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REBUTTAL TESTIMONY OF
DR. EDWARD P. GELMANN, WITNESS FOR
ONCOR ELECTRIC DELIVERY COMPANY LLC

REBUTTAL TESTIMONY OF DR. EDWARD P. GELMANN

I. POSITION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Edward P. Gelmann, M.D. My business address is 1515 North Campbell Ave., 1969K, Tucson, Arizona 85724.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS AND BACKGROUND.

A. I am a Professor of Medicine and the John Norton Endowed Chair for Prostate Cancer Research at the Arizona Cancer Center at the University of Arizona. I treat cancer patients, conduct research on the causes and prevention of cancer, and teach medical and graduate students, and physicians in training. I have treated cancer patients and conducted cancer research for over 35 years. I also supervise a cancer research laboratory at the University of Arizona, where I conduct research on the molecular and genetic basis for cancer development. In the course of my research, I have supervised graduate and postgraduate students. I also teach medicine to medical and graduate students, medical oncology fellows, and internal medicine house staff. I am licensed to practice medicine in Arizona, New York, Maryland, and the District of Columbia.

I graduated from Yale University in 1972 with a B.S. *magna cum laude,* and from Stanford University School of Medicine in 1976 with an M.D. I trained in Internal Medicine at the University of Chicago Hospitals and Clinics, and I trained in Medical Oncology at the National Cancer Institute. I am board certified in Internal Medicine and in Medical Oncology. I have practiced medical oncology, conducted research, and taught for more than 35 years. I have conducted research on the processes by which cells become cancerous. I have published over 170 scientific papers and case reports, principally on cancer. I also have co-authored several book chapters on cancer and cancer causation, and I am

the senior editor of a textbook on molecular oncology that was released in 2014.

I frequently review literature and materials on the subject of cancer that are not directly related to my own research activities. In my capacity as a cancer researcher, I have frequently assisted the National Institutes of Health ("NIH") by reviewing research proposals submitted to NIH by other researchers. In addition, I regularly serve as a peer reviewer of articles submitted for publication in scientific journals. These include leading scientific journals such as *The New England Journal of Medicine*, *Cancer Research*, *Journal of the National Cancer Institute*, *Journal of Clinical Oncology*, and *International Journal of Cancer*. I served as as a member of the Editorial Board for the journal *Cancer Research*, the primary journal of the American Association of Cancer Research. I also recently served as the editor-in-chief of the journal *Endocrine Oncology*. I am a member of the American Association for Cancer Research, the American Society of Clinical Investigation, the American Society of Clinical Oncology, and the American College of Physicians. I previously served on both the Board of Directors and the Executive Committee of the Cancer and Leukemia Group B, one of the four national cooperative clinical cancer research groups. I also served for ten years as a liaison between the American Society of Clinical Oncology and the National Cancer Advisory Board, which is a committee of scientists, physicians, and lay people appointed by the President of the United States to oversee cancer research in the United States.

My professional qualifications are more fully set forth in my curriculum vitae attached as Exhibit EPG-R-1 to my testimony.

Q. HAVE YOU EVER SUBMITTED TESTIMONY BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS ("COMMISSION")?

A. Yes, I have submitted testimony before the Commission several times on behalf of LCRA Transmission Services Corporation, Cross Texas Transmission, LLC, and Oncor Electric Delivery Company LLC ("Oncor") in Docket Nos. 29065, 29833, 33978, 37530, 38354, 38597, 40684, and 44649. On October 9, 2012, I also presented to the Texas Legislature Senate Committee on Business on matters similar to those discussed in my various testimonies filed with the Commission, namely issues relating to alleged potential health effects of electric and magnetic fields ("EMF") and extremely low frequency fields ("ELF") for persons who reside near 345 kilovolt ("kV") electric transmission lines.

II. PURPOSE OF REBUTTAL TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I have been retained by Oncor for the purpose of reviewing the direct testimony of certain intervenors in this proceeding and to offer my independent expert opinion regarding the content of some of that direct testimony.

In Section I, I set forth my professional qualifications to render the expert opinions. I will further offer my expert opinions as to certain aspects of intervenor testimony in this proceeding, specifically, intervenor testimony relating to alleged potential health effects of EMF for persons or animals living near 345 kV electric transmission lines.

I have conducted an independent evaluation of scientific research on EMF in my areas of expertise. I have assessed whether this research provides a reliable scientific basis to conclude that power frequency EMF causes any adverse health effects or biological changes that could lead to cancer or other illnesses. My evaluation of the scientific research on power frequency EMF focuses principally on studies that have been

published in peer-reviewed scientific journals. I have conducted standard searches of the scientific and medical literature to identify these studies and I have assessed them in the same manner as I evaluate scientific studies in the course of my regular professional responsibilities. My testimony summarizes my review and evaluation of many hundreds of EMF studies and reports that have been published over the past three decades. The studies and reports specifically mentioned in my testimony are examples of well-designed research that I consider useful for understanding this large body of research.

I am testifying in my individual capacity as a medical doctor and as a scientific researcher. The views expressed in my testimony are not necessarily those of the University of Arizona or any other scientific or medical organization with which I am affiliated.

III. REVIEW AND ANALYSIS OF INTERVENOR TESTIMONY

Q. IN THEIR DIRECT TESTIMONIES, SEVERAL INTERVENORS HAVE EXPRESSED CONCERNS REGARDING THE HEALTH EFFECTS ARISING FROM EMF EXPOSURE (E.G., VIKTOR & ANZHELA CHOPOVENKO; JOANNA & JEREMY GIRARD; JEREMY & KATIE YOUNG AT P. 12; MELISSA DENNIS AT PP. 3 & 15-17; ROSS ARTHUR BREWER AT P. 3, LINES 9-15; CHARLES DEE & GRETCHEN BROWN AT PP. 2-3; RAYMOND LOUSTAUNAU AT PP. 1-2; AND MARTIN ROJAS AT P. 8, LINES 5-7). ARE YOU FAMILIAR WITH STUDIES THAT HAVE BEEN PERFORMED REGARDING THE HEALTH EFFECTS OF EXPOSURE TO EMF?

A. Yes. There have been many studies conducted on EMF over the past 35 years. My review of this large body of research has included studies that are considered most critical for evaluating cancer causation. Among other studies, I examined laboratory studies that considered the effects of EMF on DNA and chromosomes as well as on living cells. I also examined

long-term studies in which animals were exposed to power frequency EMF for one or more generations. Throughout this testimony, I refer to several studies that are listed in the Reference List attached to my testimony as Exhibit EPG-R-2. When referring to those studies, I indicate the respective numerical reference in parentheses that corresponds to a full citation that appears in the Reference List.

It is important to understand that permanent change in the DNA is necessary to transform a normal cell into a cancer cell. DNA contains the genetic information that provides a blueprint for all cells and organisms and determines a cell's characteristics. DNA and chromosome studies are tests that examine whether a permanent change has occurred in the structure of the DNA that could predispose cells to become cancerous. DNA change is essential for a normal cell to become cancerous, and cancer will not occur without permanent change to the DNA.

The DNA and chromosome studies on EMF indicate that exposure to power frequency fields does not cause damage to DNA or chromosomes and, therefore, is not capable of causing a normal cell to transition to a cancer cell. For example, Kikuchi examined whether continuous exposure to power frequency fields of 5,000 mG or 50,000 mG would cause damage to chromosomes (1). The study found no increase in damage due to EMF exposures. Similarly, McNamee found no increase in DNA damage in mice brain cells exposed to 10,000 mG EMF (2). Stronati exposed human blood cells to EMF of up to 10,000 mG and found no increased damage to DNA or chromosomes in the exposed cells (3). Other researchers, such as Heredia-Rojas (4), Hone (5), Luceri (6), McNamee (7), Reese (8), Rosenthal and Obe (9), Scarfi (10;11), and Testa (12) have found similar results with other types of cells using electric, magnetic, or combined electric and magnetic fields. These results have been confirmed and expanded by more recent studies that

examined the effects of a broad range of EMF using sensitive assays of DNA damage and cell stress. There was no evidence from these studies that EMF caused mutations or in any way stressed cells such that they could be predisposed to cancerous changes (13). Similarly, Korr (34) exposed mice on a continuous basis for 8 weeks to power frequency EMF of 1,000 mG or 10,000 mG. No increase in DNA breaks was found in the mice exposed to EMF compared to non-exposed animals.

Long-term animal studies look for effects on the whole, living organism, and take into account its biological complexity. Large populations of laboratory animals can be exposed to different levels of an agent for long periods of time, often through an entire life span and even through more than one generation. If exposure to EMF could cause effects that lead to cancer, whole animal studies would reveal the effects.

There are a number of well-designed, large-scale, long-term laboratory studies involving animals exposed to EMF. The results of these studies have added significantly to our understanding of whether power frequency EMF causes or contributes to the development of cancer or other adverse health effects. The results of these studies consistently show no increased incidence of cancer or other health effects that can be attributed to the long-term exposure of animals to power frequency EMF (14-20). These studies were conducted by researchers in Canada, Japan, Australia, Europe, and the United States.

The studies in the United States by Boorman and McCormick were conducted by the U.S. National Toxicology Program (NTP). They used the standard NTP protocols for evaluating whether any agent is toxic or a cause of cancer. The Boorman study was a two-year study in which different large groups of laboratory animals were exposed to power frequency EMF at 20 mG, 2,000 mG, or 10,000 mG for most of their lives (19). The researchers found no significant differences in mortality

patterns or cancer incidence, including leukemia, breast cancer, or brain cancer. The McCormick study reported the results of a similar two-year exposure study of mice (20). The researchers found no increase in leukemia, breast cancer, brain cancer or other cancers in the exposed animals. They found a decreased incidence of lymphoma and lung cancer in some of the exposed animals. Taken as a group, these careful, extensive studies using accepted NTP protocols show no increased risk of cancer or leukemia in animals with long-term exposures to power frequency magnetic fields.

Similarly, a review of studies on the effects of EMF on cancer promotion and tumor growth showed no consistent adverse effects. Cancer promotion is a stage in the development of cancer when cellular growth is stimulated and additional damage to the DNA occurs. Tumor growth studies examine whether cancerous cells will form tumors when transplanted into animals. Cancer promoters must stimulate cell growth and proliferation; that is, to cause cells to grow faster than they normally would or induce certain kinds of chronic inflammation. The studies of power frequency EMF have not shown the effects associated with cancer promotion. For example, Cridland exposed human cells to EMF ranging from 200 mG up to 200,000 mG and found no increase in cell proliferation (21). Miyakoshi exposed animal cells to 5,000 mG and did not find any significant increase in cell proliferation (22). In whole animal studies, Anderson and also Boorman examined cancer promotion in laboratory animals exposed to EMF for 18.5 hours a day, seven days a week throughout the studies (23, 24). No significant increases in cancer incidence were seen in the exposed animals. Similarly, Mandeville found no cancer promotion in laboratory rats exposed to EMF for up to 65 weeks (25). McLean found no cancer promotion effects in animals exposed to 20,000 mG of EMF for up to 52 weeks (26). Sommer exposed animals to

10,000 mG for 24 hours per day, seven days a week, for 32 weeks and observed no cancer promotion effects (27). Similarly, Negishi did not find increased rates of leukemia or lymphoma among animals that had been treated with a carcinogen and then were exposed to EMF for 22 hours a day for 30 weeks (28). Moreover, in a more recent study EMF was shown not to affect the development of leukemia in a rat model of that disease (29).

Tumor growth studies examine the ability of cancerous cells to form tumors when transplanted into animals. Investigators have asked whether EMF could stimulate the growth of preexisting tumors. To test the effect of EMF, researchers either exposed cells to EMF and then transplanted those cells into an animal or they transplanted cancer cells in the animal host and then exposed the animals to EMF. By comparing exposed and unexposed conditions scientists can determine whether EMF affected the growth of cancer in the animals. For example, Sasser transplanted leukemia cells into laboratory animals and then exposed a portion of the animals to EMF of 10,000 mG. He found that the EMF exposure did not significantly alter the progression of leukemia in the animals (30). Studies by Devevey (31) and Galloni (32) and others have also found no significant differences in tumor incidence or animal survival.

Other laboratory studies have examined EMF and a wide range of biological end points, such as gene expression, hormone levels, immune function, and cellular calcium levels, among others. This body of research includes a large number of studies and, as is frequently the case with an extensive body of research, some of the studies have reported effects on biological endpoints, while many other studies have not found such effects. Some of this earlier inconsistent research is now being tested using sophisticated technologies. For example, when modern high-throughput gene array technology was used to examine potential effects

on gene expression in human cells exposed to high levels of EMF (up to 7,000 mG), no reproducible effects were found (33). This is a single example of a broad range of studies. In aggregate, the body of work provides no scientific basis to conclude that power frequency EMF cause or contribute to adverse health effects.

In 1999, the U.S. National Institute of Environmental Health Sciences ("NIEHS"), one of the U.S. National Institutes of Health, completed a national research program on EMF, known as the EMF-RAPID Program. At the conclusion of the $46 million EMF-RAPID Program, the NIEHS Director's report to the U.S. Congress concluded that "[v]irtually all of the laboratory evidence in animals and humans and most of the mechanistic work done in cells fail to support a causal relationship between exposure to ELF-EMF at environmental levels and changes in biological function or disease status." The report also emphasized that NIEHS would not include power frequency EMF on its list of exposures "reasonably anticipated" to cause cancer in humans.

The National Academy of Sciences stated that: "[I]n view of the negative outcomes of EMF-RAPID replication studies, it now appears even less likely that MFs [magnetic fields] in the normal domestic or occupational environment produce important health effects, including cancer.... The results of the EMF-RAPID program do not support the contention that the use of electricity poses a major unrecognized public-health danger." Lastly, in 2007, a World Health Organization review of EMF research concluded that "[o]verall there is no evidence that ELF exposure alone causes tumours [in laboratory animals.]"

Q. CAN YOU TELL US ABOUT THE EPIDEMIOLOGY STUDIES THAT EXAMINED THE RELATIONSHIP OF EMF EXPOSURE TO CANCER?

A. As a medical doctor, cancer researcher, and geneticist I am generally familiar with epidemiology studies and examine them in the course of my

regular professional activities. My perspective is that the results of epidemiology studies typically must be viewed with caution, as these studies do not involve laboratory experiments in which exposures and outcomes can be controlled, tested, and replicated in a rigorous manner. Rather, epidemiology studies often have to rely on estimates of exposure and frequently have serious limitations in terms of being able to control for uncertain variables.

For these and other reasons, epidemiology studies are principally useful to generate hypotheses that then can be tested in laboratory studies on cells and animals. There have been a number of epidemiology studies on EMF and a variety of conditions in adults and children. These studies provide no basis to conclude that EMF from power lines pose a health risk. This is not just my conclusion, but is consistent with the conclusions of many independent expert scientific panels that have examined the issues as described in my previous answer.

