

**UNIVERSITY OF OKLAHOMA
COLLEGE OF MEDICINE**

CURRICULUM VITAE

Doris Mangiaracina Benbrook, BA, PhD

Professor, Department of Obstetrics & Gynecology
Section of Gynecologic Oncology
Co-Director, Center for Chemoprevention and Drug Development, Stephenson Cancer Center
Biomedical Research Center 1217A
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Appointment Type: Tenured

EDUCATION AND TRAINING

Postgraduate Education and Training

- | | |
|-------------|--|
| 1988 - 1991 | Research Fellow, Integration of CREB and AP1 Transcription Factors in Cancer, Imperial Cancer Research Fund (Cancer Research UK), London, UK
Mentor: Nicholas C Jones, PhD |
| 1985 - 1988 | Postdoctoral Fellow, Nuclear Receptor Transcription Factors in Cancer, La Jolla Cancer Research Institute (Burnham Institute), La Jolla, CA, USA
Mentor: Magnus Pfahl, PhD. |

Education

- | | |
|-------------|---|
| 1981 - 1985 | Doctor of Philosophy, Biochemistry
Loyola University Medical Center, Maywood, IL, USA
"Effects of Norfloxacin on Pseudomonas aeruginosa and its DNA Gyrase"
Advisor: Robert V. Miller, PhD |
| 1977 - 1981 | Bachelor of Arts, Biology and Chemistry Majors, German Minor
North Central College, Naperville, IL, USA |

PROFESSIONAL EXPERIENCE

Academic

- | | |
|----------------|--|
| 2018 - Present | Adjunct Professor, Pathology, Medicine |
| 2013 - Present | Adjunct Professor, Pharmaceutical Sciences, Pharmacy, University of Oklahoma, Oklahoma City, OK, USA |
| 2011 - Present | Adjunct Professor, Genetic Counseling, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA |
| 2010 - Present | Adjunct Professor, Clinical and Translational Sciences, Graduate College, University of Oklahoma, Oklahoma City, OK, USA |
| 2010 - Present | Adjunct Professor, Clinical and Translational Sciences, Graduate College |

2004 - Present Tenured Full Professor, Gynecologic Oncology, Obstetrics and Gynecology, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA

1993 - Present Graduate Faculty, OUHSC Graduate College, University of Oklahoma, Oklahoma City, OK, USA

2005 - 2013 Adjunct Professor, Biochemistry and Molecular Biology, College of Medicine, University of Oklahoma, Oklahoma City, USA

1997 - 2005 Adjunct Associate Professor, Biochemistry and Molecular Biology, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA

1997 - 2004 Associate Professor, Gynecologic Oncology, Obstetrics and Gynecology, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA

1993 - 1997 Adjunct Assistant Professor, Biochemistry and Molecular Biology, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA

1991 - 1996 Assistant Professor, Gynecologic Oncology, Obstetrics and Gynecology, College of Medicine, University of Oklahoma, Oklahoma City, OK, USA

Administrative

2016 - Present Co-Director Gynecologic Cancers Program, Stephenson Cancer Center

2014 - Present Co-Director, Center for Chemoprevention and Drug Development, Stephenson Cancer Center, University of Oklahoma Health Sciences Center, Oklahoma City

1993 - Present Director of Research, Gynecologic Oncology, Obstetrics and Gynecology, College of Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, USA

2011 - 2014 Co-Director, Women's Cancer Program, Stephenson Cancer Center

2007 - 2009 Director, Women's Cancer Program, University of Oklahoma Cancer Institute

2006 - 2009 Co-Chair, Scientific Advisory Committee, Stephenson Cancer Center

2002 - 2009 Co-Director, Gynecologic Cancer Program, Stephenson Cancer Center

1996 - 2003 Research Tuberculosis Coordinator, Obstetrics and Gynecology, University of Oklahoma

1995 - 2003 Environmental Health & Safety Coordinator, Obstetrics and Gynecology, University of Oklahoma

1994 - 2003 Administration Liaison, Obstetrics and Gynecology, University of Oklahoma

2002 Faculty Affair Liaison, University of Oklahoma

HONORS AND AWARDS

Woman of the Year - 50 Making a Difference, the Journal Record (Received), 2016

North Central College Sequicentennial Medal, North Central College (Received), 2011

Innovator of the Year, the Journal Record (Received), 2010

Endowed Chair in Gynecologic Oncology, University of Oklahoma Health Sciences Center (Received), 2009

First Place for best business plan, Oklahoma Governors Cup Competition (Received), 2009

Second Place for best business plan, W. Reynolds Tri-State Collegiate Business Plan competition (Received), 2009

Innovator of the Year on the Brink Award, the Journal Record (Received), 2005

Oklahoma Scientist of the Year, the Oklahoma Academy of Science (Received), 2004

Woman of the Year - 50 Making a Difference, the Journal Record (Received), 2004

SCHOLARSHIP

Contracts, Grants, and Sponsored Research

* indicates mentee

Current

Grants

Benbrook, D. M. (Principal Investigator), "cGMP NSC 721689 Production for IRB-approved and NCI-funded Clinical Trials," Sponsored by NCI PREVENT, Federal
Grant/Contract Number: 721689
February 10, 2015 - Present

Mannel, R. S. (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Oklahoma Tobacco Settlement Endowment Trust (TSET)," Sponsored by State of Oklahoma, State
Current Funding (Total Cost per Year): \$5,500,000.00
Additional Information: The purpose of this project is to establish the TSET Cancer Research Program to advance translational, clinical and population-based cancer research and serve to enhance efforts to prevent and combat cancer.
July 1, 2013 - Present

Stoner, J. (Co-Principal Investigator), Houchen, C. (Co-Principal Investigator), **Benbrook, D. M.** (Course Director), "Addressing Health Disparities among Oklahoma Minority and Rural Communities through Clinical Research Education and Career Development"
Grant/Contract Number: NIH/NIMHD 1R25MD011564-01
Additional Information: The overall goal is to enhance clinical research methods expertise and research careers among underrepresented researchers focused on health disparities and minority health.
September 9, 2017 - May 31, 2022

