang, a tenured Professor at UHCC and Dr. HI Pass Director Thoracic Surgery at NYU are integral parts of my research team and we have been working together for 18 years (Yang) and 28 years (Pass). Dr. Yang studies asbestos carcinogenesis and she helps me oversee the lab when I do field-work. Our team includes experts in different disciplines with whom we join forces depending on the challenge we face: biostatisticians, chemists, epidemiologists, geneticists, geologists, mineralogists, physicians, Ca²⁺ channels and SPR experts, physicists to model protein structures and cryo-EM experts, etc. Team members participate via Zoom from the US mainland and internationally to our lab meetings providing an array of expertise, critiques and new ideas, and generating a very exciting multidisciplinary environment for our students and post-docs. Our team-work has the additional advantage that by the time we submit a paper the critical data have been reproduced in the laboratories of at least one and often several collaborators to reduce the risk of mistakes.

The same “team-approach philosophy” has helped me use our science as an ambassador of peace among different cultures, and work effectively with local and state authorities to influence public health policies to the direct benefit of citizens. In Cappadocia, for example, I had to deal with cultural, religious and language challenges. How I gained the trust of the villagers in a very religious Islamic community and the trust of my Turkish colleagues, and with their help convinced the Turkish Ministry of Health to build two completely new erionite-free villages where all the villagers have been relocated, was nicely captured in a paper by the former Chair of Pulmonology at the University of Hacettepe in Ankara, Dr. Salih Emri (Emri SA, *Ann Transl Med* 2017). In 2008, because of this work in Cappadocia, we received the *Landon-AACR Innovator Award for International Collaboration in Cancer Research* (M. Carbone PI). Our work has also been recognized by the International Mesothelioma Interest Group (iMig), which comprises scientists and physicians from all countries that study asbestos and mesothelioma. Every 2 years the iMig awards 2 prizes: the “Wagner Award” and the “Research Award”. In 2018, I received the 14th “iMig Wagner Award” and Dr. Yang received the “iMig Research Award”.

Brief summary of my most relevant research. Going against the dogma at that time, I hypothesized and then proved that genetics synergizes with carcinogenic fibers of asbestos and erionite to cause mesothelioma (Roushdy-Hammady I et al., *The Lancet* 2001; Carbone M., et al., *Nat Rev Cancer* 2007 and Carbone M., et al., *Nat Rev Cancer* 2020). With support of a NCI P01 (M. Carbone PI) I discovered that heterozygous germline *BAP1* mutations cause a novel cancer syndrome with high penetrance, and that GxE interaction modulates the incidence of mesothelioma, uveal and

cutaneous melanoma, and of other cancers in carriers of germline *BAP1* mutations (Testa JR et al., *Nature Gen.* 2011). I named this inherited condition “The *BAP1* Cancer Syndrome” (Carbone et al., *JTM* 2012; Carbone M., et al *Nat Rev Cancer* 2013). Close to 100% of those affected by this cancer syndrome developed one or more malignancies during their lifetime, and ~30% of them developed mesothelioma, findings confirmed by many studies (Carbone M., et al., *Cancer Discovery* 2020). We demonstrated that *BAP1* modulates GxE in cancer and elucidated key underlying mechanisms (Bononi A., et al., *Nature* 2017; Bononi A et al., *Cell Death Diff.*, 2017). We studied multiple families affected by the *BAP1* cancer syndrome, and we built a family tree of ~80,000 individuals tracking *BAP1* mutations back to the 18th century (Carbone et al., *PLOS Genetics* 2015). Studying these families we discovered that mesotheliomas developing in carriers of germline mutations are much less aggressive with median survival of 5-7 years, versus 12-18 months for sporadic non-genetically related mesotheliomas (Bauman F et al., *Carcinogenesis* 2015; Pastorino S., et al., *JCO* 2018), findings confirmed recently by studies at the University of Chicago and at the NCI. We also found additional germline mutations that increase susceptibility to mesothelioma (Bononi A., et al, *PNAS* 2020). It is now estimated that ~12% of mesotheliomas occur in carriers of heterozygous germline *BAP1* mutations (the most frequent mutation) or of germline mutations of other tumor suppressor genes (Carbone et al., *Cancer Discovery* 2020). We implemented preventive and early detection strategies among affected family members: these measures saved lives by curative resection of early-stage melanomas and other cancers (Carbone M., et al., *CA Cancer J Clin* 2019). During this research, I worked with state governments, in the US and Turkey to implement novel preventive approaches that are expected to save many lives from cancer. Because of our research the NCI established two clinical trials in Bethesda led by our collaborators Dr. Raffit Hassan (non-surgical) and Dr. David Schrupp (surgical) for carriers of germline *BAP1* mutations (ClinicalTrials.gov Identifier: NCT03830229 and NCT04431024). These trials aim to identify novel cancer prevention, early detection and therapies for carriers of germline *BAP1* mutations. These trials improved our ability to help and study those affected by the *BAP1* cancer syndrome.

Related studies: We discovered that *BAP1* is also the most frequently (>60%) somatically inactivated gene in mesothelioma. We elucidated why initial studies, including our own (Testa JR *Nature Genetics* 2011), underestimated the frequency of somatic *BAP1* mutations: because ~50% of these mutations encompass DNA segments of about 300-3000 kb, which are identified by high density array-CGH and MLPA, but are easily missed by NGS, a technique developed to detect mostly nucleotide level mutations (Yoshikawa Y., et al., *PNAS* 2016). Studying *BAP1* by immunohistochemistry (IHC), I elucidated how *BAP1* IHC helped to diagnose mesothelioma; my findings were confirmed by many laboratories (Nasu M., et al., *JTO* 2015). *BAP1* IHC is now used routinely in diagnostic pathology in the US and abroad in the differential diagnosis of mesothelioma versus benign mesothelial proliferations and versus other cancer types (Carbone M., et al *CA Cancer J Clin* 2019)

Studying the “E” component of the “GxE”, Dr. Yang and I elucidated critical mechanisms of asbestos carcinogenesis, which we linked to the release of HMGB1 (a DAMP) by mesothelial cells and macrophages following asbestos exposure (Yang H., et al., *PNAS* 2010). Extracellular HMGB1 induces a chronic inflammatory process that promotes the release of TNF- α and the transformation of mesothelial cells. At the same time, this process protects mesothelial cells from asbestos-induced cell death (Xue J., et al., *PNAS* 2020). Mesothelioma cells that grow out of an environment rich in HMGB1 secrete HMGB1 to promote their own growth: HMGB1 serum levels are high in mesothelioma patients, and, targeting HMGB1 in vitro and in mice reduced mesothelioma growth (Jube S., et al., *Cancer Res* 2012). Recently we discovered that *BAP1* forms a trimer with HMGB1 and HDAC1, in which *BAP1* deubiquitylates and stabilizes HDAC1 allowing HDAC1 to deacetylate HMGB1 which is therefore retained in the nucleus. Reduced *BAP1* levels destabilize HDAC1 leading to increased acetylation of HMGB1: this isoform is released from the nucleus into the cytoplasm, where it induces autophagy, and it is also secreted extracellularly where HMGB1 promotes inflammation, mesothelial cell transformation and mesothelioma growth. These results bring together our research on *BAP1* and HMGB1, both of which we had previously linked independently to mesothelioma (Novelli F. et al., *PNAS* 2022)

Having seen the danger of the carcinogenic fiber erionite in Cappadocia, I investigated possible erionite exposure in the US. Conducting fieldwork with my collaborators including mineralogists, we identified exposure in Dunn County, ND. I established a collaboration with the ND EPA led by Drs. A. Miller and S. Way. We discovered that the gravel used to pave over 300 miles of dirt roads (most roads in Dunn County are dirt roads) was heavily contaminated with erionite. However, there were no standards for erionite air contamination, so we suspected, but could not prove, that the air-levels of erionite in ND

were a health hazard. I convinced the EPA to dispatch a team led by Dr. Miller to Cappadocia and I convinced the Turkish Ministry of Health to agree to it. We flew to Cappadocia in April of 2008 and collected air samples in the “mesothelioma villages” and nearby “control” villages: the air concentrations of erionite we had measured in school buses in ND were similar to those in the villages. Experiments in my lab revealed that the erionite from ND was as carcinogenic as the one from Cappadocia. Dr. Way and I met with the ND LT Governor and health officers and convinced them to repave the roads with erionite-free gravel. Fortunately, this clean-up took place just before the boom of “fracking” in ND, when an estimated 50,000 trucks a day transited over those roads (Carbone M., et al., *PNAS* 2011). This research led to a new project in Nevada (NV) where I am studying GxE interaction.

Because of our discoveries: 1) *BAP1* germline testing is now conducted routinely on mesothelioma patients; 2) *BAP1* is included in diagnostic germline cancer panels; 3) *BAP1* IHC is now routine in pathology to improve the accuracy of mesothelioma diagnosis; 4) *BAP1* germline testing is directly correlated to prognosis and thus influences therapy; 5) The NCI established 2 clinical trials for *BAP1* mutations carriers-see below; 6) Preventive measures to decrease the burden of mesothelioma have been implemented in Turkey and in ND.

Clinical: I am board certified in anatomic pathology (both in Italy and the US) and specialize in pleural pathology. I receive hundreds of consult requests per year from all over the world on challenging cases. My diagnostic skills help me see the most unusual cases and develop new research hypotheses. I discovered and elucidated how *BAP1* immunohistochemistry (IHC) helped to diagnose mesothelioma. *BAP1* IHC is now used routinely in diagnostic pathology in the US and abroad in the differential diagnosis of mesothelioma versus benign mesothelial proliferations and other cancers.

II. Education

University of Chicago	Anatomic Pathology	1999 Board Certified
Medical School of Rome “La Sapienza” National Institutes of Health, Bethesda, MD. Combined Program	Ph.D. in Human Pathology	1993
Medical School of Rome “La Sapienza”	Anatomic Pathology	1988 Board Certified (Italy)
Medical School of Rome “La Sapienza”	M.D. (cum laude)	1984

III. Academic Appointments

William and Ellen Melohn Chair in Cancer Biology, University of Hawaii Cancer Center		2018-present
Professor (tenured) and Director Thoracic Oncology Program University of Hawaii Cancer Center,		June 2006 – present
Professor of Pathology, John A. Burns School of Medicine University of Hawaii, Honolulu, HI		June 2006- present
Member, Graduate Faculty	Molecular Biosciences & Bioengineering University of Hawaii, Honolulu, HI	Sept 2006 - present
Senior Advisor on Health Sciences to Vice Chancellor for Research M. Bruno, U. Hawaii		2018-2021
Director	University of Hawaii Cancer Center Honolulu, HI	Sept 2009 – Dec 2014
Interim Director	University of Hawaii Cancer Center Honolulu, HI	Dec 2008 – Aug. 2009
Chair	Department of Pathology John A. Burns School of Medicine University of Hawaii, Honolulu, HI	Jan 2008 – April 2010
Professor	Cancer Center, Department of Pathology, Loyola University, Chicago, IL	2005-2006
Director	Thoracic Oncology Program, Loyola University, Chicago, IL	2005-2006
Associate Professor Tenure	Cancer Center, Department of Pathology, Loyola University, Chicago, IL	July, 2002-2005
Associate Professor	Cancer Center, Department of Pathology, Loyola University, Chicago, IL	July, 2000-2002

Member, Graduate Faculty	Cancer Center, Department of Molecular Biology, Loyola University, Chicago, IL	1997-2006
Assistant Professor	Cancer Center, Department of Pathology, Loyola University, Chicago, IL	1997-June, 2000
Instructor/Resident	Department of Pathology, University of Chicago, IL	1994-1996
Visiting Professor	Anatomic Pathology University "La Sapienza" Rome, Italy	1994 (October)
Adjunct Assistant Professor	Department of Pathology Uniformed Services University of the Health Sciences, Bethesda, MD	1989-1994
Visiting Associate Head Unit of Oncogenes	Section on Viruses and Cellular Biology, NICHD-NIH, Bethesda, MD	1990-1994
Visiting Scientist	Department of Biochemistry, FREIE, University, Berlin Germany	1991 (Oct - Dec)
Adjunct Scientist	Section of Viruses and Cellular Biology, NICHD-NIH, Bethesda, MD	1989-1990
Visiting Fellow	Laboratory of Immunopathology, NIAID- NIH Bethesda, MD	1986-1989
Resident	Anatomic Pathology, University "La Sapienza" Rome, Italy	1984-1986

IV. Certifications/Licenses

Hawaii	Licensed Physician and Surgeon	2006-Present
Illinois	Board Certified (Anatomic Pathology) (USA)	1999
Illinois	Licensed Physician and Surgeon	1996-Present
Educational Commission for Foreign Medical Graduates	ECFMG Diploma	1993
Medical School of Rome "La Sapienza"	Board Certified (Anatomic Pathology) (Italy) Valid Throughout EEC	1988
Italy (Valid Throughout EEC)	Licensed Physician and Surgeon	1985-Present

V. Societies

Medical Officer Italian Embassy in the USA, 1989-1994
 Medical Officer Consulate of Italy in San Francisco for the State of Hawaii, 2008-present
 Member, American Association for Cancer Research
 Member, American Society for Investigative Pathology
 Member, European Academy of Tumor Immunology (EATI), 2016-
 Member, Academia Cosentina, Italy
 Academia Europae, Member, Cell and Developmental Biology 2019-

VI. Journal Editorial Activities and Review Committee Memberships

International Association to Study Lung Cancer (IASLC): Chair, Mesothelioma task force 2016-2019.

Associate Editor: Journal of Thoracic Oncology 2020-present

Consulting Reviewer: Nature, Nature Genetics, Nature Cancer, Nature Rev Cancer, Nature Rev Immunology, Nature Communications, Science, Cell, Cancer Cell, The Lancet, Lancet Oncology, Journal of Clinical Oncology, Jama Oncology, Cancer Research, Journal of the National Cancer Institute, Oncogene, Proceedings of the National Academy of Sciences, Cell Death and Differentiation, etc.

Study Sections:

Study Section Member, NCI SPORE in Lung and Genitourinary Cancers, 2005
 Study Section Member, NCI, Lung Cancer and Inflammation (RFA CA07-046), Aug. 2007
 Study Section Member, NCI, SPORE Special Emphasis Panel, 2010
 Site Visit Reviewer, NIH/NCI, University of Pittsburgh Cancer Institute (Cancer Center Support Grant, P30), February 2010
 Site Visit Reviewer, NIH/NCI, University of Colorado Comprehensive Cancer Center, University of Colorado (Cancer Center Support Grant, P30), June 2011
 Site Visit P30 Reviewer, NIH/NCI, University of Chicago Medicine Cancer Center, October 2017
 Site Visit P30 Reviewer, NIH/NCI, Memorial Sloan Kettering Cancer Center, May 2018

International Agreements: Member, US-Italy Science and Technology Commission, 1994-1995 that renewed the treaty of scientific collaboration between Italy and the U.S.

VII. Awards

The iMiG Wagner Medal, to “an individual who has made major original contributions to the understanding of mesothelioma, either in basic or applied research. The Wagner medal is the highest honor presented by the iMiG to a leader in the field” for “discovering the role of genetics in the pathogenesis of mesothelioma” 2018

2018 PAIR – PRIZE IN AMERICAN-ITALIAN RELATIONS, category: “Technical and Technological Science” for “overcoming the boundaries of science and the development of technology, in order to improve the quality of human life and protection of the environment” 2018

Mesothelioma Applied Research Foundation-Pioneer Award for “discovering the BAP1 cancer syndrome” 2014

<u>Landon Foundation-AACR INNOVATOR Award for International Collaboration in Cancer Research</u> for “discovering the causes of the Mesothelioma epidemics in Cappadocia, Turkey”	2008
Fogarty Fellowship (National Institutes of Health)	1986-1994

VIII. Honors

Elected in the Academia Europaea, (Academy of Europe) Life Sciences, Section Cell and Developmental Biology	2019
William and Ellen Melohn Chair in Cancer Biology, University of Hawaii Cancer Center	2018
Honorary Consul of Italy for the State of Hawaii	2010-present
Knight of the Republic of Italy (Cavaliere della Repubblica)	2001

IX. Grants and Contracts:

Complete list NIH funding: <http://grantome.com/grant/NIH/R01-CA198138-01#panel-funding>

Summary:

Active

5R01CA198138 NCI “Germline BAP1 Mutations and Malignant Mesothelioma: Mechanisms and Early Detection”	07/01/15-06/30/22 (NCE) \$1,922,500 (Total cost) presently on no cost extension	Carbone, P.I.
1R01ES030948 NIEHS "Influence of germline mutations on susceptibility to environmental carcinogens"	08/15/19-06/30/22 \$2,032,169 (Total cost)	Carbone (Contact P.I.), Yang (U Hawaii), Grzymiski, (DRI, Nevada) co-P.I.s
1R01CA237235 NCI "Mechanisms of BAP1 activity in human cancer development"	12/13/19-11/30/24 \$2,187,764 (Total cost)	Carbone (Contact P.I.) and Yang, co-P.I.
UH Foundation "Pathogenesis of Malignant Mesothelioma", through <u>unrestricted donations</u> from: Honeywell Int. Inc; Riviera United-4-a Cure; and Maurice and Joanna Sullivan Family Foundation	7/1/10-Open ~\$1.0M available	Carbone, P.I.

Pending:

N/a		
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Past National Funding:

W81XWH-16-1-0344/ CA150220 DoD (PRCRP-IDEA Award) "Identification and Validation of Novel Germline DNA Variants Associated to Increased Risk of Malignant Mesothelioma"	08/01/16-07/31/19 \$616,000 (Total cost)	Carbone/Yang, co-P.I.s
W81XWH-16-1-0441/ CA150671P1 DoD (Peer Reviewed Cancer Research Program-Translational Team Science Award) "HMGB1 and Its Isoforms as Biomarkers For Mineral Fiber Exposure and MM Detection" Team members: H. Yang , Initiating PI, M.Carbone. HI Pass, T. Mak, J. Fert-Bober; partnering PIs)	09/01/16-08/31/21 (NCE) \$1.2M (Total direct cost), presently on no cost extension	Carbone, partnering P.I. \$462,000 Total cost, \$300K direct cost
5P30 CA071789-13 NIH/NCI "University of Hawaii Cancer Center CCSG"	01/01/08-12/31/14 \$462,000 \$2,978,952 (annual direct costs)	Carbone, P.I.
NCI-PO1CA114047-01A1 "Pathogenesis of Mesothelioma"	09/15/06-08/31/13 \$8,306,435 (Total Cost)	40% - Carbone, P.I. Project 1. Gene Environment Interaction in Mesothelioma; Carbone, P.I. 20% Project 2. ERK Pathways in Pathogenesis of Mesothelioma; Mossman, P.I. (U Vermont) Project 3. AKT & Tumor Suppressor Pathways in Mesothelioma; Testa, P.I. (Fox Chase) Administrative Core. Carbone, Director, 5% Clinical Core. Pass, Director (NYU) Pathology and Virology Core. Carbone, Director, 15%
AACR-Landon Award for International Collaboration in Cancer Research 2008	01/12/08-12/31/11 \$ 100,000 (Total cost)	Carbone, P.I.
NCI-RO1CA106567 "Role of cell mediators in asbestos -SV40 carcinogenesis"	03/08/05-01/31/11 \$1,724,529 (Total Cost)	10% - Carbone, P.I.

NCI- RO1CA 092657-01 “SV40-like sequences in human tumors: analysis and biological implications”.	04/01/02-03/31/09 \$1,831,920 (Total Cost)	30% - Carbone, P.I.
NIH-EDRN U0-1 (subcontract from NYU “Australian-American Mesothelioma Research Consortium”	2005-2008 \$14,800 (Total Cost)	Pass, P.I Carbone, Co-Invest.
RSG CCE-106924 American Cancer Society-National “Contribution of genetic predisposition to fiber related mesotheliomas”	01/01/04-12/31/07 \$677,000 (Total Cost)	20% - Carbone, P.I.
Cancer Research Foundation of America “Genetics and human mesothelioma”	01/15/03-01/14/05 \$79,541 (Total Cost)	5% - Carbone, P.I.
R29 CA77220-01 NCI “SV40-like sequences in human tumors: analysis and biologic implications”	8/1/97-8/31/02 \$539,677 (Total Cost)	50% - Carbone, P.I.
RPG-99-238-01-CNE American Cancer Society-National “SV40 as a co-carcinogenesis in asbestos-induced mesothelioma”	7/1/99-6/30/03 \$375,000 (Total Cost)	20% - Carbone, P.I.
R21 NCI “In vitro selection of chemical inhibitors of papovaviruses oncoproteins”	04/01/01-03/31/03 \$304,000 (Total Cost)	5% - Bocchetta, P.I. Carbone, Co-P.I.
Riviera United-4-a Cure “Role of SV40, JC and BK viruses in predisposing to asbestos carcinogenesis”	04/15/03-Open \$120,000 (Total Cost)	Carbone, P.I.
Butitta Mesothelioma Foundation “Poliovaccines and mesothelioma”	08/01/04-06/01/06 \$15,000 (Total Cost)	N/A Carbone, P.I.

X. Patents

Yang, H., **Carbone, M.**, Pass, H. I. 2011. Biomarker of asbestos exposure and mesothelioma. U.S. Patent 9,244,074, issued Jan 26, **2016**.

