

Revised July 19, 2010

CURRICULUM VITAE

LINDA H. MALKAS, Ph.D.

ADDRESS: Indiana University School of Medicine
Joseph E. Walther Hall
Department of Medicine
Division of Hematology and Oncology
980 West Walnut Street, Room R3-218C
Indianapolis, IN 46202

TELEPHONE: (317) 278-4228 (office); (317) 278-2966 (FAX);
lmalkas@iupui.edu

EDUCATION:

<u>Institution and location</u>	<u>Degree</u>	<u>Year</u>	<u>Field</u>
City University of New York, Graduate School, New York, NY	Ph.D.	1985	Biochemistry
City University of New York Graduate School, New York, NY	Ph.M.	1981	Biochemistry
City University of New York	B.A.	1977	Chemistry
City University of New York	A.S.	1975	Engineering

PROFESSIONAL EXPERIENCE:

Professor

January 2002 – present - Indiana University School of Medicine, Department of Medicine, Division of Hematology and Oncology.

Vera Bradley Chair of Oncology

January 2002 – present - Indiana University School of Medicine Cancer Center.

Co-leader of the Indiana University Cancer Center Breast Cancer Program

March 2002 – present - Indiana University Cancer Center

Professor

July 2006 – present - Indiana University School of Medicine, Department of Pharmacology

Professor

July 2007– present - Indiana University School of Medicine, Department of Surgery

Professor

February 2009– present - Indiana University School of Medicine, Department of Medical & Molecular Genetics

Visiting Professor

September 2005 - present – Third Military Medical University, Chongqing, China.

Adjunct Full Professor

January 2002 – August 2005 - University of Maryland School of Medicine, Department of Pharmacology and Experimental Therapeutics, and the Programs in Molecular Biology, Oncology and Toxicology.

Full Professor

July 2001 – January 2002 - University of Maryland School of Medicine, Department of Pharmacology and Experimental Therapeutics, and the Programs in Molecular Biology, Oncology and Toxicology.

Affiliate Scientist

1999 – 2001 – Los Alamos National Laboratory, Los Alamos, New Mexico.

Associate Professor

July 1995 – June 2001 - University of Maryland School of Medicine, Department of Pharmacology and Experimental Biology, and the Programs in Molecular Biology, Oncology and Toxicology.

Affiliate Associate Professor

1995 - 2001 - University of Maryland School of Medicine, Department of Anesthesiology.

Assistant Professor

January 1990 – June 1995 - University of Maryland School of Medicine, Department of Pharmacology and Experimental Biology, and the Molecular and Cellular Biology Program.

Postdoctoral Research Fellow

July 1985 – January 1990 - Worcester Foundation for Experimental Biology, Shrewsbury, MA.

Graduate Research Assistant

1983 - 1985 - Hunter College of CUNY, Department of Biological Sciences, New York, NY.

RESEARCH EXPERIENCE:

Current Research Program

Several projects are currently being pursued. (1) Full proteomic characterization of a multiprotein complex (the DNA synthesome), and its components, from human cells that is required for DNA replication. (2) Elucidation of molecular alterations that occur to the DNA synthesome as a function of breast cell malignancy. (3) Identification of factors responsible for activation and regulation of the DNA synthesome. (4) Determining the mechanism of action of anticancer agents that affect cellular DNA synthesis. (5) Identification of novel biomarkers for breast cancer risk, early detection and chemotherapeutic response. (6) Identification of new molecular therapeutics for breast cancer.

Postdoctoral Research

(1) Isolation of a human cell multiprotein complex that supported simian virus 40 (SV40) DNA replication *in vitro*. (2) Purification and characterization of a dA/dT sequence binding protein that specifically recognized the dA/dT rich domain of the SV40 DNA replication origin.

Doctoral Research

Biochemical and genetic studies of nucleotide metabolism and DNA synthesis in mammalian cell mutants that were temperature-sensitive for DNA replication and cell growth.

RESEARCH INTERESTS:

1. Control of proliferation in breast normal and tumor cells.
2. Mechanism(s) and regulation of human DNA replication/repair.
3. The mechanism of action of cancer chemotherapeutic agents affecting cellular DNA synthesis.
4. Functional proteomic approaches to understanding cancer.
5. Breast cancer biomarker and molecular therapeutic target discovery.

AWARDS AND RECOGNITION:

Elected Co-Chair for the 2011 FASEB meeting *Nuclear Structure and Cancer*

US Army Medical Research and Materiel Command Ovarian Cancer Research Program 2011
Integration Panel Vision Setting member

Editorial Board Member – *Cancer Research* (2010-present)

Principal Speaker - FASEB Summer Research Conference on *Nuclear Structure and Cancer*
(June 2009)

National Institutes of Health/National Cancer Institute Public Health Service Award CA121289
(2007-2012)

Editorial Board Member - *American Journal of Translational Research* (2009-present)

Editorial Board Member – *Cancer Prevention Research* (2008-present)

2007 Indiana Woman of Achievement Award

3rd Annual Indiana Life Sciences Forum Panelist (2007)

National Institutes of Health/National Cancer Institute Public Health Service Award CA57350
(1993 - 2006)

National Institutes of Health/National Cancer Institute Public Health Service Award CA83199
(1999-2004)

Principal Speaker - FASEB Summer Research Conference on *Nuclear Structure and Cancer*
(June 2005)

Associate Editor – *Cancer Research* (2003-2010)

Editorial Board Member - *Current Cancer Therapy Reviews* (2004-present)

Breast Cancer Medical Researcher Award, the Indiana Breast Cancer Alliance (October 2003)

Honoree, Speaking of Women's Health (October 2003)

Alliance of Distinguished Rank Professors, Indiana University (2002-present)

National Institutes of Health/National Cancer Institute Public Health Service Award CA73060
(1997-2000)

National Institutes of Health/National Cancer Institute Public Health Service Award (Director's
Award (Shannon Award) CA65754 (1995-1997)

Invited faculty for the *2nd Tumor Markers Conference*, sponsored by the M.D. Anderson Cancer
Center (March 2001)

Plenary Speaker at the FASEB Summer Research Conference on *Nuclear Structure and Cancer*
(August 2001)

Women's Health Research Group Researcher (September 2000)
Chairman, *DNA Replication Session, Annual Meeting of the Cell Proliferation Society* (1999)
Plenary Speaker NIH Workshop on *Chromatin, Transcription and DNA Replication* (1999)
Chairman of the *Cell Growth and Apoptosis II: Growth Factors and Signaling Pathways Session* at the *Annual American Association of Cancer Research Meeting* (1998)
Maryland Designated Research Initiative Fund Award (1992-1998)
Plenary Speaker at the McGill University International Conference on the *Regulation of Eukaryotic DNA Replication* (1996, 1998, 2001)
University of Maryland Cancer Center Interdisciplinary Research Award (1996-1997)
National Leukemia Association Award (1993-1994)
Session Chairman and Speaker at the Gordon Research Conference on *Enzyme Organization and Cell Function* (1993)
American Cancer Society/Maryland Division Research Award (1991-1993)
American Cancer Society/Maryland Cancer Program Individual Grant Award (1990-1991)
Frank C. Bressler Research Fund Award (1990-1991)
National Institutes of Health Postdoctoral Fellowship, National Cancer Institute (1986-89)
Invited participant in the Histopathobiology of Cancer Workshop at Keystone, CO organized by the National Cancer Institute (1987)
Helene Rubinstein Graduate Tuition Grant (1982, 1983)

CURRENT RESEARCH FUNDING SUPPORT:

National Institutes of Health/National Cancer Institute Public Health Service Award (2007-2012) *A Structure/function analysis of a tumor specific protein* (R01) The goal of this project is to show that the unique structure and function of an isoform of proliferating cell nuclear antigen (caPCNA), expressed by breast cancer cells and tumor tissue, plays an important role in the proliferation and progression of these cancer cells. This application received a score of 134 in the February 2007 NIH study section meeting giving it a percentile ranking of 2.2%. **Role: Principal Investigator.** Total Costs = \$1,895,000.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (2004-2011) *Center of Excellence for Individualization of Therapy for Breast Cancer.* (The purpose of the Center of Excellence is to combine the emerging technologies of genomics, proteomics, and pharmacogenetics / pharmacogenomics to predict the response to commonly used chemotherapeutic agents and novel targeted agents in the setting of advanced breast cancer. The predicted outcome of such analyses will be therapeutic individualization, the matching of individual agents to specific patients most likely to benefit in the least toxic possible manner.) **Dr. Malkas is a co-leader in the Center.** Total Costs = \$9,994,955.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (2010-2013) *"Peptides Directed Against Cancer Associated PCNA Has Therapeutic Potential in Breast Cancer"*. Total Costs = \$180,000.

SynTherix, Inc. (7/1/09-6/30/2010) *"Targeted Peptidomimetic Evaluation"*. **Role: Principal Investigator.** Total Costs = \$300,000.

ANNA Foundation (6/06-6/10) (These funds support neuroblastoma related research studies in the laboratory.) **Role: Principal Investigator.** Total Costs = \$200,000.

Vera Bradley Foundation (02/01/02 – present) (These funds support the endowed Chair of Oncology that Dr. Malkas holds.)

National Institutes of Health/National Cancer Institute Cancer Center Support Award (2008-2013) The major goal of this project is to help support the research programs that have been established to allow successful collaboration among basic and clinical researchers. **Role: Program Co-Leader - Breast Cancer Program.** Total Costs = \$792,477.

OTHER SUPPORT DEVELOPED:

Vera Bradley Foundation (2003) I was instrumental in the development of a \$2 million endowment from the foundation for the development of a biomarker discovery program within the IUSCC Breast Cancer Program.

Vera Bradley Foundation (2006) I was instrumental in the development of a \$6.8 million pledge awarded to IUSCC for the recruitment of new faculty and the development of research related programs.

Vera Bradley Foundation (2009) I was instrumental in the development of a \$10 million endowment awarded to IUSCC for the the further development of the Breast Cancer Program.

PENDING RESEARCH SUPPORT:

National Institutes of Health/National Cancer Institute Public Health Service Award (2010-2015) “*A New Potential Cancer Therapeutic Target*” (R01) the goal of this project is to evaluate the isoform of proliferating cell nuclear antigen (caPCNA), expressed by breast cancer cells and tumor tissue, as a potential therapeutic target. **Role: Principal Investigator.** Total Costs = \$1,875,000.

SynTherix, Inc. (5/1/10-4/30/2012) “*Cancer Directed Peptide Development*”. **Role: Principal Investigator.** Total Costs = \$200,000.

PREVIOUS RESEARCH FUNDING SUPPORT:

CS-Keys, Inc. (4/15/08-12/31/09) “*Validate caPCNA as a target for drug discovery*” (The purpose of this contract is to demonstrate the validity of caPCNA for anticancer drug discovery) **Role: Principal Investigator.** Total Costs = \$235,000.

CS-Keys, Inc. (6/06-6/08) “*Validate the utility of caPCNA antibody for the detection of breast cancer*” (The purpose of this contract was to demonstrate the selectivity of caPCNAab for breast malignancy and define its ability to distinguish proliferative and benign disease from malignant breast tissues.) **Role: Principal Investigator.** Total Costs = \$71,062.

Charlotte Geyer Foundation (12/01/06 – 11/30/07) “*Identification of PCNA Post-translational Modifications*” (The goal of this project is to identify the post-translational modifications responsible for the expression of the caPCNA isoform present in breast cancer cells. **Role: Principal Investigator.** Total Costs = \$100,000

Department of Defense Medical Research and Development Command Breast Cancer Research Program (2002-2005) Cancer Specific Proliferating Cell Nuclear Antigen

as a Novel Diagnostic Marker for the Detection of Breast Cancer. The goal of this research is to develop an enzyme linked immunsorbent assay (ELISA) for csPCNA. Total costs = \$144,000.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (2002-2005) Regulatory Control of Breast Tumor Cell Poly (ADP-Ribose) Polymerase. Total costs = \$144,000.

National Institutes of Health/National Cancer Institute Public Health Service Award (1999-2005) Development and Evaluation of a Novel Cancer Biomarker (RO1 CA83199). This project was aimed at the development and validation of an antibody directed specifically at a uniquely altered form of PCNA found in breast cancer cells. Role: PI. Total Costs = \$1,780,000

Department of Defense Medical Research and Development Command Breast Cancer Research Program (1999-2002) The Regulatory Interactions of p21 and PCNA in Human Breast Cancer. Total Costs = \$66,000.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (1998-2001) The Breast Cell DNA Synthesome for Evaluating Antineoplastic Drug Action. Total Costs = \$66,000.

National Institutes of Health/National Cancer Institute Public Health Service Grant (1997-2000) Regulation of Breast Cancer Cell DNA Synthesis (RO1 CA73060). This application received a priority ranking of 7.8%. Total Costs = \$607,791.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (1997-2000) Identification of Molecular Alterations of the DNA Replication Apparatus of Human Breast Cancer Cells. Total Costs = \$66,000.

Schleicher & Schull Breast Cancer Postdoctoral Fellowship (1998-2000) A Unique Breast Cancer Biomarker for the Clinical Evaluation of Malignancy. Total Costs = \$54,000. This was a postdoctoral fellowship awarded to Dr. Pamela Bechtel who worked in the laboratory.

National Institutes of Health/National Institute of Environmental Health Sciences NRSA Postdoctoral Training Fellowship in Toxicology (1998-2000). Total costs = \$38,800. This was a postdoctoral fellowship awarded to Dr. Jennifer Sekowski who worked in the laboratory.

National Institutes of Health/National Cancer Institute Public Health Service Award (1996-2000) Unique Model For Evaluating Anticancer Drugs (RO1 CA57350-04). Total Costs = \$842,283. This competing renewal application received a priority ranking of 2.5% and was the highest scoring RO-1 proposal in the June 1996 meeting of the ET-2 study section.

Maryland Designated Research Initiative Award (1997-1998) Development of a new potential target for anticancer therapy. Total Costs = \$14,900.

Department of Defense Medical Research and Development Command Breast Cancer Research Program (1994-1998) A Novel Model System To Examine Agents Used in Breast Cancer Therapy. Total Costs = \$74,966. This was a predoctoral fellowship awarded to Jennifer Coll working in the laboratory.

National Institutes of Health/National Cancer Institute Public Health Service Award (1993-1996) Unique Model for Evaluating Anticancer Agents (RO1 CA57350). Total Costs = \$497,476.

Shannon Award, National Institutes of Health Public Health Service Grant (1995-1997) Molecular Changes That Promote Breast Cell Malignancy (RSS CA65754). Total Costs = \$100,000.

Maryland Designated Research Initiative Award (1996-1997) A Unique Model for Evaluating Anticancer Agents. Total Costs = \$14,550.

University of Maryland Cancer Center New Interdisciplinary Research Award (1996-1997) Identification and development of a new potential target for anticancer therapy. Total Costs = \$20,000.

University of Maryland Cancer Center (1996) Travel award for graduate student, Jennifer Coll, to attend San Antonio Breast Cancer Meeting and present her research results (December 1996). Award = \$700.

Maryland Designated Research Initiative Fund Award (1994-1995) Breast Cell Proliferation: Regulation of a Key Proliferation Response in Normal and Cancer Cells. Total Costs = \$15,000.

National Leukemia Association (1993-1994) Evaluating the Mechanism of Action of Ara-C and Other Antileukemic Agents. Total Costs = \$4,150.

American Cancer Society/Maryland Division Research Award (1991-1993) A Protein that Potentially Mediates the Initiation of Human Cell DNA Synthesis. Total Costs = \$26,000.