Benbrook, D. M. (Principal Investigator), 30% Effort, Rao, C. (Co-Principal Investigator), Zuna, R. (Co-Investigator), Garcia-Contreras, L. (Co-Principal Investigator), Woo, S. (Co-Principal Investigator), Zhao, D. (Co-Investigator), Frumovitz, M. (Co-Principal Investigator), Coleman, R. (Co-Principal Investigator), "Targeting HPV Consequences in a Cervical Cancer Clinical Trial," Peer-reviewed, federally-funded research grant, Sponsored by NIH/NCI, Federal
Grant/Contract Number: R01 CA200126/C3111201
Current Funding (Total Cost per Year): \$595,072.00
Total Direct Costs: \$425,303.00
Additional Information: TOTAL FEDERAL DC \$425,303 (Year 2) \$326,447 (Year 2) \$264,408 (Year 3) \$264,107 (Year 4) \$234,389 (Year 5)

TOTAL COST \$595,072 (Year 1) \$425,061 (Year 2) \$391,324 (Year 3) \$390,879 (Year4) \$346,896
June 1, 2016 - May 31, 2022

Benbrook, D. M. (Co-Investigator), 1% Effort, Miles, P. (Co-Investigator), Wu, D. (Co-Investigator),
"Iron Status at Perimenopause: Effects on Brain and Behavior," Sponsored by NIH, Federal
Grant/Contract Number: R21 ES027909
Current Funding (Total Cost per Year): \$137,500.00
Total Direct Costs: \$275,000.00
September 1, 2018 - July 31, 2020

Hays, F. A. (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Deciphering
ShcA-mediated ROS Production as a Novel Intervention Strategy in Diabetes Therapy," Sponsored
by NIH/GMI, Federal
Grant/Contract Number: R01 GM118599
Additional Information: The goal is to decipher the mechanism of how Shc proteins regulate
reactive oxygenation species in cells and apply the results toward developing novel therapies for
treatment of diabetes
July 1, 2016 - June 30, 2020

Benbrook, D. M. (Principal Investigator), 40% Effort, Rao, C. (Co-Investigator), Janakiram, N.
(Co-Investigator), Garcia-Contreras, L. (Co-Investigator), Woo, S. (Co-Investigator), Zuna, R.
(Co-Investigator), Crouse, E. (Co-Investigator), "Ovarian Cancer Chemoprevention," Peer-reviewed
Nationally-funded Research Grant, Sponsored by National Cancer Institute, Federal
Grant/Contract Number: R01 CA196200/C31042101
Current Funding (Total Cost per Year): \$503,992.00
Total Direct Costs: \$340,535.00
Additional Information: Budget Year 1 Year 2 Year 3 Year 4 Year 5
TOTAL FEDERAL DC \$413,410 (Year 1) \$340,535 (Year 2) \$337,990 (Year 3) \$314,736 (Year 4)
\$264,486 (Year 5)
TOTAL COST \$611,847 (Year 2) \$503,992 (Year 2) \$500,225 (Year 3) \$465,809 (Year 4)
\$391,439 (Year 5)
July 1, 2015 - June 30, 2020

Benbrook, D. M. (Co-Investigator), 3% Effort, You, Y. (Co-Investigator), "NIR-activatable Prodrugs
for treating peritoneally metastasized ovarian cancers," Peer-reviewed, federally-funded research
grant, Sponsored by National Cancer Institute, Federal
Grant/Contract Number: 1R01GM113940/C3101802
Current Funding (Total Cost per Year): \$205,000.00
Total Direct Costs: \$303,400.00
March 1, 2015 - April 28, 2020

Benbrook, D. M. (Principal Investigator), Chandra, V. (Co-Principal Investigator), Rai, R.
(Co-Principal Investigator), "Chemoprevention of Endometrial Hyperplasia and Its Transition to
Endometrial Cancer with NSC 721689," Sponsored by NCI PREVENT Program, Federal
2017 - 2019

Benbrook, D. M. (Principal Investigator), "Ovarian Cancer Chemoprevention," Sponsored by NCI
PREVENT Program, Federal
2015 - 2019

Garcia-Contreras, L. (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), 2% Effort,
"OHet72: A Potential New Drug in the Armamentarium against TB and MDR-TB," Sponsored by
Oklahoma Center for Respiratory & Infectious Diseases, Other Academic Institution
Current Funding (Total Cost per Year): \$35,000.00
October 26, 2018 - June 30, 2019

Benbrook, D. M. (Co-Investigator), 3% Effort, Woo, S. (Principal Investigator), "Overcoming resistance to anti-VEGF therapy with predictive modeling," Peer-reviewed, federally-funded research grant, Sponsored by American Cancer Society, Federal
Grant/Contract Number: C5092601
July 1, 2016 - June 30, 2018

Benbrook, D. M. (Co-Principal Investigator), Garcia-Contreras, L. (Co-Principal Investigator), "Development of SHetA2 vaginal suppositories for treatment of cervical dysplasia," Moonshot Program, Sponsored by MD Anderson Cancer Center, Non-Profit
June 1, 2015 - September 1, 2017

Professional Service Agreements

Rao, C. (Principal Investigator), 5% Effort, **Benbrook, D. M.** (Co-Principal Investigator), 5% Effort, "PREVENT Preclinical Drug Development Program," PREVENT Cancer Preclinical Drug Development Program: Preclinical Efficacy and Intermediate Endpoint Biomarkers, Sponsored by NIH National Cancer Institute, Federal
Grant/Contract Number: N01CN77019-18/75N91019D00020
Additional Information: This is a Prime Contract, indefinite delivery/indefinite quantity (IDIQ) agreement which allows us to compete for government contracts called "Task Orders" to conduct preclinical cancer research.
January 25, 2019 - January 24, 2024