Q. DID YOU REVIEW EMF STUDIES CITED BY SOME OF THE INTERVENORS IN THIS CASE?

A. Yes, to the extent I could find them in the scientific literature. The study by Draper et al. (2005) cited by some intervenors suggested an association solely of childhood leukemia, among all childhood cancers, with proximity to high-voltage power lines. The report analyzed composite data that had been published between 1962 and 1995. Reports like this suffer from information about field measurements, shielding, duration of proximity to the lines, and lack of information about confounding factors. Draper himself stated, "There is no accepted biological mechanism to explain the epidemiological study results, indeed, the relation may be due to chance or confounding."

Numerous studies cited by Viktor and Anzhela Chopovenko could not be located. For example, the McBride et al. (2014) article purportedly

from *Occupational and Environmental Medicine* does not appear to exist. Similarly, the Li et al. (2019) article purportedly from *Environmental Research* likewise does not appear to exist. Others, such as article 10 in their source list, did not undergo peer review.

IV. CONCLUSION REGARDING HEALTH RISKS ASSOCIATED WITH EXPOSURE TO EMF

Q. HAVE YOU FORMED AN OPINION REGARDING THE HEALTH EFFECTS OF EXPOSURE TO EMF?

A. Yes. The results of many important, well-designed studies do not provide a scientific basis to conclude that power frequency EMF cause or contribute to cancer or other adverse health effects. Based on my education, training, and experience as a medical doctor and scientific researcher, and on my review of the scientific research, I find no scientific basis to conclude that exposure to power frequency EMF from the Ramhorn Hill – Dunham 345 kV transmission line that is the subject of this case will cause or contribute to cancer or other adverse health effects.

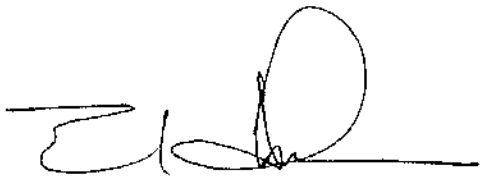
Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

DECLARATION

"My name is Edward P. Gelmann, M.D., my date of birth is May 31, 1950, and my professional address is 1515 North Campbell Ave., 1969K, Tucson, Arizona 85724, United States of America. I declare under penalty of perjury that the foregoing is true and correct."

Executed in Pima County, State of Arizona, on the 21st day of August, 2023.



Edward P. Gelmann, MD Declarant

(July, 2023)

CURRICULUM VITAE

(University of Arizona Format)

NAME Edward Paul Gelmann

PLACE OF BIRTH New York, New York

CITIZENSHIP U.S.A.

CHRONOLOGY OF EDUCATION

09/1968-06/1972	Yale University, New Haven, Connecticut. Scholar of the House, B.S., 1972, magna cum laude.
08/1972-06/1976	Stanford University School of Medicine, Stanford, California, Medical Scientist Training Program. M.D., 1976.
07/1976-06/1978	University of Chicago Hospitals and Clinics, Chicago, Illinois. Intern and Junior Assistant Resident, Department of Internal Medicine. Chairman, Alvin Tarlov, MD.
07/1978-06/1980	Medicine Branch, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, Clinical Associate. Clinical fellowship in medical oncology. Chief, Robert C. Young, MD.
07/1979-06/1983	Medical Staff Fellow, Laboratory of Tumor Cell Biology, National Cancer Institute, Bethesda, MD.

BOARD CERTIFICATION and LICENSURE

1977	Diplomat, National Board of Medical Examiners
1980	Diplomat in Internal Medicine, American Board of Internal Medicine No. 070149
1982	Subspecialty Certification in Medical Oncology
1977	Illinois State License No. 36-55120 (expired)
1978	California State License No. G 38939 (inactive)
1978	Maryland State License No. D 22807
1988	District of Columbia No. 17431
2007	New York State 243717
2018	Arizona 57252

UNIFORMED SERVICE

07/1978-10/1988	USPHS; Senior Surgeon (0-5)

ACADEMIC APPOINTMENTS

07/1983-09/1988	Senior Investigator, Medicine Branch, National Cancer Institute, Bethesda, Maryland.
07/1986-10/1988	Adjunct Associate Professor of Microbiology, Georgetown University School of Medicine and Dentistry, Washington, D.C.
10/1988-01/2007	Professor of Medicine, Professor of Cell Biology, Georgetown University School of Medicine
10/1988-06/1994	Chief, Division of Medical Oncology, Georgetown University School of Medicine.
07/1994-12/1995	Chief, Division of Hematology/Oncology, Georgetown University School of Medicine.
07/1997-06/1998	Vice Chair for Research and Academic Affairs, Department of Medicine, Georgetown University School of Medicine.
07/1999-01/2007	Chief, Division of Clinical Sciences, Department of Oncology, Georgetown University
02/2007-6/2009	Adjunct Professor Medicine and Oncology, Georgetown University.
02/2007-08/2013	Professor of Medicine and Pathology, Chief of the Division of Hematology/Oncology, Columbia University and New York Presbyterian Hospital. Deputy Director, Herbert Irving Comprehensive Cancer Center.
09/2013-09/2016	Professor of Medicine and of Pathology and Cell Biology, Columbia University and New York Presbyterian Hospital. Deputy Director, Herbert Irving Comprehensive Cancer Center.
09/2016-04/2019	Professor of Medicine and of Pathology and Cell Biology, Columbia University and New York Presbyterian Hospital.
02/2009-05/2019	Adjunct Professor of Medicine, Weill Cornell Medical College
05/1/2019-	Professor of Medicine and John Norton Endowed Chair for Prostate Cancer Research, University of Arizona, Tucson, AZ.

HOSPITAL APPOINTMENTS

10/1988-06/2007	Georgetown University Hospital, Washington, DC
07/1996-06/1997	Shady Grove Adventist Hospital, Rockville, MD
04/2007-04/2019	New York Presbyterian Hospital, New York, NY
01/2019-present	Banner University Medical Center, Tucson, AZ

HONORS AND AWARDS

1970	Phi Beta Kappa
1988	Unit Commendation, United States Public Health Service
1991	American Society for Clinical Investigation
1992	Outstanding Visit Award, Department of Medicine, Georgetown University School of Medicine
01/2002-01/2007	William M. Scholl Chair in Medical Oncology, Georgetown University School of Medicine
02/2007-06/2015	Clyde Wu Professor of Oncology, Columbia University (Chair designated for Division Chief by donor)
05/2019-	John Norton Endowed Chair for Prostate Cancer Research, University of Arizona

SERVICE/OUTREACH
NATIONAL/INTERNATIONAL OUTREACH

1984-1986	National Cancer Institute Clinical Research Subpanel
1985-1987	National Cancer Institute Technical Review Committee for Contracts
1988-1989	Program Committee - American Society of Clinical Oncology
1989-2004	American Society of Clinical Oncology Liaison to National Cancer Advisory Board
1989-1993	Study section member: Microbiology and Infectious Diseases Research Committee, NIAID, NIH
1991-1994	Study section ad hoc reviewer: for Metabolic Pathology Study Section, NCI
1991	Chair, NCI site visit for program project grant (P01), University of Arizona, Tuscon, AZ.
1992-2007	Prostate, Lung, Colon and Ovarian (PLCO) Cancer Screening Trial Steering Committee
1992	Chair, NCI Special Study Section for program project grant (P01), University of Arizona, Tucson, AZ.
1993	Special review committee for program project grant supplement, NCI.
1994-1997	Study section member: Metabolic Pathology Study Section
1994	Special review committee for R01 grant
1993-1999	Scientific Advisory Board, CaPCure Foundation
1996-2007	Chair, Ancillary Studies Committee, Prostate, Lung, Colon and Ovarian Cancer Screening Trial
1998	Correlative Sciences Subcommittee, Cancer and Leukemia Group B
1999	National Advisory Council, Horace Mann School, Riverdale, NY.
2000	Study Section member, Cancer Center Support Grant, Robert H. Lurie Cancer Center, Northwestern University, Chicago, IL.
2003	Study Section member, NIDDK, George O'Brien Centers for Urologic Research.
2003	Review committee member for quadriennial evaluation - Laboratory of Molecular Biology, National Cancer Institute
2004-05	American Society of Clinical Oncology 2004, 05 Annual Meeting Program Committee
2003	Contributing author *Medical Oncology- Medical Knowledge Self-Assessment Program (MKSAP)*
2004-06	Organizer and Chair Course in Molecular Oncology, American Society of Clinical Oncology Annual Meeting, New Orleans, LA.
2003-07	Chair, Biomolecular Studies Committee, Prostate, Lung, Colon, and Ovarian Cancer Screening Trial.
2014-present	Medical Director, Falconwood Foundation, New York, NY.
2016	Study Section review of R03 applications, National Cancer Institute, NIH.
2017	Study Section review of R03 applications (ZCA1 TCRB-D 3 S), National Cancer Institute, NIH.
2018	Study Section review of UG1 applications for NCI National Clinical Trials Network - Network Lead Academic Participating Sites (RFA-CA-17-059), National Cancer Institute, NIH.
2021	Study Section review of R21 and R03 National Cancer Institute, NIH.SEP-3: NCI Clinical and Translational R21 and Omnibus R03, PAR20-052

DEPARTMENTAL COMMITTEES

1989-1995	Research Committee
1989-1992	Pharmacy Committee, Georgetown University Hospital

1989-1994	Committee on Faculty, Georgetown University Medical Center
1989-1995	Bone Marrow Transplantation Committee
1989-1995	Executive Committee, Lombardi Cancer Research Center
1990-1993	Cancer Committee, Georgetown University Hospital
1991-1992	Task Force for Clinical Research, Chairman, Subcommittee for Clinical/Basic Science Department Interactions
1992-1993	Committee on Appointments and Promotions, Department of Medicine
1993-1995	Chairman, Department of Medicine Committee on Appointments and Promotions
1994	Subcommittee on Research Space, Research Committee
1995-1997	Department of Medicine Committee on Appointments and Promotions
1996-1997	Lombardi Cancer Center Clinical Research Committee
1996-1997	Medical Director, Lombardi Cancer Center satellite at Shady Grove.
1996	Chair, Faculty Content Task Force, Department of Medicine
1997-2005	Research Committee
1999-2006	Lombardi Cancer Center Clinical Research Committee
1998-2006	Lombardi Cancer Center Executive Committee
2009-2016	Chair, Protocol Review and Monitoring Committee, Herbert Irving Comprehensive Cancer Center, Columbia University
2020-2023	Chair, Data and Safety Monitoring Committee, Arizona Cancer Center
2020-	Clinical Research Oversight Committee, Arizona Cancer Center
2023-	Chair, Scientific Review Committee (Protocol Review and Monitoring Committee), Arizona Cancer Center

UNIVERSITY COMMITTEES

1996-2002	Chemotherapy Oversight Committee, Georgetown University Hospital
1996-1998	Committee on Admissions and Mentorship for MD-PhD Program
1997-2005	Committee on Faculty, Georgetown University Medical Center
1998-2003	GCRC Advisory Committee
2002-2005	Chair, Committee on Appointments and Promotions, Georgetown University School of Medicine (Promotion and Tenure Committee)
2008	Chair, Committee to Review Research Pharmacy, Columbia University
2008-2009	Chair, Research Pharmacy Oversight Committee, Columbia University

OTHER COMMITTEES (INTERNAL OR EXTERNAL)

1981-1983	Institutional Review Board, Clinical Oncology Program/DCT/NCI	
1985-1990	Editorial Board,	*Blood*
1983-present	Ad hoc reviewer:	*Annals of Internal Medicine*
		Cancer Research
		Journal of Clinical Oncology
		Journal of the National Cancer Institute
		Molecular Endocrinology
		International Journal of Cancer
		New England Journal of Medicine
		The Prostate
1990-1993	Director, Lombardi Cancer Research Center Urologic Oncology Program	
1993-1999	Director, Lombardi Cancer Center Prostate Cancer Program	
1997-2000	Editorial Board, *The Prostate Journal*	

1997-1999	Editorial Board, *Cancer Therapeutics*
2004-2012	Editorial Board, *Cancer Research*
2005-08	American Society of Clinical Oncology, Cancer Education Committee
2005	Ad Hoc Review Committee for NCI
2005	Chair, CDMRP Review Panel for Prostate Cancer Clinical Research Centers.
2005	Program Committee, American Association for Cancer Research 2006 Annual Meeting
2005-2006	American Society of Clinical Oncology Education Committee – Compendium Editorial Board
2005-2015	External Advisory Board, SPORE in Prostate Cancer, Dana Farber Cancer Institute.
2006	Member, Study Section for site visit of program project grant, Vancouver General Hospital, Vancouver, BC for NCI Canada.
2006-2007	External Advisory Board, application for SPORE in Prostate Cancer, New Jersey Cancer Institute
2006	Study Section member, P30 Cancer Center application, Case Western Reserve University, Cleveland, OH.
2008	Study Section for George M. O'Brien Urologic Research Centers, NIDDK, NIH.
2008	Chair, CDMRP Review Panel for Prostate Cancer Research Grants.
2008-13	Editorial Board, *Journal of Clinical Oncology*
2012-2015	Principal Investigator, Columbia University membership in the Southwest Oncology Group.
2013-2015	Editorial Board, *Cancer Research*
2016-18	Editorial Board, *Cancer Research*
2020-2022	Editor-in-Chief, *Endocrine Oncology*

PROFESSIONAL SOCIETIES

American Society for Clinical Investigation
Fellow, American College of Physicians
American Association for the Advancement of Science
American Association for Cancer Research
American Society of Clinical Oncology

TEACHING ACTIVITIES

1988-1995	Director, Subspecialty Training Program in Medical Oncology, Department of Medicine, Georgetown University School of Medicine.
2008	Lectures in Pathophysiology, Columbia University College of Physicians and Surgeons
2008	Lectures in Advanced Pathophysiology, Columbia University College of Physicians and Surgeons
2017, 18	Preceptor, Foundations of Clinical Medicine Tutorial, Columbia University College of Physicians and Surgeons.

PhD Thesis Committees

1993	Department of Cell Biology. Stephen Seslar. The role of HGF in the growth of breast cancer cells.
1994	Department of Biochemistry and Molecular Biology. Ronit Yarden. Bimodal regulation of EGF receptor by estrogen in breast cancer cells.
1997	Department of Cell Biology. Beth Pflug. Role of NGF and NGF receptor in the

growth of prostate cancer cell lines.

1997 Department of Biochemistry and Molecular Biology. Jainming Liu. Interaction of androgen receptor with SV40 T antigen.

1998 Department of Biochemistry and Molecular Biology. Kevin McGaffin. Vitamin D control of EGF receptor expression in breast cancer.