Yang, H., **Carbone, M.**, Bianchi, M.E. 2011. Treatment and Prevention of Cancer with HMBG1 Antagonists. U.S. Patent 9,561,274, issued Feb 7, **2017**.

Testa, J.R., **Carbone, M.**, Cheung, M., Pei, J. 2011. Methods for Diagnosing a Predisposition to Develop Cancer. U.S. Patent 10,344,333, issued Jul 9, **2019**.

XI. Original Research Articles.

1. Haddada H, Sogn JA, Coligan JE, **Carbone M**, Dixon K, Levine AS, and Lewis Jr AM. Viral Gene Inhibition of Class I Major Histocompatibility Antigen Expression: Not a General Mechanism Governing the Tumorigenicity of Adenovirus Type 2, Adenovirus Type 12, and Simian Virus 40 Transformed Syrian Hamster Cells. *J Virology*, 62:2755-2761, **1988**.
2. **Carbone M**, Lewis Jr. AM, Matthews BJ, Levine AS, and Dixon K. Characterization of Hamster Tumors Induced by SV40 Small-t Deletion Mutants as True Histiocytic Lymphomas. *Cancer Res*, 49:1565-1571, **1989**.
3. **Carbone M**, Kajiwara E, Patch CT, Lewis Jr. AM, Levine AS, and Dixon K. Biochemical Properties of Media Conditioned by Simian Virus 40-Induced Hamster Tumor Cells: Correlation with Distinct Cell Phenotypes But Not with Oncogenicity. *Cancer Res*, 49:6809-6812, **1989**.
4. **Carbone M**, Hauser J, Rundell K, Dixon K, Carthy M, and Levine AS. Simian Virus 40 Small-t Antigen Inhibits DNA Replication In Vitro. *J Virology*, 66:1804-1808, **1992**.
5. Cicala C, Pompetti F, Nguyen P, Dixon K, Levine AS, and **Carbone M**. SV40 Small-t Deletion Mutants Preferentially Transform Mononuclear Phagocytes and B Lymphocytes In Vivo. *Virology*, 190:475-479, **1992**.
6. Cicala C, Pompetti F, and **Carbone M**. Simian Virus 40 Induces Mesotheliomas in Hamsters. *Am J Pathol*, 142:1524-1533, **1993**.
7. Cicala C, Avantaggiati ML, Rundell K, Graessmann A, Levine AS, and **Carbone M**. SV40 Small-t Antigen Stimulates Viral DNA Replication in Permissive Monkey Cells. *J Virology*, 68:3138-3144, **1994**.
8. **Carbone M**, Pass HI, Rizzo P, Marinetti MR, DiMuzio M, Mew DJY, Levine AS, and Procopio A. Simian virus 40-like DNA sequences in human pleural mesothelioma. *Oncogene*, 9:1781-1790, **1994**.
9. Penno MB, Askin FB, Ma H, **Carbone M**, Vargas MP and Pass HI. High CD44 expression on human mesotheliomas mediates association with hyaluronan. *The Cancer J*, 1:196-203, **1995**.
10. Avantaggiati ML, **Carbone M**, Graessman A, Nakatani Y, Howard B, and Levine AS. The SV40 Large T Antigen and Adenovirus E1a Oncoproteins Interact with Distinct Isoforms of the Transcriptional Coactivator, p300. *EMBO J*, 15:2236-2248, **1996**.
11. **Carbone M**, Rizzo P, Giuliano M, Procopio A, Gebhardt M, Mangham C, Hansen M, Malkin DF, Pompetti F, Picci P, Bushart G, Levine AS, Pass HI, Bergsagel JD, and Garcea RL. SV40-like Sequences in Human Bone Tumors. *Oncogene*, 13:527-535, **1996**.
12. Pass HI, Mew DJY, **Carbone M**, Matthews WA, Donington JS, Baserga R, Walker CL, Resnicoff M, and Steinberg SM. Inhibition of Hamster Mesothelioma Tumorigenesis by an Antisense Expression Plasmid to the Insulin-like Growth Factor-1 Receptor. *Cancer Res*, 56:4044-4048, **1996**.
13. Pompetti F, Rizzo P, Simon RM, Freidlin B, Mew DJ, Pass HI, Picci P, Levine AS, and **Carbone M**. Oncogene Alterations in Primary, Recurrent, and Metastatic Human Bone Tumors. *J Cell Biochem*, 63:37-50, **1996**.
14. Agarwala B, Waldman JD, and **Carbone M**. Unguarded Tricuspid Orifice with Uhl's Malformation. *Cardiol in the Young*, 6:177-180, **1996**.
15. Wimmer PJ, Howes DS, Rumoro DP, and **Carbone M**. Fatal Vascular Catastrophe in Ehlers-Danlos Syndrome: A Case Report and Review. *J Emerg Med*, 14:25-31, **1996**.
16. De Luca A, Baldi A, Esposito V, Howard CM, Bagella L, Rizzo P, Caputi M, Pass HI, Giordano GG, De Luca A, Baldi F, **Carbone M**, and Giordano A. The retinoblastoma gene family pRb/p105, p107, pRb2/p130 and simian virus-40 large T-antigen in human mesotheliomas. *Nature Medicine*, 3:913-916, **1997**.
17. **Carbone M**, Rizzo P, Grimley PM, Procopio A, Mew DJY, Shridhar V, de Bartolomeis A, Esposito V, Giuliano M, Steinberg SM, Levine AS, Giordano A, and Pass HI. Simian Virus-40 Large-T Antigen Binds p53 in Human Mesotheliomas. *Nature Medicine*, 3:908-912, **1997**.
18. Pass H, Rizzo P, Donington J, Wu P, and **Carbone M**. Further validation of SV40-like DNA in human pleural mesotheliomas. *Dev Biol Stand*, 94:143-146, **1998**.
19. Testa JR, **Carbone M**, Hirvonen A, Khalili K, Krynska B, Linnainmaa K, Pooley FD, Rizzo P, Rusch V, and Xiao GH. A multi-institutional study confirms the presence and expression of simian virus 40 in human malignant mesotheliomas. *Cancer Res, (Advances in Brief)*, 58:4505-4509, **1998**.

20. Pass HI, Donington JS, Wu P, Rizzo P, Nishimura M, Kennedy R, and **Carbone M**. Human mesotheliomas contain the simian virus-40 (SV40) regulatory region and large tumor (T) antigen DNA sequences. *J Cardio and Thoracic Surgery*, 116:854-859, **1998**.
21. Fisher SG, Weber L, and **Carbone M**. Cancer risk associated with SV40-contaminated Polio Vaccine. *Anti-Cancer Research*, 19:2173-2180, **1999**.
22. Hirvonen A, Mattson K, Karjalainen A, Ollikainen T, Tammilehto L, Hovi T, Vainio H, Pass HI, Di Resta I, **Carbone M**, and Linnainmaa K. SV40-like DNA sequences not detectable in Finnish mesothelioma patients not exposed to SV40-contaminated poliovaccines. *Mol Carcinogenesis*, 26:93-99, **1999**.
23. Krynska B, Del Valle L, Croul S, Gordon J, Katsetos CD, **Carbone M**, Giordano A, and Khalili K. Detection of human neurotropic JC virus DNA sequence and expression of the viral oncogenic protein in pediatric medulloblastomas. *Proc Natl Acad Sci, USA*, 96:11519-11524, **1999**.
24. Ohta Y, Shridhar V, Bright RK, Kalemkerian GP, Du W, Watanabe Y, **Carbone M**, and Pass HI. VEGF and VEGF type C play an important role in angiogenesis and lymphangiogenesis in human malignant mesothelioma tumours. *Br J Can*, 81:54-61, **1999**.
25. Rizzo P, Di Resta I, Powers A, Ratner H, and **Carbone M**. Unique strains of SV40 in commercial poliovaccines from 1955 not readily identifiable with current testing for SV40 infection. *Cancer Res, (Advances in Brief)*, 59:6103-6108, **1999**.
26. Rizzo P, **Carbone M**, Fisher S, Matker C, Swinnen LJ, Powers A, DiResta I, Alkan S, Pass HI, Fisher RI. SV40 is present in most US human mesotheliomas, but it is rarely present in non-Hodgkin's lymphoma. *Chest*, 116:470S-473S, **1999**.
27. Xiao SY, Rizzo P, and **Carbone M**. Benign papillary mesothelioma of the tunica vaginalis testis. *Arch Path Lab Med*, 124:143-147, **2000**.
28. Bocchetta M, Di Resta I, Powers A, Fresco R, Tosolini A, Testa JR, Pass HI, Rizzo P, and **Carbone M**. Human mesothelial cells are unusually susceptible to simian virus 40-mediated transformation and asbestos cocarcinogenicity. *Proc Natl Acad Sci USA*, 97:10214-10219, **2000**.
29. McConnell EE, and **Carbone M**. A comparison of pleural mesotheliomas induced by asbestos or SV40 virus in Syrian golden hamsters. *Inhalation Toxicology*, 12(suppl.3):173-181, **2000**.
30. Roushdy-Hammady I, Siegel J, Emri S, Testa JR and **Carbone M**. A genetic-susceptibility factor malignant mesothelioma in the Cappadocian region of Turkey. *The Lancet*, 357:444-445, **2001**.
31. Velders MP, Macedo MF, Provenzano M, Elmishad AG, Holzhutter H-G, **Carbone M** and Kast WM. Human T cell responses to endogenously presented HLA-A*0201 restricted peptides of simian virus 40 large T antigen. *J Cell Biochem*, 82:155-162, **2001**.
32. Rizzo P, Matker C, Powers A, Setlak P, Heeney JL, Ratner H and **Carbone M**. No evidence of HIV and SIV sequences in two separate lots of polio vaccines used in the first U.S. polio vaccine campaign. *Virology*, 287:13-17, **2001**.
33. Foddis R, De Rienzo A, Broccoli D, Bocchetta M, Stekala E, Rizzo P, Tosolini A, Grobelny JV, Jhanwar SC, Pass HI, Testa JR and **Carbone M**. SV40 infection induces telomerase activity in human mesothelial cells. *Oncogene*, 21:1434-1442, **2002**.
34. Toyooka S, **Carbone M**, Toyooka KO, Bocchetta M, Shivapurkar N, Minna JD and Gazdar AF. Progressive aberrant methylation of the RASSF1A gene in simian virus 40 infected human mesothelial cells. *Oncogene*, 21:4340-4344, **2002**.
35. **Carbone M**, Rizzo P, Powers A, Bocchetta M, Fresco R and Krausz T. Molecular analyses, morphology and immunohistochemistry together differentiate pleural synovial sarcomas from mesotheliomas: clinical implications. *Anti-Cancer Res*, 22:3443-3448, **2002**.
36. Bocchetta M, Miele L, Pass HI and **Carbone M**. Notch-1 induction, a novel activity of SV40 required for growth of SV40-transformed human mesothelial cells. *Oncogene*, 22:81-89, **2003**.
37. **Carbone M**, Rudzinski J and Bocchetta M. High throughput testing of the SV40 large T antigen binding to cellular p53 identifies putative drugs for the treatment of SV40-related cancers. *Virology*, 315:409-414, **2003**.
38. **Carbone M**, Burck C, Rdzanek M, Rudzinski J, Cutrone R, and Bocchetta M. Different susceptibility of human mesothelial cells in polyomavirus infection and malignant transformation. *Cancer Res (Adv in Brief)*, 63:6125-6129, **2003**.
39. **Carbone M**, Bocchetta M, Cristaudo A, Emri S, Gazdar A, Jasani B, Lednický J, Miele L, Mutti L, Pass HI, Ramael M, Rizzo P, Testa JR, Weggen S, and Yeung A. SV40 and human brain tumors. *Int J Cancer*, 106:140-142, **2003** (Technical report).

40. Pass HI, Liu Z, Wali An, Bueno R, Land S, Lott D, Siddiq F, Lonardo F, **Carbone M**, and Draghici S. Gene Expression profiles predict survival and progression of pleural mesothelioma. *Clinical Cancer Research*, 10:849-859, **2004**.
41. Hurtuk M and **Carbone M**. A cytokeratin- and calretinin-negative staining sarcomatoid malignant mesothelioma. *Anticancer Res*, 24:3097-3102, **2004**.
42. **Carbone M**, Klein G, Gruber J, and Wong M. Modern criteria to establish human cancer etiology. *Cancer Res*, 64:5518-5524, **2004**.
43. Tanvetyanon T, Elmishad AG, and **Carbone M**. Development of malignant mesothelioma during treatment for prolymphocytic leukemia: is asbestos or simian virus 40 a link? *Anticancer Res*, 25:429-434, **2005**.
44. **Carbone M**, Rdzanek MA, Rudzinski J, DeMarco MA, Ramos-Nino M, Mossman B, Pass HI, and Bocchetta M. SV40 detection in human tumor specimens. *Cancer Res*, 65:10120-21, **2005**. DOI: 10.1158/0008-5472.CAN-05-1911
45. Cutrone R, Lednicki J, Dunn G, Rizzo P, Bocchetta M, Chumakov K, Minor P and **Carbone M**. Some oral poliovirus vaccines were contaminated with infectious simian virus 40 after 1961. *Cancer Res*, 65:10273-79, **2005**.
46. Pass HI, Lott D, Lonardo F, Harbut M, Zhandong L, Tang N, **Carbone M**, Webb C, and Wali A. Asbestos Exposure, Pleural Mesothelioma, and Serum Osteopontin Levels. *N Engl J Med*, 353:1564-73, **2005**.
47. Wali A, Morin PJ, Hough CD, Lonardo F, Seya T, **Carbone M**, Pass HI. Identification of intelectin overexpression in malignant pleural mesothelioma by serial analysis of gene expression (SAGE). *Lung Cancer*, 48:19-29, **2005**.
48. Kroczyńska B, **Carbone M**. Cross reactivity between many anti-human antibodies for their hamster homologs provide the tools to study the signal transduction pathway activated by asbestos and SV40 in the malignant mesothelioma model. *Molecular Carcinogenesis*, V 45: 537-542, **2006**.
49. Dogan UA, Baris YI, Dogan M, Emri S, Steele I, Elmishad AG, and **Carbone M**. Genetic Predisposition to Fiber Carcinogenesis Causes a mesothelioma Epidemic in Turkey. *Cancer Res*, 66:5063-5068, **2006**.
50. Yang H, Bocchetta M, Kroczyńska B, Elmishad AG, Chen Y, Liu Z, Bubici C, Mossman BT, Pass HI, Testa JR, Franzoso G, **Carbone M**. TNF-alpha inhibits asbestos-induced cytotoxicity via a NF-kappaB-dependent pathway, a possible mechanism for asbestos-induced oncogenesis. *Proc Natl Acad Sci USA*, 103:10397-10402. **2006**.
51. Kroczyńska B, Cutrone R, Bocchetta M, Yang H, Elmishad AG, Vacek P, Ramos-Nino M, Mossman BT, Pass HI, and **Carbone M**. Crocidolite asbestos and SV40 are co-carcinogens in human mesothelial cells and in causing mesothelioma in hamsters. *Proc Natl Acad Sci USA*, 103: 14128-14133, **2006**.
52. **Carbone M**, Emri S, Dogan U, Steele I, Tuncer M, Pass HI, Baris YI. A mesothelioma epidemic in Cappadocia: scientific developments and unexpected social outcomes. *Nature Reviews Cancer*, 7:147-154, **2007**.
53. Pass HI, Wali A, Tang N, Ivanova A, Ivanov S, Harbut M, **Carbone M**, Allard J. Soluble mesothelin-related peptide level elevation in mesothelioma serum and pleural effusions. *Ann Thorac Surg*, 85:265-272, **2008**.
54. Ramos-Nino ME, Blumen SR, Sabo-Attwood T, Pass H, **Carbone M**, Testa J, Altomare DA, Mossman BT. HGF mediates cell proliferation of human mesothelioma cells through a P13K/MEK5/Fra-1 pathway. *Am J Respir Cell Mol Biol*, 38: 209-217, **2008**.
55. Bocchetta M, Elias S, Arakelian De Marco M, Rudzinski J, Zhang L, **Carbone M**. The SV40 large T Antigen-p53 complexes bind and activate the insulin-like growth factor-I promoter stimulating cell growth. *Cancer Res*, 68: 1022-1029, **2008**.
56. **Carbone M**, Pannuti A, Zhang L, Testa JR, Bocchetta M. A novel mechanism of late gene silencing drives SV40 transformation of human mesothelial cells. *Cancer Res*, 68:9488-9496, **2008**. PMID: PMC2666620.
57. Flores RM, Pass HI, Seshan VE, Dycoco J, Zakowski M, **Carbone M**, Bains MS, Rusch VW. Extrapleural Pneumonectomy Versus Pleurectomy/Decortication in the Surgical Management of Malignant Pleural Mesothelioma: Results in 663 patients. *J Thorac Cardiovasc Surg*, 135:620-626.e3, **2008**.

58. Ivanov SV, Miller J, Lucito R, Tang C, Ivanova AV, Pei J, **Carbone M**, Cruz C, Beck A, Webb C, Nonaka D, Testa JR, Pass HI. Genomic events associated with progression of pleural malignant mesothelioma. *Int J Cancer*, 124: 589-599, **2009**. PMID: PMC2933144.
59. Shukla A, Bosenberg MW, MacPherson MB, Butnor KJ, Heintz NH, Pass HI, **Carbone M**, Testa JR, Mossman BT. Activated cAMP response element binding protein is overexpressed in human mesotheliomas and inhibits apoptosis. *Am J Pathol*, 175:2197-2206, **2009**. PMID: PMC2774081.
60. Altomare DA, Menges CW, Pei J, Zhang L, Skele-Stump KL, **Carbone M**, Kane AB, Testa JR. Activated TNF α /NF κ B Signaling Via Down Regulation of Fas-Associated Factor 1 in Asbestos-Induced Mesotheliomas from *Arf* Knockout Mice. *Proc Natl Acad Sci USA*, 106:3420-3025, **2009**. PMID: PMC 2644256.
61. Pass HI, Goparaju C, Ivanov S, Donington J, **Carbone M**, Hoshen M, Cohen D, Chajut A, Rosenwald S, Dan H, Benjamin S, Aharonov R. has-miR-29c* Is linked to the prognosis of malignant pleural mesothelioma. *Cancer Res*, 70:1916-1924, **2010**. PMID: PMC2831149.
62. Yang H, Rivera Z, Jube S, Nasu M, Bertino P, Goparaju C, Franzoso G, Lotze MT, Krausz T, Pass HI, Bianchi ME, **Carbone M**. Programmed necrosis induced by asbestos in human mesothelial cells causes high-mobility group box 1 protein release and resultant inflammation. *Proc Natl Acad Sci USA*, 107: 12611-12616, **2010**. PMID: PMC2906549.
63. Demaria S, Pikarsky E, Karin M, Coussens LM, Chen YC, El-Omar EM, Trinchieri G, Dubinett SM, Mao JT, Szabo E, Krieg A, Weiner GJ, Fox BA, Coukos G, Wang E, Abraham RT, **Carbone M**, Lotze MT. Cancer and inflammation: promise for biologic therapy. *J Immunother*, 33:335-351, **2010**.
64. Hillegass JM, Shukla A, Lathrop SA, MacPherson MB, Beuschel SL, Butnor KJ, Testa JR, Pass HI, **Carbone M**, Steele C, Mossman BT. Inflammation precedes the development of human malignant mesotheliomas in a SCID mouse xenograft model. *Ann N Y Acad Sci*, 1203:7-14, **2010**. PMID: PMC2936775.
65. Flores RM, Riedel E, Donington JS, Alago W, Ihekweazu U, Krug L, Rosenzweig K, Adusumilli PS, **Carbone M**, Pass HI. Frequency of use and predictors of cancer-directed surgery in the management of malignant pleural mesothelioma in a community-based (Surveillance, Epidemiology, and End Results [SEER]) population. *J Thorac Oncol*, 10:1649-1654, **2010**.
66. Shukla A, Hillegass JM, Macpherson MB, Beuschel SL, Vacek PM, Pass HI, **Carbone M**, Testa JR, Mossman BT. Blocking of ERK1 and ERK2 sensitizes human mesothelioma cells to doxorubicin. *Mol Cancer*, 9:314, **2010**.
67. Zhang L, Strianese O, Gaudino G, Morris P, Pass HI, Yang H, Nerurkar VR, Bocchetta M, **Carbone M**. Tissue tropism of SV40 transformation of human cells: role of the viral regulatory region and of cellular oncogenes. *Genes and Cancer*, 1:1008-1020, **2010**. PMID: PMC3092263.
68. Altomare DA, Menges CW, Xu J, Pei J, Zhang L, Tadevosyan A, Neumann-Domer E, Liu Z, **Carbone M**, Chudoba I, Klein-Szanto AJ, Testa JR. Losses of Both Products of the *Cdkn2a/Arf* Locus Contribute to Asbestos-Induced Mesothelioma Development and Cooperate to Accelerate Tumorigenesis. *PLoS ONE*, 6(4): e18828, **2011**. PMID: PMC3079727.
69. Hillegass JM, Blumen SR, Cheng K, Macpherson MB, Alexeeva V, Lathrop SA, Beuschel SL, Steinbacher JL, Butnor KJ, Ramos-Nino ME, Shukla A, James TA, Weiss DJ, Taatjes DJ, Pass HI, **Carbone M**, Landry CC, Mossman BT. Increased efficacy of doxorubicin delivered in multifunctional microparticles for mesothelioma therapy. *Int J Cancer*, 129:233-244, **2011**.
70. Shukla A, Hillegass JM, Macpherson MB, Beuschel SL, Vacek PM, Butnor KJ, Pass HI, **Carbone M**, Testa JR, Heintz NH, Mossman BT. ERK2 is essential for the growth of human epithelioid malignant mesotheliomas. *Int J Cancer*, 129:1075-1086, **2011**. PMID: PMC3071888.
71. Goparaju CM, Blasberg JD, Volinia S, Palatini J, Ivanov S, Donington JS, Croce C, **Carbone M**, Yang H, Pass HI. Onconase mediated NF κ B downregulation in malignant pleural mesothelioma. *Oncogene*, 30:2767-77, **2011**. PMID: PMC3118076.
72. Nasu M, **Carbone M**, Gaudino G, Ly BH, Bertino P, Shimizu D, Morris P, Pass HI, Yang H. Ranpirnase interferes with NF- κ B pathway and MMP9 activity, inhibiting Malignant Mesothelioma cell invasiveness and xenografts growth. *Genes & Cancer*, 2:576-84, **2011**.
73. **Carbone M**, Baris YI, Bertino P, Brass B, Comertpay S, Dogan AU, Gaudino G, Jube S, Kanodia S, Partridge CR, Pass HI, Rivera ZS, Steele I, Tuncer M, Way S, Yang H, Miller A.