Benbrook, D. M. (Project Director), Chandra, V. (Co-Project Director), Rai, R. (Co-Project Director), Rao, C. (Principal Investigator), "Chemoprevention of Endometrial Hyperplasia and Its Transition to Endometrial Cancer with NSC 721689," Sponsored by NCI PREVENT Program, Federal
June 16, 2017 - June 14, 2019

Benbrook, D. M. (Principal Investigator), 7.2% Effort, Janakiram, N. (Co-Principal Investigator), "Ovarian Cancer Chemoprevention," Research Contract, Sponsored by NIH/NCI/PREVENT Program, Federal
Grant/Contract Number: HHSN261201500038I
Current Funding (Total Cost per Year): \$380,847.00
Total Direct Costs: \$257,329.00
Additional Information: The goals are to establish a genetically engineered mouse model of high grade serous ovarian cancer for use in chemoprevention studies, test the effects of NSC 721689 on development of premalignant lesions and invasive cancer and to develop pharmacodynamics assays to monitor the effects of NSC 721689.
September 24, 2015 - February 23, 2019

Completed

Clinical Trial Agreements

Benbrook, D. M. (Study Co-Chair), Gold, M. A. (Study Chair), Cummings, R. (Study Co-Chair), Rodgers, W. (Study Co-Chair), "Comparison of Glycoprotein Expression and T-Synthase Function in Primary versus Metastatic Tumors," Sponsored by Gynecologic Oncology Group, Foundation
Grant/Contract Number: COG - 0221
April 13, 2007 - August 24, 2017

Benbrook, D. M. (Collaborator), Powell, M. (Study Chair), "A Phase II evaluation of Brivanib (BMS582664), an oral, multitargeted growth factor tyrosine kinase inhibitor in the treatment of recurrent or persistent endometrial carcinoma," Sponsored by Gynecologic Oncology Group (GOG) Protocol #02291, Foundation

Grant/Contract Number: GOG-0229I
July 6, 2009 - July 16, 2016

Benbrook, D. M. (Translational Research Chair), McMeekin, S. (Study Chair), "A Phase II evaluation of thalidomide in the treatment of recurrent or persistent carcinosarcoma of the uterus," Sponsored by Gynecologic Oncology Group, Foundation
Grant/Contract Number: NCT00025506
January 27, 2003 - May 27, 2015

Benbrook, D. M. (Scientific Collaborator), Usha, L. (Study Chair), "A Phase II Evaluation of Enzastaurin in the Treatment of Persistent or Recurrent Epithelial Ovarian or Primary Peritoneal Carcinoma," Sponsored by Gynecologic Oncology Group, Foundation
Grant/Contract Number: NCT00420381
January 11, 2007 - March 30, 2015

Benbrook, D. M. (Collaborator), Copeland, L. (Study Chair), "A randomized Phase III trial of maintenance chemotherapy comparing 12 monthly cycles of single agent paclitaxel or CT-2103 (IND#70177) versus no treatment until documented relapse in women with advanced ovarian, primary peritoneal or fallopian tube cancer who achieve a complete clinical response to primary platinum/taxane chemotherapy," Sponsored by Gynecologic Oncology Group (GOG) Protocol #0212, Foundation
Grant/Contract Number: NCT00108745
April 19, 2005 - January 13, 2014

Benbrook, D. M. (Translational Research Chair), Hurteau, J. A. (Study Chair), "A randomized study of tamoxifen versus thalidomide in patients with biochemical-recurrence-only epithelial ovarian cancer, cancer of the fallopian tube, and primary peritoneal cancer after first line chemotherapy," Sponsored by Gynecologic Oncology Group, Foundation
Grant/Contract Number: NCT00041080
January 27, 2003 - September 16, 2013

Benbrook, D. M. (Translational Research Chair), Rader, J. (Study Chair), "A randomized Double-Blind Phase II Trial of Celecoxib, a Cox 2 Inhibitor, in the Treatment of Patients with Cervical Intraepithelial Neoplasia 3 (CIN3)," Sponsored by Gynecologic Oncology Group (GOG) Protocol #0207, Foundation
June 2005 - September 2012

Benbrook, D. M. (Collaborating Scientist), Method, M. (Study Chair), "A Randomized, Controlled Phase II Evaluation of Megestrol in Different Dose and Sequence in the Treatment of Endometrial Intraepithelial Neoplasia (EIN) From a Referred Cohort of Atypical Endometrial Hyperplasia (AEH) or EIN," Sponsored by Gynecologic Oncology Group, Protocol #0224, Foundation
Grant/Contract Number: NCT00503581
July 2007 - July 2012

Benbrook, D. M. (Translational Research Chair), McMeekin, S. (Study Chair), "A Phase II evaluation of thalidomide in the treatment of recurrent or persistent leiomyosarcoma of the uterus," Sponsored by Gynecologic Oncology Group, Foundation
Grant/Contract Number: GOG Protocol 231-B
2007

Benbrook, D. M. (Research Scientist), McMeekin, S. (Principal Investigator), "Phase II Trial of Gleevec (Imatinib Mesylate formerly known as STI571) in Patients with CD1q17(+) Gynecologic Malignancies," Sponsored by Novartis Pharmaceutical through PRA International, Private
Total Direct Costs: \$65,882.00
November 1, 2002 - October 31, 2004

Benbrook, D. M. (Scientific Collaborator), Markman, M. (Study Chair), "A Randomized Phase III trial of maintenance chemotherapy comparing 12 monthly cycles of single agent paclitaxel or Xyotax (CT-2103) (IND#70177) versus no treatment until documented relapse in women with advanced ovarian or primary peritoneal cancer who achieve a complete clinical response to primary platinum/Taxane chemotherapy," Sponsored by Gynecologic Oncology Group, Foundation 2001 - 2003