1998 Department of Cell Biology. Keith Orford. Degradation and Processing of ∃-Catenin.

2000 Department of Cell Biology. Christine Jarret. The Roles of APC2 and IKK in the Regulation of β-catenin Signaling.

2000 Department of Oncology. Jen-Kang Wang. Apoptosis in transgenic breast cancer cells expressing *MYC*.

2001 Department of Oncology. Roger Herold. Interaction of β-catenin and retinoic acid receptor.

2002 Thesis examiner, Paul Hollington, Flinders University, Adelaide, S. Australia.

2003 Thesis examiner, Lisa Horvath, University of New South Wales, NSW, Australia

2004 Department of Oncology. Jamie Holloway. The regulation of the estrogen receptor and its coactivator, AIB1, by growth factor signaling.

2006 Department of Oncology. Lynn Nielson. The role of prolactin in breast cancer cell invasion.

2006 Department of Oncology. Aparna Mani. Ubiquitination of the Steroid Hormone Coactivator AIB1.

PhD Thesis Advisor

Mark Markowski (MD, PhD) – Inflammatory Cytokines Induce Ubiquitination and Loss of The Prostate Suppressor Protein NKX3.1, Georgetown University, 2008

Erin Muhlbradt (PhD) – The role of IGFBP-3 in Mediating NKX3.1 Tumor Suppression, Georgetown University, 2009

Lectures in courses of the Tumor Biology Training Program.

BIBLIOGRAPHY

https://orcid.org/0000-0003-1482-3334

*indicates senior author publication

Original, Peer Reviewed Articles

1. Gelmann, E.P., and Cronan, J.E.: Mutant of Escherichia coli deficient in the synthesis of cis-vaccenic acid. J Bacteriol. 112:381-387, 1972.

2. Cronan, J.E., and Gelmann, E.P.: An estimate of the minimum amount of unsaturated fatty acid required for the growth of Escherichia coli. J Biol Chem. 248:1181-1195, 1973.

3. Decleve, A., Niwa, O., Gelmann, E.P., and Kaplan, H.S.: Kinetics of propagation of B-tropic murine leukemia virus on Fv-1bcell lines: requirement for multiple cycles of cell replication for transformation and viral antigen expression. Virology 65:320-332, 1975.

4. Decleve, A., Niwa, O., Gelmann, E.P., and Kaplan, H.S.: Replication kinetics of N- and B-tropic murine leukemia viruses on permissive and nonpermissive cells in vitro. Virology 65:320-332, 1975.

5. Gelmann, E.P., and Steward, J.P.: Faculty and students as admissions interviewers: results of a questionnaire given to applicants. J Med Educ. 50:626-628, 1975.

6. Cronan, J.E., and Gelmann, E.P.: Physical properties of membrane lipids: biological relevance and regulation. Bacteriol Rev. 39:232-256, 1975.

7. Gelmann, E.P., and Steward, J.P.: Admissions interviews. (Letter to the Editor) J Med Educ. 50:1078-1079, 1975.

8. Gelmann, E.P., Niwa, O., Decleve, A., and Kaplan, H.S.: X-ray potentiation of MuLV infection in vitro. Virology 69:561-569, 1976.

9. Gelmann, E.P., Decleve, A., and Kaplan, H.S.: Biological and biochemical differences among ecotropic C-type RNA viral isolates chemically induced from C57Bl/Ka mouse embryo cells in vitro. Virol. 85:198-210, 1978.

10. Gelmann, E.P., Wong-Staal, F., Kramer, R.A., and Gallo, R.C.: Molecular cloning and comparative analyses of the genomes of simian sarcoma virus (SSV) and its associated helper virus (SSAV). Proc Nat Acad Sci, USA. 78:3373-3377, 1981.

11. Wong-Staal, F., Dalla-Favera, R., Franchini, G., Gelmann, E.P., and Gallo, R.C.: Three distinct genes in human DNA related to the transforming genes of mammalian sarcoma retroviruses. Science 213:226-228, 1981.

12. Dalla-Favera, R., Gelmann, E.P., Gallo, R.C., and Wong-Staal, F.: A human onc gene homologous to the transforming gene (v-sis) of simian sarcoma virus. Nature 295:31-35, 1981.

13. Weinstein, R.A., Golomb, H.M., Grumet, G., Gelmann, E.P., and Schechter, G.P.: Hairy cell leukemia: Association with disseminated atypical mycobacterial infection. Cancer 48:380-383,-1981.

14. Wong-Staal, F., Dalla-Favera, R., Gelmann, E.P., Manzari, V., Szala, S., Josephs, S., and Gallo, R.C.: The transforming gene of simian sarcoma virus is a new onc gene of primate origin. Nature 294:273-275, 1981.

15. Gelmann, E.P., and Dennis, L.H.: Plasma-cell dyscrasia after alkylating-agent therapy for Hodgkin's disease. New Engl J Med. 305:1350, 1981.

16. Gelmann, E.P., Petri, E., Cetta, A., and Wong-Staal, F.: Deletions of specific regions of the simian sarcoma associated virus genome are found in defective viruses and the simian sarcoma virus. J Virol. 41:593-604, 1982.

17. Westin, E.H., Wong-Staal, F., Gelmann, E.P., Dalla-Favera, R., Papas, T.S., Lautenberger, J., Eva, A., Reddy, E.P., Tronick, S.R., Aaronson, S.A., and Gallo, R.C.: Expression of cellular homologs of retroviral onc genes in human hematopoietic cells. Proc Nat Acad Sci, USA 79:2490-2494, 1982.

18. Franchini, G., Gelmann, E.P., Dalla-Favera, R., Gallo, R.C., and Wong-Staal, F.: A human gene (c-fes) related to the onc sequences of Synder-Theilen feline sarcoma virus. Mol Cell Biol. 2:1014-1019, 1982.

19. Gelmann, E., Trainor, C., Wong-Staal, F., and Reitz, M.: Molecular cloning of circular unintegrated DNA of two forms of gibbon ape leukemia virus - Seato. J. Virol. 44:269-275, 1982.

20. Dalla-Favera, R., Gelmann, E.P., Martinotti, S., Franchini, G., Papas, T.S., Gallo, R.C., and Wong-Staal, F.: Cloning and characterization of different human sequences related to the onc gene (v-myc) of avian myelocytomatosis virus (MC-29). Proc Nat Acad Sci, USA 79:6497-6501, 1982.

21. Josephs, S.F., Dalla-Favera, R., Gelmann, E.P., Gallo, R.C., and Wong-Staal, F.: 5' Viral and human cellular sequences corresponding to the transforming gene of simian sarcoma virus. Science 219:503-505, 1983.

22. Gelmann, E.P., Josephs, S., and Wong-Staal, F.: Two strains of baboon endogenous virus demonstrate a high degree of genetic conservation. Gene 21:163-166, 1983.

23. Manzari, V., Wong-Staal, F., Franchini, G., Colombini, Gelmann, E.P., Oroszlan, S., Staal, S., Gallo, R.C.: Human T-cell leukemia-lymphoma virus (HTLV). Cloning of an integrated defective provirus and flanking cellular sequences. Proc Nat Acad Sci, USA 80:1574-1578, 1983.

24. Wong-Staal, F., Hahn, H., Manzari, V., Colombini, S., Franchini, G., Gelmann, E., and Gallo, R.C.: A survey of human leukemias for sequences of a human retrovirus, HTLV. Nature 302:626-628, 1983.

25. Gelmann, E.P., Popovic, M., Blayney, D., Masur, H., Sidhu, G., Stahl, R.E., and Gallo, R.C.: Human retrovirus, HTLV, proviral DNA in lymphocytes of two patients with acquired immune deficiency syndrome (AIDS). Science 220:862-865, 1983.

26. Gallo, R.C., Sarin, P.S., Gelmann, E.P., Robert-Guroff, M., Richardson, E., Kalyanaraman, V.S., Mann, D., Sidhu, G.D., Stahl, R.E., Leibowitch, J., and Popovic, M. Isolation of human T-cell leukemia virus (HTLV) in acquired immune deficiency syndrome (AIDS). Science 220:865-868, 1983.

27. Gelmann, E.P., Clanton, D.J., Jariwalla, R.J., and Rosenthal, L.J.: Characterization and location of myc-related sequences in human cytomagalovirus. Proc Nat Acad Sci, USA 80:5107-5111, 1983.

28. Clark, M., Gelmann, E.P., and Reitz, M.S.: Homology of the human T-cell leukemia virus envelope gene with a class-1 major histocompatibility antigen gene. Nature 304:60-62, 1983.

29. Gelmann, E.P., Psallidopoulos, M., Papas, T., and Dalla-Favera, R.: Identification of reciprocal translocation sites within the c-myc onc gene and immunoglobulin μ locus in a Burkitt lymphoma. Nature 306:799-803, 1983.

30. Gelmann, E.P. Possible role for retroviruses, pp. 103-104 in Fauci, A.S. (moderator): Acquired immunodeficiency syndrome: epidemiologic, clinical, immunologic, and therapeutic considerations. Ann Int Med. 100:92-106, 1984.

31. Gelmann, E.P., Franchini, G., Manzari, V., Wong-Staal, F., and Gallo, R.C.: Molecular cloning of a new unique human T-leukemia virus (HTLV-11Mo). Proc Nat Acad Sci, USA 81:993-997, 1984.

32. Longo, D.L., Gelmann, E.P., Cossman, J., Young, R.A., Gallo, R.C., O'Brien, S., and Matis, L.A.: The isolation of a human T-cell leukemia/lymphoma virus (HTLV) transformed B-lymphocyte clone from a patient with HTLV-associated adult T-cell leukemia. Nature 310:505-506, 1984.

33. Sodroski, J., Trus, M., Perkins, D., Patarca, R., Wong-Staal, F., Gelmann, E.P., Gallo, R.C., Haseltine, W.: Repetitive structure in the long-terminal-repeat element of a type II human T-cell leukemia virus. Proc Nat Acad Sci, USA 31:4617-4621, 1984.

34. Robert-Guroff, M., Blayney, D.W., Safai, B., Lange, M., Gelmann, E.P., Gutterman, J.W., Mansell, P.W.A., Goedert, J.L, Groopman, J.E., Steigbigel, N.H., Sidhu, G.S., Johnson, J.W., Friedman-Kien, A.E., Downing, R., Bayley, A.C., Gallo, R.C.: HTLV-I-specific antibody in AIDS patients and others at risk. Lancet ii, 128-130, 1984.

35. Gelmann, E.P., Burny, A., Kettmann, R.: Characterization of cellular sequences flanking an integrated

bovine leukemia virus genome. J Virol. 52:988-990, 1984.

36. Rustgi, V., Hoofnagle, J., Gerin, J., Gelmann, E.P., Reichert, C., Cooper, J., and Macher, A.: Hepatitis B virus infection in the acquired immunodeficiency syndrome. Ann Int Med. 101:795-797a, 1984.

37. Pass, H.I., Potter, D.A., Macher, A.M., Reichert, C., Shelhamer, J.H., Masur, H., Ognibene, F., Gelmann, E.P., Lane, H.C., Fauci, A., and Roth, J.A.: Thoracic manifestations of the acquired immune deficiency syndrome. J Thoracic and Cardiovasc Surg. 88:564-658, 1984.

38. Smith, P.D., Macher, A., Bookman, M., Boccia, R., Steis, R., Gill, V., Manischewitz, J., and Gelmann, E.P.: Salmonella typhimurium enteritis and bacteremia in the acquired immunodeficiency syndrome. Ann Int Med. 102:207-209, 1985.

39. Whang-Peng, J., Budd, P.A., Knutsen, T., Kao-Shan, C.S., Broder, S., Jaffe, E., Gelmann, E.P., Blattner, W., Lofters, W., Young, R.C., and Gallo, R.C.: Cytogenetic studies in human T-cell lymphoma virus (HTLV) positive leukemia/lymphoma in the USA. J Nat Cancer Inst. 74:357-369, 1985.

40. Lane, H.C., Siegal, J., Rook, A.H., Masur, H., Gelmann, E.P., Quinnan, G.V., and Fauci, A.S.: Use of interleukin-2 in patients with the acquired immunodeficiency syndrome (AIDS). J Biol Response Modifiers 3:512-516, 1984.

41. Boccia, R.V., Gelmann, E.P., Baker, C.C., Marti, H., and Longo, D.L.: A hemolytic uremic syndrome with the acquired immunodeficiency syndrome. Ann Int Med. 101:716-717, 1984.

42. Lane, H.C., Masur, H., Gelmann, E.P., Longo, D.L., Steis, R.G., Chused, T., Walen, G., Edgar, L., and Fauci, A.S.: Immunologic profiles define clinical subpopulations of patients with the acquired immunodeficiency syndrome. Am J Med. 78:417-422, 1985.

43. Papadopoulos, N.M., Lane, H.C., Costello, R., Moutsopoulos, H.M., Masur, H., Gelmann, E.P., and Fauci, A.S.: Oligoclonal immunglobulins in patients with the Acquired Immunodeficiency Syndrome. Clin Immunol and Immunopathol. 35:43-6, 1985.

44. Gelmann, E.P., Preble, O.T., Steis, R., Lane, H.C., Rook, A.H., Wesley, M., Jacob, J., Fauci, A., Masur, H., and Longo, D.: Human lymphoblastoid interferon treatment of Kaposi's sarcoma in AIDS: clinical response and prognostic parameters. Am J Med. 78:737-741, 1985.

45. *Preble, O.T., Rook, A.H., Steis, R., Silverman, R.H., Krause, D., Quinnan, G.V., Masur, H., Jacob, J., Longo, D., and Gelmann, E.P.: Interferon-induced 2'-3'-oligoadenylate synthetase during alpha interferon therapy in homosexual men with Kaposi's sarcoma: marked deficiency in the biochemical response to interferon in AIDS patients. J Infect Dis. 152:457-465, 1985.

46. Broder, S., Yarchoan, R., Collins, J.M., Lane, H.C., Markham, P.D., Klecker, R.W., Redfield, R.R., Mitsuya, H., Hoth, D.F., Gelmann, E., et al: Effects of suramin on HTLV-III/LAV infection presenting as Kaposi's sarcoma or AIDS-related complex: clinical pharmacology and suppression of virus replication in vivo. Lancet 2:627-630, 1985.

47. Rook, A., Manischewitz, J., Frederick, W., Epstein, J., Jackson, L., Gelmann, E.P., Steis, R., Masur, H., and Quinnan, G.: Deficient HLA-restricted, cytomegalovirus-specific cytotoxic T lymphocytes and natural killer cells in patients with AIDS. J Infect Dis. 152:627-630, 1985.