- Erionite exposure in North Dakota and Turkish villages with mesothelioma. *Proc Natl Acad Sci USA*, 108:13618-23, **2011**.
74. Testa JR, Cheung M, Pei J, Below JE, Tan Y, Sementino E, Cox N, Dogan AU, Pass, HI, Trusa S, Hesdorffer M, Nasu M, Powers A, Rivera Z, Comertpay S, Tanji M, Gaudino G, Yang H, **Carbone M**. Germline *BAP1* mutations predispose to malignant mesothelioma. *Nat Genet*, 43: 1022-25, **2011**.
 75. Jube S, Rivera Z, Bianchi ME, Powers A, Wang E, Pagano I, Pass HI, Gaudino G, **Carbone M**, Yang H. Cancer cell secretion of the DAMP protein HMGB1 supports progression in malignant mesothelioma. *Cancer Res*, 72:3290-3301, **2012**.
 76. Rivera Z, Ferrone S, Wang X, Jube S, Yang H, Pass HI, Kanodia S, Gaudino G, **Carbone M**. CSPG4 As a Target of Antibody-Based Immunotherapy For Malignant Mesothelioma. *Clin Cancer Res*, 18:5352-5363, **2012**.
 77. Pass HI, Levin SM, Harbut MR, Melamed J, Chiriboga L, Donington J, Huflejt M, **Carbone M**, Chia D, Goodglick L, Goodman GE, Thornquist MD, Liu G, de Perrot M, Tsao, MS, Goparaju C. Fibulin-3 as a blood and effusion biomarker for pleural mesothelioma. *N Engl J Med*, 367:1417-1427, **2012**.
 78. **Carbone M**, Ferris LK, Baumann F, Napolitano A, Lum CA, Flores EG, Gaudino G, Powers A, Bryant-Greenwood P, Krausz T, Hyjek E, Tate R, Friedberg J, Weigel T, Pass HI, Yang H. BAP1 cancer syndrome: malignant mesothelioma, uveal and cutaneous melanoma, and MBAITs. *J Transl Med*, 10:179, **2012**.
 79. Ostroff RM, Mehan MR, Stewart A, Ayers D, Brody EN, Williams SA, Levin S, Black B, Harbut M, **Carbone M**, Goparaju C, Pass HI. Early Detection of Malignant Pleural Mesothelioma in Asbestos-exposed Individuals with a Noninvasive Proteomics-based Surveillance Tool. *PLoS One*, Oct 2012, 7(10):e46091. PMID: PMC3463527.
 80. Bertino P, Panigada M, Soprana E, Bianchi V, Bertilaccio S, Sanvito F, Rose AH, Yang H, Gaudino G, Hoffman PR, Siccardi A, **Carbone M**. Fowlpox-based survivin vaccination for malignant mesothelioma therapy. *Int J Cancer*, 133:612-623, **2013**. PMID: PMC363911.
 81. Croce A, Musa M, Allegrina M, Rinaudo C, Baris YI, Dogan AU, Powers A, Rivera Z, Bertino P, Yang H, Gaudino G, **Carbone M**. Micro-Raman spectroscopy identifies crocidolite and erionite fibers in tissue sections. *J Raman Spectrosc*, 44:1440-1445, **2013**.
 82. Gualtieri AF, Giacobbe C, Rinaudo C, Croce A, Allegrina M, Gaudino G, Yang H, **Carbone M**. Preliminary results of the spectroscopic and structural characterization of mesothelioma inducing crocidolite fibers injected in mice. *Periodico di Mineralogia*, 82:299-312, **2013**.
 83. Qi F, Okimoto G, Jube S, Napolitano A, Pass HI, Laczko R, DeMay RM, Khan G, Tiirikainen M, Rinaudo C, Croce A, Yang H, Gaudino G, **Carbone M**. Continuous exposure to chrysotile asbestos can cause transformation of human mesothelial cells via HMGB1 and TNF- α signaling. *Am J Pathol*, 183:1654-1666, **2013**. PMID: PMC3814524.
 84. Rose AH, Bertino P, Hoffmann FW, Gaudino G, **Carbone M**, Hoffmann PR. Increasing dietary selenium elevates reducing capacity and ERK activation associated with accelerated progression of select mesothelioma tumors. *Am J Pathol*, 184:1041-1049, **2014**.
 85. Cioce, M, Canino C, Goparaju C, Yang H, **Carbone M**, Pass HI. Autocrine CSF-1R signaling drives mesothelioma chemoresistance via AKT activation. *Cell Death Dis*, **2014** Apr 10; 5:e1167, doi: 10.1038/cddis.2014.136.
 86. Zhang L, Comertpay S, Shimizu D, DeMay R, **Carbone M**, Honda S, Matsuura Eaves J. Case Report: Axillary metaplastic breast carcinoma with ipsilateral pectoral invasive ductal carcinoma: An unusual presentation. *Case Reports in Oncological Medicine*, Article ID 938509, **2014**.
 87. Comertpay S, Pastorino S, Tanji M, Mezzapelle R, Strianese O, Napolitano A, Baumann F, Weigel T, Friedberd J, Sugarbaker P, Kruasz T, Wang E, Powers A, Gaudino G, Kanodia S, Pass H, Parsons B, Yang H, **Carbone M**. Evaluation of clonal origin of malignant mesothelioma. *J Transl Med*, 12: 301-306, **2014**.
 88. Baumann F, Flores E, Napolitano A, Kanodia A, Taioli E, Pass H, Yang H, **Carbone M**. Mesothelioma Patients with Germline BAP1 Mutations Have Seven-Fold Improved Long-term Survival. *Carcinogenesis*, 36:76-81, **2015**.
 89. Guo G, Chmielecki J, Goparaju C, Heguy A, Dolgalev I, **Carbone M**, Seepo S, Meyerson M, Pass HI. Whole exome sequencing reveals frequent genetic alterations in BAP1, NF2, CDKN2A and CUL1 in malignant pleural mesothelioma. *Cancer Res*, 75:264-9, **2015**.

90. Nasu M, Emi M, Pastorino S, Tanji M, Powers A, Baumann F, Zhang YA, Gazdar A, Kanodia S, Tiirikainen M, Flores E, Gaudino G, Becich GJ, Pass HI, Yang H, **Carbone M**. High incidence of somatic BAP1 alterations in sporadic malignant mesothelioma. *J Thorac Oncol*, 10:565-76, **2015**.
91. Baumann F, Buck BJ, Metcalf RV, McLaurin BT, Merkler D, **Carbone M**. The presence of asbestos in the natural environment is likely related to mesothelioma in young individuals and women from Southern Nevada. *J Thorac Oncol*, 10:731-7, **2015**.
92. Hoffmann PR, Panigada M, Soprana E, Terry F, Bandar IS, Napolitano A, Rose AH, Hoffmann FW, Ndhlovu LC, Belcaid M, Moise L, De Groot AS, **Carbone M**, Gaudino G, Matsui T, Siccardi A, Bertino P. Preclinical development of Hivax: Human survivin highly immunogenic vaccines. *Hum Vaccin Immunother*, 11:1585-95, **2015**.
93. Croce A, Allegrina M, Rinaudo C, Gaudino G, Yang H, **Carbone M**. Numerous iron-rich particles lie on the surface of erionite fibers from Rome (Oregon, USA) and Karlik (Cappadocia, Turkey). *Microsc Microanal*, 21:1341-7, **2015**.
94. Daou S, Hammond-Martel I, Mashtalir N, Barbour H, Gagnon J, Iannantuono NV, Sen Nkwe N, Motorina A, Pak H, Yu H, Wurtele H, Milot E, Mallette FA, **Carbone M**, Affar EB. The BAP1/ASXL2 Histone H2A Deubiquitinase Complex Regulates Cell Proliferation and is Disrupted in Cancer. *J Biol Chem*, 290: 28643–63, **2015**.
95. Yang H, Pellegrini L, Napolitano A, Giorgi C, Jube S, Preti A, Jennings CJ, De Marchis F, Flores EG, Larson D, Pagano I, Tanji M, Powers A, Kanodia S, Gaudino G, Pastorino S, Pass HI, Pinton P, Bianchi ME, **Carbone M**. Aspirin delays mesothelioma growth by inhibiting HMGB1-mediated tumor progression. *Cell Death Dis*, 6:e1786, **2015**.
96. **Carbone M**, Flores EG, Emi M, Johnson TA, Tsunoda T, Behner D, Hoffman H, Hesdorffer M, Nasu M, Napolitano A, Power A, Minaai M, Baumann F, Bryant-Greenwood P, Lauk O, Kirschner MB, Weder W, Opitz I, Pass HI, Gaudino G, Pastorino S, Yang H. Combined genetic and genealogic studies uncover a large BAP1 cancer syndrome kindred, tracing back nine generations to a common ancestor from the 1700s. *PLoS Genet*, 11(12): e1005633, **2015**.
97. Napolitano A, Pellegrini L, Dey A, Larson D, Tanji M, Flores EG, Kendrick B, Lapid D, Powers A, Kanodia S, Pastorino S, Pass HI, Dixit V, Yang H, **Carbone M**. Minimal asbestos exposure in germline BAP1 heterozygous mice is associated with deregulated inflammatory response and increased risk of mesothelioma. *Oncogene*, 35:1996-2002, **2016**.
98. Pass HI, Goparaju C, Espin-Garcia O, Donington J, **Carbone M**, Patel D, Chen Z, Feld R, Cho J, Gadageel S, Wozniak A, Chachoua A, Leigh N, Tsao MS, de Perrot M, Xu W, Liu G. Plasma Biomarker Enrichment of Clinical Prognostic Indices in Malignant Pleural Mesothelioma. *J Thorac Oncol*, 11:900-9, **2016**.
99. Napolitano A, Antoine DJ, Pellegrini L, Baumann F, Pagano IS, Pastorino S, Goparaju CM, Prokrym K, Canino C, Pass HI, **Carbone M**, Yang H. HMGB1 and its hyper-acetylated isoform are sensitive and specific serum biomarkers to detect asbestos exposure and to identify mesothelioma patients. *Clin Cancer Res*, 22:3087-96, **2016**.
100. Zhang L, Shimizu D, Killeen JL, Honda SA, Lu D, Stanoyevitch A, Lin F, Wang B, Monuki ES, **Carbone M**. Serous Carcinoma component championed by Heparin Binding-EGF Like Growth Factor (HB-EGF) Predisposing to Metastasis and Recurrence in Stage I Uterine Malignant Mixed Mullerian Tumor. *Hum Pathol*, 53:159-67, **2016**.
101. **Carbone M**, Kanodia S, Chao A, Miller A, Wali A, Weissman D, Adjei A, Baumann F, Boffetta P, Buck B, de Perrot M, Dogan AU, Gavett S, Gualtieri A, Hassan R, Hesdorffer M, Hirsch FR, Larson D, Mao W, Masten S, Pass HI, Peto J, Pira E, Steele I, Tsao A, Woodard GA, Yang H, Malik S. Consensus Report of the 2015 Weinman International Conference on Mesothelioma. *J Thorac Oncol*, 11:1246-1262, **2016**.
102. **Carbone M**, Shimizu D, Napolitano A, Tanji M, Pass HI, Yang H, Pastorino S. Positive nuclear BAP1 immunostaining helps differentiate non-small cell lung carcinomas from malignant mesothelioma. *Oncotarget*, 7:59314-59321, **2016**.
103. Larson D, Powers A, Ambrosi JP, Tanji M, Napolitano A, Flores EG, Baumann F, Pellegrini L, Jennings CJ, Buck BJ, McLaurin BT, Merkler D, Robinson C, Morris P, Dogan M, Dogan AU, Pass HI, Pastorino S, **Carbone M**, Yang H. Investigating palygorskite's role in the development of mesothelioma in southern Nevada: Insights into fiber-induced carcinogenicity. *J Toxicol Environ Health, Part B*, 19:213-230, **2016**.

104. Yoshikawa Y, Emi M, Hashimoto-Tamahoki T, Ohmuraya M, Sato A, Tsujimura T, Hasegawa S, Nakano T, Nasu M, Pastorino S, Szymiczek A, Bononi A, Tanji M, Pagano I, Gaudino G, Napolitano A, Goparaju C, Pass HI, Yang H, **Carbone M**. High-density array-CGH with targeted NGS unmask multiple non-contiguous minute deletions on chromosome 3p21 in mesothelioma. *Proc Natl Aca Sci USA*, 113:13432-13437, **2016**.
105. Mao W, Zhang X, Guo Z, Gao Z, Pass HI, Yang H, **Carbone M**. Association of Asbestos Exposure With Malignant Mesothelioma Incidence in Eastern China. *JAMA Oncol*, 3:562-564, **2017**.
106. Guo Z, **Carbone M**, Zhang X, Su D, Sun W, Lou J, Gao Z, Shao D, Chen J, Zhang G, Hu J, Chen K, Wang F, Pass HI, Yu H, Yang H, Mao W. Improving the accuracy of mesothelioma diagnosis in China. *J Thorac Oncol*, 12:714-723, **2017**.
107. Pellegrini L, Xue J, Larson D, Pastorino S, Jube S, Forest KH, Salim Saad-Jube Z, Napolitano A, Pagano I, Negi VS, Bianchi ME, Morris P, Pass HI, Gaudino G, **Carbone M**, Yang H. HMGB1 targeting by ethyl pyruvate suppresses malignant phenotype of human mesothelioma. *Oncotarget*, 8:22649-22661, **2017**.
108. Szymiczek A, Pastorino S, Larson D, Tanji M, Pellegrini L, Xue J, Li S, Giorgi C, Pinton P, Takinishi Y, Pass HI, Furuya H, Gaudino G, Napolitano A, **Carbone M**, Yang H. FTY720 inhibits mesothelioma growth in vitro and in a syngeneic mouse model. *J Transl Med*, 15:58, **2017**. doi: 10.1186/s12967-017-1158-z.
109. Bononi A, Giorgi C, Patergnani S, Larson D, Verbruggen K, Tanji M, Pellegrini L, Signorato V, Olivetto F, Pastorino S, Nasu M, Napolitano A, Gaudino G, Morris P, Sakamoto G, Ferris LK, Danese A, Raimondi A, Tacchetti C, Kuchay S, Pass HI, Affar EB, Yang H, Pinton P, **Carbone M**. BAP1 regulates IP3R3-mediated Ca²⁺ flux to mitochondria suppressing cell transformation. *Nature*, 546:549-553, **2017**. doi: 10.1038/nature22798.
110. Bononi A, Yang H, Giorgi C, Patergnani S, Pellegrini L, Su M, Xie G, Signorato V, Pastorino S, Morris P, Sakamoto G, Kuchay S, Gaudino G, Pass HI, Napolitano A, Pinton P, Jia W, **Carbone M**. Germline BAP1 mutations induce a Warburg effect. *Cell Death Differ*, 24:1694-1704, **2017**. doi: 10.1038/cdd.2017.95.
111. Szymiczek A, **Carbone M**, Pastorino S, Napolitano A, Tanji M, Minaai M, Pagano I, Mason J, Pass H, Bray M, Mak T, Yang H. Inhibition of the spindle assembly checkpoint kinase Mps-1 as a novel therapeutic strategy in malignant mesothelioma. *Oncogene*, 36:6501-6507, **2017**. doi: 10.1038/onc.2017.266.
112. Daou S, Barbour H, Ahmed O, Masclef L, Baril C, Sen Nkwe N, Tchelougou D, Uriarte M, Bonneil E, Ceccarelli D, Tanji M, Masson JY, Thibault P, Sicheri F, Yang H, **Carbone M**, Therrien M, Affar EB. Monoubiquitination of ASXLs controls the deubiquitinase activity of the tumor suppressor BAP1. *Nat Commun*, 9:4385, **2018**. doi: 10.1038/s41467-018-06854-2.
113. Pastorino S, Yoshikawa Y, Pass HI, Emi M, Nasu M, Pagano I, Takinishi Y, Yamamoto R, Minaai M, Tamaoki-Hashimoto T, Ohmuraya M, Goto K, Goparaju C, Sarin KY, Tanji M, Bononi A, Napolitano A, Gaudino G, Hesdorffer M, Yang H, **Carbone M**. A subset of mesotheliomas with improved survival occurring in carriers of BAP1 and other germline mutations. *J Clin Oncol*, 36:3485-3494, **2018**.
114. Bertino P, Premeaux TA, Fujita T, Haun BK, Marciel MP, Hoffmann FW, Garcia A, Yang H, Pastorino S, **Carbone M**, Niki T, Berestecky J, Hoffmann PR, Ndhlovu LC. Targeting the C-terminus of galectin-9 induces mesothelioma apoptosis and M2 macrophage depletion. *Oncoimmunology*, 8:1601482, **2019**. doi: 10.1080/2162402X.2019.1601482. eCollection 2019.
115. Tsao M-S, **Carbone M**, Galateau-Salle F, Moreira AL, Nicholson AG, Roden AC, Adjei AA, Aubry M-C, Fennell DA, Gomez D, Harpole D, Hesdorffer M, Hirsch FR, Liu G, Malik S, Nowak A, Peikert T, Salgia R, Szlosarek P, Taioli E, Yang H, Tsao A, Mansfield AS. Pathologic considerations and standardization in mesothelioma clinical trials. *J Thorac Oncol*, 14:1704-1717, **2019**. doi.org/10.1016/j.jtho.2019.06.020
116. Lee HJ, Pham T, Chang MT, Barnes D, Cai AG, Noubade R, Totpal K, Chen X, Tran C, Hagenbeek T, Wu X, Eastham-Anderson J, Tao J, Lee W, Bastian BC, **Carbone M**, Webster JD, Dey A. The tumor suppressor BAP1 regulates the Hippo pathway in pancreatic ductal adenocarcinoma. *Cancer Res*, 80:1656-1668, **2020**. doi: 10.1158/0008-5472.
117. **Carbone M**, Arron ST, Beutler B, Bononi A, Cavenee W, Cleaver JE, Croce CM, D'Andrea A, Foulkes WD, Gaudino G, Groden JL, Henske EP, Hickson ID, Hwang PM, Kolodner RD, Mak TW, Malkin D, Monnat RJ Jr, Novelli F, Pass HI, Petrini JH, Schmidt LS, Yang H. Tumour

- predisposition and cancer syndromes as models to study gene X environment interactions. *Nat Rev Cancer*, 20:533-549, **2020** (Perspective). doi:10.1038/s41568-020-0265-y. PMID: PMC8104546.
118. Xue J, Patergnani S, Giorgi C, Suarez J, Goto K, Bononi A, Tanji M, Novelli F, Pastorino S, Xu R, Carocchia N, Dogan AU, Pass HI, Tognon M, Pinton P, Gaudino G, Mak TW, **Carbone M**, Yang H. Asbestos induces mesothelial cell transformation via HMGB1-driven autophagy. *Proc Natl Acad Sci U S A*, 117:25543-25552, **2020**. doi: 10.1073/pnas.2007622117. PMID: 32999071; PMID: PMC7568322.
119. Bononi A, Goto K, Ak G, Yoshikawa Y, Emi M, Pastorino S, Carparelli L, Ferro A, Nasu M, Kim JH, Suarez JS, Xu R, Tanji M, Takinishi Y, Minaai M, Novelli F, Pagano I, Gaudino G, Pass HI, Groden J, Grzymiski JJ, Metintas M, Akarsu M, Morrow B, Hassan R, Yang H, **Carbone M**. Heterozygous germline BLM mutations increase susceptibility to asbestos and mesothelioma. *Proc Natl Acad Sci U S A*, 117:33466-33473, **2020**. doi: 10.1073/pnas.2019652117. PMID: 33318203; PMID: PMC7776606.
120. Zhang L, Vunnamadala SP, Yagi S, Meraj R, **Carbone M**. Delayed positive COVID19 nasopharyngeal test, a case study with clinical and pathological correlation. *BMC Pulm Med*, 21:278, **2021**. doi: 10.1186/s12890-021-01643-y. PMID: 34465321
121. Novelli F, Bononi A, Wang Q, Bai F, Patergnani S, Kricek F, Haglund E, Suarez J, Tanji M, Xu R, Takinishi Y, Minaai M, Pastorino S, Morris P, Sakamoto G, Pass HI, Barbour H, Gaudino G, Giorgi C, Pinton P, Onuchic JN, Yang H, **Carbone M**. BAP1 forms a trimer with HMGB1 and HDAC1 that modulates Gene X Environment interaction with asbestos. *Proc Natl Acad Sci U S A*, 118 (48):e2111946118, **2021**. doi: 10.1073/pnas.2111946118
122. Carbone M, Pass HI, Ak G, Alexander HR, Baas P, Baumann F, Blakely AM, Bueno R, Bzura A, Cardillo G, Churpek JE, Dianzani I, De Rienzo A, Emi M, Emri S, Felley-Bosco E, Fennell DA, Flores RM, Grosso F, Hayward NK, Hesdorffer M, Hoang CD, Johansson PA, Kindler HL, Kittaneh M, Krausz T, Mansfield A, Metintas M, Minaai M, Mutti L, Nielsen M, O'Byrne K, Opitz I, Pastorino S, Pentimalli S, de Perrot M, Pritchard A, Ripley RT, Robinson B, Rusch V, Taioli E, Takinishi Y, Tanji M, Tsao AS, Tuncer M, Walpole S, Wolf A, Yang H, Yoshikawa Y, Zolodnick A, Schrupp DA, Hassan R. Medical and surgical care of mesothelioma patients and their relatives carrying germline BAP1 mutations. *JTO* 2022, DOI:<https://doi.org/10.1016/j.jtho.2022.03.014>

Papers submitted for publication are not listed.