Benbrook, D. M. (Translational Research Chair), McMeekin, S. (Study Chair), "A Phase II evaluation of thalidomide in the treatment of recurrent or persistent endometrial carcinoma," Sponsored by Gynecologic Oncology Group, Foundation August 2001 - July 2002

Grants

Wenger, M. (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Memory Consolidation and Cerebral Oxygenation in Elders with Mild Cognitive Impairment," Sponsored by Norman Faculty Investment Program, Norman Research Council, The University of Oklahoma (Institutional) Total Direct Costs: \$15,000.00 2014 - 2017

Garcia-Contreras (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Inhalable Microparticle SHetA2 Nanocrystals for Lung Cancer Treatment," Sponsored by Presbyterian Health Foundation, Foundation Total Direct Costs: \$100,000.00 Additional Information: The goals are to optimize the manufacture of SHetA2 nanocrystals and subsequently into inhalable microparticles, and to develop an inhalation nanocrystal powder formulation, and establish the superiority of the pulmonary route to achieve therapeutic SHetA2 concentrations in the lungs. July 1, 2016 - August 30, 2017

Benbrook, D. M. (Co-Principal Investigator), Garcia-Contreras (Co-Principal Investigator), "Development of SHetA2 vaginal suppositories for treatment of cervical dysplasia," Sponsored by MD Anderson Moonshot Program, Non-Profit Total Direct Costs: \$30,000.00 May 15, 2015 - August 1, 2017

Summers (Principal Investigator)*, **Benbrook, D. M.** (co-Mentor), "Retinoic Acid Synthesis in Visually Guided Eye Growth," Sponsored by NIH/EY, Federal Grant/Contract Number: 1 F31 eY 025168-01A1 Additional Information: The goals are to study the synthesis and role of retinoic acid in visually guided eye growth July 1, 2015 - June 30, 2017

You, Y. (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "NIR-activatable Prodrugs for Testing Peritoneally Metastasized Ovarian Cancers," Sponsored by NIH/NIGMS, Federal Grant/Contract Number: 1R01GM113940-01 Total Direct Costs: \$205,000.00 Additional Information: The goals are to explore delivery methods and optimize a targeting strategy for the treatment of peritoneal ovarian cancers with a prodrug strategy for a synergistic combination of photodynamic therapy. March 1, 2015 - January 31, 2016

Benbrook, D. M. (Principal Investigator), "Optimizing targeting strategy for delivering NIR-activatable prodrugs to peritoneally metastasized ovarian cancers," Sponsored by Presbyterian Health Foundation/OUHSC Bridge Grant, Foundation

Total Direct Costs: \$75,000.00
March 1, 2015 - January 31, 2016

Garcia-Contreras (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Inhaled SHetA2 dry powder aerosols as novel treatment for tuberculosis," Sponsored by Presbyterian Health Foundation/OUHSC Seed Grant, Foundation

Total Direct Costs: \$45,000.00
October 1, 2014 - September 30, 2015

Benbrook, D. M. (Principal Investigator), "Sensitization of Ovarian Cancer to DR5 Agonists," Sponsored by Presbyterian Health Foundation/OUHSC Bridge Grant, Foundation

Total Direct Costs: \$75,000.00
October 1, 2014 - September 30, 2015

Guaderes (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Correlates of Quality of Life, Biomarkers, and Physical Activity in Older Women with Ovarian Cancer who Experience Chemotherapy-Induced Peripheral Neuropathy Pain (CIPN)," Sponsored by Reynold Center of Geriatric Nursing Excellence Interdisciplinary Seed Grants, Foundation

Total Direct Costs: \$30,000.00
September 1, 2014 - August 31, 2015

Craft (Principal Investigator), **Benbrook, D. M.** (Co-Investigator), "Descriptive Study of Cognitive Disturbances in Older Breast Cancer Survivors," Sponsored by Reynold Center of Geriatric Nursing Excellence Interdisciplinary Seed Grants, Foundation

Total Direct Costs: \$30,000.00
September 1, 2014 - August 31, 2015

Benbrook, D. M. (Co-Principal Investigator), Ozpolant (Co-Principal Investigator), "Autophagy in Ovarian Cancer Therapeutics and Tumor Microenvironment," Sponsored by MD Anderson Cancer Center/Stephenson Cancer Center, Non-Profit

Total Direct Costs: \$45,000.00
2013 - 2014

Akins, D. (), **Benbrook, D. M.** (Mentor of Wei-Qun Ding's Faculty Award), "Oklahoma INBRE (IDeA Network of Biomedical Research Excellence)," Sponsored by NIH/NCRR, Federal Grant/Contract Number: P20RR016478

Total Direct Costs: \$13,312,160.00
Additional Information: \$20,000 for percent effort over 4 years
2009 - 2014

Benbrook, D. M. (Principal Investigator), "A Phase II Evaluation of Enzastaurin in the Treatment of Persistent or Recurrent Epithelial Ovarian or Primary Peritoneal Carcinoma," Sponsored by Gynecologic Oncology Group (GOG), Foundation

Total Direct Costs: \$17,279.00
2007 - 2014

Benbrook, D. M. (Co-Principal Investigator), Hays, F. A. (Co-Principal Investigator), "Therapeutic Targeting of HSP70 Chaperones in Cancer Drug Discovery," Sponsored by Stephenson Cancer Center Experimental Therapeutics Program Grant

Total Direct Costs: \$25,000.00
2013

Benbrook, D. M. (Principal Investigator), "Heat Shock Proteins and Stress in Cancer Prevention," Sponsored by OUHSC Vice President of Research (VPR) Bridge Grant Program, The University of Oklahoma (Institutional)