48. Siegel, J.P., Djeu, J.Y., Stocks, N.I., Masur, H., Gelmann, E.P., Quinnan, G.V., Jr.: Sera from patients with the acquired immunodeficiency syndrome inhibit production of interleukin-2 by normal lymphocytes. J Clin

Invest. 75:1957-1964, 1985.

49. *Kasid, A., Lippman, M.E., Papageorge, A., Lowy, D., and Gelmann, E.P.: Harvey murine sarcoma virus DNA transfected into MCF-7 human breast cancer cells bypasses their dependence on estrogen for tumorigenicity. Science 228:725-728, 1985.

50. Ognibene, F., Steis, R., Macher, A., Liotta, L., Gelmann, E.P., Pass, H., Lane, C., Fauci, A., Parrillo, J., Masur, H., and Shelhamer, J.: Kaposi's sarcoma causing pulmonary infiltrates and respiratory failure in the acquired immunodeficiency syndrome. Ann Int Med. 102:471-475, 1985.

51. *Kleinerman, E., Ceccorulli, L., Zwelling, L., Twilley, T., Herberman, R., Jacob, J., and Gelmann, E.: Activation of monocyte-mediated tumoricidal activity in patients with the acquired immunodeficiency syndrome. J Clin Oncol. 3:1005-1012, 1985.

52. Gelmann, E.P.: New concepts in Kaposi's sarcoma pp. 804-805. In: Fauci, A.S., Moderator. The acquired immunodeficiency syndrome: An update. Ann Int Med. 102:800-813, 1985.

53. Lecatsas, G., Houff, S., Macher, A., Gelmann, E.P., Steis, R., Reichert, C., Masur, H., and Sever, J.L.: Retrovirus-like particles in salivary, prostate and testes of AIDS patients. Proc Soc Exp Biol Med. 178:653-655, 1985.

54. Frederick, W., Epstein, J., Gelmann, E.P., Rook, A.H., Armstrong, G., Djeu, J.Y., Jackson, L., Manischewitz, J., Enterline, J., Jacob, J., Masur, H., and Quinnan, G.V.: Viral infections and cell-mediated immunity in immunodeficient homosexual men with Kaposi's sarcoma treated with human lymphoblastoid interferon. J Infect Dis. 152:162-170, 1985.

55. Broder, S., Yarchoan, R., Collins, J., MacKham, P., Kleeker, R., Redfield, R., Mitsuya, H., Hoth, D., Gelmann, E., Groopman, J., Resnick, L., Gallo. R.C., Myers, C., and Fauci, A.: Effects of suramin in HTLV-III/LAV infection representing as Kaposi's sarcoma or AIDS-related complex: Clinical pharmacology and suppression of virus replication in vivo. Lancet ii 627-630, 1985.

56. Kovacs, J.A., Kovacs, A.A., Polis, M., Wright, W.C., Gill, V.J., Tuazon, C.V., Gelmann, E.P., Lane, H.C., Longfield, R., Overturf, G., Macher, A.M., Fauci, A.S., Parrillo, J.E., and Bennett, J.E.: Cryptococcosis in the acquired immunodeficiency syndrome. Ann Int Med. 103:533-538, 1985.

57. *Masur, H., Lane, H.C., Palestine, A., Smith, P.D., Manischewitz, J., Stevens, G., Fujikawa, L., Macher, A., Nussenblatt, R., Baird, B., Megill, M., Wittek, A., Quinnan, G., Parrillo, J.E., Rook, A., Eron, L., Poretz, D., Goldberg, R., Fauci, A., and Gelmann, E.P.: Effects of 9-(1,3 dihydroxy-2propoxymethyl) guanine on serious cytomegalovirus disease in eight immunosuppressed homosexual men. Ann Int Med. 104:41-44, 1986.

58. Palestine, A., Stevens, G., Lane, H.C., Masur, H., Fujikawa, L., Nussenblatt, R.B., Rook, A., Manischewitz, J., Baird, B., Megill, M., Quinnan, G., Gelmann, E.P., and Fauci, A.S.: Treatment of cytomegalovirus retinitis with dihydroxypropoxymethyl guanine. Am J Opthalomol. 101:95-101, 1986.

59. *Stein, C., Saville, W., Yarchoan, R., Broder, S., and Gelmann, E.P.: Suramin and function of the adrenal cortex. Ann Int Med. 104:286-287, 1986.

60. Davidson, N.E., Bronzert, D.A., Chambon, P., Gelmann, E.P., and Lippman, M.E.: Use of two MCF-7 cell variants to evaluate the growth regulatory potential of estrogen-induced products. Cancer Res. 46:1904-1908, 1986.

61. Kasid, A., Davidson, N.E., Gelmann, E.P., and Lippman, M.E.: Transcriptional control of thymidine kinase gene expression by estrogen and antiestrogens in MCF-7 human breast cancer cells. J Biol Chem. 261:5562-5567, 1986.

62. Yarchoan, R., Klecker, R.W., Weinhold, K.J., Markham, P.D., Lyerly, H.K., Durack, D.T., Gelmann, E., Lehrman, S.N., Blum, R.M., Barry, D.W., et al: Administration of 3'-azido-3'deoxythymidine, an inhibitor of HTLV-III/LAV replication, to patients with AIDS or AIDS-related complex. Lancet 1:575-580, 1986.

63. Pass, H.I., Potter, D., Shelhammer, J., Macher, A., Ognibene, F., Longo, D., Gelmann, E.P., Masur, H., and Roth, J.: Indications for and diagnostic efficacy of open-lung biopsy in patients with the acquired immunodeficiency syndrome (AIDS). Ann Thor Surg. 41:307-312, 1986.

64. Heckford, S.E., Gelmann, E.P., Agnor, C.L., Jackson, S., Zinn, S., Matis, L.A.: Distinct signals are requird for proliferation and lymphokine gene expression in murine T cell clones. J Immunol. 137:3652-3663, 1986.

65. Lippman, M.E., Dickson, R.B., Bates, S., Knabbe, C., Huff, K., Swain, S., McManaway, M., Bronzert, D., Kasid, A., and Gelmann, E.P.: Autocrine and paracrine growth regulation of human breast cancer. Breast Cancer Res. Treat. 7:59-70, 1986.

66. Watkins, E.B., Findlay, P., Gelmann, E., Lane, H.C., Zabell, A.: Enhanced mucosal reactions in AIDS patients receiving oropharyngeal irradiation. Int J Radiat Oncol Biol Phys 13:1403-1408, 1987.

67. Lippman, M.E., Dickson, R.B., Gelmann, E.P., Rosen, N., Knabbe, C., Bates, S., Bronzert, D., Huff, K., and Kasid, A.: Growth regulation of human breast carcinoma occurs through regulated growth factor secretion. J Cellular Biochem 35: 1-16, 1987.

68. Lippman, M.E., Dickson, R.B., Kasid, A., Gelmann, E.P., Davidson, N., McManaway, M., Huff, K., Bronzert, D., Bates, S., Swain, S., and Knabbe, C.: Autocrine and paracrine growth regulation of human breast cancer. J Steroid Biochem. 24(1) 147-154, 1986.

69. *Gelmann, E.P., Longo, D., Lane, H.C., Fauci, A.S., Masur, H., Wesley, M., Preble, O.T., Jacob, J., and Steis, R.: Combination chemotherapy for disseminated Kaposi's sarcoma in AIDS patients. Am J Med. 82:456-461, 1987.

70. Dickson, R., Kasid, A., Huff, K., Bates, S.E., Knabbe, C., Bronzert, D., Gelmann, E.P., and Lippman, M.E.: Activation of growth factor secretion in tumorigenic states of breast cancer induced by 17ß-estradiol or v-H-ras oncogene. Proc Natl Acad Sci, USA, 84:837-841, 1987.

71. Davidson, N.E., Gelmann, E.P., Lippman, M.E., and Dickson, R.B.: Epidermal growth factor receptor gene expression in estrogen-receptor positive and negative human breast cancer cell lines. Molec Endocrin. 1:216-223, 1987.

72. *Wilding, G., Chen, M., and Gelmann, E.P.: LHRH agonists and human breast cancer cells. Nature 329: 770, 1987.

73. Lippman, M.E., Dickson, R.B., Gelmann, E.P., Rosen, N., Knabbe, C., Bates, S., Bronzert, D., Huff, K., Kasid, A.: Growth regulatory peptide production by human breast carcinoma cells. J Steroid Biochem. 30:53-61, 1988.

74. *Wilding, G., Lippman, M.E., and Gelmann, E.P.: Effects of steroid hormones and peptide growth factors on protooncogene c-fos expression in human breast cancer cells. Cancer Res 48:802-805, 1988.

75. *Freter, C., Lippman, M.E., Cheville, A., Zinn, S., and Gelmann, E.P. Alterations in phosphoinositide metabolism associated wth 17-ß estradiol and growth factor treatment of MCF-7 breast cancer cells. Molec Endoc. 2:159-166, 1988.

76. *Zajac-Kaye, M., Gelmann, E.P., and Levens, D. A point mutation in the c-myc locus of a Burkitt lymphoma abolishes binding of a nuclear protein. Science 240: 1776-1780, 1988.

77. Averbuch, S.D., Steakley, C.S., Young, R.C., Gelmann, E.P., Goldstein, D.S., Stull, R., Keiser, H.R. Malignant pheochromocytoma: Effective treatment with a combination of cyclophosphamide, vincristine, and dacarbazine. Ann Int Med 109(4):267-273, 1988.

78. *Wilding, G., Zugmeier, G., Knabbe, C., Flanders, D., and Gelmann, E. Differential effects of transforming growth factor ß on human prostate cancer cells in vitro. Molecular and Cellular Endocrinology 62:79-87, 1989.

79. Heckford, S.E., Gelmann, E.P., and Matis, L.A. Distinct mechanisms of c-myc and lymphokine gene expression in an antigen-specific T cell clone. Oncogene 3:415-421, 1988.

80. *Wilding, G., Chen, M., and Gelmann, E.P. Aberrant response in vitro of hormone-responsive prostate cancer cells to antiandrogens. The Prostate 14:103-115, 1989.

81. *Sommers, C.L., Walker-Jones, D., Heckford, S.E., Worland, P., Valverius, E., Clark, R., McCormick, F., Stampfer, M., Abularach, S., and Gelmann, E.P. Vimentin expression in some hormone-independent breast cancer cell lines and in mammary epithelial cells transformed by two oncogenes. Cancer Research 49:4258-4263, 1989.

82. *King, C.R., Swain, S.M., Porter, L., Steinberg, S.M., Lippman, M.E. and Gelmann, E.P. Heterogenous expression of erbB-2 mRNA in human breast cancer. Cancer Research 49:4185-4191, 1989.

83. *Wilding, G., Valverius, E., Knabbe, C., and Gelmann, E.P. Role of transforming growth factor-. in human prostate cancer cell growth. The Prostate 15:1-12, 1989.

84. *Sommers, C.L., Papageorge, A., Wilding, G., and Gelmann, E.P. The role of the rasH oncogene in the tumorigenesis of MCF-7 human breast cancer cells. Cancer Res, 50: 67-71, 1990.

85. *Wilding, G., Gelmann, E.P., and Freter, C.E. Phosphoinositide metabolism in human prostate cancer cells in vitro. The Prostate 16: 15-27, 1990.

86. *Voeller, H.J., Wilding, G., and Gelmann, E.P. v-rasH expression confers hormone-independent in vitro growth to LNCaP prostate carcinoma cells. Molec Endoc, 5: 209-216, 1991.

87. Wall, R.T., Gelmann, E.P., Hahn, M.B., and Jelenich, S.E. Monitored anesthesia care for laparoscopies in oncology patients. Anesthiol Rev, 18: 43-48, 1991.

88. Sommers, C.L., Thompson, E.W., Torri, J.A., Kemler, R., Gelmann, E.P., and Byers, S.W. Absence of cell adhesion molecule uvomorulin expression in invasive human breast cancer cell lines. Cell Growth Differen, 365-372, 1991.

89. *Gelmann, E.P. Oncogenes and growth factors in prostate cancer. J NIH Res, 3: 62-64, 1991.

90. Kahn, R.A., Kern, F.G., Clark, J., Gelmann, E.P., and Rulka, C. Human ADP-ribosylation factors: A functionally conserved family of GTP-binding proteins. J Biol Chem, 266: 2606-2614, 1991.

91. *Gelmann, E.P., Thompson, E.W., and Sommers, C.L. Invasive and metastatic properties of MCF-7 cells and ras-H-transfected MCF-7 cell lines. Int J Cancer, 50: 665-669, 1992.

92. *Dawson, N.A., Wilding, G., Weiss, R.B., McLeod, D.G., Linehan, W.M., Frank, J.A., Jacob, J.L., and Gelmann, E.P. A pilot trial of chemohormonal therapy for metastatic prostate carcinoma. Cancer, 69: 213-218, 1992.

93. Tarkington, M.A., Sommers, C.L., Gelmann, E.P., Tefft, M.C., and Lynch, J.H. The effect of pH on the in vitro colony forming ability of transitional cell carcinoma cells treated with various chemotherapeutic agents: implications for in vivo therapy. J Urol 147: 511-513, 1992.

94. *Sommers, C.L., Heckford, S.E., Skerker, J.M., Worland, P., Torri, J.A., Thompson, E.W., Byers, S.W., and Gelmann, E.P. Loss of epithelial markers and acquisition of vimentin expression in adriamycin and vinblastine-resistant human breast cancer cell lines. Cancer Res, 52: 5190-5197, 1992.

95. *Carroll, A.G., Voeller, H.J., Sugars, L., and Gelmann, E.P. p53 Oncogene mutations in three human prostate cancer cell lines. The Prostate 23: 123-134, 1993.

96. *Voeller, H.J., Sugars, L.Y., and Gelmann, E.P. p53 oncogene mutations in primary human prostate cancer specimens. J. Urology, 151: 492-295, 1994.

97. *Sommers, C.L., Skerker, J.M., Chrysogelos, S.A., and Gelmann, E.P. Regulation of vimentin transcription in human breast cancer cell lines. Cell Growth and Diff, 5: 839-846, 1994.

98. *Sommers, C.L., Byers, S., Thompson, E., Torri, J.A., and Gelmann, E.P. Differentiation state and invasiveness of human breast cancer cell lines. Br Cancer Res Trtmt, 31: 325-335, 1994.

99. Sommers, C.L., Gelmann, E.P., Kemler, R., Cowin, P., and Byers, S.W. Alterations in -catenin phosphorylation and plakoglobin expression in human breast cancer cells. Cancer Res, 54: 3544-3552, 1994.

100. *Colomer, R., Bacus, S.S., Lupu, R., and Gelmann, E.P. ErbB-2 antisense oligonucleotides inhibit proliferation of breast carcinoma cells with erbB-2 oncogene amplification. Br. J. Cancer, 70: 819-825, 1994.