XII. Reviews, Commentaries, and Editorials:

1. **Carbone M**, and Levine AS. Oncogenes, Anti-oncogenes and The Regulation of Cell Growth. *Trends in Endocrinology and Metabolism*, 1:248-253, **1990**.
2. **Carbone M**, Rizzo, P, and Pass HI. Simian Virus 40, Poliovaccines and Human Tumors: A Review of Recent Developments. *Oncogene*. 15:1877-1888, **1997**.
3. Velders MP, Nieland JD, Rudolf MP, Loviscek K, Weijzen S, de Visser KE, Macedo MF, **Carbone M**, and Kast WM. Identification of peptides for immunotherapy of cancer. It is still worth the effort. *Crit Rev Immuno*. 18:7-27, **1998**.
4. Macedo MF, Velder MP, Nieland JD, Rudolf MP, Weijzen S, DaSilva DM, Franke A, Holt G, Loviscek K, **Carbone M**, Kast WM. Cellular Immunity & Immunotherapy Against Deoxyribonucleic Acid Virus-Induced Tumours. *Monaldi Archives for Chest Disease*. 53:211-218, **1998**.
5. Rizzo P, Di Resta I, Powers A, Matker CM, Zhang A, Kast WM, Mutti L, Pass HI, and **Carbone M**. The Detection of SV40 in human tumours by polymerase chain reaction. *Monaldi Archives for Chest Disease*. 53:202-210, **1998**.
6. Matker CM, Rizzo P, Pass HI, DiResta I, Powers A, Mutti L, Kast WM, and **Carbone M**. The biological activities of simian virus 40 large-T antigen and its possible oncogenic effects in humans. *Monaldi Archives for Chest Disease*. 53:193-197, **1998**.
7. Valle MT, Castagneto B, Procopio A, **Carbone M**, Giordano A, Mutti L. Immunobiology and

- immune defense mechanisms of mesothelioma cells. *Monaldi Archives for Chest Disease*. 53:219-227, **1998**.
8. Ribotta M, Roseo F, Salvio M, Castagneto B, **Carbone M**, Procopio A, Giordano A, Mutti L. Recurrent chromosome 6 abnormalities in malignant mesothelioma. *Monaldi Archives for Chest Disease*.53:228-235. **1998**.
 9. Mutti L, **Carbone M**, Giordano GG, and Giordano A. SV40 and human cancer. *Monaldi Archives for Chest Disease*. 53:198-201, **1998**.
 10. **Carbone M**, Stach R, di Resta I, Pass HI, and Rizzo P. Simian Virus-40 Oncogenesis in Hamsters. *Dev. Biol. Stand*, 94:273-279, **1998**.
 11. Rizzo P, di Resta I, Stach R, Mutti L, Picci P, Kast WM, Pass HI, and **Carbone M**. Evidence for and Implications of SV40-like Sequences in Human Mesotheliomas and Osteosarcomas. *Dev Bio Stand*, 94:33-40, **1998**.
 12. Pass HI, Mew DJY, **Carbone M**, Donington JS, Baserga R, Steinberg SM. The effect of an antisense expression plasmid to the IGF-1 receptor on hamster mesothelioma proliferation. *Dev Bio Stand*, 94:321-328, **1998**.
 13. Mutti L, De Luca A, Claudio PP, Convertino G, **Carbone M**, and Giordano A. Simian virus 40-like DNA sequences and Large-T antigen-retinoblastoma family protein pRb2/p130 interaction in human mesothelioma. *Dev Biol Stand*, 94:47-53, **1998**.
 14. **Carbone M**. Simian virus 40 and human tumors: It is time to study mechanisms. *J Cell Biochem*, 76(2):189-193, **1999**.
 15. **Carbone M**, Fisher S, Powers A, Pass HI, and Rizzo P. New molecular and epidemiological issues in mesothelioma: Role of SV40. *J Cell Physiol*, 180:167-172, **1999**.
 16. Pass HI, Robinson BW, Testa JR, and **Carbone M**. Emerging translational therapies for mesothelioma. *Chest*, 116:455S-460S, **1999**.
 17. **Carbone M**, Rizzo P, Pass H. Simian virus 40: The link with human malignant mesothelioma is well established. *Anticancer Research*. 20:875-878, **2000**.
 18. **Carbone M**. SV40: from monkeys to humans, Introduction. *Seminars in Cancer Biology*, 11:1-3, **2001**.
 19. Rizzo P, Bocchetta M, Powers A, Foddìs R, Stekala E, Pass HI, and **Carbone M**. SV40 and the pathogenesis of mesothelioma. *Seminars in Cancer Biology*, 11:63-71, **2001**.
 20. **Carbone M**, Kratzke RA, Testa JR. The pathogenesis of mesothelioma. *Seminars in Oncology*, 29:2-17, **2002**.
 21. Emri S, Demir A, Dogan M, Akay H, Bozkurt B, **Carbone M**, and Baris I. Lung diseases due to environmental exposures to erionite and asbestos in Turkey. *Toxicology Letters*, 127:251-257, **2002**.
 22. Powers A and **Carbone M**. The role of environmental carcinogens, viruses, and genetic predisposition in the pathogenesis of mesothelioma. *Cancer Biology and Therapy*, 1:4, 350-355, **2002**.
 23. Gazdar AF, Butel JS and **Carbone M**. SV40 and human tumors: myth, association or causality? *Nature Reviews Cancer*, 2:957-964, **2002**.
 24. **Carbone M**, Pass HI, Miele L, and Bocchetta M. New developments about the association of SV40 with human mesothelioma. *Oncogene*, 22:5173-5180, **2003**.
 25. Gazdar AF and **Carbone M**. Molecular pathogenesis of malignant mesothelioma and its relationship to simian virus 40. *Clin Lung Cancer*, 5:177-181, **2003**.
 26. **Carbone M** and Rdzanek MA. Pathogenesis of malignant mesothelioma. *Clinical Lung Cancer*, 5:Suppl 2, S46-S50, **2004**.
 27. Bocchetta M and **Carbone M**. Epidemiology and molecular pathology at crossroads to establish causation: molecular mechanisms of malignant transformation. *Oncogene*.23:6484-6491, **2004**.
 28. Pass HI, Bocchetta M and **Carbone M**. Evidence of an important role in SV40 in mesothelioma. *Thorac Surg Clin*, 14:489-495, **2004**.
 29. **Carbone M**, Gruber J, and Wong M. Modern criteria to establish human cancer etiology. *Seminars in Cancer Biology*, 14:397-398. **2004**.
 30. **Carbone M** and H.I. Pass. Multistep and multifactorial carcinogenesis: when does a contributing factor become a carcinogen? *Seminars in Cancer Biology*, 14:399-405, **2004**.
 31. **Carbone M**. Pathology of Asbestos-Associated Diseases, 2nd Edition. Edited by Victor L. Roggli, Tim D. Oury, and Thomas A. Sporn, New York, NY, Springer-Verlag, **2004**. *Arch Pathol Lab Med*-Vol. 129, p579-580, **April 2004**.

32. **Carbone M**, and H.I. Pass. Evolving Aspects of Mesothelioma Carcinogenesis: SV40 and Genetic Predisposition. *Journal of Thoracic Oncology*, 1: 169-171, **2006**.
33. Elmishad A.G., Bocchetta M., Pass H.I., **Carbone M**. Poliovaccines, SV40 and human tumors, an update on false positive and false negative results. *Dev Biol Standards*, 123: 109-117, **2006**.
34. **Carbone M**. Perché I ricercatori Italiani Emigrano negli USA. *Quaderni di Scienza e Scienziati Molisani*, Anno I - N. 1: 77-26, **2006**.
35. Radzanek M., Fresco R., Pass H.I., and **Carbone M**. Spindle cell tumors of the pleura: differential diagnosis. *Seminars in Diagnostic Pathology*, 23: 44-55, **2006**.
36. Ramos-Nino ME, Testa JR, Altomare DA, Pass HI, **Carbone M**, Bocchetta M, Mossman BT. Cellular and molecular parameters of mesothelioma. *J Cell Biochem*, 98:723-734, **2006**. PMID: PMC2766267.
37. **Carbone M**, Bedrossian C WM. The pathogenesis of mesothelioma. *Seminars in Diagnostic Pathology*; 23: 56-60, **2006**.
38. **Carbone M**, Strianese O, Theos K, Yang H. Mesothelioma. *Hawaii Medical Journal*, 66: 48-50, **2007**.
39. **Carbone M**. Una Epidemia Di Mesotelioma in Cappadocia. *Quaderni di Scienza e Scienziati Molisani*, Anno II - N. 2: 31-40, **2007**.
40. **Carbone M**, Albelda SM, Broaddus VC, Flores RM, Hillerdal G, Jaurand M-C, Kjaerheim K, Pass HI, Robinson B, Tsao A. 8th International Mesothelioma Interest Group (IMIG). *Oncogene*, 26: 6959-6967, **2007**.
41. Elias S, **Carbone M**, Bocchetta M. Simian Virus 40 and Cancer. *Oncology Reviews*, 1:131-140, **2007**.
42. Beck AK, Pass HI, **Carbone M**, Yang H. Overview of ranpiranase as a potential anti-tumor ribonuclease treatment for mesothelioma and other malignancies. *Future Oncol*, 4:341-349, **2008**.
43. Rivera Z, Strianese O, Bertino P, Yang H, Pass H, **Carbone, M**. The relationship between simian virus 40 and mesothelioma. *Curr Opin Pulm Med*, 14:316-321, **2008**.
44. Bocchetta M, **Carbone M**. SV40 Tag/p53 complexes actively promote malignant cell growth of human mesothelial cells. *Cellular Oncol*, 30:455, **2008**.
45. Yang H, Testa JR, **Carbone M**. Mesothelioma epidemiology, carcinogenesis, and pathogenesis. *Curr Treat Options Oncol*, 9:147-157, **2008**. PMID: PMC2717086.
46. Bertino P, **Carbone M**, Pass H. Chemotherapy of malignant pleural mesothelioma. *Expert Opin Pharmacother*, 10:99-107, **2009**.
47. **Carbone M**. Feasibility of immunotherapy for LAM. (Commentary). *Am J Pathol*, 175:2252-2254, **2009**.
48. Pass HI and **Carbone M**. Current status of screen for malignant pleural mesothelioma. *Semin Thorac Cardiovasc Surg*, 21:97-104, **2009**.
49. Qi F, **Carbone M**, Yang H, Gaudino G. Simian virus 40 transformation malignant mesothelioma and brain tumors. *Expert Rev Respir Med*, 5:683-697, **2011**.
50. **Carbone M**, Ly BH, Dodson RF, Pagano I, Morris PT, Dogan UA, Gazdar AF, Pass HI, Yang H. Malignant mesothelioma: Facts, myths and hypotheses. *J Cell Physiol*, 227: 44-58, **2012** Jan. PMID: PMC3143206.
51. **Carbone M** and Yang H. Molecular pathways: targeting mechanisms of asbestos and erionite carcinogenesis in mesothelioma. *Clin Cancer Res*, 18:598-604, **2012**.
52. **Carbone M**, Yang H, Pass HI, Krausz T, Testa JR, Gaudino G. Bap1 and cancer. *Nat Rev Cancer*, 13:153-159, **2013**. PMID: PMC3792854.
53. Baumann F, Ambrosi JP, **Carbone M**. Asbestos is not just asbestos: an unrecognised health hazard. *Lancet Oncol*, 14:576-578, **2013**.
54. **Carbone M**, Gaudino G, Yang H. Recent insights emerging from malignant mesothelioma genome sequencing. *J Thorac Oncol*, 10:409-11, **2015**.
55. Klebe S, Driml J, Nasu M, Pastorino S, Zangiabadi A, Henderson D, **Carbone M**. BAP1 hereditary cancer predisposition syndrome: a case report and review of literature. *Biomark Res*, 3:14, **2015**.
56. Bononi A, Napolitano A, Pass HI, Yang H, **Carbone M**. Latest developments in our understanding of the pathogenesis of mesothelioma and the design of targeted therapies. *Expert Rev Respir Med*, 9:633-54, **2015**.

57. Ransohoff KJ, Jaju PD, Tang JY, **Carbone M**, Leachman S, Sarin KY. Familial skin cancer syndromes: Increased melanoma risk. *J Am Acad Dermatol*, 74:423-34, **2016**.
58. Baumann F, **Carbone M**. Environmental risk of mesothelioma in the U.S.: An emerging concern - epidemiological issues. *J Toxicol Environ Health, Part B*, 19:231-249, **2016**.
59. Napolitano A, **Carbone M**. Malignant mesothelioma: Time to translate? *Trends In Cancer*, 2:467-74, **2016**.
60. **Carbone M**, Yang H. Mesothelioma: recent highlights. *Ann Transl Med*, 5(11):238, **2017**. doi: 10.21037/atm.2017.04.29
61. Chen Z, Gaudino G, Pass HI, **Carbone M**, Yang H. Diagnostic and prognostic biomarkers for malignant mesothelioma: an update. *Transl Lung Cancer Res*, 6(3):259-269, **2017**. doi: 10.21037/tlcr.2017.05.06.
62. McCambridge, AJ, Napolitano A, Mansfield AS, Dean A, Fennell DA, Sekido Y, Nowak AK, Reungwetwattana T, Mao W, Pass HI, **Carbone M**, Yang H, Peikert T. Progress in the Management of Malignant Pleural Mesothelioma in 2017. *J Thorac Oncol*, 13:606-623, **2018**. doi: 10.1016/j.jtho.2018.02.021
63. Mutti L, Peikert T, Robinson BWS, Scherpereel A, Tsao AS, de Perrot M, Woodard GA, Jablons DM, Wiens J, Hirsch FR, Yang H, **Carbone M**, Thomas A, Hassan R. Scientific Advances and New Frontiers in Mesothelioma Therapeutics. *J Thorac Oncol*, 13:1269-1283, **2018**. doi: 10.1016/j.jtho.2018.06.011.
64. **Carbone M**, Amelio I, Affar EB, Brugarolas J, Cannon-Albright LA, Cantley LC, Cavenee WK, Chen Z, Croce CM, Andrea A, Gandara D, Giorgi C, Jia W, Lan Q, Mak TW, Manley JL, Mikoshiba K, Onuchic JN, Pass HI, Pinton P, Prives C, Rothman N, Sebt SM, Turkson J, Wu X, Yang H, Yu H, Melino G. Consensus report of the 8 and 9th Weinman Symposia on Gene x Environment Interaction in carcinogenesis: novel opportunities for precision medicine. *Cell Death Differ*, 25:1885-1904, **2018**. doi: 10.1038/s41418-018-0213-5.
65. Tsao AS, Lindwasser OW, Adjei AA, Adusumilli PS, Beyers ML, Blumenthal GM, Bueno R, Burt BM, **Carbone M**, Dahlberg SE, de Perrot M, Fennell DA, Friedberg J, Gill RR, Gomez DR, Harpole DH Jr, Hassan R, Hesdorffer M, Hirsch FR, Hmeljak J, Kindler HL, Korn EL, Liu G, Mansfield AS, Nowak AK, Pass HI, Peikert T, Rimner A, Robinson BWS, Rosenzweig KE, Rusch VW, Salgia R, Sepesi B, Simone CB 2nd, Sridhara R, Szlosarek P, Taioli E, Tsao MS, Yang H, Zauderer MG, Malik SM. Current and Future Management of Malignant Mesothelioma: A Consensus Report from the National Cancer Institute Thoracic Malignancy Steering Committee, International Association for the Study of Lung Cancer, and Mesothelioma Applied Research Foundation. *J Thorac Oncol*, 13:1655-1667, **2018**. doi: 10.1016/j.jtho.2018.08.2036.
66. Affar EB, **Carbone M**. BAP1 regulates different mechanisms of cell death. *Cell Death Dis (Comment)*, 9:1151, **2018**. doi: 10.1038/s41419-018-1206-5.
67. **Carbone M**, Yang H, Gaudino G. Does chromothripsis make mesothelioma an immunogenic cancer? *J Thorac Oncol*, 14:157-159, **2018**.
68. van Zandwijk N, **Carbone M**. In memoriam: Professor Adi F. Gazdar, a pre-eminent pathologist and devoted man. *Transl Lung Cancer Res* **2019**, doi: 10.21037/tlcr.2019.04.08
69. **Carbone M**, Adusumilli PS, Alexander HR, Baas P, Bardelli F, Bononi A, Bueno R, Felley-Bosco E, Galateau-Salle F, Jablons D, Mansfield AS, Minaai M, de Perrot M, Pesavento P, Rusch V, Severson DT, Taioli E, Tsao A, Woodard G, Yang H, Zauderer MG, Pass HI. Mesothelioma: Scientific Clues for Prevention, Diagnosis, and Therapy. *CA Cancer J Clin* 69:402-429, **2019**. doi.org/10.3322/caac.21572
70. **Carbone M**, Melino G. Lipid metabolism offers anticancer treatment by regulating ferroptosis. *Cell Death Differ*, 26:2516-2519, **2019**. doi: 10.1038/s41418-019-0418-2
71. **Carbone M**, Melino G. Steroyl CoA desaturase regulates ferroptosis in ovarian cancer offering new therapeutic perspectives. *Cancer Res*, 79:5149-5150, **2019**. doi: 10.1158/0008-5472.
72. **Carbone M**, Gazdar A, Butel JS. SV40 and human mesothelioma. *Transl Lung Cancer Res*, 9(Suppl 1):S47-S59, **2020**. doi: 10.21037/tlcr.2020.02.03.
73. **Carbone M**. This special volume of mesothelioma is dedicated to my friend Adi Gazdar. *Transl Lung Cancer Res*, 9(Suppl 1):S1-S2, **2020**. doi: 10.21037/tlcr.2020.01.15.
74. **Carbone M**, Green JB, Bucci EM, Lednický JA. Coronaviruses: Facts, Myths, and Hypotheses. *J Thorac Oncol*, 15:675-678, **2020**. doi.org/10.1016/j.jtho.2020.02.024.

75. **Carbone M.** Transitional mesothelioma and artificial intelligence. Do we need one more subtype? And do we need artificial intelligence to identify them? *J Thorac Oncol*, 15(6):884-887, **2020**. doi: 10.1016/j.jtho.2020.03.025
76. **Carbone M**, Harbour JW, Brugarolas J, Bononi A, Pagano I, Dey A, Krausz T, Pass HI, Yang H, Gaudino G. Biological mechanisms and clinical significance of *BAP1* mutations in human cancer. *Cancer Discov*, 10:1103-1120, **2020**. doi: 10.1158/2159-8290.CD-19-1220.
77. Pass HI, Alimi M, **Carbone M**, Yang H, Goparaju CM. Mesothelioma Biomarkers: A Review Highlighting Contributions from the Early Detection Research Network. *Cancer Epidemiol Biomarkers Prev*, 29:2524-2540, **2020**. doi: 10.1158/1055-9965.EPI-20-0083. PMID: 32699075.
78. Pass HI, Alimi M, **Carbone M**, Yang H, Goparaju CM. Mesothelioma Biomarkers: Discovery in Search of Validation. *Thorac Surg Clin*, 30:395-423, **2020**. doi: 10.1016/j.thorsurg.2020.08.001. Epub 2020 Sep 14. PMID: 33012429.
79. Xue J, Suarez JS, Minaai M, Li S, Gaudino G, Pass HI, **Carbone M**, Yang H. HMGB1 as a therapeutic target in disease. *J Cell Physiol*, 236:3406-3419, **2021**. doi: 10.1002/jcp.30125. PMID: 33107103.
80. **Carbone M**, Lednicky J, Xiao SY, Venditti M, Bucci E. Coronavirus 2019 Infectious Disease Epidemic: Where We Are, What Can Be Done and Hope For. *J Thorac Oncol*, 16:546-571, **2021**. doi: 10.1016/j.jtho.2020.12.014. PMCID: PMC7832772.
81. Zolondick AA, Gaudino G, Xue J, Pass HI, **Carbone M**, Yang H. Asbestos-induced chronic inflammation in malignant pleural mesothelioma and related therapeutic approaches. *Precis Cancer Med*, 4:27, **2021**. doi: 10.21037/pcm-21-12

XIII. Book and Journal Editorship

1. SV40. **Carbone M** (editor). “*Seminars in Cancer Biology*”, Vol. 11-1 (February), **2001**.
2. Cancer Epidemiology. Peto J and **Carbone M**. (Editors). *Oncogene Reviews*, 23:(38), pp. 6326-6540, **2004**.
3. Current Understanding of Human Carcinogens and Carcinogenesis. **Carbone M**, Gruber J. and Wong M. (Eds.). “*Seminars in Cancer Biology*”, (December), 14: 399-405, **2004**.
4. Malignant Mesothelioma, Advances in Pathogenesis, Diagnosis, and Translational Therapies. *Malignant Mesothelioma*. Pass, HI, Vogelzang NJ and **Carbone M** (eds). Springer **2005**.