Maryland Designated Research Initiative Fund Award (1992-1993) Evaluating the Effects of Anti-Neoplastic Agents. Total Costs = \$10,000.

American Cancer Society/Maryland Cancer Program Grant Award (1990-1991) A Multiprotein Complex Mediates Polyomavirus DNA Replication In Vitro. Total Costs = \$10,000.

Frank C. Bressler Research Fund Award (PH-4) (1990-1991) A Protein that Potentially Mediates the Initiation of Human Cell DNA Synthesis. Total Costs = \$13,000.

Veterans Administration Research Grant (1992-1996) Detection of Drug Resistant Cells in Acute Leukemia. Total Costs = \$380,000. (LHM was a co-investigator on this award).

American Cancer Society/National Division Research Award (1993-1995) Anticancer Drug Action Mediated By DNA Helicases. Total Costs = \$200,000. (LHM was a co-P.I. on this award).

National Institutes of Health/National Cancer Institute (1992-1997) Master Agreement For Mechanism of Action and Biochemical Pharmacology Studies of Antitumor Agents. Total Costs = \$750,000. (LHM was a co-investigator on this award).

FEDERAL GOVERNMENT ADVISORY COMMITTEE PARTICIPATION:

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (Chemotherapy-2) (1994)

National Science Foundation External Reviewer for Grant Application (1994)

National Institutes of Health Special Reviewer/Experimental Therapeutics I Study Section (February 1994, June 1994, February 2001)

National Institutes of Health Experimental Therapeutics I Permanent Study Section Member (October 1994 – June 1998)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Grant Progress Reviewer (1996)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (Molecular Biology I) (1997)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (Academic Awards) (1998)

National Cancer Institute Rapid Access to Intervention Development Program Review Group Member (1998-1999)

National Institutes of Health/National Cancer Institute Postdoctoral Fellowships Study Section Member (March 1999 - present)

National Institutes of Health/National Cancer Institute Investigator-Initiated Conference Grant Reviewer (March 1999)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (Molecular Biology) (1999 - 2001)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Project Review Study Section Member (December 1999)

National Institutes of Health/National Cancer Institute Grant Reviewer for Interdisciplinary Research Teams for Molecular Target Assessment (Oct. 2000)

National Institutes of Health/National Cancer Institute Study Section Site Visit Program Project Reviewer, Subcommittee D – Clinical Studies (Sept. 2000)

National Institutes of Health Special Reviewer Biochemistry Study Section Member (Feb. 2001)

National Institutes of Health Minority Students and Students with Disabilities Fellowships Reviewer (Sept. 2000, March 2001)

National Institutes of Health/National Cancer Institute Diagnosis and Treatment of Cancer Special Emphasis Panel (SBIR) Study Section Member (July 2000 - 2002)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Project Review Study Section Chair (October 2001)

National Institutes of Health/National Cancer Institute Grant Reviewer for Molecular Targets for Drug Discovery for Cancer Study Section (November 2001)

National Institutes of Health Postdoctoral Fellowships Study Section Member (March 2001 – 2003)

National Institutes of Health/National Cancer Institute Study Section Site Visit Program Project Reviewer, Subcommittee C – Basic and Preclinical Studies (May 2002)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (Molecular Biology and Genetics 4) (August 2002)

National Institutes of Health/National Cancer Institute Special Reviewer for Cancer Molecular Pathobiology (CAMP) Study Section (February, June 2003)

Department of Defense Medical Research and Development Command Concept Award Review Study Section (2003)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section (June 2003, April 2004)

National Institutes of Health/National Cancer Institute Reviewer for Cancer Molecular Pathobiology (CAMP) Study Section (October 2003 – June 2007)

National Institutes of Health Reviewer for Academic Public Private Partnership Program Planning Grants (March 2004)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Study Section Member (2004, 2005)

VA Merit Review Subcommittee for Oncology B Full Member (June 2004-June 2007)

National Institutes of Health/National Cancer Institute Reviewer for Special Emphasis Panel ZRG1 Onc-L (04) DNA Repair Study Section (March 2005)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section Chair (April 2005)

National Institutes of Health/National Cancer Institute Cancer Center Review/Site Visit (Cancer Center Support Grant, P30) (May 2005)

National Institutes of Health/National Cancer Institute Cancer Center Parent Committee *Ad Hoc* Reviewer (Cancer Center Support Grants, P30) (July 2005)

National Institutes of Health Reviewer for Academic Public Private Partnership Program Planning Grants (September 2005)

Department of Defense Medical Research and Development Command Breast Cancer Program Study Section Chair (December 2005)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Concept Award Reviewer (2006)

National Cancer Institute Subcommittee A for Cancer Center Support – Full Parent Committee Member - (2006-2010)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section Chair (2006, 2008)

US Army Medical Research and Materiel Command Breast Cancer Research Program *Ad hoc* Integration Panel Member (2006, 2007, 2008, 2009, 2010)

Department of Defense Medical Research and Development Command Breast Cancer Research Program Synergistic Idea Award Study Section Chair (March 2007)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section Chair (September 2007)

National Institutes of Health/National Cancer Institute *Ad Hoc* Reviewer for (MONC) Study Section (September 2007)

National Cancer Institute review panel member of the NCI-Frederick Federally-Funded Research and Development Center (NCI-FFRDC) (January 2008)

Avon-NCI “Progress for Patients” (PFP) applications for Early Phase Clinical Interventions and Biomarkers in Breast Cancer (Limited Competitive Supplements for P30 Cancer Center Support and P50 SPORE Grants) study section (February 2008)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section Chair (2008)

Department of Defense Congressionally Directed Medical Research Program for Bone Marrow Failure - Study Section Chair (2008)

National Institutes of Health/National Cancer Institute *Ad hoc* Reviewer for Cancer Genetics Study Section (October 2008, February 2009)

Department of Defense Congressionally Directed Medical Research Program for the Deployment Related Medical Research Program (DRMRP) - Study Section Chair (2008)

National Institutes of Health/National Cancer Institute SPORE in Gynecological Cancers Review Panel - Co-Chair (February 2009)

National Institutes of Health Postdoctoral Fellowship Review-Panel ZRG1 F06 E 20 L - *Ad hoc* Reviewer (2009)

Department of Defense Medical Research and Development Command Ovarian Cancer Program Study Section Chair (Panel OC-1) (2009)

Department of Defense Medical Research and Development Command Ovarian Cancer Program
Study Section Chair (Panel OC-4) (2009)
National Institutes of Health/National Cancer Institute ARRA Application Review Panel – Chair
(August 2009)
National Institutes of Health/National Cancer Institute Initial Review Group for Burnham
Institute Cancer Center (NCI-A RTRB-L (P1) – Chair of Review Panel (October 2009)
National Institutes of Health/National Cancer Institute SPORE in Breast, Ovarian, and Skin
Cancers Review Panel – Discussion Leader/study section member (February 2010)
US Army Medical Research and Materiel Command Ovarian Cancer Research Program 2010
Integration Panel *Ad hoc* member during programmatic review
US Army Medical Research and Materiel Command Ovarian Cancer Research Program 2011
Integration Panel Vision Setting member

OTHER ADVISORY COMMITTEE PARTICIPATION:

Medical Research Council of Canada (External Reviewer) (1998, 2000)
Canadian Institutes of Health Research (CIHR) Grant Reviewer (March 2004)
Florida Department of Health Grant Reviewer (2004)
Florida Department of Health Grant Reviewer (Summer 2005)
Sharon Bassett Breast Cancer Foundation Advisory Board Member (2007 - present)
Susan G. Komen for the Cure Program: *Promise Award* study section member (2009)
Neurological Foundation of New Zealand grant reviewer (May 2009)
National Institute for Health Research (NIHR), United Kingdom, reviewer for Clinician Scientist
Award for Applied Clinical Research Program (September 2009)
City of Hope Comprehensive Cancer Center External Advisory Board Member (2010 – present)
Susan G. Komen for the Cure Program: *Postdoctoral Clinical Investigator Fellowship Award*
study section member (2010)

ADMINISTRATIVE DUTIES:

Panel participant at faculty educational seminars, Indiana University and Clarian Health
Ventures (February 2010)
Editorial Board Member – *Cancer Research* (2010-present)
Scientific Advisory Council (SAC) for the Indiana University School of Medicine (2009-present)
Indiana University CTSI preclinical grant review committee member (2009-present)
Editorial Board Member – *Cancer Prevention Research* (2008-present)
In Vivo Therapeutics (IVT) Core advisory committee member Indiana University Simon Cancer
Center (2008-present)
Co-Founded *ITRAC* (Indiana Translational Research Activity Corporation) at the Indiana
University Cancer Center (2006)
Board of Directors member (Center of Excellence in Women's Health at Indiana University)
(2006-present)
Indiana University Institutional American Cancer Society grant review committee member
(2006-present)
Developed the concept and initial implementation of the IUCC Resource and Skills Inventory
(2005-2006)
Editorial Board Member - *Current Cancer Therapy Reviews* (2004-present)
Associate Editor, *Cancer Research* (May 2003-2010)
IUCC Translational Initiative Steering Committee (2005-2006)
Indiana University Cancer Center Executive Committee (March 2002-present)
Indiana University Cancer Center, Co-Leader of Breast Cancer Program (March 2002- present)

Indiana University Cancer Center, Director Vera Bradley Breast Cancer Research Program (June 2003 – present)

Indiana University School of Medicine Leadership Co-Director for the Center of Excellence in Women's Health (May 2004-2008).

Indiana University Cancer Hospital Genetic Markers/Cancer Screening Program Team Member (2003 - 2004)

Indiana University School of Medicine Research Core Working Group (October 2002-January 2004)

University of Maryland School of Medicine, Appointments, Promotions and Tenure Committee Member (September 2001 – January 2002)

Women's Health Research Group of the Department of Epidemiology & Preventive Medicine, University of Maryland School of Medicine, Leadership Group Member (2000-2002)

Institutional Research Planning Advisory Committee, University of Maryland School of Medicine, Member (1999 - January 2002)

Faculty Mentor Committee, University of Maryland School of Medicine, Member (1999 - January 2002)

University of Maryland School of Medicine, Member of the Search Committee for Chair of the Department of Neurology (2001)

University of Maryland School of Medicine Strategic Plan 2000-2005 Steering Committee Member (2000)

University of Maryland School of Medicine, Member of the Host Defenses and Infectious Diseases Curriculum Committee (1999)

University of Maryland School of Medicine, Member of the Institutional Self-Study Task Force (1999)

University of Maryland School of Medicine, Member of Search Committee for Associate Dean for Research and Graduate Studies (1999)

Chairman, University of Maryland, Baltimore Recombinant DNA Committee (1998-1999)

Chairman, University of Maryland Marlene and Stewart Greenebaum Cancer Center Research Award Review Committee (1995-1998)

University of Maryland School of Medicine Graduate Research Award Allocation Advisory Committee Member (1996-1998)

University of Maryland School of Medicine Admissions Committee Member (1992-1998)

University of Maryland School of Medicine Search Committee Member for Associate Dean of Medical Education (1997)

University of Maryland at Baltimore Search Committee Member for Director of the Office of Technology Development (1996)

University of Maryland Cancer Center Search Committee for Chief of Hematology (1996)

University of Maryland School of Medicine Department of OB/GYN Review Committee (1993)

University of Maryland Cancer Center Strategic Planning Group (1993)

University of Maryland Cancer Center Basic Research Planning Group (1993)

Created and developed the Department of Pharmacology Pre-Doctoral Oncopharmacology Track Curriculum (1993).

SERVICE TO THE ACADEMIC AND NON-ACADEMIC COMMUNITIES:

Keynote speaker at the *Nontraditional Employment for Women Workshop* (October 2009)

Panelist for *Life Sciences Day* at the Kelley School of Business, Indianapolis, IN (April 2009)

Promotion evaluator for a faculty member at University of North Texas Health Science Center (February 2009)

Speaker at the *2009 Society of Women Engineers Region H Conference* (February 2009)

Keynote speaker at the *District Leadership Conference* of the Business Professionals of America (January 2009)

Panelist for *Basics to Bench to Bedside... "Emerging Trends and New Developments in CancerDiscovery, Diagnosis and Treatment"* Cancer-Oncology Summit (December 2008)

Guest Speaker-Undergraduate Summer Biomedical Research Program, Indiana University School of Medicine (June 2008)

Grant Reviewer for the Austrian Science Fund Division of Biology and Medicine (November 2007)

Guest speaker at *AWARE for All – Indiana*, Indianapolis, IN (November 2007)

Guest speaker at the *Indiana Life Sciences Forum*, Indianapolis, IN (October 2007)

Guest speaker at the ACS's *Evening to Remember*, Indianapolis, IN (September 2007)

Guest speaker at *Innovention 2007*, Indianapolis Convention Center, IN (June 2007)

Guest speaker at the *Women's Faculty and Staff* meeting, Bloomington, IN (May 2007)

Guest speaker at the *Tapestry of Faith* Breast Cancer Event, Tulsa, OK (April 2007)

Keynote speaker at *President Herbert's STEM Initiative Summit*, Indianapolis, IN (April 2007)

Panel Participant at the *University Club Annual Meeting*, Bloomington, IN (March 2007)

Guest speaker at the *Indiana Breast Cancer Alliance* meeting, Indianapolis, IN (February 2007)

Guest speaker at *Nancy's Retreat*, Puerto Viarta, MX (November 2006)

Guest speaker at the *Colloquium for Women of Indiana University*, Bloomington, IN (November 2006)

Guest speaker at *AWARE for All - Clinical Research Education & Awareness Day* (September 2006)

Guest speaker at the *Vera Bradley Tickled Pink* breast cancer awareness event, Fort Wayne IN (October 2006)

Guest speaker the Indiana University 2006 State Men Legislators' Event (July 2006)

Key speaker the Indiana University 2006 State Women Legislators' Event entitled *Dr. Linda Malkas and Momma Mia!* (April 2006)

Participant in the *Indiana University Life Sciences Exhibit and Reception* at the Indiana State House in Indianapolis (March 2006).