101. *Berchem, G., Bosseler, M., Sugars, L.Y., Voeller, H.J., Zeitlin, S. and Gelmann, E.P. Androgens induce resistance to bcl-2-mediated apoptosis in LNCaP prostate cancer cells. Cancer Res, 55: 735-738, 1995.

102. *Cardillo, M., Berchem, G., Tarkington, M.A., Krajewski, S., Krajewski, M., Reed, J., Tehan, T., Ortega, L., Lage, J. and Gelmann, E.P. Resistance to apoptosis and upregulation of Bcl-2 in benign prostatic hyperplasia after androgen deprivation. J. Urol, 158: 212-216, 1997.

103. Gumerlock, P.H., Chi, S.-G., Shi, X.-B., Voeller, H.J., Jacobson, J.W., Gelmann, E.P. and deVere White, R.W. p53 abnormalities in primary prostate cancer: SSCP analysis of cDNA detects rare mutant transcripts. J Natl Cancer Inst, 89:66-71, 1997.

104. He, W.W., Sciavolino, P.J., Wing, J., Augustus, M., Hudson, P., Meissner, P.S., Curtis, T., Shell, B., Bostwick, D.G., Tindall, D.J., Gelmann, E.P., Abate-Shen, C., and Carter, K.C. A novel human prostate-specific, androgen-regulated homeobox gene that maps to 8p21, a region frequently mutated in prostate cancer. Genomics, 43:69-77, 1997. PMID: 9226374

105. *Voeller, H.J., Augustus, M., Madlike, V., Bova, G.S., Carter, K.C. and Gelmann, E.P. Coding region of NKX3.1, a prostate-specific homeobox gene on 8p21, is not mutated in human prostate cancers. Cancer

Research, 57:4455-9, 1997

106. *Stearns, V. and Gelmann, E.P. Does tamoxifen cause cancer in humans? J Clin Oncol, 16: 779-792, 1998.

107. Prorok, P.C., Andriole, G., Bresalier, R., Buys, S., Crawford, E.D., Fogel, R., Gelmann, E.P., Gilbert, F., Hasson, M., Hayes, R., Johnson, C.C., Mandel, J.S., O' Brien, B., Oken, M., Rafla,S., Reding, D., Rutt, W., Terasaki, P.I., Weissfeld, J.L., Yokochi, L., Gohagen, J.K. Design of the Prostate, Lung, Colon and Ovarian (PLCO) Cancer screening trial.Controlled Clinical Trials. 21:249S-406S, 2000.

108. *Bowen,C., Spiegel, S. and Gelmann, E.P. Radiation-induced apoptosis mediated by retinoblastoma protein. Cancer Res,58: 3275-3281, 1998.

109. Voeller, H.J., Truica, C.I., and Gelmann, E.P. β-catenin mutations in human prostate cancer. *Cancer Res* 58:2520-2523, 1998. PMID: 9635571.

110. *Kimura, K., Bowen, C., Spiegel, S., and Gelmann, E.P. TNF-α sensitizes prostate cancer cells to γ-radiation-induced apoptosis. Cancer Res, 59: 1606-1614, 1999.

111. *Bowen, C., Voeller, H.J., Kikly, K. and Gelmann, E.P. Synthesis of procaspases-3 and –7 during apoptosis in prostate cancer cells. Cell Death and Differentiation, 6: 394-401, 1999.

112. Mack, P.C., Gandara, D.R., Bowen, C., Edelman, M.J., Paglieroni, T., Schnier, J.B., Gelmann, E.P. and Gumerlock, P.H. Rb status as a determinanat of response to UCN-01 in non-small cell lung carcinoma. Clin Cancer Res, 5:2596-2604, 1999.

113. *Kimura, K. and Gelmann, E.P. TNF-α and Fas activate complementary FADD-dependent pathways that enhance apoptosis induced by γ-irradiation. J Biol Chem, 275: 8610-17, 2000.

114. *Steadman, D.J., Giuffrida, D., and Gelmann, E.P. DNA binding sequence of the human prostate-specific homeodomain protein NKX3.1, Nucleic Acids Research, 28: 2389-2395, 2000.

115. Nava, V.E., Cuvillier, O., Edsall,L.C., Kimura, K., Gelmann, E.P., and Spiegel, S. Sphingosine enhances apoptosis of radiation resistant prostate cancer cells. Cancer Res, 60:4468-4474, 2000.

116. *Truica, C., Byers, S., and Gelmann, E.P. β-Catenin affects androgen receptor transcriptional activity and ligand specificity. Cancer Res. 60: 4709-13, 2000. PMID: 10987273.

117. *Bowen, C., Bubendorf, L., Voeller, H.J., Slack, R., Willi, N., Sauter, G., Gasser, T.C., Koivisto, P., Lack, E.E., Kononen, J., Kallioniemi, O., and Gelmann, E.P. Loss of NKX3.1 expression in human prostate cancers correlates with tumor progression. Cancer Research, 60:6111-5, 2000.

118. *Kimura, K., Markowski, M., Bowen, C., Gelmann, E.P. Androgen blocks apoptosis of hormone-responsive prostate cancer cells. Cancer Research, 61:5611-18, 2001.

119. Gelmann, E.P., Chia, D., Pinsky, P.F., Andriole, G.L., Crawford, E.D., Reding, D., Hayes, R.B., Kramer, B.S., Woodrum, D.L., Gohagan, J.K., and Levin, D.L. representing the PLCO Screening Trial Investigators. Relationship of demographic and clinical factors to free and total PSA. Urology, 58:561-6, 2001.

120. *Taylor, K.L., Shelby, R.A., Schwartz, M.D., Ackerman, J., LaSalle, V.H., Gelmann, E.P., & McGuire, C. The impact of item order on ratings of cancer risk perception. Cancer Epidemiology, Biomarkers and Prevention, 11:654-9, 2002.

121. Martin, M.B., Voeller, H.J., Gelmann, E.P., Lu, J., Stoica, E.G., Hebert, E.J., Reiter, R., Singh, B., Danielsen, M., Pentecost, E., Stoica, A. Role of cadmium in the regulation of AR gene expression and activity. Endocrinology 143:263-75, 2002.

122. *Gelmann, E.P., Steadman, D.J., Ma, J., Ahronovitz, N., Voeller, H.J., Swope, S., Abbaszadegan, M., Brown, K., Strand, K., Hayes, R.B., and Stampfer, M.J. Occurrence of NKX3.1 C154T polymorphism in men with and without prostate cancer and studies of its effect on protein function. Cancer Res, 62:2654-9, 2002.

123. *Kimura, K. and Gelmann, E.P. Propapoptotic effects of NF-κB in LNCaP prostate cancer cells lead to serine protease activation. Cell Death and Differentiation, 9:972-980, 2002.

124. *Kimura, K., Markowski, M., Edsall, L., Spiegel, S., and Gelmann, E.P. Role of ceramide in mediating apoptosis in irradiated LNCaP prostate cancer cells. Cell Death Differentiation, 10:240-8, 2003.

125. *Bowen, C., Birrer, M., and Gelmann, E.P. Retinoblastoma protein-mediated apoptosis after γ-irradiation. J. Biol Chem, 277:44969-79, 2002.

126. Gelmann, E.P., Bowen, C., and Bubendorf, L. Expression of NKX3.1 in normal and malignant tissues. The Prostate. 55:111-117, 2003.

127. Zellweger, T., Ninck, C., Mirlacher, M., Annefeld, M., Glass, A.G., Gasser, T.C., Mihatsch, M.J., Gelmann, E.P., and Bubendorf, L. Tissue microarray analysis reveals prognostic significance of syndecan-1 expression in prostate cancer. The Prostate. 55:20-29, 2003.

128. *Song, L., Herrell, R., Byers, S., Shah, S., Wilson, E.M., Gelmann, E.P. β-Catenin binds to the activation function-2 region of the androgen receptor and modulates the effects of the N-terminal domain and TIF2 on ligand-dependent transcription. Molec Cell Biol 23:1674-1687, 2003. PMID: 12588987.

129. *Zhang, Y., Glass, A., Bennett, N., Oyama, K.A., Gehan, E., and Gelmann, E.P. Long-term outcomes after radical prostatectomy performed in a community-based health maintenance organization. Cancer, 100:300-307, 2004.

130. *Song, L.N., Coghlan, M., and Gelmann, E.P. Antiandrogen effects of mifepristone on coactivator and corepressor interactions with the androgen receptor. Molec. Endoc. 18:70-85, 2004.

131. *Taylor, K.L., Shelby, M.A., Gelmann, E., & McGuire, C. Quality of life and trial adherence among participants in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial. Journal of the National Cancer Institute, 96:1083-94, 2004.

132. Amin, A., Halabi, S., Gelmann, E.P., Stadler, W., Vogelzang, N., Small, E. 9-Nitrocamptothecin as second line chemotherapy for men with progressive, metastatic, hormone refractory prostate cancer: Results of the CALGB 99901. Urol. Oncol. 22:398-403, 2004.

133. *Asatiani, E, Huang, W.-X., Wang, A., Ortner, A.R., Cavalli, L.R., Haddad, B.R. and Gelmann, E.P. Deletion, methylation, and expression of the NKX3.1 suppressor gene in primary human prostate cancer Cancer Research, 65:1164-73, 2005. Pub Med 15734999

134. Andriole, G.L., Levin, D.L., Crawford, E.D., Gelmann, E.P., Pinsky, P.F., Chia, D., Kramer, B.S., Reding, D.R., Church, T.R., Grubb, R.L., Izmirlian, G., Ragard, L.R., Prorok, P.C., Gohagan, J.K. for the PLCO Project Team., Prostate Cancer Screening in the Prostate, Lung, Colorectal and Ovarian (PLCO) Cancer

Screening Trial: Findings from the Initial Screening Round of a Randomized Trial. J Natl Cancer Inst, USA, 97:433-8, 2005.

135. Li, H., Zhang, Y., Glass, A., Zellweger, T., Gehan, E., Bubendorf, L., Gelmann, E.P., and Nevalainen, M.T. Activation of signal transducer and activator of transcription-5 (Stat5) in prostate cancer predicts early recurrence. Clin Cancer Res, 11:5863-8, 2005.

136. *Ortner, E.R., Hayes, R.B., Weissfeld, J. and Gelmann, E.P. The effect of homeodomain protein NKX3.1 R52C polymorphism on prostate gland size. Urology, 67:311-315, 2006.

137. Hayes, R.B., Sigurdson, A., Moore, L., Peters, U., Huang, W.-Y., Pinsky, P., Reding, D., Gelmann, E.P., Rothman, N., Pfeiffer, R.M., Hoover, R.N., Berg, C.D., for the PLCO Trial Team. Methods for etiologic and early marker investigations in the PLCO trial. Mutation Research, 592:147-154, 2005.

138. *Song, L.-N. and Gelmann, E.P. Interaction of β-catenin and transcriptional intermediary factor-2/glucocorticoid receptor interacting protein-1 in transcriptional activation by the androgen receptor. J Biol Chem 280:37853-67, 2005, PMID: 16141201.

139. *Zheng, S.L., Ju, J.-H., Chang, B.-L., Ortner, E., Sun, J., Isaacs, S.D., Sun, J., Wiley, K.E., Liu, W., Zemedkun, M., Walsh, P.C., Ferretti, J., Gruschus, J., Isaacs, W.B., Gelmann, E.P., Xu, J. Germline mutation of NKX3.1 co-segregates with hereditary prostate cancer and alters the homeodomain structure and function. Cancer Res., 66: 69-77, 2006.

140. Gohagan,J.K., Marcus,P.M., Fagerstrom,R.M., Pinsky,P.F., Kramer,B.S., Prorok,P.C., Ascher,S., Bailey,W., Brewer,B., Church,T., Engelhard,D., Ford,M., Fouad,M., Freedman,M., Gelmann,E., Gierada,D., Hocking,W., Inampudi,S., Irons,B., Johnson,C.C., Jones,A., Kucera,G., Kvale,P., Lappe,K., Manor,W., Moore,A., Nath,H., Neff,S., Oken,M., Plunkett,M., Price,H., Reding,D., Riley,T., Schwartz,M., Spizarny,D., Yoffie,R. and Zylak,C. Final results of the Lung Screening Study, a randomized feasibility study of spiral CT versus chest X-ray screening for lung cancer, Lung Cancer, 47: 9-15, 2005.

141. Crawford, E.D., Pinsky, P.F., Chia, D., Kramer, B.S., Fagerstrom, R.F., Andriole, G., Reding, D., Gelmann, E.P., Levin, D.L., and Gohagan, J.K. Prostate specific antigen changes as related to the initial prostate specific antigen: data from the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial. J. Urol 175:1286-1290, 2006.

142. True L, Coleman I, Hawley S, Huang CY, Gifford D, Coleman R, Beer,T.M., Gelmann,E, Datta,M., Mostaghel,E., Knudsen,B., Lange,P., Vessella,R., Lin,D., Hood,L., Nelson,P.S.. A molecular correlate to the Gleason grading system for prostate adenocarcinoma. Proc Natl Acad Sci U S A 103:10991-6, 2006. PMID:16829574.

143. *Ju, J.H., Maeng, J-S., Zemedkun, M., Ahronovitz, A., Mack, J.W., Ferretti, J.W., Gelmann, E.P., and Gruschus, J.M. Physical and functional interactions between the prostate suppressor homeoprotein NKX3.1 and serum response factor. J. Molec. Biol., 360:989-999, 2006.

144. *Bowen, C., Stuart, A., Ju, J-H., Tuan, J., Blonder, J., Conrads, T.P., Veenstra, T.D., and Gelmann, E.P. NKX3.1 homeodomain protein binds to topoisomerase I and enhances its activity. Cancer Res, 67:455-67, 2007. Pub Med 17234752.

145. Pinsky, P.F., Miller, A., Kramer, B.S., Church, T., Reding, D., Prorok, P., Gelmann, E., Schoen, R.E., Buys, S., Hayes, R.B. and Berg, C.D. Evidence of a healthy volunteer effect in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial, Am J. Epidem., 165:874-81, 2007.

146. Yeager, M., Orr, N., Hayes, R.B., Jacobs, K.B., Kraft, P., Wacholder, S., Minichiello, M.J., Fearnhead, P., Yu, K., Chatterjee, N., Wang, Z., Welch, R., Staats, B.J., Calle, E.E., Feigelson, H.S., Thun, M.J., Rodriguez, C., Albanes, D., Virtamo, J., Weinstein, S., Schumacher, F.R., Giovannucci, E., Willett, W.C., Cancel-Tassin, G., Cussenot, O., Valeri, A., Andriole,nG.L., Gelmann, E.P., Tucker, M., Gerhard, D.S., Fraumeni, J.F.Jr, Hoover, R., Hunter, D.J., Chanock, S.J., Thomas, G. Genome-wide association study of prostate cancer identifies a second locus at 8q24. Nature Genetics, 39:645-9, 2007.