XIV. Book Chapters

1. **Carbone M**, Pompetti F, Cicala C, Nguyen P, Dixon K, and Levine AS. The Role of Small-t Antigen in SV40 Oncogenesis. *Molecular Basis of Human Cancer*, Plenum Press, C. Nicolini (ed.), p. 191-206, **1991**.
2. Pompetti F, and **Carbone M**. Oncogene Alterations in Giant-Cell Tumors and Chondrosarcomas. *Frontiers of Osteosarcoma Research*, J.F. Novak and J.H. McMaster (eds.), Hogrefe and Huber Publishers, Seattle, p. 443-446, **1993**.
3. **Carbone M**, Rizzo P, and Pass HI. Association of Simian Virus 40 with Rodent and Human Mesotheliomas. *DNA Tumor Viruses: Oncogenic Mechanisms*, Plenum Press, Friedman and G. Barbanti Bodrano (eds.), p. 75-90, **1995**.
4. Pass HI, Kennedy RC, and **Carbone M**. Evidence for and Implication of SV40-like Sequences in Human Mesotheliomas. *Important Advances in Oncology*, 5th edition, Lippincott Co. Press, V.T. DeVita, S. Hellman, and S.A. Rosenberg (eds.), p. 89-108, **1996**.
5. Shearer MH, Pass HI, **Carbone M**, and Kennedy RC. Modulation of the Immune Response to Simian Virus 40 Large Tumor Antigen Via Idiotype-Anti-Idiotype Interactions. *Idiotypes in Medicine, Infections, Autoimmunity, and Cancer*, Elsevier Publications, Y. Shoenfeld, (ed.), p. 317-329, **1997**.
6. Howard CM, Claudio PP, **Carbone M**, and Giordano A. SV40 and Human Cancer. *Genes, Cancer and Ethics in the Work Environment*. OEM Press, Beverly, MA, Samuel S.W. and Upton A.C. (eds.), p.167-174, **1998**.

7. Rudolf M, Velders MP, Nieland JD, Franke A, Loviscek K, Weijzen S, Macedo MF, Holt GE, Da Silva D, **Carbone M**, and Kast WM. Vaccine design for DNA virus induced cancer. *Pathology, Immunology, and Gene Therapy, Sourcebook on Asbestos Diseases*. Peters GA and Peters BJ (eds.), Vol. 17; pgs. 267-293, **1998**.
8. **Carbone M**, Powers A, Pass HI, Fisher SG, Di Resta I, Mutti L, Kast WM, and Rizzo P. Asbestos, simian virus 40, and the development of malignant mesothelioma. *Sourcebook on Asbestos Diseases*. GA Peters, BJ Peters (eds.) Lexis Law Publ. Reed Elsevier (Charlottesville, VA) 11:269-287, **1998**.
9. Powers A, Rizzo P, Pass HI, Di Resta I, Matker CM, Mutti L, Kast WM, and **Carbone M**. SV40, Asbestos, and the development of malignant mesotheliomas. *The Health Effects of Chrysotile Asbestos: Contribution of Science to Risk Management Decisions*. Nolan, RP, Langer AM, Wicks FJ, Ross H (eds.), Special Publication of the Mineralogical Association of Canada, Special Pub. 5, pp 135-140, **2001**.
10. Testa JR, Pass HI, and **Carbone M**. Benign and Malignant Mesothelioma. *Cancer: Principles and Practice of Oncology*. 6th ed. De Vita VT, Hellman S, & Rosenberg SA. (ed.). Lippincott Williams and Wilkins: Philadelphia. pp. 1937-1943, **2001**.
11. **Carbone M**. SV40. *Encyclopedic Reference of Cancer*. Schwab M. (ed.). pp. 861-865, **2002**.
12. **Carbone M**, Setlak P, Bocchetta M, Rizzo P, Emri S, Pass HI, Testa JR, and Baris Y. Genetic Susceptibility to Mesothelioma. Peters, G.A., Peters, B.J. (eds.), *Asbestos and Cancer, Sourcebook on Asbestos Diseases*. Vol. 23, pp. 151-168. Charlottesville, VA: LEXIS Law, Matthew Bender & Co., Inc., **2001**.
13. Testa JR and **Carbone M**. Mesothelioma. *Encyclopedic Reference of Cancer*. Schwab M. (ed.). pp. 545-550, **2002**.
14. **Carbone M**, Powers A, Fisher S, Rizzo P, Bright R, and Pass HI. Novel molecular, epidemiological, and therapeutic issues in mesothelioma: The role of SV40. *Mesothelioma*. BW Robinson, AP Chahinian (eds.). Martin Dunitz Ltd, London UK, pp. 295-306, **2002**
15. Setlak P, Bocchetta M, and **Carbone M**. Malignant Mesothelioma: biologic and clinical advances. 2002 ASCO Spring Education Book, pp. 356-358, **2002**.
16. Pass HI, Hadjiev O, and **Carbone M**. Animal models of mesothelioma. *Tumor Models in Cancer Research*. Teicher BA, (ed.). pp. 507-520, **2002**.
17. Pass HI and **Carbone M**. Surgical management of malignant pleural mesothelioma. *Atlas of Cancer*. Markman M, (ed). Lippincott Williams & Wilkins. pp. 158-164, **2003**.
18. **Carbone M** and Bocchetta M. SV40 and Notch-I: multi-functionality meets pleiotropy. *Viruses and Apoptosis*. C. Alonso (ed.), Springer Verlag, Heidelberg, pp. 289-305, 1st ed., **2004**; 2nd printing XVI, **2008**.
19. Pass HI, Vogelzang N, Hahn SM and **Carbone M**. Mesothelioma. *Cancer: Principles and Practice of Oncology*. 7th ed. De Vita VT, Hellman S, and Rosenberg SA. (ed.). Lippincott Williams and Wilkins: Philadelphia. pp. 1687-1715, **2005**.
20. Bocchetta M and **Carbone M**. SV40-mediated oncogenesis. *Malignant Mesothelioma*. Pass HI, Vogelzang NJ and **Carbone M** (eds). Springer Verlag, Heidelberg, pp. 34-59, **2005**.
21. **Carbone M** and Baris IY. Genetics and Human Mesothelioma. *Malignant Mesothelioma*, Pass HI, Vogelzang NJ and **Carbone M** (eds) Springer Verlag, Heidelberg, pp. 364-68, **2005**.
22. Powers A and **Carbone M**. Diagnosis of Synovial Sarcoma of the Pleura and Differentiation from Malignant Mesothelioma. *Malignant Mesothelioma*, Pass, HI, Vogelzang NJ, and **Carbone M** (eds.) Springer Pub. 543-554, **2005**.
23. Elmishad A.G., Bocchetta M., Pass H.I. and **Carbone M**. Polio vaccines, SV40 and human tumours, an update on positive and negative results. Vaccine Cell Substrates. Petricciani J., Sheets R (eds). Dev. Biol. (Basel), Basel Karger pp. 85-94, **2005**.
24. **Carbone M**, Barbanti-Brodano G. Viral Carcinogenesis. *Oncology: An Evidence Based Approach*. Springer-Verlag, New York. A. Chang, P. Ganz, D. Hayes, T. Kinsella, H. Pass, J. Schiller, R. Stone, and V. Strecher (eds) 17:214-232, **2006**.
25. Pass H, **Carbone M**, Chahinian A. *Malignant Mesothelioma*. Cancer Medicine (e.7) 81:1225-1236, **2006**.
26. Powers A, Bocchetta M, and **Carbone M**. Viral factors in the pathogenesis of malignant mesothelioma. *Malignant Pleural Mesothelioma*, O'Bryne K, Rusch V (eds). Oxford University Press: UK, **2007**.

27. Pass HI, Vogelzang NT, Hahn SM, **Carbone M**. Benign and malignant mesothelioma. In: *Cancer: Principles and Practice of Oncology*. 8th ed. DeVita VT, Hellman S, Rosenberg SA, (Eds). Philadelphia: Lippincott, Williams & Wilkins; pp. 1835-62, **2008**.
28. Yang H, Pass H and **Carbone M**. Pathogenesis of mesothelioma. In: *Mesothelioma from Bench Side to Clinic*. Baldi A (ed.). Nova Biomedical: New York. pp. 105-116, **2008**.
29. Pass HI and **Carbone M**. Surgical Management of Malignant Pleural Mesothelioma. *Atlas of Lung Cancer, 2nd Edition*. Lippincott Williams & Wilkins.
30. **Carbone M** and Yang H. SV40. *Encyclopedia of Cancer, 2nd Ed.*, Schwab M (Ed.). Springer.
31. Testa JR and **Carbone M**. Mesothelioma. *Encyclopedia of Cancer, 2nd Ed.*, Schwab M (Ed.). Springer.
32. Pass HI, Vogelzang N, Hahn S, **Carbone M**. Chapter 46: Malignant Mesothelioma. *Annals of Thoracic Surgery*.
33. **Carbone M** and Bocchetta M. SV40 and Notch-I: multi-functionality meets pleiotropy. *Viruses and Apoptosis*. C. Alonso (ed.), Springer Verlag, Heidelberg, 2nd printing XVI, **2008**. (1st ed., 2004).
34. Pass HI, Vogelzang NJ, Hahn SM, **Carbone M**. Benign and malignant mesothelioma. In: *Cancer: Principles & Practice of Oncology*, 9th ed. DeVita VT, Lawrence TS, Rosenberg SA. (Eds). Philadelphia: Lippincott, Williams & Wilkins; pp. 2052, **2011**.
35. Napolitano A, Jube S, Gaudino G, Pass HI, **Carbone M**, Yang H. Asbestos-induced chronic inflammation and cancer. *Cancer and Inflammation Mechanisms: Chemical, Biological, and Clinical Aspects*, Hiraku Y, Kawanishi S, Ohsima H (eds.). John Wiley & Sons, Inc.: Hoboken, New Jersey, pp. 223-234, **2014**.
36. Pass HI, **Carbone M**, Krug LM, Rosenzweig K. Benign and Malignant Mesothelioma. In: *Cancer: Principles and Practice of Oncology*, 10th ed. De Vita VT, Lawrence TS, and Rosenberg SA. (Eds). Baltimore: Lippincott, Williams and Wilkins; **2014**.
37. Napolitano A, Pellegrini L, Yang H, **Carbone M**. Somatic and germline BAP1 mutations in malignant mesothelioma. In: *Malignant Pleural Mesothelioma: Present Status and Future Directions*, 1st ed. Mineo TC (Ed). Sharjah U.A.E: Bentham Science Publishers Ltd.; **2016**. ISBN: 978-1-68108-193-9.
38. **Carbone M**, Yang H. Biological Activities of Asbestos and Other Mineral Fibers. In: Gualtieri, AF (Ed), *European Mineralogical Union, EMU Notes in Mineralogy, Vol 18; Mineral fibres: crystal chemistry, chemical-physical properties, biological interaction and toxicity*. European Mineralogical Union, pp435-441, **2017**. ISBN 978-0903056-65-6
39. Pass HI, **Carbone M**, Krug LM, Rosenzweig KE. Benign and Malignant Mesothelioma. In: *Cancer: Principles and Practice of Oncology*, 11th ed. De Vita VT, Rosenberg SA, and Lawrence TS (Eds). Philadelphia: Wolters Kluwer; **2019**. ISBN/ISSN 9781496394637
40. Pass HI, Alimi M, **Carbone M**, Yang H, Goparaju CM. Mesothelioma biomarkers discovery in search of validation. In: *Thoracic Surgery Clinics*, Volume 30, Issue 4. Malignant Pleural Mesothelioma: State of the Art. Burt BM (Ed); Litle VR (Consulting Ed). Elsevier: Philadelphia, PA, pp. 395 – 423, **2020**. ISBN-13: 978-0-323-75964-9.
41. Gaudino G, Minaai M, **Carbone M**, Yang H. Biomolecular Pathways in Mesothelioma: What Is New Perspective on Biomolecular Research for Mesothelioma? In: *Malignant Pleural Mesothelioma Advances in Pathogenesis, Diagnosis, and Treatments*, Nakano T, Kijima T (Eds). Gateway East, Singapore: Springer Nature Singapore Pte Ltd., pp.43-52, **2021**. ISBN 978-981-15-9157-0.

XV. Scientific Correspondence:

1. **Carbone M** and Testa JR. Genetic susceptibility and familial malignant mesothelioma. *Lancet*, 357:1804, **2001**.
2. Dogan UA, Baris YI, Emri S, Testa JR and **Carbone M**. Familial malignant mesothelioma. *Lancet*, 358:1813-1814, **2001**.
3. **Carbone M** and Pass HI. Debate on the link between SV40 and human cancer continues. *J. Natl. Cancer Inst.*, 94:229-230, **2002**.
4. **Carbone M**. Commentary. *Anti-Cancer Research*, 23:3116, **2003**.

5. **Carbone M.** Pathology of asbestos-associated diseases. Archives of Pathology. 2nd ed, Roggli VL, Oury TD, and Sporn TA (eds). Pp 421, New York, NY, Springer-Verlag, **2004**.
6. Pass H, **Carbone M**, Wali A. Asbestos Exposure, Pleural Mesothelioma, and Serum Osteopontin Levels. *N Engl J Med* 353:1564-73, **2005**.
7. Baumann F, Buck BJ, Metcalf RV, McLaurin BT, Merkler D, **Carbone M**. Reply to "No increased risk for mesothelioma in relation to natural-occurring asbestos in Southern Nevada". *J Thorac Oncol*, 10:e64-65, **2015**.
8. Napolitano A, **Carbone M**. Letter to Editor "Concerns about presence of a wild-type BAP1 allele in absence of nuclear protein expression". *JAMA Dermatol*, 151:1265-1266, **2015**.
9. **Carbone M**. Just a handful of publications can collect the prize. *Nature*, 561(7724): 464, **2018**. doi: 10.1038/d41586-018-06816-0.

XVI. Clinical and Teaching Activities

Clinical activities: I review about 300 pleural pathology consults per year that I receive from, Hawaii, the US and from all over the world. Also, I am and I have been the pathologist reviewer of clinical trials for mesothelioma. I provide my diagnostic expertise free of charge to all patients and physicians who ask for my opinion on issues related to pleural and peritoneal diagnosis, and I teach how to diagnose mesothelioma to pathologists in the US and abroad.

Professor, Department of Pathology	John A. Burns School of Medicine University of Hawaii, Honolulu, HI	2006 - present
Director, Research Lecture Series For Medical Students	Loyola University, Chicago, IL	2003 – 2006
Director, Molecular Biology of Oncogenesis Course	Loyola University, Chicago, IL	2003 – 2006
Autopsy Service and Consulting Pleural Pathologist	Loyola University, Chicago, IL	2000 – 2006
Research Funding Committee	Loyola University, Chicago, IL	1998 – 2006
Molecular Biology of Oncogenesis to Ph.D. Students in Molecular Biology	Loyola University, Chicago, IL	1997 - 2002
Associate Director Molecular Pathology	Loyola University, Chicago, IL	1996 - 2006
20 hours course on “Oncogenes” to Residents in Oncology and Anatomic Pathology	University La Sapienza” Rome, Italy	1994
Molecular Pathology to M.D. and Ph.D. Students	Uniformed Services University of the Health Sciences, Bethesda, MD	1989-1994

XVII. Meetings Organized and Chaired

1. **Carbone M** and Vogelzang N. *Malignant Mesothelioma: Therapeutic Options and Role of SV40: An Update*. University of Chicago, Chicago, IL, April 20-21, **2001**.
2. **Carbone M** and Wong M. *Validation of a Causal Relationship: Criteria to Establish Etiology*. National Cancer Institute Workshop, Washington, DC, Dec. 11-12, **2003**.
3. **Carbone M** and Nerurkar V. *Interactions Among Infectious Agents, Environmental Carcinogens, & Genetics in Human Cancer Development*. Symposium, John A. Burns School of Medicine and Cancer Research Center of Hawaii, Honolulu, HI, February 16, **2007**.
4. **Carbone M**. *Mesothelioma, Early Detection, Diagnosis, and Therapeutic Implications*. Workshop, John A. Burns School of Medicine and Cancer Research Center of Hawaii, Honolulu, HI, August 17, **2007**.
5. **Carbone M**. *Translational Cancer Medicine Symposium: Preventive Therapeutic Opportunities in Gene-Environment Interaction & Immunotherapy*. Cancer Research Center of Hawaii, The Queen’s Medical Center, Hawaii Pacific Health, Kuakini Health Systems, Honolulu, HI, February 17-18, **2009**.
6. **Carbone M**. *Hepatitis B Virus and the Prevention and Control of Liver Cancer*. Cancer Research Center of Hawaii and The Queen’s Medical Center, Honolulu, HI, March 11, **2010**.

7. **Carbone M**, Chadwick D, Gaudino G, Ishihara-Wong D, Iwahashi GY, Morris PT, Yang H. Third Annual Translational Cancer Medicine Symposium. *Mesothelioma-Melanoma Cancer Syndrome: Gene-Environment Interaction?* University of Hawaii Cancer Center, The Queen's Medical Center, Honolulu, HI, December 2, **2011**.
8. **Carbone M**, Yu H, Fagan P. Fourth Annual Translational Cancer Medicine Symposium. *How Do We Reduce Cancer Risks? Altering Pathways to Obesity and Tobacco Use*. University of Hawaii Cancer Center, The Queen's Medical Center, Honolulu, HI, July 27, **2012**.
9. **Carbone M**. Fifth Annual Translational Cancer Medicine Symposium. *Looking closely at HMGB1*. University of Hawaii Cancer Center, Honolulu, HI, February 25, **2013**.
10. **Carbone M**, Yu H. Workshop: *Gene Environment interaction in human cancer development*. University of Hawaii Cancer Center, Honolulu, HI, September 23-24, **2013**.
11. **Carbone M**. Weinman Symposium. University of Hawaii Cancer Center, Honolulu, HI, February 21-22, **2014**.
12. **Carbone M**. 2014 Weinman Symposium. Hawaii Bridging the U.S. and Asia in the Fight Against Cancer. University of Hawaii Cancer Center, Honolulu, HI, May 5, **2014**.
13. **Carbone M**. Weinman: Cancer Mini Symposium (Dr. Tak Mak, Dr. Gerry Melino, Dr. Qiang Pan-Hammarstrom). University of Hawaii Cancer Center, Honolulu, HI, January 16, **2015**.
14. **Carbone M**. Weinman: Nobel Laureate Seminar "Bridging the Cancer Research World". University of Hawaii Cancer Center, Honolulu, HI, August 20-21, **2015**.
15. **Carbone M**, Chao A, Kanodia S, Malik S, Miller M, Wali A, Johnson R. 2015 Weinman Symposium. International Conference On Mesothelioma In Populations Exposed To Naturally Occurring Asbestiform Fibers. University of Hawaii Cancer Center, Honolulu, HI, November 9-10, **2015**.
16. **Carbone M**, Beutler B, Yang H. 8th Weinman Symposium. International Conference on Gene X Environment Interaction. University of Hawaii Cancer Center, Honolulu, HI, January 26-27, **2017**.
17. **Carbone M**, Beutler B, Croce C, Yang H. 9th Weinman Symposium. International Conference on Gene, Metabolism, and Cancer. University of Hawaii Cancer Center, Honolulu, HI, November 30-December 1, **2017**. <https://www.weinmansymposium.com/>
18. **Carbone M**, Beutler B, Croce C, Yang H. 10th Weinman Symposium. International Conference on Cancer Syndromes. University of Hawaii Cancer Center, Honolulu, HI, November 29-30, **2018**. <https://www.weinmansymposium.com/>
19. **Carbone M**, Pass HI, Bueno R, Tsao A (Co-chairs), IASLC Mesothelioma Meeting, July 10-12, **2019**, New York, NY. Chair & Lead Discussion: DNA Repair Session; and Moderator: Debate2, Genomic Profiling.
20. **Carbone M.**, Satouchi M (Session Chairs): BAP1 & Other Novel Molecular & Metabolic Targets in Mesothelioma. IASLC World Conference on Lung Cancer, September 7-10, **2019**, Barcelona, Spain.
21. **Carbone M**, Beutler B, Croce C, Yang H. 11th Weinman Symposium. International Conference on Cancer Cell Metabolism. University of Hawaii Cancer Center, Honolulu, HI, January 22-24, **2020**. <https://www.weinmansymposium.com/>
22. **Carbone M**, Hassan R, Schrump. BAP1 Virtual Workshop. Cancer Prevention and Therapy in carriers of BAP1 and other germline mutations. University of Hawaii Cancer Center, Honolulu, Hawaii, February 13, **2021**.
23. **Carbone M**, Jaurand MC. Innovative Models to Design New Therapies for Mesothelioma (Session Chairs). Virtual Meeting – Why do we need independent research in oncology? The “Mesothelioma Model”, Rome, Italy, February 18-29, **2021**.
24. Robinson B, **Carbone M**. (Session Chairs); Fennell D, Carbone M, Robinson B, Chin M. Panel Discussion; Pre-Conference Workshop: The Future of Mesothelioma - What Might the Next Decade Look Like For Our Patients? 15th International Conference of the International Mesothelioma Interest Group (iMig), Virtual, May 2, **2021**.
25. **Carbone M**, Beutler B, Croce C, Yang H. 12th/13th Weinman Symposium. International Conference on GXE in Cancer. University of Hawaii Cancer Center, Honolulu, HI, January 26-28, **2022**. <https://www.weinmansymposium.com/>