Guest speaker at the Breast Cancer Survivors Group, Champaign, IL (October 2005)

Volunteer at the Black and Minority Health Fair held in conjunction with the Indiana Black Expo (July 2005)

Member of the Executive Committee for "*Mary Ellen's Bank*" at Indiana University (2005)

Guest speaker at the *Vera Bradley Tickled Pink* breast cancer awareness event, Fort Wayne IN (September 2005)

Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2005)

Promotion evaluator for Dr. Yehia Mechref at Indiana University Bloomington (February 2005)

Participated in the *Pack the Hall* Event to support breast cancer research, Bloomington, IN (February 2005)

Participated in the *Advancing Indiana/Life Sciences Initiative* and featured in the *Human Genome Project* display at the Indiana State Museum (January 2005)

Medical Advisory Chair for the 10th Annual *Y-Me Fashion Show* (October 2004)

Keynote speaker for the Women's Health Conference, Notre Dame University, South Bend, IN (October 2004)

Guest speaker at the *Bridge to a Cure* event, Indianapolis, IN (October 2004)

Guest speaker at the Indiana University Alumni Luncheon, Chicago, IL (October 2004)

Guest speaker at the *Making Strides Against Breast Cancer Kick-Off Breakfast*, Indianapolis, IN (August 2004)

Guest speaker at the Breast Cancer Survivors Group, Champaign, IL (August 2004)

Keynote speaker for the Women's Health Conference, Bloomington, IN (April 2004)

Guest speaker at the Indiana University Nursing Alumni Association, IU East Campus (Richmond) (March 2004)
 Participated in the *Pack the Hall* Event to support breast cancer research, Bloomington, IN (January 2004)
 Guest speaker at the Indiana University Alumni Association Executive Council meeting (December 2003)
 Guest speaker at the *Women and Cancer: Hope for Tomorrow* program hosted by the Parkview Hospital in Fort Wayne, IN (October 2003)
 Keynote speaker for the Women and Hi Tech Leading Light Awards Dinner (September 2003)
 Presentation to the Women's Fund OPTIONS group (August 2003)
 Presented to Indiana University Cancer Center Communications and Outreach Forum (July 2003)
 Presenter, Indiana University Distinguished Alumni Service Award Ceremony (June 2003)
 Presentation to the Indiana University Spring Women Faculty Luncheon (May 2003)
 Organizer of the 1st Annual Indiana University Breast Cancer Research Retreat (May 2003)
 Peachey Travel Award Evaluation Panel Member (April 2003-present)
 Presentation to the Kappa Kappa Sigma Sorority Convention (April 2003)
 Promotion evaluator for Dr. Paula Vertino at Emory University (December 2002)
 Guest speaker at the Methodist Hospital Women's Health Symposium (October 2002)
 Participant in Priorities in Medicine at Indiana University 2002 (October 2002)
 Guest speaker at the Indiana University School of Medicine Dean's Council Dinner (October 2002)
 Guest speaker at the Indiana University Cancer Center Board of Development meeting (September 2002)
 The Science Advisory Board (April 2002-present)
 Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2002)
 Panel participant and presenter at the *4th Annual Insights: A Colloquium for Women at IUPUI* (March 2002)
 1st Annual University of Maryland Women's Health Research Poster Day Judge (2001)
 Invited speaker at the University of Maryland Baltimore County College Science Club meeting (2000)
 Mentor for Maryvale High School Student, Dana Olson (1999)
 University of Maryland, Baltimore, Internal Reviewer of Pews Scholars Program Applications for selection of a candidate for the National competition (1999)
 Invited speaker at the University of Maryland Baltimore Board of Visitors meeting (October 1999)
 FASEB Congressional Liaison Committee, Member (1999-present)
 University of Maryland School of Medicine, Women's Health Research Group of the Department of Epidemiology & Preventive Medicine grant reviewer (1999, 2000)
 Arkansas Science & Technology Authority, grant reviewer (1999)
 University of Maryland, Baltimore, Member of the Senior Faculty Group meeting with the NIH Site Review Team for the Molecular and Cellular Biology Program Training Grant application (1998)
 American Cancer Society Institutional Research Grant Review Committee (1998-present)
 Panel Member for Ethics Workshop, UMB Graduate School Orientation (1998-present)
 University of Maryland, Baltimore, Internal Reviewer of Searle Scholarship Applications for selection of a candidate for the National competition (1997)
 Department of Pharmacology Distinguished Seminars Committee Member (1997)
 Invited speaker at Maryvale Preparatory High School - described science as a career (1997).
 University of Maryland Marlene and Stewart Greenebaum Cancer Center Breast Cancer Program Faculty Search Committee (1995, 1997)

University of Maryland School of Medicine Council (faculty representative, 1995-1997)
External Thesis Examiner for the Division of Experimental Medicine at McGill University,
Montreal, Canada (1994, 1996, 1997, 1998, 2000)
University of Maryland Cancer Center Search Committee for Chief of Hematology (1996)
University of Maryland Cancer Center Robert Shapiro Distinguished Research Award and
Lectureship Committee (1996)
Department of Pharmacology Promotions Committee Member for Drs. Patson Nhamburo and
Robert Bulliet (1996)
University of Maryland Cancer Center Search Committee for the Deputy Director for Cell and
Molecular Biology, Member (1996)
Co-Chairman Maryland Designated Research Initiative Fund Grant Study Section (1995, 1996)
Department of Pharmacology Adjunct Appointment Committee for Dr. Alfred Maelicke (1995)
Program Committee Member for the John C. Krantz, Jr., Lecture in Pharmacology (1992, 1996)
American Cancer Society/Maryland Cancer Biology Program Grant Reviewer (1993, 1994)
Department of Pharmacology Secondary Appointment Committee Member for Dr. Ernest
Borden, Director of the University of Maryland Cancer Center (1994)
Maryland Designated Research Initiative Fund Grant Application Reviewer (1990, 1992-1994)
Maryland Department of Economic and Employment Scientific Reviewer for the Challenge
Investment Program in Biotechnology (1992-1993)
University of Maryland Cancer Center Research Seminar Series Program Committee Member
(1994-1996)
University of Maryland School of Medicine Department of Pharmacology and Experimental
Therapeutics Predoctoral Student Admissions Committee (1993-1996)
University of Maryland Molecular and Cellular Biology Program Distinguished Speakers
Seminar Committee Member (1992-1996)
University of Maryland School of Medicine Department of Pharmacology and Experimental
Therapeutics Graduate Program Review Committee Member (1993)
Maryland Science Center/Maryland Science Week Visiting Guest Research Scientist (1993)
University of Maryland Faculty Judge for the Medical Students Research Day (1992)
University of Maryland Faculty Judge for the Graduate Student Research Day (1992)

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

American Society for Biochemistry and Molecular Biology
American Association for Cancer Research
American Chemical Society
Women in Cancer Research
Sigma Delta Epsilon-Graduate Women in Science
The Association for Women in Science

REVIEWER FOR JOURNALS:

Current Cancer Therapy Reviews, Biochemistry, Cancer Research, Cancer Chemotherapy and Pharmacology, DNA and Cell Biology, Journal of Pharmacology and Experimental Therapeutics, Gene, Nucleic Acids Research, Breast Cancer Research and Treatment, Journal of Neurosurgery, BioTechniques, Environmental Research, Clinical Cancer Research, Nutrition and Cancer, European Journal of Biochemistry, Journal of Cell Biology, Journal of Cellular Biochemistry, Electrophoresis, Journal of Cell Science, Journal of Molecular Biology, Experimental Cell Science, Oncogene, Laboratory Investigation, Journal of Biological Chemistry, Electrophoresis, Molecular Pharmacology, British Journal of Pharmacology

PARTICIPATION IN MEETINGS AND WORKSHOPS:

- (1981) Annual Cell Culture Symposium, *Viruses as Probes for Differentiated Cell Functions*, Hunter College of the City University of New York.
- (1982) Cold Spring Harbor DNA Tumor Virus Meeting on *SV40, Polyoma and Adenoviruses*.
- (1986) American Society of Biological Chemists Meeting in Washington, D.C.
- (1986) Gordon Research Conference on *Animal Cells and Viruses* in Tilden, NH.
- (1986) Cold Spring Harbor DNA Tumor Virus Meeting on *SV40, Polyoma and Adenoviruses*.
- (1987) *Protein Structural Analysis: Theory, Practice, and Application* Workshop at the Waksman Institute of Microbiology of the State University of New Jersey.
- (1987) *The Histopathobiology of Cancer* workshop organized by the National Cancer Institute.
- (1987) *Eukaryotic DNA Replication Symposium* held at Cold Spring Harbor Laboratories.
- (1987) American Society for Microbiology meeting on *DNA Replication and Mutagenesis* at Marco Island, FL.
- (1988) 14th International Congress of Biochemistry in Prague, Czechoslovakia.
- (1989) Joint meeting of American Society for Biochemistry and Molecular Biology and The American Society for Cell Biology at San Francisco, CA.
- (1989) UCLA Symposia on *Molecular Mechanisms in DNA Replication and Recombination*, Keystone, CO.
- (1991) Fifth Annual Symposium of The Protein Society, Baltimore, MD.
- (1991) *Eukaryotic DNA Replication* symposium held at Cold Spring Harbor Laboratories.
- (1992) UCLA Symposia on *Molecular Mechanisms in DNA Replication and Recombination*, Taos, NM.
- (1992) American Association of Cancer Research meeting held in San Diego, CA.
- (1992) McGill University Conference on *Regulation of Eukaryotic DNA Replication*, held in Montreal, Quebec, Canada.
- (1993) Gordon Research Conference on *Enzyme Organization and Cell Function*, CA.
- (1993) American Association of Cancer Research meeting held in Orlando, FL.
- (1993) *Eukaryotic DNA Replication Symposium* held at Cold Spring Harbor Laboratories.
- (1994) American Association of Cancer Research meeting held in San Francisco, CA.
- (1994) *The Cell Cycle Symposium* held at Cold Spring Harbor Laboratories.
- (1994) American Society of Biochemistry and Molecular Biology Meeting held in Washington, D.C.
- (1994) McGill University Conference on *Regulation of Eukaryotic DNA Replication*, held in Montreal, Quebec, Canada.
- (1995) Gordon Research Conference on *Enzyme Organization and Cell Function*, CA.
- (1996) American Association of Cancer Research meeting held in Washington, D.C.
- (1996) McGill University Conference on *Regulation of Eukaryotic DNA Replication*, held in Montreal, Quebec, Canada.
- (1996) American Association of Cancer Research meeting held in San Diego, CA.

- (1997) Department of Defense Breast Cancer Research Program (*Era of Hope*) Meeting held in Washington, D.C.
- (1997) *20th Annual San Antonio Breast Cancer Symposium* held in San Antonio, TX.
- (1998) Breast Cancer Think Tank 8 meeting held in Tobago, British West Indies.
- (1998) American Association of Cancer Research annual meeting held in New Orleans, LA.
- (1998) *Drug Development for the 21st Century: Meeting the Challenge of Modern Medicine*, Rio de Janeiro, Brazil.
- (1998) National Cancer Institute *First Annual Experimental Therapeutics of Human Cancer Meeting* held in Fredrick, MD.
- (1998) McGill University Conference on *Regulation of Eukaryotic DNA Replication* held in Montreal, Quebec, Canada.
- (1998) *21st Annual San Antonio Breast Cancer Symposium* held in San Antonio, TX.
- (1999) CSR/NIGMS/NCI/NIA Workshop on *Chromatin, Transcription and DNA Replication*, held in Bethesda, Maryland.
- (1999) *Annual Meeting of The Cell Proliferation Society*, held in Greenbelt, Maryland.
- (1999) American Association of Cancer Research meeting held in Philadelphia, PA.
- (1999) *Eukaryotic DNA Replication Symposium* at Cold Spring Harbor Laboratories.
- (1999) Cambridge Healthtech Institute meeting on *Disease Biomarkers: Genetic and Proteomic Approaches* held in Baltimore, Maryland.
- (1999) BioCapital Connection 2000 Group meeting held in Bethesda, Maryland.
- (2000) American Association of Cancer Research meeting held in San Francisco, CA.
- (2000) Department of Defense Breast Cancer Program (*Era of Hope*) Meeting held in Atlanta, GA.
- (2000) NCI-EORTC meeting *From Discovery to Clinical Practice: Diagnostics Innovation, Implementation, and Evaluation* held in Denmark.
- (2000) *2nd Tumor Markers Conference* held in Santa Barbara, California.
- (2000) American Association of Cancer Research annual meeting held in New Orleans, LA.
- (2001) McGill University Conference on *Regulation of Eukaryotic DNA Replication* held in Montreal, Quebec, Canada.
- (2001) International Institute of Anticancer Research Conference on *New Anticancer Agents* held in Athens, Greece.
- (2001) FASEB Summer Research Conference on *Nuclear Structure and Cancer* held at the Vermont Academy in Saxtons River, Vermont.
- (2002) The Amelia Project: Giving Wings to Research meeting, held in Indianapolis, IN.
- (2002) American Association of Cancer Research annual meeting held in San Francisco, CA.
- (2002) INGEN Proteomics Symposium, Indianapolis, IN
- (2002) *25th Annual San Antonio Breast Cancer Symposium* held in San Antonio, TX.
- (2003) The Amelia Project: Giving Wings to Research meeting, held in Indianapolis, IN.
- (2003) 1st Annual Indiana University Breast Cancer Research Retreat, in Indianapolis, IN.
- (2003) American Association of Cancer Research annual meeting to be held Washington, D.C.
- (2003) NCI Early Detection Research Network meeting held in Pittsburgh, PA.
- (2004) The Amelia Project: Giving Wings to Research meeting, held in Indianapolis, IN.
- (2004) American Association of Cancer Research annual meeting held in Orlando Florida.
- (2005) FASEB Summer Research Conference on *Nuclear Structure and Cancer* held at the Vermont Academy in Saxtons River, Vermont.
- (2006) BIO06, held in Chicago, IL
- (2006) *29th Annual San Antonio Breast Cancer Symposium* held in San Antonio, TX.
- (2007) American Association of Cancer Research annual meeting held in Los Angeles, CA.
- (2007) 5th Annual Congress of International Drug Discovery Science and Technology held in China November 2007
- (2009) The Amelia Project: Giving Wings to Research meeting, held in Indianapolis, IN.

- (2009)** American Association of Cancer Research annual meeting held in Denver, CO.
(2009) FASEB Summer Research Conference on *Nuclear Structure and Cancer* held at the Vermont Academy in Saxtons River, Vermont.
(2010) American Association of Cancer Research annual meeting held in Washington, DC.

INVITED SEMINARS:

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Wayne State University Medical School, Department of Biochemistry (November 1988).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the University of Maryland School of Medicine, Department of Anatomy (January 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Albany Medical College, Department of Microbiology (January 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Medical College of Virginia, Department of Radiology (February 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the University of Chicago (March 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Cornell Veterinary School, Department of Pathology (April 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the University of South Florida School of Medicine, Department of Biochemistry (April 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Tufts University School of Medicine, Department of Biochemistry (May 1989).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Worcester Foundation for Experimental Biology (June 1989).

Human Cell DNA Replication, presented to the University of Maryland Cancer Center (March 1991).

A Multiprotein Complex Mediates SV40 DNA Replication *In Vitro*, presented to the UMDNJ-New Jersey Medical School, Department of Microbiology and Molecular Genetics, Newark, NJ (May 1991).

Human Cell DNA Replication Is Mediated By A Multiprotein Complex, presented to the UMAB School of Medicine M.D./Ph.D. Program (December, 1991).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the University of Maryland Cancer Center Molecular Biology Group (April 1992).

A Multiprotein Complex Mediates Mammalian DNA Replication *In Vitro*, presented to the Ohio State University, Department of Radiology (May 1992).

A Multiprotein Complex Mediates Mammalian DNA Replication In Vitro: Implications For Understanding Antineoplastic Drug Action, presented to the University of Maryland School of Pharmacy, Dept. of Pharmacology and Toxicology (December 1992).

A Multiprotein Complex Mediates Mammalian DNA Replication In Vitro, presented to Allegheny College, Dept. of Biology, Meadville, PA (April 1993).

A Multiprotein Complex Mediates Mammalian DNA Replication In Vitro: Implications For Understanding Antineoplastic Drug Action, presented in the Neoplasia Seminar Series, University of Maryland School of Medicine (April 1993).

A Novel In Vitro Model for the Evaluation of Anticancer Drugs, presented to the Short Term Research Training Program for Medical Students, University of Maryland School of Medicine (July 1993).

A Multiprotein Complex Mediates Mammalian DNA Replication In Vitro, presented to the Johns-Hopkins Oncology Center, Baltimore, MD (December 1993).

A Multiprotein Complex Mediates Mammalian DNA Replication In Vitro, presented to the McGill University Cancer Center, Montreal, Quebec, Canada (December 1993).

Mammalian DNA Replication, presented to the Center for Advanced Research in Biotechnology, (March 1994)

A Multiprotein Complex Mediates Mammalian DNA Replication, presented to the Wright State University, Ohio (October 1994).

A Multiprotein Complex Mediates Mammalian DNA Replication, presented to the University of Massachusetts Medical School, Worcester, MA (January 1995).