Total Direct Costs: \$60,000.00
July 1, 2012 - June 30, 2013

Benbrook, D. M. (Principal Investigator), "Translational Research of GOG2291 Phase II trial of Brivnab for Persistent or Recurrent Endometrial Cancer," Sponsored by Gynecologic Oncology Group (GOG) NIH/NCI, Federal
Total Direct Costs: \$20,000.00
July 1, 2012 - June 30, 2013

Benbrook, D. M. (Co-Investigator), Kelly (Principal Investigator), "Probing the Interactions of SHetA2 and Hsp70 Mortalin: A new route for Flex-Het Anticancer Activity?," Sponsored by Oklahoma IDeA Network of Biomedical Research Excellence (INBRE) NIH/NCRR, Federal
Grant/Contract Number: P20RR016478
Total Direct Costs: \$50,000.00
April 1, 2012 - March 31, 2013

Benbrook, D. M. (Co-Investigator), Rundle (Principal Investigator), "Structure Activity Relationship Studies to Develop Improved Cancer Drugs," Sponsored by Oklahoma IDeA Network of Biomedical Research Excellence Collaborative Grant, Federal
Total Direct Costs: \$49,919.00
April 1, 2012 - March 31, 2013

Benbrook, D. M. (Principal Investigator), "Flex-Het Treatment for Polycystic Kidney Disease," Sponsored by University of Oklahoma Growth Fund, The University of Oklahoma (Institutional)
Total Direct Costs: \$50,000.00
2009 - 2011

Benbrook, D. M. (Principal Investigator), "Flexible Heteroarotinoids for Chemoprevention," Sponsored by Rapid Access to Preventative Intervention Development (RAPID)/NCI, Federal
2007 - 2011

Benbrook, D. M. (Principal Investigator), "Mechanism of SHetA2 in Ovarian Cancer," Sponsored by NCI/NIH (R01), Federal
Total Direct Costs: \$987,500.00
June 1, 2005 - May 31, 2010

Benbrook, D. M. (Principal Investigator), "Bringing OU Research to New Dimensions with Multiplex Technologies," Sponsored by Presbyterian Health Foundation - Equipment Grant, Federal
Total Direct Costs: \$50,000.00
September 1, 2008 - August 31, 2009

Benbrook, D. M. (Collaborator), Hanigan, M. H. (Parent Grant), Dozmorov, I. (Principal Investigator), "Search for the Potential Targets for the Prevention of Carcinogenesis," Sponsored by American Cancer Society, Non-Profit
Total Direct Costs: \$25,000.00
July 1, 2008 - June 30, 2009

Benbrook, D. M. (Co-Investigator), Moore, K. (Principal Investigator), "The Role of Ribonucleotide Reductase Regulatory Subunit 1 (RRM1) and Excision Repair Cross Complementation Group 1 (ERCC1) in Determining Chemosensitivity for Advanced Ovarian Cancer," Sponsored by Gynecologic Cancer Foundation, Foundation
Total Direct Costs: \$50,000.00
2007 - 2008

Benbrook, D. M. (Co-Director of Women's Cancer Program), Ozer, H. (Principal Investigator), "Cancer Center Planning Grant (P20)," Sponsored by NCI Program Planning Grant for NCI Cancer Research Centers, Federal
Total Direct Costs: \$925,084.00
July 1, 2002 - June 30, 2008

Benbrook, D. M. (Collaborator), Rundle, D. (Principal Investigator), "Effects of heteroarotinoids on PKC activation and apoptosis in ovarian carcinoma organotypic cultures," Sponsored by University of Central Oklahoma Basic Research Grant to Faculty, State
Total Direct Costs: \$10,000.00
June 1, 2007 - May 31, 2008

Benbrook, D. M. (Collaborator), Kelly, W. (Principal Investigator), "Investigations of SHetA2 mediated Mitochondrial changes," Sponsored by Oklahoma IDeA Network of Biomedical Research Excellence (INBRE) NIH/NCRR, Federal
Total Direct Costs: \$50,000.00
Additional Information: \$15,383 to Dr. Benbrook
May 1, 2007 - April 30, 2008

Benbrook, D. M. (Collaborator), Cummings, R. (Principal Investigator), "Gene Regulation of Glycan Antigen in Cancer Cells," Sponsored by NCI/NIH, Federal
Total Direct Costs: \$200,000.00
April 1, 2005 - March 31, 2007

Benbrook, D. M. (Principal Investigator), "Lab Analysis for GOG0207 Phase II Trial of Celecoxib for CINIII," Sponsored by Gynecologic Oncology Group, Foundation
Total Direct Costs: \$64,028.00
April 1, 2005 - March 31, 2007

Benbrook, D. M. (Co-Investigator), Goodfellow, P. (Principal Investigator), "A Murine Model of Endometrial Tumorigenesis," Sponsored by National Cancer Institute/National Institutes of Health (R01), Federal
Total Direct Costs: \$74,996.00
April 1, 2004 - March 31, 2007

Benbrook, D. M. (Collaborator), Kelly, W. (Principal Investigator), "Investigations of SHetA2 mediated Mitochondrial changes," Sponsored by Oklahoma IDeA Network of Biomedical Research Excellence (INBRE) NIH/NCRR, Federal
Total Direct Costs: \$50,000.00
Additional Information: \$15,383 to Dr. Benbrook
June 1, 2006 - December 31, 2006

Benbrook, D. M. (Principal Investigator), "SHetA2 will Inhibit Cancer Recurrence Without Retinoid-Associated Toxicities," Sponsored by Rapid Access to Intervention Development (RAID), Federal
Total Direct Costs: \$2,083,000.00
2003 - 2006

Benbrook, D. M. (Principal Investigator), "Steroids and Stem Cells in Carcinogenesis," Sponsored by NCI/NIH (R03), Federal
Total Direct Costs: \$100,000.00
September 30, 2004 - June 30, 2006

Benbrook, D. M. (Principal Investigator), "Mechanism of ER Activation in Thyroid Hormone Administration in Breast Cancer Survivors," Sponsored by Mary Kay Ash Charitable Foundation,