XVIII. Invited Lectures (at major conferences and courses)

1. **Carbone M.** *SV40 Induces Mesotheliomas in Rodents.* II International Mesothelioma Conference, San Francisco, CA, **1993.**
2. **Carbone M.** *Evidence for and Implications of SV40-like Sequences in Human Mesotheliomas.* 14th Nordic Virus Symposium, Tromso, Norway, p. 24 proceedings of the meeting, **1995.** (Keynote Lecture.)
3. **Carbone M.** *SV40 and Mesothelioma.* 3rd International Mesothelioma Interest Group Conference, Paris, France, **1995.** (Invited Speaker & Chairman of session on Genetics).
4. **Carbone M.** *Possible role of SV40 in the Pathogenesis of Human Mesotheliomas.* 1st U.S.-Italy Mesothelioma Conference, Torino, Italy, **1996.** (Invited Speaker and US-Chairman of the Conference).
5. **Carbone M.** *Role of DNA Tumor Viruses in the Development of Human Osteosarcomas.* II International Bone Tumor Conference, November 18-23, Bologna, Italy, **1996.**
6. **Carbone M.** *SV40 Oncogenicity in Hamsters.* United States of America, Department of Health and Human Services, CBER-NCI-NICHD-NCID-NIP-NVPO, Simian Virus (SV40): A Possible Human Polyomavirus, Workshop, Jan. 28, p.60 proceedings of the meeting, Bethesda, MD, **1997.** (Invited Speaker and Panelist).
7. **Carbone M.** *Evidence for Implication of SV40 Sequences in Human Mesotheliomas and Osteosarcomas.* United States of America, Department of Health and Human Services, CBER-NCI-NICHD-NCID-NIP-NVPO, Simian Virus (SV40): A Possible Human Polyomavirus, Workshop, Jan. 27, p.266-282, proceedings of the meeting, Bethesda, MD, **1997.** (Invited Speaker and Panelist)
8. **Carbone M.** *Evidence for SV40 in mesothelioma.* 4th International Mesothelioma Interest Group Conference, Philadelphia, PA, March 12-15, **1997.** (Invited Speaker and Chairman of session on Genetics).
9. **Carbone M.** *SV40 and its Association with Human Mesotheliomas.* 2nd U.S.-Italy Mesothelioma conference. Belgirate, Italy, May 29-30, **1997.** (Invited Speaker and U.S. Chairman of the Conference).
10. **Carbone M.** *Evidence for and Implications of SV40 Sequences in Human Tumors.* First Joint International Conference, AACR and Sbarro Institute for Molecular Medicine, Gene Targets for Cancer Treatment, Capri, Italy, June 3-6, **1997.**
11. **Carbone M.** *SV 40 and Human Mesothelioma.* A Workshop on The Health Effects of Chrysotile Asbestos: Contribution of Science to Risk Management Decisions, Montreal, Canada, September 14-16, **1997.**
12. **Carbone M.** *Simian Virus 40; A Possible Co-Factor in the Development of Malignant Pleural Mesothelioma.* New Developments in Pathogenesis of Malignant Pleural Mesotheliomas. Hacettepe University. Ankara, Turkey, November 19-26, **1997.** (Keynote Lecture).
13. **Carbone M.** *Molecular Biology for Microbiology and Virology.* International Meeting - Molecular Biology Clinical Perspectives. Parma, Italy, December 12, **1997.**
14. **Carbone M.** *SV40 and Asbestos as Co-Carcinogenesis in Mesothelioma Development.* Seminar on Environmental Pathology, 305 Course, University of Vermont, College of Medicine, Burlington, Vermont, April 2, **1998.**
15. **Carbone M.** *Possible Pathogenic Role and Detection of SV40 in Human Mesothelioma.* Molecular Biology of Small DNA Tumor Viruses Meeting. Madison, WI. 7/14-7/19, **1998.**
16. **Carbone M.** *Pitfalls in Pathologic Diagnosis of Malignant Mesothelioma.* 3rd U.S.-Italy Mesothelioma conference. Brescia, Italy, October 16, **1998.** (Invited Speaker and U.S. Chairman of the Conference).
17. **Carbone M.** *SV40 Associated Tumorigenesis.* The Society for Biological Therapy, Pittsburgh, PA, October 21-24, **1998.**
18. **Carbone M.** *SV40 Virus, Polio Vaccine, and Human Mesothelioma: Recent Developments.* American College of Chest Physicians. Mesothelioma Update: 1998. Toronto, Canada, November 10-12, **1998.** Panel Discussion.
19. **Carbone M.** *Role of SV40 in the Pathogenesis of Mesothelioma.* Multimodality Therapy of Chest Malignancies: Update 98. Harvard Medical School, Boston, MA, **1998.** Guest Faculty.

20. **Carbone M.** *Simian Virus 40 and Human Mesothelioma*. 4th U.S.-Italy Mesothelioma conference. Lignano Sabbiadoro, Italy, March 18-19, **1999**. (Invited Speaker and U.S. Chairman of the Conference).
21. **Carbone M.** *The Association of Simian Virus 40 with Hamsters and Human Lymphomas: Biological Significance*. British Lymphoma Society Meeting. Cardiff, U.K., May 14, **1999**. (Keynote lecture, delivered by P. Rizzo).
22. **Carbone M.** *Mesothelioma*. 1st International Chicago Symposium on Malignancies of the Chest and Head/Neck. Chicago, IL, October 1-2, **1999**.
23. **Carbone M.** *Molecular Genetics of Mesothelioma*. American College of Chest Physicians. Plenary Lecture: Mesothelioma. Chicago, IL, November 2, **1999**.
24. **Carbone M.** *Role of SV40 in the Pathogenesis of Mesothelioma*. Multimodality Therapy of Chest Malignancies: Update 2000. Harvard Medical School, Boston, MA, **2000**. Guest Faculty.
25. **Carbone M.** *Molecular Genetics of Mesothelioma*. International Mesothelioma Conference. Aviano, Italy, April 25, **2000**.
26. **Carbone M.** *Malignant Mesothelioma*. Joint Meeting of Pulmonary Diseases and Thoracic Surgery. Antalya, Turkey, November 6-9, **2000**.
27. **Carbone M.** *Epidemiology and pathogenesis of mesothelioma: asbestos, SV40 and genetics*. Le mesotheliome Das Mesotheliom. Fribourg, November 20, **2000**. (Keynote Lecture).
28. **Carbone M.** *Human Mesothelial Cells are Uniquely Susceptible to SV40 Infection and Transformation*. 2nd International Mesothelioma Meeting, Chicago, IL. April 21, **2001**.
29. **Carbone M.** *Role of environment virus and genetic in the pathogenesis of mesothelioma*. ICC International Cancer Center, Rovigo, Italy, May 11, **2002**.
30. **Carbone M.** *Malignant Mesothelioma: New Biological and Clinical Advances*. Meet the Professors Session: American Society of Clinical Oncology, Orlando, FL, May 18-21, **2002**.
31. **Carbone M.** *Mesothelioma Pathogenesis*. American Society of Clinical Oncology, Orlando, FL, May 18-21, **2002**.
32. **Carbone M.** *Pathogenesis of mesothelioma: Role of asbestos, SV40 and genetic predisposition*. 18th UICC International Cancer Congress, Oslo, Norway, June 30–July 5, **2002**.
33. **Carbone M.** *The presence and mechanisms of SV40 in human cancers*. National Academy of Science – Immunization Safety Review Committee, Washington, DC, July 11, **2002**.
34. **Carbone M.** *Role of environmental carcinogens, viruses, and genetic predisposition in the pathogenesis of malignant mesothelioma*. Internal Medicine Grand Rounds Lecture. Eastern Virginia Medical School, July 24, **2002**.
35. **Carbone M.** *The presence and mechanisms of SV40 in human cancers*. Milton S. Hershey Medical Center - Department of Microbiology & Immunology Seminar, Hershey, PA, October 3, **2002**.
36. **Carbone M.** *Il Mesotelioma maligno: novita eziologiche e terapeutiche*. Sala Rossini – Caffè Pedrocchi, Padova, Italy, March 5, **2003**.
37. **Carbone M.** *SV40 and human cancer* Society for General Microbiology. 152nd Meeting. Edinburgh, Scotland, April 7-11, **2003**.
38. **Carbone M.** *Etiology and Pathology of Mesotheliomas* 4th International Lung Cancer Congress. Maui, Hawaii, June 25-28, **2003**.
39. **Carbone M.** *Molecular pathogenesis of mesothelioma*. 10th World Conference on Lung Cancer. Vancouver, Canada, August 10-14, **2003**.
40. **Carbone M.** *Pathogenesis of mesothelioma*. Italian Society of Anatomic Pathology, Genova, Italy. October 22-25, **2003**.
41. **Carbone M.** *Multistep and multifactorial carcinogenesis. When does a contributing factor become a human carcinogen? Validation of a causal relationship: criteria to establish etiology*. National Cancer Institute Workshop, Washington, DC, Dec. 11-12, **2003**.
42. **Carbone M.** *Role of environmental carcinogens, SV40 and genetic predisposition in the pathogenesis of human mesothelioma*. Karmanos Cancer Institute Grand Rounds, Detroit, Michigan, Jan. 8, **2003**.
43. **Carbone M.** *Pathogenesis of mesothelioma*. VII Meeting of the International Mesothelioma Interest Group (iMig), Brescia, Italy, June 24-26, **2004**.
44. **Carbone M.** *SV40 in human tumors, an update*. National Institute of Allergy and Infectious Diseases (NIAID) Vaccine Cell Substrates, June 29-July 1, **2004**.

45. **Carbone M.** *Inherited mesothelioma*. First International Symposium on Malignant Mesothelioma, October 14-16, Las Vegas, **2004**.
46. **Carbone M.** *The Pathogenesis of Mesothelioma*. Karmanos Cancer Institute, Detroit, Michigan, November 15, **2004**.
47. **Carbone M.** *Contribution of Asbestos, Erionite, Genetics and SV40 in the Pathogens of Human Malignant Mesothelioma*. University of Pittsburgh, February 23, **2005**.
48. **Carbone M.** *Mesothelioma: Carcinogenesis Issues: New Insights on "The Asbestos/SV40 Phenomenon"*. 11th World Conference on Lung Cancer, Barcelona, Spain, July 3, **2005**.
49. **Carbone M.** *Pathogenesis of Mesothelioma-Early Detection Markers*. University of Sydney, Australia. July 25, **2005**.
50. **Carbone M.** *Interaction among Asbestos, Erionite, SV40 and Genetics in the Pathogenesis of Human Malignant Mesothelioma*. Honolulu, University of Hawaii. August 29, **2005**.
51. **Carbone M.** *Turkey, Erionite, and the Genetic Connection*. Second International Symposium on Malignant Mesothelioma. Las Vegas, NV. October 6-8, **2005**.
52. **Carbone M.** *Mesothelioma in Cappadocia: The Gene/Environment Interaction*. The 8th International Conference of the International Mesothelioma Interest Group. Chicago, IL, October 19-22, **2006**.
53. **Carbone M.** *Asbestos*. An International Conference on Occupational Lung Diseases: Up Close. Sudbury, Ontario, May 10, **2007**.
54. **Carbone M.** *Gene Environmental Interaction in Mesothelioma*. 10th Annual West Hawaii Cancer Symposium. Kailua-Kona, HI, September 7-8, **2007**.
55. **Carbone M.** *Interaction of Mineral Fibers with Genetic and Viruses in the Pathogenesis of Mesothelioma*. Harvard Medical School, Brigham and Women's Hospital. Boston, MA, September 14, 2007. Lecturer, International Mesothelioma Program.
56. **Carbone M.** *Mesothelioma: New Developments in Pathogenesis and Early Detection Offer Possible Opportunities for Immunotherapy*. Workshop, NCI-University of Texas in El Paso. El Paso, TX, September 21-22, **2007**.
57. **Carbone M.** *Interactions Among Genetics, Erionite and Asbestos Exposure, and SV40 Infections, in the Pathogenesis of Human Malignant Mesothelioma*. M.D. Anderson Grand Rounds Lecture, Blaffer Visiting Professorship, Houston, TX, February 1, **2008**.
58. **Carbone M.** *SV40 Tag/p53 Complexes Actively Promote Malignant Cell Growth of Human Mesothelial Cells*. 2nd Conference on Aneuploidy and Cancer: Clinical and Experimental Aspects, Oakland, CA, February 2-3, **2008**.
59. **Carbone M.** *New Approaches in Treatment and Screening of Mesothelioma*. National Cancer Week of Turkey, April 3, **2008**.
60. **Carbone M.** *Mesothelioma 2008: Diagnostic and Therapeutic State of the Art*. 11th Annual West Hawaii Cancer Symposium. Kailua-Kona, HI, September 5-6, **2008**.
61. **Carbone M.** *Etiology of mesothelioma other than mineral fibres: hereditary factors and virus*. European Respiratory Society (ERS) Congress 2008, Berlin, Germany, Oct. 4-8, **2008**.
62. **Carbone M.** *Gene Environment Interaction as Cause of Mesothelioma Epidemics*. Translational Cancer Medicine Symposium: Preventive and Therapeutic Opportunities in Gene-Environment Interaction and Immunotherapy. Honolulu, HI, February 17-18, **2009**.
63. **Carbone M.** *Results of a randomized Phase 3 clinical trial using Onconase+doxorubicin vs. doxorubicin alone and possible use of Onconase in individuals from high risk families with high levels of mesothelin/osteopontin*. 2nd NIH Mesothelioma Conference, Bethesda, MD, March 6, **2009**.
64. **Carbone M.** *Early Detection of Mesothelioma in Cappadocia*. 6th Early Detection Research Network (EDRN) Scientific Workshop, & 19th EDRN Steering Committee Meeting. Mesothelioma Working Group Meeting, Bethesda, MD, August 31-September 3, **2009**.
65. **Carbone M.** *Interactions among viruses, genetics and environment in mesothelioma pathogenesis*. Comprehensive Cancer Center of Wake Forest University, Department of Cancer Biology: Sixth Annual Deal Lectureship, Winston-Salem, NC, October 6, **2009**.
66. **Carbone M.** *Gene-Environment Cancer Interaction*. 5th International Asian Pacific Organization for Cancer Prevention (APOCP) Conference, Istanbul, Turkey, April 3-7, **2010**.
67. **Carbone M.** *Role of mineral fibers, genetics and SV40 in the pathogenesis of mesothelioma*. Twentieth Annual Harold L. Stewart Lecture in Experimental Oncology, Bethesda, MD,

- November 18, **2010**.
68. **Carbone M.** *Mechanisms of mineral fibers, genetics and SV40 in the pathogenesis of human mesothelioma lead to novel preventive and therapeutic approaches.* Medical Academy of Rome, Speaker, 2010-2011 Scientific Program, Rome, Italy, November 25, **2010**.
 69. **Carbone M.** *Gene-Environment Interaction in Mesothelioma.* Center for Translational and Public Health Genomics: Seminar Series, M.D. Anderson Cancer Center, Houston, TX, March 30, **2011**.
 70. **Carbone M.** *Genetic Predisposition, Erionite, and Mesothelioma.* 1th Joint Meeting: Advances in Cancer Research between Magna Graecia University and University of Hawaii. Distinguished Lecture, Istituto Nazionale Tumori "Regina Elena", Catanzaro, Italy, July 8, **2011**.
 71. **Carbone M.** *Genetics, asbestos and HMGB1 driven inflammation in the pathogenesis of mesothelioma.* University of Pittsburgh: Immunology Seminar Series, Pittsburgh, PA, October 27, **2011**.
 72. **Carbone M.** *The BAP1 Cancer Syndrome: Mesothelioma, Cutaneous and Uveal Melanoma and Atypical Spitz Nevi.* 15th Annual West Hawaii Cancer Symposium, Kona, HI, September 7-8, **2012**.
 73. **Carbone M.** *The BAP1 Cancer Syndrome.* 11th International Conference of the International Mesothelioma Interest Group (iMig), Boston, MA, September 11-14, **2012**. (Keynote speaker and Session Chair).
 74. **Carbone M.** *The Bap1 Cancer Syndrome: Mesothelioma, uveal and cutaneous melanoma.* The Second Symposium of the Affiliated Shanghai Sixth People's Hospital of SJTU and University of Pittsburgh School of Medicine, Shanghai, China, September 20, **2012**.
 75. **Carbone M.** *The Bap1 Cancer Syndrome.* 2012 Zhejiang and Jiangxi Cancer Conference, Hangzhou, Zhejiang, China, September 27-29, **2012**.
 76. **Carbone M.** (Panel Speaker) News from the genetics front; and Multidisciplinary panel to promote interaction between clinicians and researchers to achieve the best possible outcome for mesothelioma patients. Meso Foundation 2013 Symposium: All-in for a Cure! Las Vegas, NV, March 6-8, **2013**.
 77. **Carbone M.** *Functional p53 facilitates Simian Virus infection of human cells via IGF-1.* 5th International Conference on Polyomaviruses and Human Diseases: Basic and Clinical Perspectives, Stresa, Italy, May 9-11, **2013**.
 78. **Carbone M.** *Bap1 Cancer Syndrome.* Seminar-Cooperative Program on Translational Research on Pleural Mesothelioma, Magna Graecia University and Tommaso Campanella Cancer Center, Catanzaro, Italy, May 15, **2013**.
 79. **Carbone M.** *BAP1 gene mutation and mesothelioma pathogenesis.* IASLC: 15th World Conference on Lung Cancer, Sydney, Australia, October 27-30, **2013**.
 80. **Carbone M.** *Contributions of genetic and environmental factors to mesothelioma.* The 18th Congress of the Asian Pacific Society of Respiriology (APSR 2013), Yokohama, Japan, November 11-14, **2013**. (Session Chair/Speaker).
 81. **Carbone M.** *The BAP1 Cancer Syndrome: What do mesotheliomas, melanomas, and renal cell carcinomas have in common?* The Division of Cancer Medicine Grand Rounds, M.D. Anderson Cancer Center, Houston, TX, February 11, **2014**.
 82. **Carbone M.** Keynote Address. Mesothelioma Applied Research Foundation International Symposium on Malignant Mesothelioma, Alexandria, VA, March 5-7, **2014**.
 83. **Carbone M.** Keynote Speaker. *BAP1 cancer syndrome: mesothelioma and other malignancies.* 2014 Eastern China Thoracic Oncology Symposium and the 7th Thoracic Oncology Forum of Zhejiang Province, Hangzhou, China, June 27-29, **2014**.
 84. **Carbone M.** BAP1 mutations in sporadic mesothelioma. 2014 International Mesothelioma Interest Group (iMig) Cape Town, South Africa, October 21-24, **2014**.
 85. **Carbone M.** The BAP1 Cancer Syndrome and Mesothelioma, Sidra Medical and Research Center, October 28, **2014**, Doha, Qatar.
 86. **Carbone M.** *The BAP1 Cancer Syndrome: High Incidence of Mesothelioma, Uveal and Cutaneous Melanomas, and Other Malignancies.* Department of Biomedical Informatics (DBMI) Colloquium, University of Pittsburgh Cancer Institute, Pittsburgh, PA, October 31, **2014** (Visiting Professor).