A Multiprotein Complex Mediates Mammalian DNA Replication, presented to the University of Maryland School of Medicine Department of Microbiology and Immunology (May 1995).

Get Switched Onto Science, presented to Taconic High School in Pittsfield, MA (May 1995).

The Breast Cell DNA Synthesome, presented to George Washington University Medical School, Washington, DC (April, 1996).

The Breast Cell DNA Synthesome, presented to Georgetown University Medical School, Washington, DC (September, 1996).

The Breast Cell DNA Synthesome, presented to University of Maryland Cancer Center Director's Conference, Baltimore, MD (October, 1996).

The Mammalian DNA Synthesome: A Physiologically Relevant Model For Evaluating Anticancer Drug Action, presented to Wyeth Ayerst Research, Princeton, NJ (December 1996).

The Breast Cell DNA Synthesome, presented to Georgetown University Oncology Center Breast Cancer SPORE group, Washington, DC (December 1996).

The Human Breast Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to MatriTech, Inc., Newton, Massachusetts (April 1997).

The Human Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to the Johns-Hopkins Oncology Center, Baltimore, MD (September 1997).

The Human Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to the University of Maryland Department of Pathology (September 1997).

The Human Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to University of Texas MD Anderson Cancer Center, Houston, TX (September 1997).

The Human Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to George Washington University Medical School, Washington, D.C. (October 1997).

The Human Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to University of Maryland Department of Biochemistry and Molecular Biology (December 1997).

The Breast Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to The Thomas Jefferson School of Medicine, Department of Radiation Oncology, Philadelphia, PA (April, 1998).

The Mammalian DNA Synthesome: A Physiologically Relevant Model For Evaluating Anticancer Drug Action, presented to the National Cancer Institute Laboratory of Molecular Pharmacology (April, 1998).

The Mammalian DNA Synthesome: A Physiologically Relevant Model For Evaluating Anticancer Drug Action, presented to *The DNA Polymerase Club* at Yale University School of Medicine (May, 1998).

The Error-Prone DNA Replication Apparatus of Malignant Human Cells, presented to the Penn State University School of Medicine, Hershey, PA (July 1998).

The DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented to The National Institutes of Health/National Cancer Institute Extramural Program, Bethesda, MD (October, 1998).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to The Uniform Services University of the Health Sciences, Department of Biochemistry and Molecular Biology, Bethesda, MD (October, 1998).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to the Los Alamos National Laboratory, Los Alamos, New Mexico (March 1999).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to Labcorp, Research Triangle, North Carolina (October 1999).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to Diagnostic Products Corporation, Los Angeles, CA (January 2000).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to University of Maryland College Park (February 2000).

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, presented to the McGill Cancer Centre, Montreal, Quebec, Canada (April 2000).

Functional Genomics Underlying the Mutagenic Breast Cancer Cell DNA Replication Complex, presented to the Los Alamos National Laboratory, Los Alamos, New Mexico (August 2000).

Structure/Function Analysis of the Mutagenic Breast Cancer Cell DNA Replication Apparatus, presented to the Indiana University Cancer Center, Indianapolis, Indiana (January 2001).

Functional and Structural Alterations of the Cancer Cell DNA Replication Apparatus, presented to the Indiana University School of Medicine, Department of Biochemistry, Indianapolis, Indiana (April 2001).

The Mutagenic DNA Replication Apparatus of Malignant Human Cells, presented to the University of New Mexico School of Medicine, Albuquerque, NM (September 2001).

Proteomics and Breast Cancer, presented to the Central Indiana Breast and Cervical Cancer Coalition, Indianapolis, IN (July 2002).

DNA Replication Meets Cancer, presented to the Indiana University Bloomington, Department of Medical Sciences, Bloomington, IN (September 2002)

DNA Replication Meets Cancer, presented to the Purdue University School of Pharmacy, Department of Pharmaceutical Sciences, Lafayette, IN (October 2002)

DNA Replication Meets Cancer, presented to Wright State University, Ohio (February 2004)

DNA Replication Meets Cancer, presented to the DePauw University IN (March 2004)

DNA Replication Meets Cancer, presented to the University of Arizona Cancer Center, Tucson, AZ (December 2004)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the Second Military Medical University, Shanghai, China (September 2005)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the Second Military Medical University, Chongqing, China (September 2005)

Cancer Cell DNA Replication: Mining for Biomarker and Therapeutic Discovery, presented to Purdue University, Department of Basic Medical Sciences, (September 2006)

Cancer Cell DNA Replication: Implications for Biomarker & Therapeutic Discovery, presented to University of Texas, MD Anderson Cancer Center, Department of Gastrointestinal Medical Oncology and Gastrointestinal Cancer Research Program (October 2006)

Cancer Cell DNA Replication: Implications for Biomarker & Therapeutic Discovery, presented to Indiana University Cancer Center Grand Rounds (December 2006)

Cancer Cell DNA Replication: Implications for Biomarker & Therapeutic Discovery, presented to the Fox Chase Cancer Center (March 2007)

Cancer Cell DNA Replication: Implications for Biomarker & Therapeutic Discovery, presented to the University of Missouri School of Medicine, Kansas City, MO (March 2007)

Cancer Cell DNA Replication: Implications for Biomarker & Therapeutic Discovery, presented to University of Texas, MD Anderson Cancer Center Division of Medicine Grand Rounds (July 2007)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the University of California Davis Cancer Center (January 2008)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the University of South Carolina School of Medicine (January 2008)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented for Grand Rounds at the Karmanos Cancer Center at Wayne State University, Detroit, MI (March 2008)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the Northwestern University Medical School Robert H. Lurie Comprehensive Cancer Center (May 2008)

Cancer Biomarker and Molecular Target Discovery, a Grand Rounds talk presented to the Reid Hospital & Health Care Services (July 2008)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the Florida International University Department of Environmental and Occupational Health, Robert Stempel School of Public Health (September 2008)

A Basic Scientist's Journey Towards Translation, a Grand Rounds talk presented to the Indiana University Division of Hematology and Oncology (November 2008)

A Basic Scientist's Journey Towards Translation, a Grand Rounds talk presented at the University of New Mexico School of Medicine (February 2009)

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a Grand Rounds talk presented to the Indiana University Visiting Professor Program at St. Mary's Medical Center, Evanston, IN (July 2009)

Development of a Novel Nuclear Protein Isoform as a Cancer Diagnostic and Novel Therapeutic Target, a seminar presented to the Eli Lilly Pharmaceutical Corporation, (October 2009)

Functional Proteomics and Its Applications, a Grand Rounds talk presented at Reid Hospital, Richmond, IN (October 2009)

Translating Breast Cancer Lab Findings to the Patient, a Grand Rounds talk presented at Union Hospital, Terre Haute, IN (October 2009)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the Case Western Comprehensive Cancer Center (November 2009)

Development of a Novel Nuclear Protein Isoform as a Cancer Diagnostic and Therapeutic Target, a seminar presented to the Kansas University Medical Center, Kansas City, Kansas (January 2010)

Development of a Novel Nuclear Protein Isoform as a Cancer Diagnostic and Therapeutic Target, a seminar presented to the Kansas University Drug Discovery Institute, Lawrence, Kansas (March 2010)

Cancer Cell DNA Replication: Implications for Biomarker and Molecular Target Discovery, presented to the City of Hope Comprehensive Cancer Center (April 2010)

Breast Cancer Biomarkers and Their Role in Patient Care Management, a Grand Rounds talk to be presented to the IU Visiting Professor Program at St. Mary's Medical Center, Evanston, IN (August 2010)

SCIENTIFIC MEETING PRESENTATIONS:

A Multiprotein Complex Mediates Mammalian DNA Replication, platform talk presented at the (1992) McGill University Conference on Regulation of Eukaryotic DNA Replication, held in Montreal, Quebec, Canada.

A Multiprotein Complex Mediates Mammalian DNA Replication, platform talk presented at the (1993) Gordon Research Conference on Enzyme Organization and Cell Function held in Casa Sirena, CA.

Human Cell DNA Replication Is Mediated By A Multiprotein Complex, presented at the American Cancer Society/Maryland Division Board of Directors Meeting held in Annapolis, MD (June 1993).

A Multiprotein Complex Mediates DNA Synthesis In Mammalian Cells, platform talk presented at the Eukaryotic DNA Replication meeting held at the Cold Spring Harbor Laboratory (September 1993).

A DNA Synthesome Isolated from Human Leukemia Cells (April 1996), presented at the American Association for Cancer Research Annual Meeting *DNA Repair Session* in Washington, D.C.

The Mammalian Cell DNA Synthesome a plenary speaker platform talk presented at the (October 1996) McGill University Conference on Regulation of Eukaryotic DNA Replication, held in Montreal, Quebec, Canada.

The Breast Cell DNA Synthesome: Alteration of Its Structure and Function in Malignancy, presented at the Breast Cancer Think Tank 8 meeting (January 1998), Tobago, British West Indies.

A Variety of Human Cancers Exhibit an Altered Form of PCNA, (April 1998) presented at the American Association for Cancer Research Annual Meeting *Carcinogenesis Session*, New Orleans, LA.

The Effect of Camptothecin on DNA Replication Intermediates, (April 1998) presented at the American Association for Cancer Research Annual Meeting *DNA Topoisomerase Poisons: Action and Resistance Session*, New Orleans, LA.

Human Cell DNA Synthesome Associated Polymerases Are Inhibited Differentially by the Antimetabolite 1- β -arabinofuranosylcytosine (Ara-CTP), (April 1998) presented at the American Association for Cancer Research Annual Meeting *Mechanism and Determinants of Antimetabolites Session*, New Orleans, LA.

MCF-7 Breast Cancer Cell DNA Synthesome as a Regulatory Center for Estrogen Induced Cellular Proliferation, (April 1998) presented at the American Association for Cancer Research Annual Meeting *Cell Growth and Apoptosis II: Growth Factors and Signaling Pathways Session*, New Orleans, LA.

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, platform talk presented at the (September 1998) Universidade Federal do Rio de Janeiro symposium on *Drug Development for the 21st Century: Meeting the Challenge of Modern Medicine*, Rio de Janeiro, Brazil.

The DNA Synthesome: Alteration of Its Structure and Function in Malignancy, a plenary speaker platform talk presented at the (October 1998) McGill University Conference on *Regulation of Eukaryotic DNA Replication*, in Montreal, Quebec, Canada.

Cancer Cells Contain an Error-Prone DNA Replication Apparatus, a platform talk presented at the National Institute of Health *Chromatin, Transcription and DNA Replication Workshop* (February 1999), Bethesda, MD.

Structure/Function Analysis of the Mutagenic DNA Replication Apparatus of Breast Cancer Cells, a platform talk presented to *The Cell Proliferation Society Annual Meeting* (March 1999), in Baltimore, MD.

The Human Cell DNA Synthesome Replication Machinery Is Coupled to Mismatch Repair Proteins, a platform talk presented at the Eukaryotic DNA Replication meeting held at the Cold Spring Harbor Laboratory (September 1999).

Cancer-Specific PCNA: A New Biomarker for Breast Cancer, a plenary platform talk presented at the Cambridge Healthtech Institute meeting on *Disease Biomarkers: Genetic and Proteomic Approaches* (November 1999) held in Baltimore, Maryland.

Breakthroughs in Cancer Therapies, presented at the BioCapital Connection 2000 Group Meeting (March 2000) held in Bethesda, Maryland.

Cancer-Specific PCNA: A New Biomarker for Breast Cancer, presented at the 2nd Tumor Markers Conference, sponsored by the UT M.D. Anderson Cancer Center, held in Santa Barbara, California (March 2-6, 2001).

The Role of the Cancer Specific Form of PCNA in Mediating Mutagenic DNA Replication, a plenary platform talk presented at the McGill University Conference on *Regulation of Eukaryotic DNA Replication*, held in St. Sauveur, Quebec, Canada (April 2001).

Cancer-Specific PCNA: A New Biomarker for Breast Cancer a platform talk presented at the International Institute of Anticancer Research Conference on *New Anticancer Agents* held in Athens, Greece (June 9-12, 2001).

Functional and Structural Alterations of the Cancer Cell DNA Replication Apparatus, a plenary platform talk presented at the FASEB Summer Research Conference on “Nuclear Structure and Cancer,” held at the Vermont Academy in Saxtons River, Vermont (August, 2001).

Proteomics and Breast Cancer, a platform talk presented to The Amelia Project: Giving Wings to Research meeting, held in Indianapolis, IN (February 2002).

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a platform talk presented to 1st INGEN Proteomics Symposium, held in Indianapolis, IN (November 2002).

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a platform talk presented to National Cancer Institute Early Detection Research Network (EDRN), held in Pittsburgh, PA (June 2003).

Cancer Cell DNA Replication, a Principal Speaker platform talk presented at the FASEB Summer Research Conference on “Nuclear Structure and Cancer,” held at the Vermont Academy in Saxtons River, Vermont (June, 2005).

Participated in a Panel entitled, “*Virtually Integrated Pharma Companies (VIPCOs)*” at the 2007 Burrill Life Sciences Forum.

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a platform talk presented to the 5th Annual Congress of International Drug Discovery Science and Technology, held in China (November 2007).

Participated in a Panel on forging links between academia and business at the *Strategic Collaborations Conference*, Indianapolis, In (May 2009)

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a keynote talk presented at Research Day at the joint VA Medical Center - University of Kansas Medical Center Symposium (June 2008).

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a platform talk presented at the Summit on Onco-Biotechnology: The Future Starts Now. Cancer Prevention, Treatment and Cure at held the Lurie Cancer Center at Northwestern University (July 2008).

A Functional Proteomics Approach to Discover New Cancer Biomarkers, a platform talk presented at the *Symposium on Biomarker Discovery and Systems* (October 2008).

Development of a Novel Nuclear Protein Isoform as a Cancer Diagnostic and Novel Therapeutic Target. a Principal Speaker platform talk presented at the FASEB Summer Research Conference on “Nuclear Structure and Cancer,” held at the Vermont Academy in Saxtons River, Vermont (June, 2009).

Post-translational Modification as a Starting Point for Cancer Biomarker and Therapeutic Target Discovery, a talk to be presented at the American Association of Cancer Research annual meeting held in Washington, DC (April 2010).

PUBLICATIONS:

Refereed Articles

E.F. Baril, **L.H. Malkas**, R.J. Hickey, C.J. Li, J.K. Vishwanatha, and S. Coughlin, A multiprotein DNA polymerase α complex from HeLa cells: Interaction with other proteins in DNA replication. (1988) *Cancer Cells* **6**: 373-384.

J.J. Dermody, K.G. Lawlor, H. Du, B. Wojcik, K.K. Jha, **L.H. Malkas**, R.J. Hickey, E.F. Baril, and H.L. Ozer, Polyomavirus DNA synthesis *in vitro*: Studies with CHO, 3T3, and their tsDNA mutants. (1988) *Cancer Cells* **6**: 95-100.

R.J. Hickey, **L.H. Malkas**, N. Pedersen, C. Li, and E.F. Baril, A multiprotein complex for DNA replication in HeLa cells. (1988) in: DNA Replication and Mutagenesis: pp. 41-54, (Eds. Robb Moses and William Summers) Amer. Soc. Microbiology Publications, Washington, DC.

James J. Dermody, Kenneth G. Lawlor, **Linda Malkas**, Hong Du, Martin Orlian, Brian Wojcik, Krishna K. Jha, and Harvey L. Ozer, Mammalian cell mutants ts in DNA synthesis. (1988) in Current Communications in Molecular Biology: Cell Cycle Control in Eucaryotes: pp. 100-105, Cold Spring Harbor Press.