147. Taylor, K.L., Cox, L.S., Zincke, N., Mehta, L., Mcguire, C., and Gelmann, E. Lung cancer screening as a teachable moment for smoking cessation. Lung Cancer 56: 125-134, 2007.

148. Pinsky,P.F. Crawford,E.D., Kramer,B.S., Andriole,G.L., Gelmann,E.P., Grubb,R., Greenlee,R., Gohagan,J.K. Repeat prostate biopsy in the prostate, lung, colorectal and ovarian cancer screening trial. Brit J. Urol. Intl. 99:775-9, 2007.

149. Schumacher, F.R., Feigelson, H.S., Cox, D.G., Haiman, C.A., Albanes, D., Buring, J., Calle, E.E., Chanock, S.J., Colditz, G.A., Diver, W.R., Dunning, A.M., Freedman, M.L., Gaziano, J.M., Giovannucci, E., Hankinson, S.E., Hayes, R.B., Henderson, B.E., Hoover, R.N., Kaaks, R., Key, T., Kolonel, L.N., Kraft, P., Le Marchand, L., Ma, J., Pike, M.C., Riboli, E., Stampfer, M.J., Stram, D.O., Thomas, G., Thun, M.J., Travis, R., Virtamo, J., Andriole, G., Gelmann, E., Willett, W.C., Hunter, D.J. A common 8q24 variant in prostate and breast cancer from a large nested case-control study. Cancer Res. 67:2905-7, 2007.A common 8q24 variant in prostate and breast cancer from a large nested case-control study. Cancer Res. 67:2905-7, 2007.

150. Taplin ME, Manola J, Oh WK, Kantoff PW, Bubley GJ, Smith M, Barb D, Mantzoros C, Gelmann EP, Balk SP. A Phase II Study of Mifepristone (RU-486) in Castration Resistant Prostate Cancer with Correlative Assessment of Androgen related hormones. *BJU.* 101:1084-89, 2008, PMID: 18399827.

151. Tan, S.H., Dagvadorj, A., Shen, F., Gu, L., Liao, Z., Abdulghani, J., Zhang,Y., Gelmann,E.P., Zellweger,T., Culig,Z., Visakorpi,T., Bubendorf,L., Kirken,R.A., Karras,J., Nevalainen,M.T. Transcription factor Stat5 synergizes with androgen receptor in prostate cancer cells. *Cancer Res* 68:236-48, 2008.

152. *Song, L-N. and Gelmann, E.P. Silencing mediator for retinoic and thyroid hormone receptor and nuclear receptor corepressor attenuate transcriptional activation by the ∃-catenin-TCF4 complex. *J. Biol. Chem.* 283:25988-25999, 2008, PMID: 18632669.

153. *Markowski, M.C., Bowen, C., and Gelmann, E.P. Inflammatory cytokines induce phosphorylation and ubiquitination of prostate suppressor protein NKX3.1. *Cancer Res.* 68:6896-6901, 2008. Pub Med 18757402.

154. *Muhlbradt, E., Asatiani, E., Ortner, E., Wang, A, and Gelmann, E.P. NKX3.1 activates expression of IGFBP-3 to mediate IGF-I signaling and cell proliferation. *Cancer Research,* 69:2615-22, 2009. Pub Med 19258508

155. Andriole, G.L., Crawford, E.D., Grubb, R.L. III, Buys, S.S., Chia, D., Church, T.R., Fouad, M.N., Gelmann, E., Kvale, P.A., Reding, D.J., Weissfeld, J.L., Yokochi, L.A., O'Brien, B., Clapp, J.D., Rathmell, J.M., Riley, T.L., Hayes, R.B., Berg, C.D., Kramer, B.S., Izmirlian, G., Miller, A.B., Pinsky, P.F., Prorok, P.C., and Gohagan, J.K. for the PLCO Project Team. Seven year mortality results and related findings from the prostate component of the PLCO randomized cancer screening trial. *New Engl J Med,* 360:1310-19, 2009, PMID: 1929756.

156. Croswell,J.M., Kramer,B.S., Kreimer,A.R., Prorok,P.C., Xu,J.L., Baker,S.G., Fagerstrom,R., Riley,T.L., Clapp,J.D., Berg,C.D., Gohagan,J.K., Andriole,G.L., Chia,D., Church,T.R., Crawford,E.D., Fouad,M.N., Gelmann, E.P., Lamerato, L., Reding, D., and Schoen, R.E. Cumulative incidence of false-positive results in repeated, multimodal cancer screening. Annals of Family Med. 7: 212-222, 2009.

157. Ju, Jeong Ho, Maeng, J-S., Lee, D-Y., Piszczek, G., Gelmann, E., Gruschus, J. Interactions of the acidic domain and SRF interacting motifs with the NKX3.1 homeodomain. *Biochemistry*, 48: 10601-7, 2009, PM 19780584.

158. *Bowen, C. and Gelmann, E.P. NKX3.1 activates cellular response to DNA damage. *Cancer Research*, 70: 3089-97, 2010, PMID: 20395202.

159. Beildeck M.E., Gelmann E.P., Byers S.W. Cross-regulation of signaling pathways: an example of nuclear hormone receptors and the canonical Wnt pathway. *Exp Cell Res*; 316:1763-72, 2010, PMID: 20138864.

160. Ruiz C, Oeggerli M, Germann M, Gluderer S, Stocker H, Andreozzi M, Thalmann, G.N., Cecchini, M.G., Zellweger, T., Sturm, S., Koivisto, P.A., Helin, H.J., Gelmann, E.P.; Glass, A.G., Gasser, T.C., Terracciano, L.M., Bachmann, A., Wyler, S., Bubendorf, L., Rentsch, C.A. High NRBP1 expression in prostate cancer is linked with poor clinical outcomes and increased cancer cell growth. *Prostate* 72:1678-87, 2012, PMID - 22473923

161. *Song, L.-N., Bowen, C., and Gelmann, E.P. Structural and functional interactions of the prostate cancer suppressor NKX3.1 with topoisomerase I. *Biochem J* 453:125-136, 2013. PMID – 23557481

162. *Bowen, C., Ju, J.-h., Lee, J.-H., Paull, T.T., and Gelmann, E.P. Functional activation of ATM by the prostate cancer suppressor NKX3.1. *Cell Reports*, 4: 516-529, 2013 PMID – 23890999

163. *Muhlbradt, E., Ma, J., Severi, G., Ortner, E., Hayes, V., Hoang, H.N., Stampfer, M., Giles, G., Pollak, M., and Gelmann, E.P. Variant NKX3.1 and serum IGF-1 – investigation of interaction in prostate cancer. *Genes and Cancer*. 4:535-545, 2013. PMID – 24386513

164. *Song, L.-N., Silva, J., Koller, A., Rosenthal, A., Chen, E.I., and Gelmann, E.P. The tumor suppressor NKX3.1 is targeted for degradation by DYRK1B kinase. *Mol. Cancer Res.* 13:913-22, 2015. PMID: 25777618.

165. *Bowen, C., Zheng, T., and Gelmann, E.P. NKX3.1 suppresses TMPRSS2-ERG gene rearrangement and mediates repair of androgen receptor-induced DNA damage. *Cancer Res.*, 75:2686-98, 2015. PMID: 25977336

166. Zhang, H., Zheng, T., Chua, C.W., Shen, M., and Gelmann, E.P. Nkx3.1 controls the DNA repair response in the mouse prostate. *The Prostate*. 76:402-408, 2016. PMID:26660523

167. Andrews C, Fortier B, Hayward A, Lederman R, Petersen L, McBride J, Petersen DC, Ajayi O, Kachambwa P, Seutloali M, Shoko A, Mokhosi M, Hiller R, Adams M, Ongaco C, Pugh E, Romm J, Shelford T, Chinegwundoh F, Adusei B, Mante S, Snyper NY, Agalliu I, Lounsbury DW, Rohan T, Orfanos A, Quintana Y, Jacobson JS, Neugut AI, Gelmann E, Lachance J, Dial C, Diallo TA, Jalloh M, Gueye SM, Kane PMS, Diop H, Ndiaye AJ, Sall AS, Toure-Kane NC, Onyemata E, Abimiku A, Adjei AA, Biritwum R, Gyasi R, Kyei M, Mensah JE, Okine J, Okyne V, Rockson I, Tay E, Tettey Y, Yeboah E, Chen WC, Singh E, Cook MB, Duffy CN, Hsing A, Soo CC, Fernandez P, Irusen H, Aisuodionoe-Shadrach O, Jamda AM, Olabode PO, Nwegbu MM, Ajibola OH, Ajamu OJ, Ambuwa YG, Adebiyi AO, Asuzu M, Ogunbiyi O, Popoola O, Shittu O, Amodu O, Odiaka E, Makinde I, Joffe M, Pentz A, Rebbeck TR. Development, evaluation, and implementation of a pan-African cancer research network: men of African descent and carcinoma of the prostate. *J Glob Oncol.* 2018 Sep;(4):1-14. doi: 10.1200/JGO.18.00063. PMID: 30260755

168. Srivastava, M., Leighton, X., Bera, A., Eidelman, O., Bubendorf, L., Zellweger, T., Banerjee, J., Gelmann, E.P., and Pollard, H.B. Tissue microarray analysis delineate potential prognostic role of Annexin A7 in prostate cancer progression. PLoS One 2018. 13: e0205837. PMID 30321230.

169. Bowen, C., Ostrowski, M. C., Leone, G., and Gelmann, E. P. Loss of PTEN accelerates NKX3.1 degradation to promote prostate cancer progression. *Cancer Research.* 2019. 79:4124-34. PMID 31213464

170. Bowen, C., Maho Shibata, Hailan Zhang, Sarah K. Bergren, Michael M. Shen and Edward P. Gelmann.CRISPR/Cas9-Mediated Point Mutation in Nkx3.1 Prolongs Protein Half-Life and Reverses Effects Nkx3.1 Allelic Loss. *Cancer Research.* 80:4805–14, 2020. PMID 32943441.

171. Branigan, G.L., Torrandell-Haro, G., Soto, M., Gelmann, E.P., Vitali, F., Rodgers, K., and Brinton, R.D. Androgen targeting therapeutics mitigate the adverse effect of GnRH agonist on risk of neurodegenerative disease in men treated for prostate cancer. *Cancer Med.*, https://doi.org/10.1002/cam4.4650. 2022

Case Reports

1. Weinstein, R.A., Gelmann, E.P., and Golomb, H.M.: Disseminated atypical mycobacterial infection in hairy cell leukemia. Lancet ii:1052-1053, 1978.

2. Gelmann, E.P., Costa, J., and Myers, C.: An aplastic sarcoma arising in a benign chondroblastoma. Orthopedic Survey 3:379-385, 1980.

3. Gelmann, E.P., Anderson, T.A., Jaffe, E., and Broder, S.: Chemotherapy for lymphoma in a patient with common variable immunodeficiency. Arch Intern Med. 142:90-92, 1982.

4. *Gelmann, E.P. and Lack, E.J. DNA testing to refute the diagnosis of cancer. New Engl J Med, 337:1245-7, 1997.

5. Çetiner, H., Kır, G., Gelmann, E.P.,Ozdemirli, M. Primary vulvar ewing's sarcoma/primitive neuroectodermal tumor:a report of two cases and review of the literature. *Int J Gynecol Oncol.* 19:1131-36, 2009. PMID -19820381

Reviews, Chapters and Editorials

1. Decleve, A., Niwa, O., Gelmann, E.P., and Kaplan, H.S.: Radiation activation of endogenous leukemia viruses in cell culture: Acute X-ray irradiation . Yuhas, J.M., Tennant, R.W., and Regan, J.D. (Eds.): Biology of Radiation Carcinogenesis. New York, Raven Press, 1976, pp. 217-225.

2. Leiberman, M., Decleve, A., Gelmann, E.P., and Kaplan, H.S.: Biological and serological characterization of the C-type RNA viruses isolated from the C57B1/Ka strain of mice. II. Induction of propagation of the isolates. Kaplan, J.F. (Ed.): Radiation-induced Leukemogenesis and Related Viruses. INSERM. Symposium No. 4, Amsterdam, Elsevier North-Holland Biomedical Press, 1977, pp. 217-225.

3. Gallo, R.C., and Gelmann, E.P.: Editorial. In search of a Hodgkin's disease virus. New Engl J Med. 304:169-170, 1981.

4. Westin, E.H., Wong-Staal, F., Gelmann, E.P., Baluda, M., Papas, T., Eva, A., Reddy, E.P., Tronick, S.R., Aaronson, S.A., and Gallo, R.C.: Expression of the abl, myc and myb genes in human hematopoietic cells. Yohn, D.S., and Blakeslee, J.R. (Eds.): Advances in Comparative Leukemia Research 1981. Amsterdam, Elsevier North Holland, Inc. pp. 405-406, 1982.

5. Wong-Staal, F., Dalla-Favera, R., Gelmann, E.P., Westin, E., and Gallo, R.C.: Cloning of the simian sarcoma virus genome and its homologous human onc gene and studies on the expression of this gene in different human hematopoietic cells. Yohn, D.S., and Blakeskee, J.R. (Eds.): Advances in Comparative Leukemia

Research 1981. Amsterdam, Elsevier North Holland, Inc. pp. 407-408, 1982.

6. Wong-Staal, F., Josephs, S., Dalla-Favera, R., Westin, E., Gelmann, E.P., Franchini, G., and Gallo, R.C.: Cellular onc genes: The role as progenitors of viral onc genes and their expression in human cells. Neth, Gallo, Greaves, Moore, Winkler (Eds.): Modern Trends in Human Leukemia. Munich, Springer-Verlag, pp. 178-185, 1983.

7. Dalla-Favera, R., Westin, E., Gelmann, E.P., Martinotti, S., Bregni, M., Wong-Staal, F., and Gallo, R.C.: The human onc gene c-myc. Structure, expression, and amplification in the human promyelocytic leukemia cell line HL-60. Neth, Gallo, Greaves, Moore, Winkler (Eds.): Modern Trends in Human Leukemia, Munich, Springer-Verlag, pp. 247-254, 1983.

8. Wong-Staal, F., Westin, E., Franchini, G., Gelmann, E.P., Dalla-Favera, R., Manzari, V., and Gallo, R.C.: The cloning and analyses of human cellular genes homologous to retroviral onc genes. P. Chandra (Ed.): Biochemical and Biological Markers of Neoplastic Transformation. New York, Plenum Press, pp. 479-492, 1983.