87. **Carbone M.** *Pathogenesis and Diagnosis of Mesothelioma*. DRI: Asbestos Medicine Seminar, November 6-7, **2014**, San Francisco, CA.
88. **Carbone M.** *BAP1 mutations-spectrum and biology in cancer*. The Cholangiocarcinoma Foundation Annual Conference, February 5-6, **2015**, Salt Lake City, Utah.
89. **Carbone M.** *The BAP1 cancer syndrome: Mesothelioma, melanoma, sarcomas, renal cell, cholangiocarcinomas and MBAITs*. Workshop on New Frontiers in Oncology, University of Rome Tor Vergata, April 27, **2015**, Rome, Italy.
90. **Carbone M.** *BAP1 cancer syndrome, mesothelioma, melanomas and carcinomas: Mechanisms and preventive strategies*. Mini Workshop: Mesothelioma Maligno della Pleura, University of Ferrara, April 29, **2015**, Ferrara, Italy.
91. **Carbone M.** *The BAP1 cancer syndrome traced to a Switzerland family in the 1700's: Mechanisms and clinical implications*. Surgical & Gastroenterological Grand Rounds, University of Zurich, June 16, **2015**, Zurich, Switzerland.
92. **Carbone M.** *The Bap1 cancer syndrome: Mesothelioma, melanomas, carcinomas and more, ancestral origin, clinical presentation and molecular mechanisms*. Dipartimento di Medicina Sperimentale - Università di Roma Sapienza, June 25, **2015**, Rome, Italy.
93. **Carbone M.** *The BAP1 cancer syndrome: Mesotheliomas, melanomas, carcinomas and sarcomas*. Department of Thoracic Surgery, Mount Sinai Hospital, New York, July 31, **2015**.
94. **Carbone M.** *BAP1 cancer syndrome and mesothelioma* (Presenter-Mini Symposium). Discussant: Oral Session: Prevention & Cancer Risk; Session Chair: Mini Oral: Epidemiology, Early Detection, Biology. IASLC: 16th World Conference on Lung Cancer, Denver, Colorado, September 5-9, **2015**.
95. **Carbone M.** *Aspirin and others HMGB1 inhibitors as potential drugs to prevent or delay human mesothelioma growth* (Presenter). Chair of Session: DAMPS in Tumor Immunology. 7th International Symposium DAMPS and HMGB1, September 10-12, **2015**, Bonn, Germany.
96. **Carbone M.** *BAP1 mutations originating in 1500s in Switzerland and transmitted through multiple generations*. Seminars in Molecular Oncology, Department of Medicine and Clinical Trials, University Magna Grecia, Catanzaro, Italy, September 24, **2015**.
97. **Carbone M.** *The BAP1 Cancer Syndrome: Mesothelioma, Melanomas, Carcinomas and Sarcomas. Causes, Mechanisms and Clinical Implications* (Keynote speaker). UC Davis Comprehensive Cancer Center: 21st Annual Cancer Research Symposium, Sacramento, CA, October 29-30, **2015**.
98. **Carbone M.** *The BAP1 Syndrome and the significance of somatic BAP1 mutations in mesothelioma and other malignancies*. San Raffaele Rome Research Center, Rome Italy, November 18, **2015**.
99. **Carbone M.** *BAP1 cancer syndrome asbestos and mesothelioma*. Seminar: Genetic and carcinogenic asbestos, University of Turin Science Department of Public Health and Pediatric, Section of Occupational Medicine, November 19, **2015**.
100. **Carbone M.** *BAP1 mutations and mesothelioma*. UT Southwestern Medical Center, Center for Genetics of Host Defense Seminar, Dallas, TX, February 1, **2016**.
101. **Carbone M.** *BAP1 and Genetics* (Mini Symposium Session Chair); *BAP1 and mesothelioma* (Speaker). 13th International Conference of the International Mesothelioma Interest Group (iMig), Birmingham, UK, May 1-4, **2016**.
102. **Carbone M.** *BAP1 mutations and cancer*. Loyola University Chicago, Cardinal Bernardin Cancer Center, Chicago, IL, June 20, **2016**.
103. **Carbone M.** Topic: Mesothelioma -- progress of research (Speaker panel). Rotary of Catanzaro, Catanzaro, Italy, September 13, **2016**.
104. **Carbone M.** *Mesothelioma: new scientific and clinical developments*. Seminar: University of Roma "Tor Vergata", Department of Medicine, Rome, Italy, September 20, **2016**.
105. **Carbone M.** *Gene-environment interaction in mesothelioma: multiple noncontiguous minute deletions on chromosome 3p21*. Genes Versus Environment in Cancer Workshop. University of Roma "Tor Vergata", Department of Medicine, Rome Italy, December 2, **2016**.
106. **Carbone M.** *Mesothelioma Workshop* (Session Chair); *Mesothelioma in a Setting of Germline BAP1 Mutations* (Speaker). IASLC: 17th World Conference on Lung Cancer, Vienna, Austria, December 4-7, **2016**.

107. **Carbone M.** *Gene mutations in mesothelioma.* 2017 International Symposium on Malignant Mesothelioma (MARF), Bethesda, MD, March 27-28, **2017**.
108. **Carbone M.** *Germline BAP1 and genetic interactions with the environment.* NCI Mesothelioma Clinical Trials Planning Meeting, Bethesda, MD, March, 29-30, **2017**.
109. **Carbone M.** *Genetics of Mesothelioma.* 2017 European Lung Cancer Conference (ELCC), Malignant Pleural Mesothelioma Educational Session, Geneva, Switzerland, May 5-8, **2017**.
110. **Carbone M.** *Molecular epidemiology of pleural mesothelioma: the role of BAP1.* Magna Graecia University, Specialty School Program of Medical Oncology, Catanzaro, Italy, May 8-12, **2017**.
111. **Carbone M.** *Natural occurring asbestos with special attention to erionite; and Genetic factors and carcinogenesis of mineral fibres (Distinguished Lecturer).* 2017 European Mineralogical Union (EMU) School on Mineral fibres: crystal chemistry, chemical physical properties, biological interaction and toxicity, Modena, Italy, June 19-23, **2017**.
112. **Carbone M.** *How BAP1 regulates gene-environment interaction in preventing or, when mutated, causing human cancer (Keynote speaker).* 2017 Eastern China Thoracic Malignancy Symposium and the 9th Thoracic Malignancy Forum of Zhejiang Province, Huzhou, China, July 1-2, **2017**.
113. **Carbone M.** *Molecular mechanisms regulating gene-environment interaction in human cancer.* Institute for Health Innovation, Desert Research Institute, Reno, Nevada, July 24, **2017**.
114. **Carbone M.** *How BAP1 modulates gene-environment interaction in carcinogenesis and renders tumor cell resistant to chemotherapy.* IASLC 2017 Multidisciplinary Symposium in Thoracic Oncology, Chicago, IL, September 14-16, **2017**.
115. **Carbone M.** *Gene-environment interaction in asbestos carcinogenesis and mesothelioma.* The Monticello Conference on Elongated Mineral Particles: An Assessment of Health Effects, Definitions, and Research Priorities, Charlottesville, VA, October 18-20, **2017**.
116. **Carbone M.** *The Roles of miRNA and BAP1 (Mini Symposium Session Chair); How BAP1 modulates gene-environment interaction in carcinogenesis and renders tumour cells resistant to chemotherapy (Oral presenter); Application of CGH in mesothelioma and its role in the identification of new treatment targets (Speaker).* 14th International Conference of the International Mesothelioma Interest Group (iMig), Ottawa, Canada, May 2-5, **2018**.
117. **Carbone M.** *Course of lessons on mesothelioma and gene-Environment interaction in human cancer.* Xiamen University, China, May 29-June 4, **2018**.
118. **Carbone M.** *Mechanisms and targets for BAP1 activity (Speaker, Mini Symposium- Clinical Science in Mesothelioma); Mesothelioma Workshop (Session Chair/Moderator): BAP1 mutations: Mechanisms and Significance (Oral presentation).* IASLC: 19th World Conference on Lung Cancer, Toronto, Canada, September 23-26, **2018**.
119. **Carbone M.** *BAP1 mutations and mesothelioma.* 2018 Hangzhou International Symposium of Oncology, Zhejiang Cancer Hospital, Hangzhou, China, October 19-21, **2018**.
120. **Carbone M.** *The BAP1 Cancer Syndrome: Mesothelioma, Uveal Melanoma, Renal, Cholangio and Breast Carcinomas; Mechanisms and Clinical Significance.* Temple University, Department of Biology, Philadelphia, PA, October 29, **2018**.
121. **Carbone M.** *The BAP1 Cancer Syndrome: Mesothelioma, Uveal Melanoma, Renal, Cholangio and Breast Carcinomas; Mechanisms and Clinical Significance.* University of Roma Sapienza, Department of Internal Medicine, Rome, Italy, May 17, **2019**.
122. **Carbone M.** *The Bap1 Cancer Syndrome (Open Lecture).* Xiamen University, China, June 3-8, **2019**.
123. **Carbone M.** *BAP1 cancer syndrome -mesothelioma-melanoma, etc.-, how we discovered it, where it originated, GxE, mechanisms and clinical implications.* Distinguished Min Chiu Li, M.D., Lecture, University of California San Diego, Moores Cancer Center, San Diego, CA, August 5, **2019**.
124. **Carbone M.** *Mesothelioma (Speaker), Highlight of the Previous Day Session.* IASLC World Conference on Lung Cancer, Barcelona, Spain, September 7-10, **2019**.
125. **Carbone M.** *BAP1 cancer syndrome: how this gene regulate gene x environment interactions.* ABCD 2019 Congress, Bologna, Italy, September 19-21, **2019**.
126. **Carbone, M.** *BAP1 and Mesothelioma.* From Genes to Environment in Thoracic Cancers (Tribute to Claudio Mineo). University of Rome Tor Vergata, Rome, Italy, September 23, **2019**.

127. **Carbone M.** *The BAP1 cancer syndrome: unique mechanisms and clinical characteristics requiring specific medical approaches* (Distinguished Lecture). Conference of Italian Association of Cell Cultures (AICC); From Single Gene Analysis to Single Cell Profiling: A New Era for Genomic Medicine, Catanzaro, Italy, October 1-2, **2019**.
128. **Carbone M.** *COVID-19*. Webinar presentation (Speaker), ABA Conference, May 14, **2020**.
129. **Carbone M.** *SARS-CoV-2 infection vs. COVID-19 disease*. Podcast "Unbreaking Science with Dr Jack" (Dr. Lyons-Weiler), July 29, **2020**. Podcast Guest.
130. **Carbone M.** *COVID-19*. Webinar: Maui County Medical Society, September 16, **2020**. Guest Speaker.
131. **Carbone M.** *The BAP1 Cancer Syndrome: a model to study Gene x Environment interaction in mesothelioma and in other cancers*. Webinar, Lighthouse Series talk, Navigate BioPharma Services, Inc. November 4, **2020**. Guest Speaker.
132. **Carbone M.** *Mesothelioma: Scientific Clues for Prevention, Diagnosis and Therapy*. Webinar: Eskisehir Osmangazi University Lung and Pleural Cancers Clinical and Research Center, Research Conferences, January 13, **2021**.
133. **Carbone M.** *BAP1 as a Biomarker - Implications for Treatment (Including Immunotherapy)*. IASLC 2020 World Conference on Lung Cancer, Singapore, Worldwide Virtual Event (WCLC 2020), January 28–31, **2021**.
134. **Carbone M.** *Biological differences of mesothelioma in carriers of germline mutations of BAP1 and of other genes*. BAP1 Virtual Workshop. Cancer Prevention and Therapy in carriers of BAP1 and other germline mutations. University of Hawaii Cancer Center, Honolulu, Hawaii, February 13, **2021**.
135. **Carbone M.** *Mesothelioma Metabolism*. Virtual Meeting – Why do we need independent research in oncology? The “Mesothelioma Model”. February 18-29, **2021**.
136. **Carbone M.** *Gene X Environment Interaction in Cancer and in Mesothelioma: Opportunities for Prevention, Early Detection and Novel Therapies*. 15th International Conference of the International Mesothelioma Interest Group (iMig), Virtual, May 7-9, **2021**.
137. **Carbone M.** *Environmental exposure to carcinogenic fibres, genetic predisposition and mesothelioma*. Assessing and managing the risk of carcinogenic erionite in New Zealand - Webinar Series, June 8, **2021**, Auckland, Wellington.
138. **Carbone M.** *Mesothelioma in carriers of germline BAP1 mutations: Story and discovery*. 3rd International NTNU Symposium on Clinical Biomarkers of Cancer, Virtual, June 15-17, **2021**, Oslo, Norway.
139. **Carbone M.** Webinar. *Pleural Mesothelioma: clinical Implications of genetic and molecular alterations*, June 29, **2021**, Alessandria, Italy.
140. **Carbone M.** *The BAP1 cancer syndrome and the overall significance of GXE interaction in mesothelioma*. Alliance Against Cancer (ACC) 6th Annual Meeting, Virtual, September 23-25, **2021**, Italy. <https://meetingacc2021-ircsbari.it/>
141. **Carbone M.** *The discovery of the BAP1 Cancer Syndrome and its present clinical impact*. Renown Cancer Institute Seminar Series, Reno, Nevada, March 10, **2022**.
142. **Carbone M.** *Pleural Mesothelioma: clinical Implications of BAP1 mutations*. (Open Lecture) The Beutler Institute Distinguished Lecture Series at Xiamen University, China. Webinar: March 17, **2022**.

XIX. Editorials and Commentaries in Scientific Journals about Dr. Carbone’s Research:

1. Brown P. Mystery virus linked to asbestos cancer. *New Scientist*, p.4, May, **1994**.
2. *Comment*. Fear of failing. *New Scientist*, p.3, May, **1994**.
3. Brown P. Polio vaccine linked to cancer. *New Scientist*, p.16, August, **1996**.
4. Pennisi E. Monkey virus DNA found in rare human cancers. *Science*, p.748-749, February, **1997**.
5. Wiman KG and Klein G. An old acquaintance resurfaces in human mesothelioma. *Nature Medicine*, p.839-840, August, **1997**.
6. Klein G. Simian virus 40 and the human mesothelium. *PNAS*, 97:9830-21, **2000**.
7. Clare Samson. SV40 link with mesotheliomas. *The Lancet, Oncology*, 1:69, **2000**.

8. M. Anello. Turkish towns provide genetic link to malignant mesothelioma. *Oncology News Intl.*, 10(6):9, **2001**.
9. M. Anello. Consensus growing for SV40 role in some mesotheliomas. *Oncology News Intl.*, 10(7):31, **2001**.
10. Ferber D. Monkey virus link to cancer grows stronger. *Science*, 296(5570):1012-1015, **2002**.
11. Vastag B. Sewage yields clues to SV40 transmission. *JAMA*, 288(11): **2002**.
12. Bookchin D. Vaccine scandal revives cancer fear. *New Scientist*, p. 6-7, July **2004**.
13. Ross K. Millions May Have Received Contaminated Polio Vaccine. *Science AAAS*, 11/15/**2005**.
14. Bangham J. A rock and a hard place. *Nature Reviews Cancer* V 6: 489, **2006**.
15. Editorial: How asbestos triggers cancer. *Chemical & Engineering News*, Vol 84(26):34, June **2006**.
16. Exposure to North Dakota Road Material May Increase Risk of Lung Cancer. *Science Daily*, Dec **2010**.
17. Maher B. Fear in the dust. *Nature*, 468: 884-885, Dec **2010**.
18. Levin M. Peril in the West. *www.fairwarning.org*, Oct **2011**.
19. Goldstein AM. Germline *BAP1* mutations and tumor susceptibility. *Nature Genetics*, 43:925-926, **2011**.
20. Wilson C. Villages of the Damned. *New Scientist*, 218:34-37, **2013**.
21. Bledsoe K. *BAP1* and *PTEN* Stabilize *IP3R3* to promote Ca^{2+} mediated apoptosis. *Cancer Discovery*, doi: 10.1158/2159-8290.CD-RW2017-122, **2017**.
22. Amelio I. Genes versus Environment: cytoplasmic *BAP1* determines the toxic response to environmental stressors in mesothelioma. *Cell Death Dis*; 8(6):e2907, **2017**. doi: 10.1038/cddis.2017.293. PMID: PMC5520942.

XX. Professional Courses:

1. Acquired Immunodeficiencies and Related Pathology. Scuola Superiore di Oncologia e Scienze Biomediche, Genova, Italy. May 6-7, 1985.
2. TRAC 3 Recombinant DNA Methodology. Foundation for Advanced Education in Sciences, National Institutes of Health, Bethesda, MD. October 2 - December 18, 1986.
3. TRAC 2 Separation Techniques: Proteins and Other Biomolecules. Foundation for Advanced Education in Sciences, National Institutes of Health, Bethesda, MD. March 31 - June 2, 1987.
4. XI Course of the International School of Pure and Applied Biostructure NATO-ASI on Molecular Basis of Human Cancer, Erice, Italy. May 1990.
5. Forty- First Tutorial on Clinical Cytopathology. Chicago, IL March 9-16, 1996.
6. Forty-Second Tutorial on Clinical Cytopathology. Los Angeles, CA. March 15-22, 1997.
7. 9th Annual Review, Gastrointestinal Surgical Pathology and the 19th Annual Course Hepatopathology '98. Armed Forces Institute of Pathology, Bethesda, MD, August 16-20, 1998.
8. Thoracic Pathology: With Clinical and Radiologic Correlations. Armed Forces Institute of Pathology, Lake Buena Vista, Florida, December 10-13, 1998.
9. 9th Annual Anatomic Pathology. Armed Forces Institute of Pathology, Silver Spring, MD. May 2-8, 1999.
10. 10th Annual Review, Gastrointestinal Surgical Pathology and the 20th Annual Course Hepatopathology '99. Armed Forces Institute of Pathology, Bethesda, MD, August 15-17, 1999.
11. 2nd Annual Soft Tissue Tumors. Armed Forces Institute of Pathology, Silver Spring, MD. October 7-9, 1999.
12. Current Issues in Gynecologic Pathology. Armed Forces Institute of Pathology, Amelia Island, Florida, December 9-11, 1999.
13. U.S. and Canadian Academy of Pathology – Diagnostic Pathology 2000. Armed Forces Institute of Pathology, Philadelphia, PA, August 3-11, 2000.
14. Thoracic Pathology with Clinical and Radiologic Correlation. Armed Forces Institute of Pathology. Bethesda, MD, November 13-15, 2002.
15. Diagnostic Pathology of Soft Tissue Tumors. Harvard Medical School. Boston, MA, November 18-22, 2002.

16. Soft Tissue Tumor Pathology. Armed Forces Institute of Pathology, Bethesda, MD. September 29-October 3, 2003.
17. Fundamentals of Personnel Law for Managers and Supervisors. Human Resources Council January 15, 2004.
18. Soft Tissue Tumor Pathology. Armed Forces Institute of Pathology, Bethesda, MD. September 26-29, 2005.

XXI. Abstracts – Available upon request.

1. Baroni CD, Pezzella F, Mirolo M, **and Carbone M.** Distribution of P24 HTLV3 Major Core Protein in Lymph Nodes from LAS Patients. Proceedings of the Immunobiology of Cancer and Immuno Disfunctions, Copenhagen, Denmark. p. 80, **1985.**
2. **Carbone M,** Mirolo M, and Baroni CD. Morphological and Immunohistochemical Characteristics of LAS Induced by HTLVIII. XVI Meeting of the Medical Society of Calabria. Cosenza, Italy, **1985.**
3. **Carbone M,** and Caramanico L. Immunological and Morphological Characteristics of the Immune Response in Breast Cancer. *Recentia Medica*, 2:99-108, **1985.**
4. Grandinetti M, Vero S, Tripodi G, Pingitore D, Perri F, **and Carbone M.** Evaluation of the Muscle and Skeleton Pathology of the Leg by CAT Scan. *Scripta Medica Brutia*, 1:2-10, **1985.**
5. Iritano A, Raffa S, Tripodi G, **and Carbone M.** Skeletal Malformation in the Fat Syndromes of Children. *Scripta Medica Brutia*, 3:142-149, **1985.**
6. **Carbone M,** Lewis Jr. AM, Matthews BJ, Haddada H, Levine AS, and Dixon K. SV40 Small-t Deletion Mutants Induce Macrophage Lymphomas in Syrian Hamsters. The Imperial Cancer Research Fund, London, U.K. Tumour Virus Meeting on SV40, Polyoma and Adenoviruses, p. 192, **1987.**
7. Pompetti F, Cicala C, Nguyen P, Dixon K, Levine AS, **Carbone M.** Transformation by SV40 small t mutants is restricted, *in vivo*, to limited cell types. **1987.**
8. Roy A, Murai K, **Carbone M,** Levine AS, and Patch CT. Growth of SV40 Induced Tumors: A Recently Identified Growth Inhibitory Factor Secreted by SV40-Transformed Hamster Cells has an Anti-proliferative Effect on Immune Effector Cells. Nato Advance Research Workshop, Les Arcs, France. Cell to Cell Signals in Mammalian Development. **1988.**
9. **Carbone M,** Chattopadhyay SK, and Lewis Jr. AM. Peculiar Persistence and Expression of Viral Genomes in Adenovirus 5 Transformed BALB/C Mouse Cells. Tumor Virus Meeting on: SV40, Polyoma, and Adenoviruses, Cold Spring Harbor, NY. p. 115, **1988.**
10. **Carbone M,** Chattopadhyay SK, and Lewis Jr. AM. “Hit and Run” Transformation by Human Adenoviruses: Ad5 Genome Function May Initiate But Not Be Required to Maintain the Neoplastic Phenotype of Transformed Mouse Cells. AACR Special Conference in Cancer Research: The Role of DNA Viruses in Human Tumors, San Diego, CA. **1989.**
11. **Carbone M,** Kajiwara E, Patch CT, Lewis Jr. AM, Levine AS, and Dixon K. Lack of Correlation Between the Production of an Antiproliferative Factor (M1) and the Tumor Inducing Capacity of SV40 Transformed Hamster Cells. The 1989 ICN-UCI International Conference on Virology: Common Mechanisms of Transformation and Pathogenesis by Papilloma, SV40, and Polyoma Viruses. Newport Beach, CA. **1989.**
12. Pompetti F, Levine AS, Picci P, and **Carbone M.** Oncogenes and Antioncogenes in Human Bone Tumors Molecular Basis of Human Cancer. Proceedings of the Foundation for Advanced Cancer Studies, Frederick, M.D. p. 60, **1990.**
13. Pompetti F, Cicala C, Nguyen P, Dixon K, Levine AS, and **Carbone M.** Transformation by SV40 Small-t Mutants is Restricted, In Vivo, to Limited Cell Types. Tumor Virus Meeting on: SV40 Adenoviruses and Polyoma; Cold Spring Harbor, N.Y. p.135, **1990.**
14. **Carbone M,** Hauser J, Rundell K, Dixon K, Carthy M, and Levine AS. SV40 Small-t Antigen Mediated Inhibition of DNA Replication Can be Overcome by PP2A Catalytic Subunit. Eukaryotic DNA Replication Meeting, Cold Spring Harbor, NY. p. 36, **1991.**
15. Pompetti F, Cicala C, Picci P, Levine AS, and **Carbone M.** RB, P53, RAS, and MYC Oncogenes in Primary Untreated Osteosarcomas Negative Controls on Cell Growth and Their Breakdown During the Pathogenesis of Cancer. AACR Special Conference on Cancer, Cape Cod, MA. **1991.**