L.H. Malkas and E.F. Baril, A DNA sequence recognition protein associated with the multiprotein form of DNA polymerase α from HeLa cells-specific binding to the dA/dT tract in the ori region of SV40 DNA. (1989) *Proc. Natl. Acad. Sci. USA* **86**: 70-74.

L.H. Malkas, R.J. Hickey, C.J. Li, and E.F. Baril, A 21S enzyme complex from HeLa cells that functions in Simian Virus 40 DNA replication *in vitro*. Isolation, purification and characterization of its physical and catalytic properties. (1990) *Biochemistry* **29**: 6362-6374.

N. Bachur, F. Yu, R. Johnson, R. Hickey, Y. Wu and **L.H. Malkas**, Helicase Inhibition By Anthracycline Anticancer Agents. (1992) *Molecular Pharmacology* **41**: 993-998.

N. R. Bachur, R. Johnson, F. Yu, R. Hickey, N. Applegren, and **L.H. Malkas**, Anti-Helicase Action of DNA Binding Anticancer Agents: Relationship to G/C Intercalator Binding. (1993) *Molecular Pharmacology* **44**: 1064-1069.

Y. Wu, R. Hickey, K. Lawlor, P. Wills, F. Yu, H. Ozer, R. Starr, J. Y. Quan, M. Lee and **L.H. Malkas**, A 17S Multiprotein Form of Murine Cell DNA Polymerase Mediates Polyomavirus DNA Replication In Vitro. (1994) *J. Cellular Biochemistry* **54**: 32-46.

N.R. Bachur, F. Yu, R. Johnson, R. Hickey and **L.H. Malkas**, Anthracycline Antihelicase Action. (1995) In: Anthracycline Antibiotics: New Analogues, Methods of Delivery, and Mechanisms of Action: pp. 204-221 (American Chemical Society, Washington, DC).

N. Applegren, R. Hickey, A.M. Kleinschmidt, Q. Zhou, J. Coll, P. Wills, R. Swaby, Y. Wei, J.Y. Quan, M.Y.W.T. Lee and **L.H. Malkas**. Further Characterization of the Human Cell Multiprotein DNA Replication Complex. (1995) *J. Cellular Biochemistry* **59**: 91-107.

L.H. Malkas and R. J. Hickey, The Expression, Purification and Characterization of Papovavirus DNA Polymerase. (1996) In: Methods in Enzymology Volume 275: Viral Polymerases and Related Proteins: pp. 133-167 (Academic Press).

P. Wills, R. Hickey, D. Ross, D. Cuddy, and **L.H. Malkas**, A Novel *In Vitro* Model System for Studying the Action of Ara-C. (1996) *Cancer Chemotherapy and Pharmacology* **38**: 366-372.

C.M.G. Simbulan, D.S. Rosenthal, H. Hilz, R. Hickey, **L. Malkas**, N. Applegren, Y. Wu, G. Bers, and M.E. Smulson, Poly(ADP-ribose) polymerase is a component of the multiprotein DNA replication complex. (1996) *Biochemistry* **35**: 11622-11633.

T.D. Tom, **L.H. Malkas**, and R.J. Hickey, Identification of multiprotein complexes containing DNA replication factors by native immunoblotting of HeLa cell protein preparations with T-antigen-dependent SV40 DNA replication activity. (1996) *J. Cellular Biochemistry* **63**: 259-267.

J.M. Coll, R.J. Hickey, Y. Wei and **L.H. Malkas**, The Human Cell Multiprotein DNA Replication Complex (MRC): The Effects of Camptothecin on Its Ability To Support *In Vitro* DNA Synthesis. (1996) *Cancer Chemotherapy and Pharmacology* **39**: 97-102.

J.M. Coll, J. Weeks Sekowski, R.J. Hickey, L. Schnaper, W. Yue, A. Brodie and **L.H. Malkas**, The human breast cell DNA synthesome: its purification from tumor tissue and cell culture. (1996) *Oncology Research* **8**: 435-447.

J. W. Sekowski, **L. H. Malkas**, Y. Wei, and R. J. Hickey, Mercuric Ion Inhibits the Activity and Fidelity of the Human Cell DNA Synthesome. (1997) *Toxicology and Applied Pharmacology* **145**: 268-276.

S. Lin, R.J. Hickey, and **L.H. Malkas**, The Isolation of a DNA Synthesome from Human Leukemia Cells. (1997) *Leukemia Research* **6**: 501-512.

S. Lin, R. Hickey and **L. Malkas**, The Biochemical Status of the DNA Synthesome Can Distinguish Between Permanent and Temporary Cell Growth Arrest. (1997) *Cell Growth & Differentiation* **8**:1359-1369.

J.M. Coll, R.J. Hickey, E.A. Cronkey, H.-Y., Jiang, L. Schnaper, M.Y.W.T. Lee, L. Uitto, J.E. Syvaaja, **L.H. Malkas**, Mapping Specific Protein-Protein Interactions within the Core Component of the Breast Cell DNA Synthesome. (1997) *Oncology Research* **9**: 629-639.

N.R. Bachur, L. Lun, P.M. Sun, C.M. Trubey, E.E. Elliott, M.J. Egorin, **L. Malkas**, and R. Hickey, Anthracycline Antibiotic Blockade of SV40 T Antigen Helicase Action. (1998) *Biochemical Pharmacology* **55**: 1025-1034.

J.W. Sekowski, **L.H. Malkas**, L. Schnaper, P.E. Bechtel, B.J. Long and R.J. Hickey, Human Breast Cancer Cells Contain an Error-prone DNA Replication Apparatus. (1998) *Cancer Research* **58**: 3259-3263.

P.E. Bechtel, R.J. Hickey, L. Schnaper, J.W. Sekowski, B.J. Long, R. Freund, N. Liu, C. Rodriguez-Valenzuela and **L.H. Malkas**, A Unique Form of Proliferating Cell Nuclear Antigen Is Present in Malignant Breast Cells. (1998) *Cancer Research* **58**: 3264-3269.

H. Jiang, R.J. Hickey, P.E. Bechtel, P.W. Wills, S. Han, T.D. Tom, Y. Wei and **L.H. Malkas**, Whole Gel Eluter Purification of a Functional Multiprotein DNA Replication Complex. (1998) *BioRadiations* 102: 18-20.

C.M. Simbulan-Rosenthal, D.S. Rosenthal, A. Hamid Boulares, R. Hickey, **L. Malkas**, J. Coll and M.E. Smulson, Regulation of the Expression or Recruitment of Components of the DNA Synthesome by Poly(ADP-Ribose) Polymerase. (1998) *Biochemistry* 37: 9363-9370.

H. Pospiech, I. Kursula, W. Abdel-Aziz, **L. Malkas**, L. Uitto, M. Kastelli, M. Vihinen-Ranta, S. Eskelinen, and J.E. Syvaaja, A Neutralizing Antibody against Human DNA Polymerase ϵ Inhibits Cellular but Not SV40 DNA Replication. (1999) *Nucleic Acids Research* 27: 3799-3804.

D. Strumberg, A.A. Pilon, M. Smith, R. Hickey, **L. Malkas**, and Y. Pommier, Conversion of topoisomerase I cleavage complexes on the leading strand of ribosomal DNA into 5'-phosphorylated DNA double-stranded breaks by replication runoff. (2000) *Molecular and Cellular Biology* 20: 3977-3987.

W. Abdel-Aziz, H.-Y. Jiang, R. J. Hickey, and **L. H. Malkas**, Ara-C Affects Formation of Cancer Cell DNA Synthesome Replication Intermediates. (2000) *Cancer Chemotherapy and Pharmacology* 45: 312-319.

H.Y. Jiang, R. J. Hickey, W. Abdel-Aziz, and **L. H. Malkas**, Effects of Gemcitabine and Ara-C on *in vitro* DNA Synthesis Mediated by the Human Breast Cell DNA Synthesome. (2000) *Cancer Chemotherapy and Pharmacology* 45: 320-328.

S. Han, R.J. Hickey, T.D. Tom, P.W. Wills, J.E. Syvaaja and **L.H. Malkas**, Differential Inhibition of the Human Cell DNA Replication Complex-Associated DNA Polymerases by the Antimetabolite 1- β -D-Arabinofuranosylcytosine Triphosphate (ara-CTP). (2000) *Biochemical Pharmacology* 60: 403-411.

P.W. Wills, R. Hickey, and **L. Malkas**, Ara-C Differentially Affects Multiprotein Forms of Human Cell DNA Polymerase (2000) *Cancer Chemotherapy and Pharmacology* 46: 193-203.

D. Tomic, S. G. Brodie, C. Deng, R. J. Hickey, J. K. Babus, **L. H. Malkas** and J. A. Flaws, Smad 3 May Regulate Follicular Growth in the Mouse Ovary. (2002) *Biology of Reproduction* 66: 917-923.

H.-Y. Jiang, W. Abdel-Aziz, T. D. Tom, R. J. Hickey, P. Wills, J. Liu and **L. H. Malkas**, Human Cell DNA Replication Is Mediated by a Discrete Multiprotein Complex. (2002) *J. Cellular Biochemistry* 85: 762-774.

L. H. Malkas, P. E. Bechtel, J. W. Sekowski, L. Schnaper, C. Langford, D.J. Hoelz, D. Tomic and R. J. Hickey, A Cancer-Specific Form of Proliferating Cell Nuclear Antigen (csPCNA) Is Present in Malignant Human Breast cells and Tissues (2002) *J. Ligand Chemistry* 25:20-32.

A. J. M. da Silva, C. D. Buarque, F. V. Brito, L. Aurelian, L. F. Macedo, **L. H. Malkas**, R. J. Hickey, D. V. de Souza, F. Noël, Y. L. B. Murakami, N. M. V. Silva, P. A. Melo, R. R. B. Caruso, N. G. Castro, and P. R. R. Costa, Synthesis and Preliminary Pharmacological Evaluation of New 1,4-Naphthoquinones Structurally Related to Lapachol. (2002) *Bioorganic & Medicinal Chemistry* 10: 2731-2738

P. M. Vertino, J. A. Sekowski, J. M. Coll, N. Applegren, S. Han, and **L. H. Malkas**, DNMT1 Is a Component of a Multiprotein DNA Replication Complex. (2002) *Cell Cycle* 6:416-423.

Abdel-Aziz, W., **Malkas, L.**, Wills, P., Hickey, R. The DNA Synthesome: Its Potential as a Novel *in vitro* Model System for Studying S-phase Specific Anticancer Agents. (2003) *Critical Reviews in Oncology/Hematology* 48: 19-33.

Abdel-Aziz, W., Hickey, R., Edelman, M., **Malkas, L.** Effect of Novel Benzoylphenylurea Derivatives on DNA Polymerase α Activity Using the Synthesome-based *in vitro* Model System. (2003) *Investigational New Drugs* 21: 421-428.

R. J. Hickey, D. Hoelz and **L. H. Malkas**, DNA Replication: Mammalian and Yeast (2004) *Nature Encyclopedia of Life Sciences*.

D. Hoelz, R. J. Hickey, and **L. H. Malkas**, Prokaryotic DNA Replication. (2004) *Nature Encyclopedia of Life Sciences*.

Waleed Abdel-Aziz, Robert J. Hickey, and **Linda H. Malkas**. An *in vitro* model system that can differentiate the stages of DNA replication affected by anticancer agents. (2004) *Biochemical Pharmacology* 68: 11-21.

Jin Yang, Zhiwen Chen, Yang Liu, Robert J. Hickey, and **Linda H. Malkas**, Altered DNA Polymerase ϵ expression in Breast Cancer Cells Leads to a Reduction in DNA Replication Fidelity and a Higher Rate of Mutagenesis, (2004) *Cancer Research* 64: 5597-5607.

Mauricio A. Escobar*, Derek J. Hoelz*, John A. Sandoval, Robert J. Hickey, Jay L. Grosfeld and **Linda H. Malkas**, Profiling of Nuclear Extract Proteins From Human Neuroblastoma Cell Lines: The Search for Fingerprints, (2005) *Journal of Pediatric Surgery* 40:349-58. * These authors contributed equally to the project.

Sandoval JA, Hickey RJ, and **Malkas LH**. Isolation and characterization of a DNA synthesome from a neuroblastoma cell line. (2005) *Journal of Pediatric Surgery* 40: 1070-1077.

Tanaka, H., M. S. Mendonca, P. S. Bradshaw, D. J. Hoelz, **L. H. Malkas**, M. S. Meyn, and D. Gilley (2005) DNA damage induced phosphorylation of the human telomere-associated protein TRF2. *Proc. Natl. Acad. Sci. U.S.A* 102(43): 15539-15544.

Sandoval JA, Grosfeld JL, Hickey RJ, and **Malkas LH**. Structural Analysis of the Human Neuroblastoma DNA Replication Complex: Insights into Faulty Proliferation. *Journal of Pediatric Surgery* (2006) 41:266-270.

Sandoval JA, Hoelz DJ, Woodruff HA, Powell RL, Jay CL, Grosfeld JL, Hickey RJ, and **Malkas LH**. Novel peptides secreted from human neuroblastoma: Useful clinical tools? *Journal of Pediatric Surgery* (2006) 41:245-251.

Eppstein AC, Sandoval JA, Klein PJ, Woodruff HA, Grosfeld JL, Hickey RJ, **Malkas LH**, Schmidt CM. Differential Signaling Response of Neuroblastoma to MEK Activity Inhibitor Predicts Resistance to MAP Kinase Based Treatment Strategies. *Journal of Pediatric Surgery* (2006) 41:252-259.

Sandoval JA, Dobrolecki LE, Huang J, Grosfeld JL, Hickey RJ, and **Malkas LH**. Neuroblastoma detection using serum proteomic profiling: a novel mining technique for cancer? (2006) *Journal of Pediatric Surgery* 41(4):639-46.

Derek J. Hoelz, Randy J. Arnold, Lacey E. Dobrolecki, Waleed Abdel-Aziz, Andrew P. Loehrer, Milos V. Novotny, Lauren Schnaper, Robert J. Hickey, and **Linda H. Malkas**. The Discovery of Labile Methyl Esters on Proliferating Cell Nuclear Antigen by Mass Spectrometry Peptide Mapping. (2006) *Proteomics* 6(7):4808-4816.

Sandoval JA, Eppstein AC, Hoelz DJ, Klein PJ, Linebarger JH, Turner KE, Rescorla FJ, Hickey RJ, **Malkas LM**, Schmidt CM. Proteomic analysis of neuroblastoma subtypes in response to mitogen-activated protein kinase inhibition: profiling multiple targets of cancer kinase signaling. (2006) *Journal of Surgery Research*, 134(1):61-7

Linda H. Malkas, Brittney-Shea Herbert, Waleed Abdel-Aziz, Lacey E. Dobrolecki, Yang Liu, Beamon Agarwal, Derek Hoelz, Sunil Badve, Lauren Schnaper, Randy J. Arnold, Yehia Mechref, Milos V. Novotny, Patrick Loehrer, Robert J. Goulet, and Robert J. Hickey. A cancer-associated PCNA expressed in breast cancer has implications as a potential biomarker. (2006) *Proc. Natl. Acad. Sci. U.S.A.* 103(51):19472-19477.

Zane T Hammoud, Sunil Badve, Romil Saxena, Karen Rieger, Kenneth A Kesler, **Linda Malkas**, Robert J Hickey, A novel biomarker for the detection of esophageal adenocarcinoma (2007) *J Thorac Cardiovasc Surg*:133:82-87.

Zane Hammoud, Lacey Dobrolecki, Kenneth Kesler, Emad Rahmani, Karen Rieger, **Linda Malkas**, and Robert Hickey. (2007) Diagnosis of Esophageal Adenocarcinoma by Serum Proteomic Pattern, *Annals of Thoracic Surgery*, 84:384-92.