9. Wong-Staal, F., Sarngadharan, M.G., Gelmann, E.P., Arya, S., and Gallo, R.C.: Growth of human T-cells, T-cell growth factor, and human T-cell leukemia viruses. Golde, D.W., and Marks, P.A. (Eds.): Normal and Neoplastic Hamatopoiesis. New York, Alan R. Liss, Inc.1983.

10. Wong-Staal, F., Franchini, G., Hahn, B., Arya, S.K., Gelmann, E.P., Manzari, V., and Gallo, R.C.: Human T-cell leukemia/lymphoma virus, in vitro transformation, and leukemia: some molecular studies. In Gallo, R.C., and Essex, M. (Eds.): Human T-cell Leukemia/Lymphoma Viruses, Cold Spring Harbor Laboratory, 1984, pp. 133-140.

11. Gelmann, E.P., Franchini, G., Manzari, V., Wong-Staal, F., and Gallo, R.C.: Molecular cloning of a new unique human T-cell leukemia virus (HTLV-IIMO). In Gallo, R.C., and Essex, M. (Eds.): Human T-cell Leukemia/Lymphoma Viruses, Cold Spring Harbor Laboratory, 1984, pp. 189-195.

12. Gelmann, E.P., Popovic, M., Lomonico, A., Richardson, E., Sarin, P., Gallo, R.C.: Evidence of HTLV infection in two patients with AIDS. In Friedman-Kien, A., and Laubenstein, L.J. (Eds.): AIDS: The Epidemic of Kaposi's Sarcoma and Opportunistic Infections. New York, Masson Publishing USA INC., 1984, pp. 127-133.

13. Ognibene, F.P., Shelhamer, J., Gill, V., Macher, A.M., Loew, D., Parker, M., Gelmann, E., Fauci, A.S., Parrillo, J.E., Masur, H.: The diagnosis of Pneumocystis carinii pneumonia in patients with the acquired immunodeficiency syndrome using subsegmental bronchoalveolar lavage. Am Rev Respir Dis. 129:929-932, 1984.

14. Lotze, M.T., Robb, R.J., Frana, L.W., Seipp, C.A., Sharrow, S.S., Longo, D.L., Gelmann, E.P., and Rosenberg, S.A.: Clinical studies with purified human IL-2 in patients with the acquired immunodeficiency syndrome and cancer. in Acquired Immune Deficiency Syndrome, Alan R. Liss, Inc., New York, pp. 409-423, 1984.

15. Gelmann, E.P., Wong-Staal, F., and Gallo, R.C.: The etiology of acute leukemia: Molecular genetics and viral oncology. In Wiernik, P., Canellos, G., Kyle, R., and Schiffer, C. (Eds.): Neoplastic Diseases of the Blood. New York, Churchill Livingstone, Inc., pp. 161-182, 1985.

16. Wong-Staal, F., Franchini, G., Hahn, B., Arya, S., Gelmann, E.P., Manzari, V., and Gallo, R.C.: Molecular Biology of HTLV. In Aaronson, S.A., Frati, L., Verna, R. (Eds.): Genetic and Phenotypic Makers of Tumors, Plenum Publishing Corp., pp. 337-344, 1985

17. Lane, H.C., Masur,H., Gelmann, E.P., and Fauci, A.S.: Therapeutic approaches to patients with AIDS. Cancer Res. 45 Suppl. 4674s-4676s, 1985.

18. Preble, O.T., Rook, A.H., Quinnan, G.V., Vilcek, J., Friedman, R.M., Steis, R., Gelmann, E.P., and Sonnabend, J. Role of interferon in AIDS. Ann NY Acad Sci. 437:65-75, 1984.

19. *Longo, D.L., Steis, R., Lane, H.C., Lotze, M., Rosenberg, S., Preble, O., Masur, H., Rook, A., Fauci, A., Jacob, J., and Gelmann, E.P.: Malignancies in the AIDS patient: Natural history, treatment strategies, and preliminary results. Ann NY Acad, Sci. 437:421-430, 1984.

20. Lippman, M.E., Dickson, R.B., Gelmann, E.P., Kasid, A., Bates, S., Knabbe, C., Swain, S.M., McManaway, M., Wilding, G., Davidson, N., Huff, K., and Bronzert, D.: Mechanisms of growth regulation of human breast cancer. Proceedings of the 18th Mian symposium. Advances in Gene Technology Molecular Biology of the Endocrine System. Paett, D., Ahmeod, F., Beach, S., and Whelon, W.J. (Eds.), ICSU Short Reports, Vol. 4, pp. 254-257, 1986.

21. Lippman, M.E., Dickson, R.B., Gelmann, E.P., Knabbe, C., Kasid, A., Bates, S., and Swain, S.: Mechanisms of estrogenic and antiestrogenic regulation of growth and polypeptide growth factor secretion in human breast carcinoma. Proceeding of the Symposium on Hormonal Manipulation of Cancer: Peptides Growth Factors and New(Anti)Steroidal Agents Rotterdam, The Netherland, June 4-6, 1986. Raven Press, New York, 1986.

22. Gelmann, E.P., Agnor, C., and Lippman, M.E., The role of the ras oncogene in human mammary cancer. in Steroid Receptors in Health and Disease ed. Moudgil, V.K. (New York: Plenum Press), 1988, p. 313-324.

23. Dickson, R.B., Knabbe, C., Bates, S.E., Huff, K., Davidson, N.E., Bronzert, D., Swain, S., Valverius, E., Gelmann, E.P., and Lippman, M.E. Growth factors, receptors and oncogenes in breast cancer. Current Prospects in Breast Cancer Mittra, I. and Desai, R. (Eds.) Bombay, India. Tata- McGraw Hill Publishing Company Ltd, 1988. p. 73-80.

24. Dickson, R.B., Rosen, N., Gelmann, E.P., and Lippman, M.E.: Oncogenes and Breast Cancer: Importance of receptor- and signal transduction-related protooncogenes. Trends in Pharmacological Sciences, 8: 372-5, 1987.

25. Zajac-Kaye, M., Avigan, M., Takimoto, M., Pittaluga, S., Quinn, J., Gelmann, E., Levens, D. Multifactorial regulation of the human c-myc oncogene. Curr Top Microbiol Immunol. 141:247-252, 1988.

26. *Gelmann, E.P.: The role of laparoscopy in cancer management, in Updates: Cancer - Principles and Practice of Oncology. eds. Devita, V.T., Hellman, S. and Rosenberg, S.A., 1988, pp. 1-11.

27. Gelmann, E.P. and Lippman, M.E. Role of oncogenes in human breast cancer. in The Breast, eds. Bland, K.I. and Copeland, E.M. (W.B. Saunders, Philadelphia, PA). pp 351-362, 1991.

28. Kern, F.G., Wellstein, A., Flamm, S., Zugmeier, G., Cheville, A., Lupu, R., McLesky, S., Gelmann, E.P., and Lippman, M.E. Secretion of heparin binding growth factors by breast cancer cells and their role in promoting cancer cell growth. Cancer Chemotherapy: Challenges for the Future, vol 5. Tokyo, Excerpta Medica, Ltd. 1990. p 167-174.

29. *Lippman, M.E. and Gelmann, E.P. Endocrine management of malignant disease. in Endocrinology, ed. DeGroot, L.I., Philadelphia: W.B. Saunders, Co. pp. 2846-2869, 1995.

30. *Gelmann, E.P. Androgen receptor mutations in prostate cancer. in Drug Resistance, ed. W.N. Hait. Boston,

Massachusetts: Kluwer Academic Publishers, pp 285-304, 1996.

31. *Gelmann, E.P. Tamoxifen induction of apoptosis in ER-negative cancers: New tricks for an old dog? Editorial. J Natl Cancer Inst, 88: 224-226, 1996.

32. *Gelmann, E.P. Oncogenes in Human Breast Cancer. in The Breast, eds. Bland, K.I. and Copeland, E.M. Philadelphia: W.B. Saunders. 1998.

33. *Gelmann, E.P. Tamoxifen for the treatment of malignancies other than breast and endometrial carcinoma. Semin Oncol 24(Suppl 1):S1-65-S1-70, 1997.

34. *Gelmann, E.P. The molecular biology of the androgen receptor. J Clin Oncol, 20:3001-15, 2002. PMID: 12089231.

35. *Liu, M. and Gelmann, E.P. P53 Gene Mutations: Case study of a clinical marker for solid tumors. Semin Oncol, 29:246-257, 2002.

36. *Gelmann, E.P. Searching for the gatekeeper of prostate cancer. Crit. Rev. Oncol/Hematol 46:S11-S20, 2003.

37. *Liu, M.C., Dickson, R.B., Lippman, M.E., and Gelmann, E.P. Molecular Oncology of Breast Cancer, in The Breast, third edition, eds. Bland, K.I. and Copeland, E.M. Philadelphia: W.B. Saunders. 2004.

38. *Mani, A. and Gelmann, E.P. The ubiquitin proteasome pathway and its role in cancer. J Clin Oncol. 21:4776-99, 2005.

39. *Gelmann, E.P. Molecular Biology. Chapter 2 in Oncology MKSAP. Alexandria, VA: American Society of Clinical Oncology. Editor: Cheson, B. pp21-56, 2004.

40. *Asatiani, E. and Gelmann, E.P. Targeted Therapies for Prostate Cancer. Expert Opinion on Therapeutic Targets, 9:283-98, 2005.

41. Gelmann, E.P. and Semmes, O.J. Expression of genes and proteins specific for prostate cancer. J Urol 172:S23-27, 2004.

42. *Shand, R.L. and Gelmann, E.P. Molecular biology of prostate cancer pathogenesis. Curr Opin Urol. 16:123-131, 2006.

43. Gelmann, E.P. Complexities of prostate cancer risk. *New Engl. J. of Med.*, 358:961-3, 2008.

44. Gelmann, E.P. and Muhlbradt, E.E. Molecular Biology of Prostate Cancer. In *Prostate Cancer: A Clinical Guide.* eds. Gulley, J.L., Dahut, W.L., Moul, J.W., and Sandler, H.M. Philadelphia: Lippincott, Williams, & Wilkins. 2008. pp 1-7.

45. Abate-Shen, C., Shen, M.M., and Gelmann, E. Integrating differentiation and cancer: The Nkx3.1 homeobox gene in prostate organogenesis and carcinogenesis. *Differentiation* 76:717-727, 2008.

46. Gelmann, E.P. and Henshall, S.M. Clinically relevant prognostic markers for prostate cancer: the search goes on. *Ann. Int Medicine* 150:647-9, 2009.

47. Beildeck, M.E., Gelmann, E.P., and Byers, S.W. Cross-regulation of signaling pathways: An example of nuclear hormone receptors and the canonical Wnt pathway. *Exp Cell Res.* In press, 2010.

48. Lim, E. and Gelmann, E.P. Renal cell cancer treated with a single-edged sword *Cell Rep.* 3:275-276, 2013 PM:23438368

49. Gelmann, E.P., Sawyers, C.L., and Rauscher, F.J. Editors. *Molecular Oncology. Causes of Cancer and Targets for Treatment.* Cambridge, U.K. Cambridge University Press. pp 984. 2014 ISBN: 9780521876629.

50. Neugut, A.I. and Gelmann, E.P. Treatment to the prostate in the presence of metastases: lessons from other solid tumours. 69:795-796, 2016.

Patents
None

Abstracts
I did not record my published abstracts.

Audiovisual/Media
None

FELLOWSHIP AND GRANT SUPPORT

GRANTS: pending

GRANTS: current

2023-4	National Cancer Institute R03-TR004465-01 DYRK1B Inhibition for Prostate Cancer. RFA-RM-22-024: Pilot Projects Investigating Understudied G Protein-Coupled Receptors, Ion Channels, and Protein Kinases PI: Edward Gelmann Annual Direct Costs: $100,000
2021	Regeneron Corp A Phase 1/2 Study of REGN5678 (Anti-PSMAxCD28) with Cemiplimab (Anti-PD-1) in Patients with Metastatic Castration-Resistant Prostate Cancer
3/26/2020-	Pharmacyclics Corp. A Phase 1b/2 study of ibrutinib combination therapy in selected advanced gastrointestinal and genitourinary tumors Institutional PI – Edward Gelmann, MD Total Costs: $465,992
2020	BioNTech Corp First-in-human, dose titration and expansion trial to evaluate safety, immunogenicity and preliminary efficacy of W-pro1 in patients with metastatic castration resistant prostate cancer and W-pro1 in combination with cemiplimab and/or goserelin acetate in patients with high-risk, localized prostate cancer (PRO-MERIT)
2020	F. Hoffmann-La Roche Ltd A Phase III, Multicenter, Randomized, Open-Label Study of Atezolizumab in

	Combination with Cabozantinib in Patients with Renal Cell Carcinoma who Experienced Disease Progression During or After Check Point Inhibitor Treatment
GRANTS: expired	
1/1/15- 4/30/19	Falconwood Foundation Targeted Therapy in Prostate Cancer PI – Edward Gelmann Total Annual Costs - $300,000
8/1/2017-4/30/2019	Syndax Corporation A Phase 2 Single-Arm Multi-Center Study of Entinostat in Patients with Relapsed or Refractory Abdominal Neuroendocrine Tumors PI – Edward Gelmann Total Annual Costs - $1,000,000
11/1/15 - 10/31/17	New York State - Department of Health (NYSDOH) DOH01-C30316GG-3450000 16% effort Title: Prostate Cancer Research Direct Cost per year 195,652 (two years)
11/1/2011-2016	National Cancer Institute P01 CA154293 Molecular Mechanism of Prostate Cancer Initiation PI - Michael Shen Project 3, Role of the DNA Damage Response Prostate Carcinogenesis, Core A - E Gelmann, Total Costs for Project - $1,475,000; Core - $629,000
1/1/2011-2013	Department of Defense - PC100082 Targeting Kinases in Prostate Cancer PI- Edward Gelmann Total Costs - $ 730,000
12/1/2006-10	Department of Defense - PC061532 NKX3.1 Genotype and IGF-1 Interact in Prostate Cancer Risk, PI- Edward Gelmann Total Costs - $ 582,000
09/1/03-8/31/08	National Institute of Environmental Health Sciences, R01 ES09888 Genetic Polymorphism in Prostate Cancer (Years 05-09 of R01) PI - Edward Gelmann, Total Costs $900,000
10/1/05-9/30/08	Department of Defense The Role of Inflammatory Cytokines in Prostate Cancer Initiation, PI – Mark Markowski Predoctoral training grant, Mentor – Edward Gelmann
3/1/2006-2/28/2007	Prostate Cancer Foundation Interaction of Prostate Cancer Risk Factors PI – Edward Gelmann Total Costs - $100,000.
07/1/02-6/30/06	National Cancer Institute, R01 CA96854