Foundation
Total Direct Costs: \$100,000.00
July 1, 2004 - June 30, 2006

Benbrook, D. M. (Collaborator), Kelly, W. (Principal Investigator), "Investigations of SHetA2 mediated Mitochondrial changes in Human Cancer Organotypic Cultures," Sponsored by Oklahoma INBRE (IDeA Network of Biomedical Research Excellence), State
Total Direct Costs: \$50,000.00
Additional Information: \$15,383 to Dr. Benbrook
June 1, 2005 - December 31, 2005

Benbrook, D. M. (Co-Investigator), Ceresa, B. (Principal Investigator), "Does HPV16 E5 affect EGF Receptor Endocytosis and Signaling?," Sponsored by Oklahoma Center for the Advancement of Science and Technology (OCAST), State
Total Direct Costs: \$100,000.00
July 1, 2003 - June 30, 2005

Benbrook, D. M. (Principal Investigator), "Agreement Using Proxima Technology to Screen Libraries of Recombinant Probes," Sponsored by Proxima Concepts, LTD, London, England, UK, Private
Total Direct Costs: \$6,078.00
December 22, 2004 - May 31, 2005

Benbrook, D. M. (Co-Investigator), McMeekin, S. (Principal Investigator), "Phase II Trial of Gleevac (Imatinib Mesylate Formerly Known as STI571) in Patients with CD1q17(+) Gynecologic Malignancies," Sponsored by Novartis Pharmaceutical through PRA International, Private
Total Direct Costs: \$65,882.00
November 1, 2002 - October 31, 2004

Benbrook, D. M. (Collaborator), Kelly, W. (Principal Investigator), "Is Retinoid Induced Cell Apoptosis Mediated by Superoxide Radical Anion Production," Sponsored by Oklahoma Biomedical Research Infrastructure Network (BRIN) Collaborative Grant, State
Total Direct Costs: \$50,000.00
Additional Information: \$15,383 to Dr. Benbrook
February 1, 2004 - June 30, 2004

Benbrook, D. M. (Principal Investigator), "Analysis for GOG229-B, GOG230-B, GOG-231-B Stage I," Sponsored by Gynecologic Oncology Group, Foundation
Total Direct Costs: \$25,290.00
July 1, 2002 - June 30, 2004

Benbrook, D. M. (Principal Investigator), "Mechanism & Potential of Retinoid & DNA Damage Therapy," Sponsored by NCI/NIH (R01), Federal
Total Direct Costs: \$310,555.00
July 1, 1999 - June 30, 2004

Benbrook, D. M. (Principal Investigator), Lu, S. (Postdoctoral Fellow), "Human Papillomavirus and Epidermal Growth Factor Receptor as Biomarkers of Retinoid Cervix Cancer Chemoprevention," Sponsored by Cancer Research Foundation of America (CRFA) Fellowship, Foundation
Total Direct Costs: \$60,000.00
January 15, 2000 - January 4, 2003

Benbrook, D. M. (Principal Investigator), "Develop and Perform ELISA's for Neo-MS-02 Clinical Trial," Sponsored by NeoPharm, Private

Total Direct Costs: \$72,000.00
May 1, 2000 - June 30, 2002

Benbrook, D. M. (Principal Investigator), "Determination of Retinoid X Receptor Ligand Structure-Function Properties," Sponsored by Procter & Gamble, Private
Total Direct Costs: \$48,000.00
February 1, 2002 - June 15, 2002

Benbrook, D. M. (Collaborator), Glore, S. (Principal Investigator), "Ligand Activation of Peroxisome Proliferator-Activated Receptors in Rodent Mammary Tumor Models," Sponsored by American Institute for Cancer Research (AICR), Non-Profit
Total Direct Costs: \$100,000.00
January 1, 1998 - December 1, 2000

Benbrook, D. M. (Principal Investigator), "Development of Retinoids and Response Biomarkers for Ovarian Cancer," Sponsored by Mary Kay Ash Charitable Foundation
Total Direct Costs: \$90,864.00
Additional Information: \$9,136 Indirect
July 1, 1998 - June 30, 2000

Benbrook, D. M. (Co-Investigator), Nelson, E. C. (Principal Investigator), "Biological Activity of Heteroarotinoids," Sponsored by NCI/NIH (R01), Federal
Total Direct Costs: \$269,761.00
Additional Information: \$124,190 indirect
August 1, 1996 - December 1, 1999

Benbrook, D. M. (Principal Investigator), "Determination of Retinoid Receptor Transactivation Properties," Sponsored by Procter & Gamble, Private
Total Direct Costs: \$8,890.00
July 1, 1999 - September 1, 1999

Benbrook, D. M. (Principal Investigator), "Carotenoid Effects on Transcription and Growth in Tumors," Sponsored by American Institute of Cancer Research, 94A63, Non-Profit
Total Direct Costs: \$10,000.00
Additional Information: \$10,000 Indirect
July 1, 1994 - June 30, 1996

Benbrook, D. M. (Principal Investigator), "Radiation and Retinoid Effects on Cervical Cancer," Sponsored by Presbyterian Health Foundation, Foundation
Total Direct Costs: \$25,000.00
January 1, 1994 - January 1, 1995

Benbrook, D. M. (Principal Investigator), "DNA Binding Specificities of cJun Dimers," Sponsored by National Science Foundation, MCB-9209479, Foundation
Grant/Contract Number: MCB-9209479
Total Direct Costs: \$16,200.00
Additional Information: \$1,800 Indirect
August 1, 1992 - January 31, 1994

Benbrook, D. M. (Principal Investigator), "Retinoids, cJun and Cervical Cancer," Sponsored by Oklahoma Medical Alumni Association, Foundation
Total Direct Costs: \$20,000.00
Additional Information: \$20,000 awarded, \$11,000 accepted due to overlap with other funding
September 1, 1992 - August 31, 1993