John A. Sandoval, Katharyn E. Turner, Derek J. Hoelz, Frederick J. Rescorla, Robert J. Hickey, and **Linda H. Malkas**, Serum Protein Profiling to Identify High-Risk Neuroblastoma: Preclinical Relevance of Blood-Based Biomarkers (2007) *Journal of Surgical Research* 142(2):268-74.

Kyselova Z, Mechref Y, Kang P, Goetz JA, Dobrolecki LE, Sledge GW, Schnaper L, Hickey RJ, **Malkas LM**, Novotny MV. Breast Cancer Diagnosis and Prognosis through Quantitative Measurements of Serum Glycan Profiles. (2008) *Clin Chem* 54(7):1166-75.

Elisabeth J. Rushing, Beamon Agarwal, Yao-Go Man, Mariarita Santi, Jarmon C. Comeaux, Robert J. Hickey and **Linda H. Malkas**. Evaluation of hormone receptor status and proliferation with a novel isoform of proliferating cell nuclear antigen (ca-PCNA) in predicting recurrence of pediatric meningioma. *The FASEB Journal*. 2008;22:706.26.

Novotny NM, Grosfeld JL, Turner KE, Rescorla FJ, Pu X, Klaunig JE, Hickey RJ, **Malkas LH**, Sandoval JA. Oxidative status in neuroblastoma: a source of stress? (2008) *J Pediatr Surg*. 43(2):330-4.

Kumar, Hari, Zhong, Xiaoling, Sandoval, John, Hickey, Robert and **Malkas, Linda** (2008) Applications of Emerging Technologies in Glioblastoma Multiforme, *Expert. Rev. Neurother.* 8 (10): 1497-1506.

H Dai, J Liu, **L Malkas** and R Hickey. (2009) Characterization of RNA primers synthesized by the human breast cancer cell DNA synthesome. *J. Cell Biochem.* 106(5):798-811 (Selected as a Feature article by the journal).

H Dai, J Liu, **LH Malkas**, J Catalano, S Alagharu, RJ Hickey. (2009) Chromium reduces the *in vitro* activity and fidelity of DNA replication mediated by the human cell DNA Synthesome *Toxicology and Applied Pharmacology* 236(2):154-165.

Zhong, Xiaoling, Hoelz, Derek J, Kumar, Hari R., Sandoval, John A., Rescorla, Frederick, Hickey, Robert J., **Malkas, Linda H.** (2009) Bin1 is linked to metastatic potential and chemosensitivity in neuroblastoma. *Pediatric Blood & Cancer* 53(3):332-7.

Snider BM, Phipps E, Smith SJ, Herbert BS, Hickey RJ, **Malkas LH.** (2009) DNA Replication: Mammalian. *Encyclopedia of Life Sciences.* John Wiley & Sons, Ltd: Chichester <http://www.els.net/> [DOI: 10.1002/9780470015902.a0001041.pub2]

Turner KE, Kumar HR, Hoelz DJ, Zhong X, Rescorla FJ, Hickey RJ, **Malkas LH**, Sandoval JA. (2009) Proteomic analysis of neuroblastoma microenvironment: effect of the host-tumor interaction on disease progression. *Oncoproteomics of Neuroblastoma. Journal of Surgery Research* 156:116-122.

Heqiao Dai, Jianying Liu, **Linda H. Malkas** and Robert J. Hickey, Differential effects of Fara-ATP and ara-CTP on the synthesis and extension of RNA primer by the human breast cancer cell DNA Synthesome. (2010) (*Biochemical Pharmacology in press*)

Fei Shen, Benjamin Thirlby, Zhimin Xiao, Kashif Kirmani, Robert Hickey and **Linda Malkas** Nuclear protein isoforms and cancer. (2010) *J. Cell. Biochem. (in press)*.

Heqiao Dai, Jianying Liu, Robert J. Hickey, Beamon Agarwal, Min Huang, Robert Bigsby, Carita Lanner, Stephanie Tieken, **Linda H. Malkas.** Ovarian Cancer Cells Contain a Functionally Altered DNA Replication Apparatus (2010) (*submitted*).

Xiaoyan Wang, Robert J. Hickey, **Linda H. Malkas**, Michael O. Koch, Shaobo Zhang, George E. Sandusky, David J. Grignon, John N. Eble, Liang Cheng. Elevated expression of cancer-associated proliferating cell nuclear antigen in high-grade prostatic intraepithelial neoplasia and prostate cancer (2010) (*in preparation*).

Stephen Jett, Shanna Smith, Melanie Smith, Robert Hickey, and **Linda Malkas.** Visualization of the Human Cell DNA Replication Apparatus Reveals it is a Conservative and Unique Structure. (*in preparation*).

Lacey E. Dobrolecki, Elizabeth Phipps, Robert J. Hickey and **Linda H. Malkas**, Defining the amino acid borders of the cancer associated domain of caPCNA. (2010) (*in preparation*).

Lacey E. Dobrolecki, Elizabeth Phipps, Fei Shen, Brandy Snider, Yesium Polar, George Sledge, Robert J. Hickey and **Linda H. Malkas**, Novel peptides that exhibit cytotoxicity in breast cancer cells. (2010) (*in preparation*).

Elizabeth Phipps, Fei Shen, Yesium Polar, George Sledge, Robert J. Hickey and **Linda H. Malkas**, BRCA deficient breast cancer cells exhibit increased sensitivity towards a DNA repair related cytotoxic peptide. (2010) (*in preparation*).

Reviews and Chapters

L.H. Malkas, R. J. Hickey, and E. F. Baril (1990) Macromolecular complexes in replication. In: *The Eucaryotic Nucleus: Molecular Biochemistry and Macromolecular Assemblies*: pp. 45-68 (Telford Press, New Jersey).

L. Malkas (1996) Simian virus 40 (SV40) *in vitro* DNA replication: A potential model for studying anticancer drug action. In: *The SV40 Chromosome Model for Studies of Anticancer Drugs That Disrupt Mammalian DNA*, ed. R.M. Snapka, R. G. Landes Co., Georgetown, TX, pp. 141-152.

R. J. Hickey and **L.H. Malkas** (1997) Mammalian cell DNA replication. In: *Critical Reviews In Eukaryotic Gene Expression* (Eds. G. Stein, J. Stein, J. Lian), Vol. 7, pp 125-157.

L.H. Malkas (1998) DNA replication machinery of the mammalian cell. In: *Journal of Cellular Biochemistry Supplements* 30/31, pp. 18-29, *The 25th Anniversary Issue*.

C. Lankford, **L.H. Malkas** and R.H. Hickey (2001) Structural and functional alterations of the DNA synthesome in human cancers. In: *Recent Research Developments in Cancer, Volume 3*.

L. H. Malkas, L. A. Schnaper, C. Langford, P.E. Bechtel, J.W. Sekowski and R. J. Hickey (2002) Mining the cancer cell's DNA replication apparatus for new biomarkers and therapeutic targets. In: *Tumor Markers: Physiology, Pathobiology, Technology, and Clinical Applications*, Pps. 411-424, AACC Press.

Abdel-Aziz, W., **Malkas, L.**, Wills, P., Han, S., and Hickey, R. (2003) The utilization of a novel *in vitro* model system to analyze the molecular actions of 1- β -D-Arabinofuranosylcytosine (ara-c). *Transworld Research Network, Recent Research Developments in Cancer* 4:693-715.

Malkas, L.H., Hoelz, D.J., Abdel-Aziz, W., Brittney Shea-Herbert, Schnaper, L., and Hickey, R.J. (2006) A Functional Proteomic Approach For Biomarker Discovery, *Drug Discovery and Development* 9(8):S6-S10.

INVENTIONS:

R.J. Hickey and **L.H. Malkas**. Method for purifying cancer-specific proliferating cell nuclear antigen. (U.S. Patent Application 11/983,939 filed 11/13/07; **awarded 3/15/10.**)

R.J. Hickey, K. Rothhaar, and **L.H. Malkas**. Precursors and Enzymes Associated with Post-translational Modification of Proteins Implicated in Isoform Generation of PCNA. (U.S. Patent Application 12/284,241; filed 9/9/08; response to reviewer comments 5/10/10).

R.J. Hickey and **L.H. Malkas**. Prophylactic and Therapeutic Treatment of the Ductal Epithelium of a Mammary Gland for Cancer. (U.S. Patent Application 11/912,704 filed 10/27/07; response to reviewer comments 2/18/10).

R.J. Hickey and **L.H. Malkas**. Identification of a Novel Carboxyl Methyltransferase Capable of Post-translationally Modifying caPCNA (Non-Provisional Patent Application 61/250,271 filed 10/9/09)

R.J. Hickey and **L.H. Malkas**. Action of caPeptides in Breast Cancer Cells Lacking BRCA1. (Non-Provisional Patent Application 61/249,528 filed 10/7/09)

R.J. Hickey and **L.H. Malkas**. A novel PCNA peptide has cytotoxic activity in cancer cells (International Patent Application PCT/US2009/051643 filed 7/24/09)

R.J. Hickey and **L.H. Malkas**. Molecular Models of Inhibitors of caPCNA (Non-Provisional Patent Application 61/116,818 filed 11/21/08)

R.J. Hickey and **L.H. Malkas**. Precursors and enzymes associated with post-translational modification of proteins implicated in isoform generation of PCNA. (U.S. Patent Application 12/284,241 filed 9/19/08; awarded 5/10/10.)

R.J. Hickey and **L.H. Malkas**. Cancer Peptide Therapeutics (Non-Provisional Patent Application 61/083,393 filed 7/24/08)

R.J. Hickey, **L.H. Malkas**, D. Hoelz, J.T. Zhang and H. Peng. Small molecule inhibitor of caPCNA-protein-protein interaction (U.S. Patent Application 61/058,064 filed 6/2/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (India Patent Application 3220/KOLNP/2008 filed 7/25/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Eurasia Patent Application 200801847 filed 7/25/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (China Patent Application 200780005289.4 filed 7/25/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Brazil Patent Application PI0707948.6 filed 8/18/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Japan Patent Application 2008-555524 filed 8/15/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Europe Patent Application 7757135.4 filed 8/19/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Australia Patent Application 2007217037 filed 8/13/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Canada Patent Application 2,638,866 filed 8/15/08)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (Mexico Patent Application MX/a/2008/010287)

R.J. Hickey and **L.H. Malkas**. Peptide Based Inhibitors of csPCNA Protein-Protein Interaction and Function. (U.S. Patent Application 12/279,028 filed 8/11/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Hong Kong Patent Application 8108633.8 filed 7/17/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (U.S. Patent Application 11/993,252 filed 12/20/07)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Japan Patent Application 2008-519448 filed 12/26/07)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Mexico Patent Application MXa07/016576 filed 12/19/07)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (India Patent Application 63/KOLNP/2008 filed 1/3/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Europe Patent Application 6785569.2 filed 1/11/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Eurasia Patent Application 200800144 filed 1/25/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (China Patent Application 680030926.9 filed 2/20/08)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Canada Patent Application 2612695 filed 12/18/07)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Brazil Patent Application PI061170341 filed 12/27/07)

R.J. Hickey, **L.H. Malkas**, and D. Hoelz. csPCNA Isoform Modifications and Uses Thereof. (Australia Patent Application 2006261856 filed 1/10/08)

R.J. Hickey and **L.H. Malkas**. Antibody to the csPCNA Isoform. (Hong Kong Patent Application 8104648 filed 10/26/07)

R.J. Hickey and **L.H. Malkas**. Antibody to the csPCNA Isoform. (U.S. Patent Application 60/675,275 filed 4/27/05)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Europe Patent Application 6751685.6 filed 10/26/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Eurasia Patent Application 200702361 filed 11/28/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Mexico Patent Application MX/a/2007/013584 filed 10/26/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Japan Patent Application 2008-509143 filed 10/26/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (India Patent Application 4566/KOLNP/2007 filed 10/26/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (China Patent Application 200680022868.5 filed 12/24/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Canada Patent Application 2605745 filed 10/23/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Brazil Patent Application PI0607676-9 filed 10/29/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (Australia Patent Application 2006239318 filed 10/26/07)

R.J. Hickey, **L. H. Malkas**, L. Schnaper, and Y. Liu. csPCNA Isoform Antibodies and Uses Thereof. (U.S. Patent Application 11/912,704 filed 10/26/07)

R.J. Hickey and **L. H. Malkas**. Modifications of csPCNA Isoforms. (U.S. Patent Application 60/694,159 filed 6/27/05)

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy. International Patent Application WO99/16469. (1999).

J. Coll, **L.H. Malkas**, R.J. Hickey. Method for detecting the presence of malignant cells using a multiprotein DNA replication complex. (Patent 6,093,543). Issued July 25, 2000.

J. Sekowski, **L.H. Malkas**, R.J. Hickey. Assay for measuring the activity and fidelity of DNA replication and kit therefore. (U.S. Patent Application 6,063,575). Issued May 16, 2000.

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy (U.S. Patent Application 10/238,871) (pending)

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy (Australia Patent Application 750082) (Issued 10/31/02)

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy (Europe Patent Application 98 950 772.8) (pending)

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy (Japan Patent Application 2000-513502) (pending)

L.H. Malkas, R.J. Hickey, P.E. Bechtel. Altered DNA synthesome components as biomarkers for malignancy (S. Korea Patent Application 2000-70003417) (pending)

L.H. Malkas, R.J. Hickey, P.E. Bechtel, D.J. Hoelz, M. Park, L. Schnaper, D. Tomic. Method for purifying cancer specific proliferating cell nuclear antigen. (U.S. Patent Application 10/83,576) (pending).

Disclosures:

IU Disclosure 1: Identification of Small Molecules That Mimic the Cancer Specific Domain of caPCNA. (IURTC Tech No. 07160 – provisional patent application in preparation)

FOUNDER:

Founder of CS-Keys, Inc. (<http://www.cs-keys.com>), a biotech start-up company in Indianapolis, IN (incorporated in 2005) to translate laboratory findings into the development of a new generation of cancer diagnostics.

CS-Keys, Inc. received from the *Biocrossroads Fund* \$285,000 in seed money (June 2006) to facilitate validation studies for a diagnostic tool that is under development.

CS-Keys, Inc. received seed money from the *Triathlon Medical Ventures* (Ohio) in an amount similar to that of the *Biocrossroads Fund* (July 2006) to facilitate validation studies for a diagnostic tool that is under development.

CS-Keys, Inc. closed a Series A round of funding on January 25, 2008 for \$6.25 million.

CS-Keys, Inc. nominated on 4/3/08 for the *Innovation of the Year Award* (2008 TechPoint Mira Awards)

Founder of SynTherix, Inc. a biotech spin out company in Indianapolis, IN (incorporated in 2009) to translate laboratory findings into the development of a new generation of cancer therapeutics.

SynTherix, Inc. awarded \$2,000,000 grant from Indiana Economic Development Corporation (June 2009)

TEACHING EXPERIENCE:

While a graduate student at the City University of New York I participated in the teaching of undergraduate and graduate courses in both the chemistry and biology departments at Hunter College of the C.U.N.Y. Among these were: General Chemistry for nursing students, Organic Chemistry for nursing students, Organic Chemistry for chemistry majors, Biochemistry, General Biology, Cell Biology, Molecular Biology, Advanced Techniques in Cell and Tissue Culture.

In addition, while a graduate student at Hunter College of the C.U.N.Y. I also directed several undergraduate students doing independent research.

During my post-doctoral training at the Worcester Foundation for Experimental Biology I had been involved in directing student interns in projects related to my field of research and in summer student research training.