	β-Catenin in Prostate Cancer PI - Edward Gelmann, Total Costs $884,640
4/1/90 - 3/31/93	National Cancer Institute Molecular Mechanisms for Prostate Cancer Cell Growth, R01-CA50355, PI - Edward Gelmann, 10% effort. Total direct costs: $567,056.
7/1/90 - 6/30/93	American Cancer Society Clinical Oncology Fellowship. PI - Edward Gelmann. Total direct costs: $10,000.
10/1/92 - 9/30/95	National Cancer Institute SPORE in Prostate Cancer. Developmental Grant 1-P20-CA58189. PI - Edward Gelmann, 5% effort. Total costs: $ 225,000.
7/1/93 - 6/30/95	National Cancer Institute Inhibition of Heparin-Binding Growth Factors, R01-CA57406. PI - Anton Wellstein, Co-PI Edward Gelmann, 5% effort. Total direct costs: $835,989.
1993-1995	Janssen Corporation, Randomized trial of liarozole versus prednisone for metastatic prostate cancer. 5% effort. Total costs: $72,000.
7/1/92 - 6/30/97	National Cancer Institute Markers for Malignant Progression in Prostate Cancer, U01-CA57178, PI - Edward Gelmann, 10% effort. Total direct costs: $498,808.
7/1/93 - 6/30/97	National Cancer Institute Cancer Center Support Grant, P30 - CA51008, PI - Marc Lippman. 10% effort: Director, Prostate Cancer Program, Total direct costs: $2,408,218.
12/1/93-11/30/94	CaP CURE Foundation Research in Prostate Cancer, PI - Edward Gelmann. Total Costs: $200,000.
1/1/97-1/98	Janssen Pharmaceuticals Phase II trial of liarozole and prednisone in hormone-refractory prostate cancer. PI- Edward Gelmann. Total Costs $50,000.
1/1/97-1/98	Janssen Pharmaceuticals Phase II trial of liarozole in newly relapse local prostate cancer. PI - Edward Gelmann. Total Costs $50,000.
12/1/94-11/30/95	CaP CURE Foundation Research in Prostate Cancer, PI - Edward Gelmann. Total Costs $100,000.
12/1/95-11/30/96	CaP CURE Foundation Research in Prostate Cancer, PI - Edward Gelmann. Total Costs $100,000.
12/1/96-11/30/97	CaP CURE Foundation Research in Prostate Cancer, PI - Edward Gelmann. Total Costs $50,000.
07/1/98-9/1/98	Glaxo-Wellcome Phase II Evaluation of Humanized Monoclonal Antiepithelial Antibody in Patients with Early Relapse of Prostate Cancer. PI - Edward Gelmann.
06/1/98-5/30/00	National Cancer Institute *NKX3.1* in Prostate Cancer, R21CA78327 PI - Edward Gelmann, Total Costs, $313,000
07/1/98-12/31/00	Agouron Corporation Randomized Trial to Assess AG3340 in Patients with Hormone-Refractory

	Prostate Cancer. PI - Edward Gelmann, Total Costs - $80,000.
10/1/98-3/31/01	DOD - Prostate Cancer Research Program - PC000016 *NKX3.1* in Prostate Cancer, PI - Edward Gelmann Total Costs - $393,750
1/1/98-12/31/01	National Cancer Institute, R01 CA79912 Apoptosis in Prostate Cancer Cells, PI - Edward Gelmann Total Costs - $640,83
06/01/00-05/31/02	National Cancer Institute, R21-CA87855 β-Catenin in Prostate Cancer, PI – Edward Gelmann Total Costs - $312,000
4/01/01-3/31/03	Department of Defense – PC 000016 phase II NKX3.1 in Prostate Cancer, PI – Edward Gelmann Total Costs - $738,559
7/01/01-6/30/03	National Cancer Institute, R21 CA87855 β-Catenin in Prostate Cancer, PI - Edward Gelmann Total Costs - $312,000
11/1/01-10/31/04	Department of Defense PC-010281 Genetic Risk Factor for Prostate Cancer, PI Edward Gelmann Annual Direct Costs - $114,220
7/1/03-6/30/07	National Cancer Institute, R01 CA100743-01 Molecular Epideniology of Fatal Prostate Cancer, PI – Shiela Weinmann, PhD; Edward Gelmann PI of subcontract, Total Costs $500,000 (13.3%ile, awaiting funding).
10/1/93-9/30/08	National Cancer Institute Prostate, Lung, Colon, and Ovarian Cancer Screening Trial. 1-N-01-CN25522-00, PI - Edward Gelmann. 35% Effort. Total costs $21,040,000.
4/1/02-3/30/07	National Cancer Institute Cancer Center Support Grant PI – Anatoly Dritschilo Director of Cancer Center Core Facility – Clinical Research Management Office. Director – Program in Growth Regulation of Cancer
4/1/03-03/31/09	Cancer and Acute Leukemia Group B (CALGB) Institutional Grant 1U10 CA77597, PI – Edward Gelmann Annual Direct Costs - $107,873

LIST OF COLLABORATORS (LAST FIVE YEARS)

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Zheng, Tian	Professor, Department of Statistics, Columbia University, New York, NY

This is a true and accurate statement of my activities and accomplishments. I understand that misrepresentation in security continuing tenure and promotion my lead to dismissal or suspension under ABOR Policy 6-201 J.
Edward P. Gelmann, MD

Reference List

(1) Kikuchi T, Ogawa M, Otaka Y, Furuta M. Multigeneration exposure test of Drosophila melanogaster to ELF magnetic fields. Bioelectromagnetics 1998;19(6):335-40.

(2) McNamee JP, Bellier PV, McLean JRN, Marro L, Gajda GB, Thansandote A. DNA damage and apoptosis in the immature mouse cerebellum after acute exposure to a 1 mT, 60 Hz magnetic field. Mutation Research/Genetic Toxicology and Environmental Mutagenesis 2002 Jan 15;513(1-2):121-33.

(3) Stronati L, Testa A, Villani P, Marino C, Lovisolo GA, Conti D, et al. Absence of genotoxicity in human blood cells exposed to 50 Hz magnetic fields as assessed by comet assay, chromosome aberration, micronucleus, and sister chromatid exchange analyses. Bioelectromagnetics 2004 Jan;25(1):41-8.

(4) Heredia-Rojas JA, Caballero-Hernandez DE, Rodriguez-de la Fuente AO, Ramos-Alfano G, Rodriguez-Flores LE. Lack of alterations on meiotic chromosomes and morphological characteristics of male germ cells in mice exposed to a 60 Hz and 2.0 mT magnetic field. Bioelectromagnetics 2004 Jan;25(1):63-8.

(5) Hone P, Lloyd D, Szluinska M, Edwards A. Chromatid damage in human lymphocytes is not affected by 50 Hz electromagnetic fields. Radiat Prot Dosimetry 2006;121(3):321-4.

(6) Luceri C, De FC, Giovannelli L, Blangiardo M, Cavalieri D, Aglietti F, et al. Extremely low-frequency electromagnetic fields do not affect DNA damage and gene expression profiles of yeast and human lymphocytes. Radiat Res 2005 Sep;164(3):277-85.

(7) McNamee JP, Bellier PV, Chauhan V, Gajda GB, Lemay E, Thansandote A. Evaluating DNA damage in rodent brain after acute 60 Hz magnetic-field exposure. Radiat Res 2005 Dec;164(6):791-7.

(8) Reese JA, Jostes RF, Frazier ME. Exposure of mammalian cells to 60-Hz magnetic or electric fields: analysis for DNA single-strand breaks. Bioelectromagnetics 1988;9(3):237-47.

(9) Rosenthal M, Obe G. Effects of 50-hertz electromagnetic fields on proliferation and on chromosomal alterations in human peripheral lymphocytes untreated or pretreated with chemical mutagens. Mutat Res 1989 Feb;210(2):329-35.

(10) Scarfi MR, Bersani F, Cossarizza A, Monti D, Castellani G, Cadossi R, et al. Spontaneous and mitomycin-C-induced micronuclei in human lymphocytes exposed to extremely low frequency pulsed magnetic fields. Biochem Biophys Res Commun 1991 Apr 15;176(1):194-200.

(11) Scarfi MR, Sannino A, Perrotta A, Sarti M, Mesirca P, Bersani F. Evaluation of genotoxic effects in human fibroblasts after intermittent exposure to 50 Hz electromagnetic fields: a confirmatory study. Radiat Res 2005 Sep;164(3):270-6.

(12) Testa A, Cordelli E, Stronati L, Marino C, Lovisolo GA, Fresegna AM, et al. Evaluation of genotoxic effect of low level 50 Hz magnetic fields on human blood cells using different cytogenetic assays. Bioelectromagnetics 2004 Dec;25(8):613-9.

(13) Burdak-Rothkamm S, Rothkamm K, Folkard M, Patel G, Hone P, Lloyd D, et al. DNA and chromosomal damage in response to intermittent extremely low-frequency magnetic fields. Mutat Res 2009 Jan 31;672(2):82-9.

(14) Mandeville R, Franco E, Sidrac-Ghali S, Paris-Nadon L, Rocheleau N, Mercier G, et al. Evaluation of the potential carcinogenicity of 60 Hz linear sinusoidal continuous-wave magnetic fields in Fischer F344 rats. FASEB J 1997 Nov;11(13):1127-36.

(15) Yasui M, Kikuchi T, Ogawa M, Otaka Y, Tsuchitani M, Iwata H. Carcinogenicity test of 50 Hz sinusoidal magnetic fields in rats. Bioelectromagnetics 1997;18(8):531-40.

(16) Otaka Y, Chida T, Yamagishi Y, Kitamura S. Carcinogenicity test in B6C3F1 mice after parental and prenatal exposure to 50 Hz magnetic fields. Bioelectromagnetics 2002 Apr;23(3):206-13.

(17) Harris AW, Basten A, Gebski V, Noonan D, Finnie J, Bath ML, et al. A test of lymphoma induction by long-term exposure of E mu-Pim1 transgenic mice to 50 Hz magnetic fields. Radiat Res 1998 Mar;149(3):300-7.

(18) Sommer AM, Lerchl A. The risk of lymphoma in AKR/J mice does not rise with chronic exposure to 50 Hz magnetic fields (1 microT and 100 microT). Radiat Res 2004 Aug;162(2):194-200.

(19) Boorman GA, McCormick DL, Findlay JC, Hailey JR, Gauger JR, Johnson TR, et al. Chronic toxicity/oncogenicity evaluation of 60 Hz (power frequency) magnetic fields in F344/N rats. Toxicol Pathol 1999 May;27(3):267-78.

(20) McCormick DL, Boorman GA, Findlay JC, Hailey JR, Johnson TR, Gauger JR, et al. Chronic toxicity/oncogenicity evaluation of 60 Hz (power frequency) magnetic fields in B6C3F1 mice. Toxicol Pathol 1999 May;27(3):279-85.

(21) Cridland NA, Cragg TA, Haylock RG, Saunders RD. Effects of 50 Hz magnetic field exposure on the rate of DNA synthesis by normal human fibroblasts. Int J Radiat Biol 1996 Apr;69(4):503-11.

(22) Miyakoshi J, Ohtsu S, Shibata T, Takebe H. Exposure to magnetic field (5 mT at 60 Hz) does not affect cell growth and c-myc gene expression. J Radiat Res (Tokyo) 1996 Sep;37(3):185-91.

(23) Anderson LE, Boorman GA, Morris JE, Sasser LB, Mann PC, Grumbein SL, et al. Effect of 13 week magnetic field exposures on DMBA-initiated mammary gland carcinomas in female Sprague-Dawley rats. Carcinogenesis 1999 Aug;20(8):1615-20.

(24) Boorman GA, Anderson LE, Morris JE, Sasser LB, Mann PC, Grumbein SL, et al. Effect of 26 week magnetic field exposures in a DMBA initiation-promotion mammary gland model in Sprague-Dawley rats. Carcinogenesis 1999 May;20(5):899-904.

(25) Mandeville R, Franco E, Sidrac-Ghali S, Paris-Nadon L, Rocheleau N, Mercier G, et al. Evaluation of the potential promoting effect of 60 Hz magnetic fields on N-ethyl-N-nitrosourea induced neurogenic tumors in female F344 rats. Bioelectromagnetics 2000 Feb;21(2):84-93.

(26) McLean JR, Thansandote A, McNamee JP, Tryphonas L, Lecuyer D, Gajda G. A 60 Hz magnetic field does not affect the incidence of squamous cell carcinomas in SENCAR mice. Bioelectromagnetics 2003 Feb;24(2):75-81.

(27) Sommer AM, Lerchl A. 50 Hz magnetic fields of 1 mT do not promote lymphoma development in AKR/J mice. Radiat Res 2006 Mar;165(3):343-9.

(28) Negishi T, Imai S, Shibuya K, Nishimura I, Shigemitsu T. Lack of promotion effects of 50 Hz magnetic fields on 7,12-dimethylbenz(a)anthracene-induced malignant lymphoma/lymphatic leukemia in mice. Bioelectromagnetics 2008 Jan;29(1):29-38.

(29) Bernard N, Alberdi AJ, Tanguy ML, Brugere H, Helissey P, Hubert C, et al. Assessing the potential leukemogenic effects of 50 Hz magnetic fields and their harmonics using an animal leukemia model. J Radiat Res (Tokyo) 2008 Nov;49(6):565-77.

(30) Sasser LB, Morris JE, Miller DL, Rafferty CN, Ebi KL, Anderson LE. Exposure to 60 Hz magnetic fields does not alter clinical progression of LGL leukemia in Fischer rats. Carcinogenesis 1996 Dec;17(12):2681-7.

(31) Devevey L, Patinot C, Debray M, Thierry D, Brugere H, Lambrozo J, et al. Absence of the effects of 50 Hz magnetic fields on the progression of acute myeloid leukaemia in rats. Int J Radiat Biol 2000 Jun;76(6):853-62.

(32) Galloni P, Marino C. Effects of 50 Hz magnetic field exposure on tumor experimental models. Bioelectromagnetics 2000 Dec;21(8):608-14.

(33) Henderson B, Kind M, Boeck G, Helmberg A, Wick G. Gene expression profiling of human endothelial cells exposed to 50-Hz magnetic fields fails to produce regulated candidate genes. Cell Stress Chaperones 2006;11(3):227-32.

(34) Korr, H., Angstman, N. B., Born, T. B., Bosse, K., Brauns, B., Demmler, M., Fueller, K., Kantor, O., Kever, B. M., Rahimyar, N., Salimi, S., Silny, J., Schmitz, C. No evidence

of persisting unrepaired nuclear DNA single strand breaks in distinct types of cells in the brain, kidney, and liver of adult mice after continuous eight-week 50 Hz magnetic field exposure with flux density of 0.1 mT or 1.0 mT. PLoS One, 9 (10): e109774, 2014.