Benbrook, D. M. (Principal Investigator), "Retinoids, cJun and Cervical Cancer," Sponsored by Milheim Foundation for Cancer Research, 92-14, Foundation
 Grant/Contract Number: 92-14
 Total Direct Costs: \$14,000.00
 July 1, 1992 - June 30, 1993

Benbrook, D. M. (Principal Investigator), "Repair of an Ultracentrifuge," Sponsored by Presbyterian Health Foundation, Research Equipment Fund, Foundation
 Total Direct Costs: \$5,000.00
 1992

Publications - Peer-Reviewed/Refereed

* indicates Mentee

+ indicates Co-First Author

indicates Contributing Author/Corresponding Author

Scientific/Scholarly Journals

1. **Watts, F. M.**, Pouland, T. *, Bunce, R. A., Berlin, K. D., Benbrook, D. M., Mashayekhi, M., D. B., Zhou, D. (2018). Activity of oxygen-versus sulfur-containing analogs of the Flex-Het anticancer agent SHetA2. *European Journal of Medicinal Chemistry*, 158, 720-732. PMID: 30245396.
2. Virani, N. A., Thavathiru, E. *, McKernan, P., Moore, K., **Benbrook, D. M.**, Harrison, R. G. (2018). Anti-CD73 and anti-OX40 immunotherapy coupled with a novel biocompatible enzyme prodrug system for the treatment of recurrent, metastatic ovarian cancer. *Cancer Letters*, 425, 174-182. PMID: 29574275. DOI: 10.1016/j.canlet.2018.03.027
3. Mahjabeen, S., Hatipagolu, M. K., **Benbrook, D. M.**, Garcia-Contreras, L. (2018). Pharmacokinetics and pharmacodynamics of escalating doses of SHetA2 after vaginal administration to mice. *Journal of Pharmaceutical Sciences*. PMID: 30196041. DOI: 10.1016/j.xphs.2018.08.024
4. Carlson, B. W., Craft, M. A., Carlson, J. R., Deardeuff, K., **Benbrook, D. M.** (2018). Accelerated vascular aging and persistent cognitive impairment in older female breast cancer survivors. *Geroscience*, 40(3), 325-336. PMID: 29804200. DOI: 10.1007/s11357-018-0025-z
5. Mahjabeen, S., Hatipoglu, M. K., **Benbrook, D. M.**, Kosanke, S. D., Garcia-Contreras, D., Garcia-Contreras, L. (2018). Influence of the estrus cycle of the mouse on the disposition of SHetA2 after vaginal administration. *European Journal of Pharmaceutics and Biopharmaceutics: Official Journal of Arbeitsgemeinschaft fur Pharmazeutische Verfahrenstechnik e.V.*, 130, 272-280. PMID: 30064701. DOI: 10.1016/j.ejpb.2018.07.004
6. **Benbrook, D. M.** #, Janakiram, N. B., Chandra, V. *, Pathurib, G., Madk, V., Stratton, N. C., Masamha, C. P. *, Farnsworth, C. N. *, Garcia-Contreras, L., Hatipoglu, M. K., Lightfoot, S., Rao, C. V. (2018). Development of a dietary formulation of the SHetA2 chemoprevention drug for mice. *Investigational New Drugs*, 36(4), 561-570. PMID: 29273857. DOI: 10.1007/s10637-017-0550-0
7. Ramraj, S. K., Smith, K. M., Janakiram, N. B., Toal, C., Raman, A., **Benbrook, D. M.** (2018). Correlation of clinical data with fallopian tube specimen immune cells and tissue culture capacity. *Tissue & cell*, 52, 57-64. PMID: 29857829. DOI: 10.1016/j.tice.2018.04.001
8. Sharma, A., **Benbrook, D. M.**, Woo, S. (2018). Pharmacokinetics and interspecies scaling of a novel, orally-bioavailable anti-cancer drug, SHetA2. *PloS one*, 13(4), e0194046. PMID: 29634717. DOI: 10.1371/journal.pone.0194046
9. Sill, M. W., Beumer, J. H., Lankes, H. A., **Benbrook, D. M.**, Garcia, F., Trimble, C., Thigpen, T.,