Medical Student Training

Medical Biochemistry Course – Clinical Correlation and Conferences (2001)

Medical Pharmacology Course- Chemotherapy Lectures and Conferences (1991-1995)

Medical Pharmacology Discussion Group Leader (1991-1995)

Medical Microbiology and Immunology Course - Antibiotics Lectures (1995-2000)

Pathophysiology and Therapeutics Small Group on Antineoplastic Therapy (1995-present)

Medical Microbiology and Immunology Course - Antibiotics Small Group Leader (1996)

Medical Microbiology and Immunology Course - Antibiotics Panel Discussion (1996)

Research Advisor-Medical Students (Ramona Swaby, 1991-1993, and Udai Kammula, 1991)

Graduate Student Training

Research Advisor-Pre-Doctoral Students, Dept. of Pharmacology, Indiana University School of Medicine (Benjamin Thirlby, 2009-2010, Zhimin Xiao, 2009-present)

Research Advisor-Pre-Doctoral Students, Dept. of Molecular Genetics, Indiana University School of Medicine (Elizabeth Phipps, 2009-present)

Guest Lecturer in the **Biotechnology Training Program**, Indiana University Bloomington (2008)

Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2005)

Ph.D. Dissertation External Reviewer – McGill University (Sahar Sibani, 2005)

Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2002)

Research Advisor-Pre-Doctoral Students, Dept. of Pharmacology, University of Maryland School of Medicine (Yan Wu, 1990-1996; Nancy Applegren, 1992-1997; Jennifer Coll, 1993-1998; Lori McDermott, 1998-1999; Hai-Yan Jiang, 1995-1999; Waleed Abdel-Aziz, 1996-2001, Carla Lankford, 1996-2001, Derek Hoelz, 1997-2002; Philip Wills, 1997-2002; Yang Liu, 2001-2005)

Research Advisor-Pre-Doctoral Student, Program in Toxicology, University of Maryland School of Medicine (Shankung Lin, 1994-1997)

Research Advisor-M.D./Ph.D. Student, Dept. of Pharmacology, University of Maryland School of Medicine (Melanie Smith, 1997-2004)

Research Advisor-Masters Student, Dept. of Pharmacology, University of Maryland School of Medicine (Erika Cronkey, 1995-1997; Derek Hoelz, 1996-1997; Anand Desai, 1996-1998, Joyti Patel, 2000-2003)

Ph.D. Dissertation Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Dmitry Grigoryev, 1999)

Ph.D. Thesis Committee Mentor – Molecular and Cellular Biology Program, University of Maryland School of Medicine (Joanne Doherty, 1999)

Ph.D. Dissertation Committee Member – Program in Toxicology, University of Maryland School of Medicine (Taro Akiyama, 1998)

External Ph.D. Thesis Examiner for the Division of Experimental Medicine at McGill University, Montreal, Canada (Marcia Teresa Ruiz Guerra, 1997)

Ph.D. Dissertation Committee Member – University of Maryland Dental School (Patrick Fields, 1997)

Ph.D. Thesis Committee Mentor – Program in Toxicology, University of Maryland School of Medicine (Taro Akiyama, 1997)

Ph.D. Dissertation Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Tao Peng, 1996)

Ph.D. Dissertation Committee Member – University of Maryland Dental School (Xiaoling Zhou, 1996)

External Ph.D. Thesis Examiner for the Division of Experimental Medicine at McGill University, Montreal, Canada (Torsten Nielson, 1996)

Ph.D. Dissertation Committee Member – University of Maryland Baltimore County, Dept. of Chemistry (Lijuan Wang, 1995)

External Ph.D. Thesis Examiner for the Division of Experimental Medicine at McGill University, Montreal, Canada (Christopher Pearson, 1994)

Ph.D. Dissertation Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Wei Yue, 1994)

Ph.D. Oral Exam Committee Member – Dept. of Biochemistry, University of Maryland School of Medicine (John Mc Goldrick, 1994)

Ph.D. Oral Exam Committee Member – Molecular and Cellular Biology Program, University of Maryland School of Medicine (D. Chung, 1994)

Ph.D. Oral Exam Committee Member – Molecular and Cellular Biology Program, University of Maryland School of Medicine (Joanne Doherty, 1994)

Ph.D. Oral Exam Committee Member – Program in Toxicology, University of Maryland School of Medicine (Shankung Lin, 1994)

Research Advisor-Undergraduate Student, University of Maryland Cancer Center Summer Program (Joshua Schiffer, 1992, 1993)

Ph.D. Preliminary Exam Committee Member – Program in Toxicology, University of Maryland School of Medicine (Shankung Lin, 1993)

Academic Advisor Ph.D. Student – Dept. of Pharmacology, University of Maryland School of Medicine (Diana Chung, 1992 – 1993)

Ph.D. Preliminary Exam Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Tao Peng, 1992)

Ph.D. Thesis Committee Member – Dept. of Microbiology and Immunology, University of Maryland School of Medicine (Chu Pei, 1991- 1993)

Ph.D. Thesis Committee Member – Dept. of Pathology, University of Maryland School of Medicine (Yuan Lin, 1992-1995)

Ph.D. Thesis Committee Member – Dept. of Biochemistry, University of Maryland School of Medicine (Hsingchi Lin, 1992-present)

M.D./Ph.D Dissertation Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Theodore Chung, 1991)

Ph.D. Dissertation Committee Member – Dept. of Pharmacology, University of Maryland School of Medicine (Jianhua Luo, 1991)

Ph.D. Dissertation Committee Member – Dept. of Microbiology, University of Maryland School of Medicine (Chu Pei, 1993)

Ph.D. Dissertation Committee Member – Dept. of Pathology, University of Maryland School of Medicine (Yuan Lin, 1993)

Lecturer in the **Advanced Molecular Genetics** Course, Molecular and Cellular Biology Program, University of Maryland School of Medicine (1991-1994)

Lecturer in the **Fundamentals of Molecular Biology** Course, Molecular and Cellular Biology Program, University of Maryland School of Medicine (1993-1998)

Lecturer in the **Molecular Aspects of Oncopharmacology** Course, Dept. of Pharmacology, University of Maryland School of Medicine (1993-1998)

Lecturer in the **Fundamentals of Pharmacology** Course, Dept. of Pharmacology, University of Maryland School of Medicine (1994-1998)

Lecturer in the **Integrated Pharmacology** Course, Dept. of Pharmacology, University of Maryland School of Medicine (1999-present)

Lecturer in the **Biochemical Pharmacology** Course, Dept. of Pharmacology, University of Maryland School of Medicine (1995-present)

Lecturer in the **Molecular Epidemiology** Course, Dept. of Epidemiology, University of Maryland School of Medicine (1999)

Guest Lecturer in the **Molecular Oncology** Course, Program in Molecular and Cellular Oncology, George Washington Medical School (1996, 1998)

Lecturer in the University of Maryland School of Pharmacy, **Principles of Drug Action** (1996, 1997)

Project Director for the **Applications in Biotechnology** course for the Dept. of Medical and Research Technology, University of Maryland School of Medicine (1996, 1997)

Graduate Course Development and Implementation

Created and developed the University of Maryland **Molecular Aspects of Oncopharmacology** course offered for the first time in the spring of 1993.

Created and developed the Department of Pharmacology Pre-Doctoral **Oncopharmacology Track Curriculum**, University of Maryland School of Medicine (1993).

Pharmacology Special Topics or Readings Courses Developed and Delivered, University of Maryland School of Medicine:

Cancer Biology and Anticancer Therapy
DNA Replication and DNA Repair
Molecular Approaches to Anticancer Chemotherapy

UNDERGRADUATE TRAINING:

Presented at *Meet the Professor* for the “Undergraduate Research for Prospective Physician-Scientists and Physician-Engineers” Program. Indiana University School of Medicine (June 2009).

CURRENT AND PREVIOUS TRAINEES:

Graduate Students

Yan Wu, Nancy Applegren, Shankung Lin, Jennifer Coll, Philip Wills, Hai-Yan Jiang, Anand Desai, Waleed Abdel-Aziz, Carla Langford, Melanie Smith, Derek Hoelz, Joyti Patel, Erica Cronkey, Yang Liu, Lori McDermott, Ben Thirlby, Zhimin Xiao, and Elizabeth Phipps.

Postdoctoral Fellows

Sugata Ray, Ph.D. (1994), Timothy Tom, M.D., Ph.D. (1995), Suhua Han (1997-2001), Jennifer Sekowski, Ph.D. (1998-2000), Pamela Bechtel, Ph.D. (1998-2000), Andrea Todd (1999), Hai-Yan Jiang, Ph.D. (1999-2000), Dragana Tomic, M.D. (2000-2001), Keta Selaru, M.D. (2001), Carla Lankford, M.D./Ph.D. (2001), Zhiwen Chen (2002-2003), Waleed Abdel-Aziz, Ph.D. (2001-2004), Jin Yang (2002-2005), Derek Hoelz (2002-2005), Jin Yang (2002-2005), Yang Liu, M.D. (2001-2006), Shanna Smith (2009-present)

Senior Research Associates in the Laboratory

Jianying Liu, Ph.D. (1991-present), Heqiao Dai, Ph.D. (2002-present)

Junior Faculty in the Laboratory

Shari Soule, M.D. (2002-2003), Carita Lanner, Ph.D. (2003-2005), Waleed Abdel-Aziz, Ph.D. (2004-2008), Travis Day, Ph.D. (2005-2006), Derek Hoelz, Ph.D. (2005-2009), Xiao-Ling Zhong 2006-present), Fei Shen (2009-present)

Medical Resident Fellows

Timothy Tom, M.D., Ph.D. (1996), John Sandoval (2002-present), Tony Escobar (2003-2004), Andrew Epstein (2004-2005), Nathan Novotny (2006-2007), Hari Kumar (2006-2009), Heather McDermott (2009-present)

Medical and Technology Research Students

Rosemin Daya (1996), Fredrick Shemer (1997)

Undergraduate Students

Maryam Beheshti (1996), Avreca Schools (1996), Dionne Morris (2001), Wai Soon Chan (2006-2007), Chris Cox (2008)

Students Under My Supervision Awarded the Ph.D.

Yan Wu, Department of Pharmacology, awarded May 1996, currently an Internal Medicine member at the Robert Wood Johnson Medical Center.

Nancy Applegren, Department of Pharmacology, awarded January 1997, currently a postdoctoral fellow at the Johns-Hopkins Oncology Center.

Shankung Lin, Program in Toxicology, awarded May 1997.

Jennifer Coll, Department of Pharmacology, awarded August 1998, currently a medical fellow.

Hai-Yan Jiang, Department of Pharmacology, awarded January 2000, currently on staff at the University of Maryland Cancer Center.

Carla Lankford, Department of Pharmacology, awarded June 2001, currently a Staff Scientist at the FDA.

Waleed Abdel-Aziz, Department of Pharmacology, awarded August 2001, currently working in the pharmaceutical industry.
Derek Hoelz, Department of Pharmacology, awarded August 2001, currently a junior faculty member at the Maine Genetics Institute.
Philip Wills, Department of Pharmacology, awarded August 2002, currently a staff scientist with Paragon Biosciences.
Yang Liu, Department of Pharmacology, awarded August 2005, currently a medical fellow at the University of Pittsburgh.

Students Under My Supervision Awarded the Masters Degree

Erika Cronkey, Department of Pharmacology, awarded May 1997, currently a biotech market researcher at *Market Measures*.
Anand Desai, Department of Pharmacology, currently a predoctoral student at University of Maryland.
Jasmine Kamran, trained with me under a NIH funded T35 Women's Health Research Program at the Indiana University School of Medicine, awarded degree in August 2009.

Awards and Honors Won by My Trainees

Elizabeth Phipps - DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (2010-2013)
Benjamin Thirlby – NSF GK-12 Graduate Teaching Fellowship (2010-2011)
Dr. Shanna Smith – NIH/NCI Postdoctoral Fellowship (2009-2012)
Dr. Derek Hoelz - DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (2002-2005)
DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (1999-2002)
Dr. Waleed Abdel-Aziz - Egyptian Predoctoral Fellowship (1996-2001)
Second place award in Molecular Biology III at the Graduate Student Research Day (1999)
First place award at the Graduate Student Research Day (2001)
University of Maryland Award for Outstanding Doctoral Thesis (2001)
American Association of Cancer Research *Scholar-in Training* Award (2001)
DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (2003-2005)
Dr. John Sandoval- American Association for Cancer Research Travel Award (2003)
NIH Medical School Loan Repayment Award (2003-present)
American Association for Cancer Research Travel Award (2004)
Walther Cancer Institute 2004 Marilyn Hester Scholarship
A.N.N.A. award (2005)
Dr. Tony Escobar- Chosen to give a platform presentation at the 2004 British Association of Pediatric Surgery at Oxford University in England
Dr. Suhua Han- DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (2000-2001)
Dr. Jennifer Sekowski -NIEHS NRSA Postdoctoral Fellowship (1998-2000)
American Association for Cancer Research Travel Award (1999)
Women's Health Research Award (1999-2000)
Dr. Pamela Bechtel – DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (1998-2000)
Schleicher & Schull Breast Cancer Postdoctoral Fellowship (1998-2000)
Dr. Andrea Todd – FCAR Postdoctoral Fellowship (2000-2002)
Dr. Carla Lankford - 1st Annual Women's Health Research Poster Day First Place Award (2001)

- Yan Wu - Sigma Xi Graduate Research Awards (1991, 1992)
Awarded Ph.D. in Pharmacology (1996)
- Nancy Applegren - Sigma Xi Graduate Research Award (1992, 1994)
Eli Lilly Travel Award to present her research work at the American Association of Cancer Research Meeting held in Orlando, FL (1993)
Invited Participant in the Histopathobiology of Cancer Workshop held at the Medical College of Virginia, Richmond, VA (1993)
Awarded Ph.D. in Pharmacology (1997)
- Jennifer Coll - DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (1994-1998)
Sigma Xi Graduate Research Award (1994)
Invited participant in the Histopathobiology of Cancer workshop held by the National Cancer Institute in Keystone, Colorado (1995)
National Dean's List (1996)
Who's Who among American Graduate Students (1996)
University of Maryland Cancer Center Travel Award (1996)
Awarded Ph.D. in Pharmacology (1998)
- Shankung Lin - University of Maryland Graduate School Merit Award (1996)
Awarded Ph.D. in Toxicology (1997)
- Philip Wills - University of Maryland Graduate Merit Award (1999)
1st Annual Women's Health Research Poster Day First Place Award (2001)
- Hai-Yan Jiang - DOD Medical Research and Development Command Breast Cancer Research Program Fellowship (1998-2001)
- Melanie Smith - Bristol Myers-Squibb Academic Medicine Fellowship (1998-1999)
American Association for Cancer Research Travel Award (2001)
American Association for Cancer Research Travel Award (2002)
- Ramona Swaby - STRTP Fellowship (1991, 1992)
Monumental City Medical Society Scholarship (1993)
Placed 3rd in poster presentations, UMAB Medical Student Research (1993)
- Udai Kammula - Placed 1st in oral presentations, UMAB Medical Student Research (1991)

Mentoring and Advising of Junior Faculty Outside of Laboratory

- Dr. Chanyan He – Assistant Professor of Public Health (2009-present)
- Dr. Mircea Ivan – Assistant Professor of Medicine (2009 – present)
- Dr. Katherine Kelly – Assistant Professor of Medicine (2008 - present)
- Dr. Christine Quirk – Assistant Professor of Pharmacology (2007-2009)
- Dr. Christie M. Orschell - Associate Scientist/Associate Professor of Medicine (2004-present)
- Dr. Brittany Shea-Herbert– Assistant Professor of Medical Genetics (2003-present), promoted to Associate Professor with Tenure 2009
- Dr. Daniela Matei-Associate Professor of Medicine (2004-present)
- Speaker at IU workshop “*Successful Internal Grant Proposals: Unlocking the Secret to Peer Review*” (February 2004)