16. **Carbone M**, Hauser J, Rundell K, Dixon K, Carthy M, and Levine AS. Simian Virus 40 small-t Antigen Inhibits DNA Replication In Vitro. *Molecular Biology of Human Pathogenic Viruses. UCLA-Keystone Symposia on Molecular Biology and Cellular Biology, J. Cell. Bioch.* (Supplement 15 E), p.65, **1991**.
17. Levine AS, Cicala C, Pompetti F, and **Carbone M**. Transformation by SV40 t Mutants Appears Restricted In Vivo to Cycling Cells. *Transgene Development and Disease, UCLA - Keystone Symposia on Molecular Biology and Cellular Biology, 1991. J. Cell. Bioch.* (Supplement 15 A), p. 195, **1991**.
18. Pompetti F, Levine AS, Picci P, and **Carbone M**. Oncogenes and Antioncogenes in human bone tumors. *The Molecular Basis of Human Cancer, 2nd Annual Meeting*, p. 60, June, **1991**.
19. Pompetti F, Levine AS, Picci P, and **Carbone M**. Oncogene Alterations in Human Bone Tumors. *Genetics of Cancer, AACR Special Conference, Hilton Head, SC.* **1992**.
20. **Carbone M**, Cicala C, Pompetti F, Festa A, and Levine AS. SV40 Induces Mesotheliomas in Hamsters. *Proceedings of the American Association for Cancer Research*, vol. 33, p. 393, **1992**.
21. Levine AS, Hauser J, Carty M, Rundell K, Dixon K, and **Carbone M**. Simian Virus 40 Small-t Antigen Inhibits SV40 Replication In Vitro. *Keystone Symposia on Molecular Biology, J. Cell Bioch.* (Supplement -16B), p. 59, **1993**.
22. Cicala C, Avantaggiati ML, Levine AS, Rundell K, Graessmann A, and **Carbone M**. Simian Virus-40 Small-t Antigen Accelerates DNA Replication In Vivo. *Keystone Symposia on Molecular Biology, J. Cell Bioch.* (Supplement. 17D), p. 16, **1993**.
23. **Carbone M**, Rizzo P, Procopio A, Mew DJY, Giuliano MT, Steinberg SM, Levine AS, Grimley P, and Pass HI. SV40 Large T Antigen and p53 Relationship in Pleural Mesothelioma. *Keystone Symposia on Molecular Biology, J. of Cell Bioch.* (Supplement 19A), p. 321, **1995**.
24. **Carbone M**, Rizzo P, Giuliano MT, Procopio A, Gephardt M, Hansen M, Malkin D, Pompetti F, Bushart G, Levine AS, Pass HI, and Garcea. Incidence of SV40-like sequences in human tumors. *Proceedings of the American Association for Cancer Research.* vol. 36, p. 201, **1995**.
25. Penno MB, Askin FB, Ma H, **Carbone M**, Vargas P, and Pass HI. CD44 hyaluronan and human mesotheliomas. *Proceedings of the American Association for Cancer Research*, vol. 36, p.41, **1995**.
26. **Carbone M**, Rizzo P, Mew DJY, and Pass HI. Evidence for and implications of SV40 in human tumors. *14h Nordic Virus Symposium, Tromso, Norway, June, 1995*.
27. Giuliano M, Marinacci, Messins E, Capogrossi MC, Cirielli C, Pass HI, Modestl A, **Carbone M**, and Procopio A. Adenovirus-mediated wild-type p53 gene transfer induces apoptosis and inhibits in vivo tumor growth of human mesothelioma cells. *J. of Investigative Medicine*, vol. 4, p.280A, **1996**.
28. **Carbone M**, Pass HI, Rizzo P, Howard CM, De Luca A, and Giordano A. Possible Mechanisms of SV40-Mediated Carcinogenesis in Human Mesotheliomas. *Keystone Symposia on Molecular & Cellular Biology, "Genetics of Human Cancer"*, **1997**.
29. Shridhar V, Shridhar R, **Carbone M**, and Pass HI. Four distinct regions of allele loss on the long arm of chromosome 6 in malignant mesotheliomas. *The American Society of Human Genetics*, **1997**.
30. Rizzo P, **Carbone M**, Mutti L, Cosimi MF, Libener R, and Betta PG. Further evidence for the presence of simian virus 40 (SV40)-like DNA sequences in asbestos-related human malignant mesothelioma (MM) of the pleura. *XXII International Congress of the International Academy of Pathology, Nice (Acropolis) France, October, 1998*.
31. **Carbone M**. Possible pathogenic role and detection of SV40 in human mesothelioma. *DNA Virus Conference, Madison, WI, July 14-19, 1998*.
32. Rizzo P, Di Resta I, Pass HI, and **Carbone M**. Analyses of the regulatory regions of SV40 present in human mesotheliomas. *DNA Conference, Madison, WI, July 14-19, 1998*.
33. Hirvonen A, Mattson K, Karjalainen A, Ollikainen T, Tammiletho L, Hovi T, Vainio H, Pass HI, Di Resta I, **Carbone M**, and Linnainmaa K. SV40 is not necessary for the development of asbestos-induced mesothelioma. *DNA Conference, Madison, WI, July 14-19, 1998*.
34. Tognon M, Martini F, Lazzarin L, Iaccheri L, Rizzo P, Pass HI, **Carbone M**. Abortive reactivation of SV40 progeny from human mesotheliomas found positive for SV40-like sequences. *DNA Conference, Madison, WI, July 14-19, 1998*.

35. Testa JR, **Carbone M**, Hirvonen A, Khalili K, Krynska B, Linnainmaa K, Pooley FR, Rizzo P, Rusch V, and Xiao GH. Simian virus 40 DNA sequences are frequently present in human malignant mesotheliomas. DNA Conference, Madison, WI, July 14-19, **1998**.
36. Pass HI, Donington JS, Wu P, Rizzo P, Nishimura M, Kennedy R, **Carbone M**. Human mesotheliomas contain the simian virus-40 (SV40) regulatory region and large tumor (T) antigen DNA sequences. DNA Conference, Madison, WI, July 14-19, **1998**.
37. **Carbone M**. The International Mesothelioma Group. Malignant Pleural Mesothelioma Conference. Lignano Sabbadoro, Italy, March 18-19, **1999**.
38. **Carbone M**. SV40 Associated Tumorigenesis. IBC's Conference on Functional Antigens. Arlington, VA, March 29-30, **1999**.
39. **Carbone M**, Rizzo P, Di Resta I, Matker C, Pass HI, Alkan S, Swinnen L, Fisher RI, and Fisher S. SV40 is rarely present in non-Hodgkin's lymphoma. American Association for Cancer Research, Philadelphia, PA, April 10-14, **1999**.
40. Ernest F. McConnell and **Michele Carbone**. A comparison of pleural mesotheliomas induced by asbestos and SV40 virus in Syrian golden hamsters. 7th International Symposium on Particle Toxicology, Maastricht, The Netherlands, October 12-15, **1999**.
41. **Carbone M**. The role of SV40 virus in the carcinogenesis of mesothelioma. *Lung Cancer*, Journal of the International Association for the Study of Lung Cancer. 25(3):232, **1999**.
42. Albaracin CT, Rizzo P, Matker C, Kuan SF, Jafri J, **Carbone M**, Montag AG. Identification of simian virus40 DNA sequences in mixed mullerian tumors of the uterus. United States and Canadian Academy of Pathology Annual Meeting, New Orleans, LA. March 25-31, **2000**.
43. **Carbone M** and Bocchetta M. Human mesothelioma cells are uniquely susceptible to SV40 transformation. United States and Canadian Academy of Pathology Annual Meeting, New Orleans, LA. March 25-31, **2000**.
44. Bocchetta M, and **Carbone M**. Human mesothelial cells are unusually susceptible to SV40-mediated transformation and asbestos co-carcinogenicity. DNA Tumor Virus Conference. Madison, WI. July 8-13, **2000**.
45. Foddis R, Stekala E, Bocchetta M, Rizzo P and **Carbone M**. SV40 induces telomerase activity in human mesothelial cells. Proceedings of the American Association for Cancer Research, Vol. 42, pg. 111, **2001**.
46. Toyooka S, **Carbone M**, Toyooka KO, Bocchetta M, Shivapurkar N, Minna JD, and Gazdar AF. Progressive aberrant methylation of the RASSF1A gene in SV40 infected human mesothelial cells. American Association for Cancer Research, 43:1117, **2002**.
47. Wali A, Mussman J, Sluchak-Carlson J, Sharma S, Draghici S, Reeves R, Bocchetta M, **Carbone M**, and Pass HI. Differential expression profile of methylated genes in simian virus 40 transformed mesothelial cells. American Association for Cancer Research, 43:1116, **2002**.
48. **Carbone M**. The pathogenesis of mesothelioma: Role of environmental carcinogens, SV 40, and genetic predisposition. 18th UICC International Cancer Congress. Int J Cancer, Suppl. 13:50, **2002**.
49. **Carbone M**, Burck C, Rdzanek M, Cutrone R, Rudzinski J and Bocchetta M. Human mesothelial cells have different susceptibility to SV40, BK and JC virus infection and transformation. 1st International Conference. Florence, Italy. May 8-10, **2003**.
50. Cutrone R, Rizzo P, Bocchetta M, Pass HI and **Carbone M**. Archetypal and non-archetypal SV40 in human mesotheliomas. Society for General Microbiology. 152nd Meeting. Edinburgh, Scotland, April 7-11, **2003**.
51. **Carbone M**. Role of asbestos, SV40, erionite and genetics in the pathogenesis of malignant mesothelioma. VII Meeting of the International Mesothelioma Interest Group (iMig). Brescia Italy. June 24-26, **2004**.
52. Emri S, Dogan U, Akay H, **Carbone M**, and Baris I. Epidemiology of malignant mesothelioma in Cappadocia. VII Meeting of the International Mesothelioma Interest Group (iMig). Brescia Italy. June 24-26, **2004**.
53. Gazdar A, Suzuki M, Pass HI, and **Carbone M**. Aberrant methylation profile of human malignant mesotheliomas and its relationship to SV40 infection. VII Meeting of the International Mesothelioma Interest Group (iMig). Brescia, Italy. June 24-26, **2004**.
54. Pass HI, **Carbone M**, and Wali A. Studies of genomics and proteomics in mesothelioma. VII Meeting of the International Mesothelioma Interest Group (iMig). Brescia Italy. June 24-26, **2004**.

55. **Carbone M**, Emri S, Rdzanek M, Elmishad A, Dogan U, and Baris YI. “Pathogenesis of Mesothelioma: Genetic Predisposition”. Second International Symposium on Malignant Mesothelioma, Las Vegas, Nevada – October 6-8, **2005**.
56. Kroczyńska B, Yang H, **Carbone M**. Co-carcinogenesis study of wild type SV40 virus and crocidolite asbestos. American Association for Cancer Research, San Diego, CA, April 12-16, **2008**.
57. Beck A, Ivanova A, Ivanov S, Price L, Goldberg J, Wali A, Harbut M, **Carbone M**, Pass HI. Plasma osteopontin is an early detection and prognostic marker in malignant pleural mesothelioma. 44th American Association of Clinical Oncology Annual Meeting, Chicago, IL, May 30-June 3, **2008**. Kroczyńska B, Yang H, **Carbone M**. Co-carcinogenesis study of wild type SV40 virus and crocidolite asbestos. American Association for Cancer Research, San Diego, CA, April 12-16, **2008**.
58. Flores RM, Riedel E, Donington JS, Krug L, Rosenzweig K, Adusumilli P, **Carbone M**, Rusch VW, Pass HI. Surgical resection is associated with improved survival but is performed less frequently in the management of malignant mesothelioma in a community based population. Results in 5,937 patients. American Association of Clinical Oncology Annual Meeting, Orlando, FL, May 29-June 2, **2009**.
59. Zhang L, Loo SYT, Shimizu D, Honda S, Cao Y, Powers A, **Carbone M**. MYB overexpression associated with advanced stage and metastasis of adenoid cystic carcinoma and together with TTF-1 identifying rare lung primary subtype, United States and Canadian Academy of Pathology, March 17-23, 2012, Vancouver BC, Canada. *Mod Path*, 25(suppl): 319A, **2012**.
60. **Carbone M**, Ferris LK, Baumann F, Napolitano A, Lum CA, Flores EG, Gaudino G, Powers A, Bryant-Greenwood P, Krausz T, Hyjek E, Tate R, Friedberg J, Weigel T, Pass HI, Yang H. The BAP1 Cancer Syndrome. 11th International Conference of the International Mesothelioma Interest Group (iMig). Boston, MA, September 11-14, **2012**.
61. Qi F, Okimoto G, Jube S, Pass HI, Laczko R, DeMay RM, Khan G, Tiirikainen M, Yang Y, Gaudino G, **Carbone M**. Common and different effects induced in primary human mesothelial cells and mice exposed to chrysotile or crocidolite asbestos. American Association for Cancer Research 2013 Annual Meeting. Washington, DC, April 6-10, **2013**.
62. Napolitano A, **Carbone M**. BAP1 gene mutation and mesothelioma pathogenesis. IASLC: 15th World Conference on Lung Cancer, Sydney, Australia, *J Thorac Oncol*, 8(Suppl 2): S703, **2013**.
63. Qi F, Okimoto G, Jube S, Napolitano A, Pass H, Laczko R, Demay RM, Khan G, Tiirikainen M, Rinaudo C, Croce A, Yang H, Gaudino G, **Carbone M**. Continuous exposure to chrysotile asbestos can cause transformation of human mesothelial cells via HMGB1 and TFN- α signaling.
64. **Carbone M**. BAP1 gene mutation, mesothelioma pathogenesis and a novel cancer syndrome. AACR Cancer Susceptibility and Cancer Susceptibility Syndromes conference, San Diego, CA, January 29-February 1, **2014**.
65. Nasu M, Napolitano A, Pastorino S, Tanji M, Flores E, Baumann F, Powers A, Gaudino G, Pass HI, Yang H, **Carbone M**. BAP1 mutation in mesothelioma and BAP1 Cancer Syndrome. American Association for Cancer Research 2014 Annual Meeting, San Diego, CA, April 5-9, **2014**.
66. **Carbone M**. BAP1 gene mutations and mesothelioma. Lung Cancer SPORE Workshop, Rockville, MD, July 25-26, **2014**.
67. **Carbone M**, Nasu M, Tanji M, Pastorino S, Flores E, Baumann F, Powers A, Kanodia K, Gaudino G, Pass, HI, Emi E, Yang H. BAP1 mutations in sporadic mesothelioma. 2014 International Conference of the International Mesothelioma Interest Group (iMig), Cape Town, S. Africa, October 21-24, **2014**.
68. Zhang L, Shimizu D, Killeen J, Honda, SA, Lu D, Lin F, Monuki ES, **Carbone M**. Predictive Value of Serous Carcinoma Component for Metastasis and Recurrence in Stage I Malignant Mixed Mullerian Tumor, Possible Role of HB-EGF. 2015 United States & Canadian Academy of Pathology Annual Meeting, Boston, MA, March 21-27, **2015**.
69. Nasu M, Pastorino S, Luk H, Flores E, Baumann F, Powers A, Kanodia S, Gaudino G, Zhang Y, Gazdar A, Yang H, Pass HI, Emi M, **Carbone M**. High incidence of somatic BAP1 alterations in sporadic malignant mesothelioma. American Association for Cancer Research 2015 Annual Meeting. Philadelphia, PA, April 18-22, **2015**.
70. Flores E, Emi M, Johnson T, Tsunoda T, Behner D, Hoffman H, Hesdorffer M, Nasu M,

- Napolitano A, Baumann F, Yang H, **Carbone M**. A founder mutation in the BAP1 gene among four caucasian families with high incidences of malignant peritoneal mesothelioma and uveal melanoma: a molecular and genealogical study in a 10-generation BAP1 cancer syndrome kindred. American Association for Cancer Research 2015 Annual Meeting. Philadelphia, PA, April 18-22, **2015**.
71. Napolitano A, Pellegrini L, Day A, Larson D, Tanji M, Flores EG, Kendrick B, Lapid D, Powers A, Kanodia S, Pastroino S, Pass HI, Dixit V, Yang H, **Carbone M**. Minimal asbestos exposure in germline BAP1 heterozygous mice is associated with deregulated inflammatory response and increased risk of mesothelioma. American Association for Cancer Research 2015 Annual Meeting. Philadelphia, PA, April 18-22, **2015**.
 72. Baumann F, Flores EG, Napolitano A, Taioli E, Pass HI, Yang H, **Carbone M**. Germline BAP1 mutation is associated with a significant increased survival and multiple cancer in mesothelioma patients. IASLC Annual Meeting, Denver, CO, September 5-9, **2015**.
 73. Napolitano A, Pellegrini L, Dey A, Larson D, Tanji M, Flores EG, Kendrick B, Lapid D, Powers A, Kanodia S, Pastorino S, Pass HI, Dixit V, Yang H, **Carbone M**. Minimal asbestos exposure in germline BAP1 heterozygous mice is associated with deregulated inflammatory response and increased risk of mesothelioma. IASLC Annual Meeting, Denver, CO, September 5-9, **2015**.
 74. **Carbone M**, Flores EG, Emi M, Gaudino G, Pastorino S, Yang H, Johnson T, Tsunoda T, Hesdorffer M, Pass HI. Combined genetic and genealogic studies uncover a large BAP1 cancer syndrome kindred, tracing back nine generations to a common ancestor from the 1700s. American Association for Cancer Research 2016 Annual Meeting. New Orleans, LA, April 16-20, **2016**.
 75. Napolitano A, Antoine DJ, Pellegrini L, Baumann F, Pagano IS, Pastorino S, Goparaju CM, Prokrym K, Canino C, Pass H, **Carbone M**, Yang H. HMGB1 and its hyper-acetylated isoform are sensitive and specific serum biomarkers to detect asbestos exposure and to identify mesothelioma patients. 13th International Conference of the International Mesothelioma Interest Group (iMig), Birmingham, UK, May 1-4, **2016**.
 76. **Carbone M**, Flores EG, Emi M, Johnson T, Tsunoda T, Behner D, Hoffman H, Hesdorffer M, Nasu M, Napolitano A, Powers A, Minaai M, Baumann F, Bryant-Greenwood P, Lauk O, Kirschner M, Weder W, Opitz I, Pass HI, Gaudino G, Pastorino S, Yang H. BAP1 and Mesothelioma. 13th International Mesothelioma Interest Group (iMig) Conference, Birmingham, UK, May 1-4, **2016**.
 77. Larson D, Powers A, Ambrosi JP, Tanji M, Napolitano A, Flores EG, Baumann F, Pellegrini L, Jennings C, Buck B, Mclaurin B, Merkler D, Robinson C, Morris P, Dogan M, Dogan AU, Pass HI, Pastorino S, **Carbone M**, Yang H. Investigating palygorskite's role in the development of malignant mesothelioma. 13th International Conference of the International Mesothelioma Interest Group (iMig), Birmingham, UK, May 1-4, **2016**.
 78. **Carbone M**, Pass HI, Yang H. Mesothelioma in a setting of germline BAP1 mutations. IASLC 17th World Conference on Lung Cancer, Vienna, Austria, December 4-7, **2016**.
 79. **Carbone M**, Yoshikawa Y, Emi M, Hashimoto-Tamaoki T, Ohmuraya M, Sato A, Tsujimura T, Hasegawa S, Nakano T, Nasu M, Pastorino S, Szymiczek A, Bononi A, Pass HI, Yang H. High-density array-CGH with targeted NGS unmask multiple non-contiguous minute deletions on chromosome 3p21 in mesothelioma. American Association for Cancer Research 2017 Annual Meeting, Washington, DC, April 1-5, **2017**.
 80. Yang H, **Carbone M**. Mesothelioma, a unique model to study HMGB1 and Cancer. 8th International DAMPs and Alarmins Symposium (iDEAs), Cold Spring Harbor, NY, November 6-7, **2017**.
 81. **Carbone M**, Bononi A, Giorgi C, Patergnani S, Pass HI, Jia W, Pinton P, Yang H. *BAP1 modulates gene-environment interaction in carcinogenesis*. American Association for Cancer Research Annual 2018 Meeting, Chicago, IL, April 14-18, **2018**.