PUBLIC EDUCATION ACTIVITIES:

Have met with the following individuals or groups since joining Indiana University to discuss the ongoing research in the laboratory and/or conduct tours of our research facility:

- IUCC Board Meeting (attended with B. Baaekgaard of Vera Bradley)
- Sheila D. Ward, M.D. (Dr. Ward is now creating an IU professorship for translational research for metastatic breast cancer)
- Jim Kelley/Ruth Jansen and daughters - Vera Bradley VIP donors

- Marian J. Morrison (Miss Morrison is now creating an IU Chair for breast cancer research)
- IUCC Board Meeting (attended with P. Miller)
- Vera Bradley - Volunteer tours (2003)
- Vera Bradley - Volunteer tours (2004)
- Broad Ripple High School Key Club
- Friends-4-Cures (Campbell Family) Board of Directors
- PACT – Peers Against Cancer Together – of Brebeuf High School
- Women legislators for the state of Indiana (2006)
- Male legislators for the state of Indiana (2006)
- Senator Evan Bayh’s officer staffing the Dept. of Defense sub-committee (2008)
- IUF Board Spouse event (2009)

The following lectures and presentations were done for public education purposes:

- Presented a Keynote address entitled, “*The Future of Individualized Breast Cancer Therapy*”, at the Annual Healthcare Businesswomen Association Meeting (October 2009)
- Presented a talk entitled, “*Development of a Novel Nuclear Protein Isoform as a Cancer Diagnostic and Novel Therapeutic Target*,” to the Annual Meeting of the Ceres Venture Fund in Chicago, IL (May 2009)
- Participated in the Indiana Medical Sciences “*Meet the Researcher*” Event, held at the Indianapolis Speedway (May 2008)
- Participated in the “*Moving Technology from the Academic to the Business Setting*” Panel at the University Club of Indiana University Annual Meeting (April 2008)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the County Chamber of Commerce Networking Luncheon in Portland, IN (April 2008)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the Susan G. Komen Breast Cancer Survivor’s Lunch, Amish Acres, IN (March 2008)
- Presented a talk entitled, “*Recent Developments in the Early Detection of Cancer*”, at the Executive Alliance Group, Indianapolis, IN (February 2008)
- Presented a talk at the *Life Sciences on Tap* for the Bloomington Life Sciences Partnership and the Indiana University Kelley LifeSC Initiative (February 2008)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the *Clinical Research Education & Awareness Day* (October 2007)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the *A Night to Remember* Event for cancer survivors, Indianapolis, IN (September 2007)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the 7th Annual Mickey’s Camp for Men (August 2007) in IN.
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the 6th Annual Mickey’s Camp for Women (August 2007) in IN.
- Keynote speaker for the The Region I Fair, a science fair for high school students, The Berkshire, Massachusetts (March 2007)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at *Nancy’s Retreat*, Puerto Viarta, MX (November 2006).
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the 8th Annual Insights: A Colloquium for Women at IUPUI (November 2006) in Bloomington, IN.
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the *Clinical Research Education & Awareness Day* (October 2006)

- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the *Vera Bradley Tickled Pink* breast cancer awareness event, Fort Wayne IN (October 2006)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the 6th Annual Mickey’s Camp for Men (August 2006) in IN.
- Presented a talk entitled, “*Getting Cancer in My Sites*,” at the the Indiana University 2006 State Men Legislators’ Event (July 2006)
- Key speaker the Indiana University 2006 State Women Legislators’ Event entitled *Dr. Linda Malkas and Momma Mia!* (April 2006)
- Participant in the *Indiana University Life Sciences Exhibit and Reception* at the Indiana State House in Indianapolis (March 2006).
- Guest speaker at the Breast Cancer Survivors Group, Champaign, IL (October 2005)
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the IU Alumni Foundation, October 6, 2005 in Bloomington, IN.
- Presented a talk entitled, “*Getting Cancer in My Sites*,” to the Christie Clinic Breast Cancer Support Group, October 5, 2005 in Champaign, IL.
- Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2005)
- Participated in the *Advancing Indiana/Life Sciences Initiative* and featured in the *Human Genome Project* display at the Indiana State Museum (January 2005)
- Keynote speaker for the *Women’s Health Conference*, Notre Dame University, South Bend, IN (October 2004)
- Guest speaker at the *Indiana University Alumni Luncheon*, Chicago, IL (October 2004)
- Guest speaker at the *Breast Cancer Survivors Group*, Champagne, IL (August 2004)
- Keynote speaker for the *Women’s Health Conference*, Bloomington, IN (April 2004)
- Guest speaker at the *Indiana University Nursing Alumni Association*, IU East Campus (Richmond) (March 2004)
- Guest speaker at the *Indiana University Alumni Association Executive Council* meeting (December 2003)
- Guest speaker at the *Women and Cancer: Hope for Tomorrow* program hosted by the Parkview Hospital in Fort Wayne, IN (October 2003)
- Presentation to the *Women’s Fund OPTIONS* group (August 2003)
- Presented to *Indiana University Cancer Center Communications and Outreach Forum* (July 2003)
- Presentation to the *Indiana University Spring Women Faculty Luncheon* (May 2003)
- Presentation to the *Kappa Kappa Sigma Sorority Convention* (April 2003)
- Guest speaker at the *Methodist Hospital Women’s Health Symposium* (October 2002)
- Guest speaker at the *Indiana University School of Medicine Dean’s Council Dinner* (October 2002)
- Guest speaker at the *Indiana University Cancer Center Board of Development meeting* (September 2002)
- Lecturer in the Indiana University School of Medicine *Mini-Med School Series* (March 2002)
- Panel participant and presenter at the *4th Annual Insights: A Colloquium for Women at IUPUI* (March 2002)

OTHER PUBLIC TRAINING:

Was “shadowed” by Campbell Miller, a 5th grade student of The Orchard School in Indiana (November 2008)

MEDIA EXPERIENCE:

"The Big Picture" The Vera Bradley Foundation for Breast Cancer Magazine (June 2010)

"Researcher aims to make cancer easy to find" Interview for Indianapolis Star Biz Buzz (December 2009) www.IndyStar.com/BizBuzz

"Vera Bradley essential to breast cancer fight" Fort Wayne Journal Gazette (November 2009)

Gave an interview regarding research on Breast Cancer for the nationally syndicated radio program *"The Lia Show"* (September 2009)

"DNA Model, DNA Machine" Indiana University Research and Technology Corporation ad campaign (Fall 2009)

"Breast Cancer Myths Debuked" Interview for Vera Bradley Foundation for Breast Cancer (July 2009)

"Personal Mission" Guidepost (October 2008)

"Tech stars: Mira Awards recognize innovators who are putting technology to work in Indiana" Indiana Business (July 2008)

"CS-Keys prepares for new VC funds" Indianapolis Star (January 2008)

"Extraordinary as the Stars: Cancer Research Shows Promise" iberkshires.com (March 2007)

"Married to research – and to each other" Indianapolis Star (December 2006)

"Fighting breast cancer" Fort Wayne Journal Gazette (December 2006)

"IU researchers discover breast cancer marker" Indianapolis Star (December 2006)

"A Company formed by Indiana University Researchers has Received a Significant Seed Investment Fund for Triathlon Medical Ventures" Triathlon Medical Ventures (July 2006)

"CS-Keys receives investment" American Venture Magazine (July 2006)

"Discovering Cancer at Its Earliest Stages" Indiana University Life Sciences (July 2006)

"New Gift Awarded to IU Cancer Center" IU Home Pages (June 2006)

"Another Successful Vera Bradley Classic" News Report for Wayne TV News Channel (June 2006)

"Business of Health" TV interview for Inside Indiana Business with Gerry Dick

"Vera Bradley endows \$6.8 million to IU Cancer Center" Indiana Daily Student (June 2006)

"BioCrossroads Ponies Up Funding For Indiana Breast Cancer Research" Midwest Technology Business News (June 2006)

“Worthy Purse Strings Tie Vera Bradley Foundation \$6.8 M gift to IU Cancer Center” Indiana University Media Relations (June 2006)

“Indiana Seed Fund Invests in Breast Cancer Research Company” Inside Indiana Business News Report (June 2006)

“IU’s life sciences expertise on display at BIO 2006” Indiana University Media Relations (April 2006)

“IU Life Sciences and Breast Cancer Research” TV interview and newsletter for Gerry Dick’s Inside Edge (2005)

“Fighting Cancer Through Research” <http://advancing.indiana.edu/minds/malkas.shtml> (2005)

“Technology Transfer: Bringing Life Sciences and Information Technology Discoveries to Market” IU Research and Technology Corporation (IURTC) Annual Report (2005)

Radio interview on the PBS WFYI show *“Sound Medicine”* with Barbara Lewis (January 2005)

“Improving Lives through Life Science Research”, Indiana University News (January 2005)

Radio interview on the PBS WFYI show *“Sound Medicine”* with Barbara Lewis (October 2004)

“Personalized treatment goal of IU breast cancer study funded by \$10 million dollar DoD grant”, EurekAlert! (April 2004)

TV interview with Rob Young for *Comcast Newsmakers* (April 2004)

TV interview with Kaylyn Easton for Indiana high school show (January 2004)

TV interview with Gerry Dick for WFYI (September 2003)

“Women and Cancer,” participated as a panel member in a call-in forum of this PBS program (June 2003).

“Standing United in the Fight Against Cancer”, Report to the Indiana Elks State Convention, (June 2003)

“Hope on Horizon for Beating Breast Cancer”, House Call section of Indiana Alumni Magazine, Vol. 65 (5):15, (May/June 2003)

“Vera Bradley Foundation Pledges \$2 Million for Biomarker Research Program”, Press Release, (April 17, 2003)

Dialog section of the magazine *Indianapolis Monthly*, Vol. 26 (2):34, (October 2002).

“Revealing Hidden Cancer is IU Scientist’s Mission”, a newspaper article in the *Indianapolis Star*, Indianapolis, IN, Cover page, (May 10, 2002)

“IU Researcher to Conduct Cancer Study”, a newspaper article in the Bedford Daily Times Mail, Lawrence County, IN, C-14,200, (May 10, 2002)

“IU Researcher to Conduct Study on Cancer Detection”, a newspaper article in the Shelbyville News, Shelby County, IN, C-11,500, (May 10, 2002)

“IU Researcher Studies Early Cancer Detection”, a newspaper article in the Madison Courier, Jefferson County, IN, C-10,000, (May 10, 2002)

“IU Researcher to Conduct Study on Early Detection of Cancer”, a newspaper article in the Sullivan Daily Times, Sullivan County, IN, C-4800, (May 10, 2002)

“IU Researcher to Conduct Study on Early Detection”, a newspaper article in the Clinton Clintonian, Vermillion County, IN, C-5460, (May 10, 2002)

“IU Researcher to do Study on Early Cancer Detection”, a newspaper article in the New Castle Courier Times, Henry County, IN, C-12,500, (May 10, 2002)

“IU Researcher to Conduct Study on Early Breast Cancer Detection”, a newspaper article in The Times Frankfort, Clinton County, IN, C-7100, (May 10, 2002)

“IU Researcher to Conduct Study on Early Detection”, a newspaper article in the Columbia City Post & Mail, Whitley County, IN, C-5000, (May 11, 2002)

“Early Detection Studies Ongoing at IU”, a newspaper article in the Michigan City News Dispatch, LaPorte County, IN, C-16,500 (Dly & Sun), (May 11, 2002)

“IU Researcher’s Study of Proteins Could Lead to Simple Lab Test for Breast Cancer”, a newspaper article in the Ft. Wayne News Sentinel, Allen County, IN, C-53,000, (May 11, 2002)

“IU Researcher to Study Early Cancer Detection”, a newspaper article in the South Bent Tribune, St. Joseph County, IN, C-90,943 (Daily), C-128,502 (Sun), (May 11, 2002)

“IU Researcher Plans Study on Early Cancer Detection”, a newspaper article in the Richmond Palladium Item, Wayne County, IN, C-19,547 (Daily), C-23,441 (Sun), (May 11, 2002)

“Researcher to Study Early Cancer Detection”, a newspaper article in the Muncie Star Press, Delaware County, IN, C-37, 5000 (Daily), C-42,000 (Sun), (May 11, 2002)

“IU Researcher Leading Cancer Detection Study”, a newspaper article in the Ft. Wayne Journal Gazette, Allen County, IN, C-60,000 (Daily), C-132,000 (Sun), (May 12, 2002)

“Researcher Working to Develop Early Breast Cancer Detection”, a newspaper article in the Goshen News, Elkhart County, IN, C-17,349, (May 12, 2002)

“Many Paths, One Goal: Eliminating Breast Cancer,” Indiana University Medicine Magazine, (Spring 2002)

“Trustees Approve Two Endowed Chairs”, IU School of Medicine Scope, (April 29, 2002), Vol. 6 (17), Indianapolis, IN.

- “Proteomics in Breast Cancer Research,”* Sound Medicine, WFYI Public Radio (April 27, 2002)
- “The Next Screening Frontier?”* an article in MAMM magazine, Vol. 3(3) (January 2001), includes comments made by me about the importance of developing biomarkers for early detection of cancer.
- “Bringing Cancer Markers to Market,”* an article published in the TECHGAZETTE (October 1999) describing our efforts to start a biotech company to develop a test-kit for cancer.
- “Cancer Research,”* a taping for the television show Frontiers in Medicine. An interview in which I describe my laboratory’s cancer research work and its potential long-term implications for future cancer diagnosis and treatment. (Aired in 1999).
- “Powerful New Marker for Breast Cancer Diagnosis; Scientists Discover Cellular Machinery Causing Genetic Mutations in Cancer Cells,”* news releases made by the Science Daily and Reuters news services (1998).
- “University of Maryland School of Medicine,”* a brochure describing the research and education missions of the school in which I am depicted. (1996)
- “Winter 1995-96 Bulletin,”* A publication of the University of Maryland Medical Alumni Association that, among its reports, describes the opening of the Health Sciences Facility research building. I am depicted and described as one of researchers that occupy the new building.
- “Bringing Research To Life,”* a video that was produced by Video Press at the University of Maryland, Baltimore for the opening of the new Health Sciences Facility research building. The concept of the video was to demonstrate how research affects the lives of the people of Maryland. I was interviewed for the video, along with four other scientists at the University, on the importance of research and what the new facility meant to the treatment and cure of disease. (1995)
- “Scientist Exhorts Students to Live Their Dreams,”* A report published in the Berkshire Eagle describing a talk I presented to high school students on the challenges and thrills that await the scientists of the future. (1995)
- “Super Scientist,”* a video that was produced by Mentor Media, Inc. as a prototype for a series that was aimed at promoting the pursuit of science careers to young girls between the ages of 9-12 years. The video describes how I became interested in science and how I went about preparing myself for my career. (1995)
- “University of Maryland Cancer Center 1994 Annual Report,”* contains an interview in which I describe my laboratory’s research work and its role in understanding the development and treatment of cancer.
- “The Importance of Research,”* American Cancer Society, Maryland Division, Inc. Newsletter (February 1993), announcement of the awarding of a research grant to me and a discussion of the impact basic research has on the treatment of cancer.

"Picking Professors in Pairs," an interview given to The Washington Post in 1992 on the difficulties of married scientists to find academic positions together.