- Lieberman, R., Zuna, R. E., Leath, C. A., Spirtos, N. M., Byron, J., Thaker, P. H., Lele, S., Alberts, D., Rader, J. (2017). A stratified randomized double-blind phase II trial of celecoxib for treating patients with cervical intraepithelial neoplasia: The potential predictive value of VEGF serum levels: an NRG Oncology/Gynecologic Oncology Group study. *Gynecologic Oncology*(145), 291-297. PMID: 28285845. DOI: 10.1016/j.ygyno.2017.02.040
10. Sharma, A., Thavathiru, E., **Benbrook, D. M.**, Woo, S. (2017). Bioanalytical Method Development and Validation of HPLC-UV Assay for the Quantification of SHetA2 in Mouse and Human Plasma: Application of Pharmacokinetics Study. *Journal of Pharmaceutical Technology & Drug Research*, 6(2). DOI: 10.7243/2050-120X-6-2
 11. **Janakiram, N. B.**, Mohammed, A., Briant, T., Ritchie, R., Stratton, N., Jackson, L., Lightfoot, S., Benbrook, D. M., Ash, A. S., Lang, M. L., Rao, C. (2017). Loss of natural killer T cells promotes pancreatic cancer in LSL-Kras(G12D/+) mice. *Immunology*, 152, 36-51.
 12. Muhjabeen, S., Hatipoglu, M. K., Chandra, V. *, **Benbrook, D. M.**, Garcia-Contreras, L. (2017). Optimization of a vaginal suppository formulation to deliver SHetA2 as a novel treatment for cervical dysplasia. *Journal of Pharmaceutical Sciences*, 107(2), 638-646. PMID: 28989018. DOI: 10.1016/j.xphs.2017.09.018
 13. Griffith, J., Andrade, D., Mehta, M., Berry, W., **Benbrook, D. M.**, Aravindan, N., Tanaka, T., Herman, T. S., Ramesh, R., Munshi, A. (2017). Silencing BMI1 radiosensitizes human breast cancer cells by inducing DNA damage and autophagy. *Oncology Reports*, 37(4), 2382-2390. PMID: 28260023. DOI: 10.3892/or.2017.5478
 14. Chandra, V., Kim, J. J., **Benbrook, D. M.**, Dwivedi, A., Rai, R. #, Gyeongbuk, G. (2016). Therapeutic options for management of endometrial hyperplasia: An update. *J Gynecol Oncol*, 27(1). PMID: 26463434. DOI: 10.3802/jgo.2016.27.e8
 15. Gunderson, C. C., Ding, K., Dvorak, J., Moore, K., McMeekin, D. S., **Benbrook, D. M.** (2016). The pro-inflammatory effect of obesity on high grade serous ovarian cancer. *Gynecologic Oncology*. PMID: 27423378. DOI: 10.1016/j.ygyno.2016.07.103
 16. Walgama, C., Al Mubarak, Z. H., Zhang, B., Akinwale, M., Pathiranage, A., Deng, J., Berlin, K. D., **Benbrook, D. M.**, Krishnan, S. (2016). Label-free real-time microarray imaging of cancer protein-protein interactions and their inhibition by small molecules. *Analytical Chemistry*, 88(6), 3130-5. PMID: 26886845. DOI: 10.1021/acs.analchem.5b04234
 17. Okon, I. S. *, Ding, Y., Coughlan, K. A., Wang, Q., Song, P., **Benbrook, D. M.**, Zou, M.-H. (2016). Aberrant NRP-1 expression serves as predictor of metastatic endometrial and lung cancers. *Oncotarget*, 7(7), 7970-8. PMID: 26701889. DOI: 10.18632/oncotarget.6699
 18. Chandra, V. *, Kim, J. J., **Benbrook, D. M.**, Dwivedi, A., Rai, R. * (2016). Therapeutic options for management of endometrial hyperplasia. *Journal of Gynecologic Oncology*, 27(1), e8. PMID: 26463434. DOI: 10.3802/jgo.2016.27.e8
 19. Gnanasekaran, K. K., **Benbrook, D. M.**, Nammalwar, B., Thavathiru, E. *, Bunce, R. A., Berlin, K. D. (2015). Synthesis and evaluation of second generation Flex-Het scaffolds against the human ovarian cancer A2780 cell line. *European Journal of Medicinal Chemistry*, 96, 209-17. PMID: 25880346. DOI: 10.1016/j.ejmech.2015.03.070
 20. Ozpolat, B., **Benbrook, D. M.** (2015). Targeting autophagy in cancer management - strategies and developments. *Cancer Management and Research*, 7, 291-9. PMID: 26392787. DOI: 10.2147/CMAR.S34859

21. Powell, M. A., Sill, M. W., Goodfellow, P. J., **Benbrook, D. M.**, Lankes, H. A., Leslie, K. K., Jeske, Y., Mannel, R. S., Spillman, M. A., Lee, P. S., Hoffman, J. S., McMeekin, D. S., Pollock, P. M. (2014). A phase II trial of brivanib in recurrent or persistent endometrial cancer: an NRG Oncology/Gynecologic Oncology Group Study. *Gynecologic Oncology*, 135(1), 38-43. PMID: 25019571. DOI: 10.1016/j.ygyno.2014.07.083
22. **Benbrook, D. M.**, Nammalwar, B., Long, A.* , Matsumoto, H., Singh, A., Bunce, R. A., Berlin, K. D. (2014). SHetA2 interference with mortalin binding to p66shc and p53 identified using drug-conjugated magnetic microspheres. *Investigational New Drugs*, 32(3), 412-23. PMID: 24254390. DOI: 10.1007/s10637-013-0041-x
23. Slaughter, K. N.* , Thai, T. C., Penaroza, S., **Benbrook, D. M.**, Thavathiru, E.* , Ding, K., Nelson, T., McMeekin, D. S., Moore, K. (2014). Measurements of adiposity as clinical biomarkers for first-line bevacizumab-based chemotherapy in epithelial ovarian cancer. *Gynecologic Oncology*, 133(1), 11-5. PMID: 24680585. DOI: 10.1016/j.ygyno.2014.01.031
24. Bishop, E. A.* , Lightfoot, S., Thavathiru, E.* , **Benbrook, D. M.** (2014). Insulin exerts direct effects on carcinogenic transformation of human endometrial organotypic cultures. *Cancer Investigation*, 32(3), 63-70. PMID: 24499106. DOI: 10.3109/07357907.2013.877479
25. **Benbrook, D. M.**, Chambon, P., Rochette-Egly, C., Asson-Batres, M. A. (2014). History of retinoic acid receptors. *Sub-Cellular Biochemistry*, 70, 1-20. PMID: 24962878. DOI: 10.1007/978-94-017-9050-5_1
26. **Benbrook, D. M.**, Guruswamy, S., Wang, Y., Sun, Z., Mohammed, A., Zhang, Y., Li, Q., Rao, C. (2013). Chemoprevention of colon and small intestinal tumorigenesis in APC(min/+) mice by SHetA2 (NSC721689) without toxicity. *Cancer Prevention Research (Philadelphia, Pa.)*, 6(9), 908-16. PMID: 23852423. DOI: 10.1158/1940-6207.CAPR-13-0171
27. Moxley, K. M.* , **Benbrook, D. M.**, Queimado, L., Zuna, R. E., Thompson, D., McCumber, M., Premkumar, P.* , Thavathiru, E.* , Hines, L., Moore, K.* (2013). The role of single nucleotide polymorphisms of the ERCC1 and MMS19 genes in predicting platinum-sensitivity, progression-free and overall survival in advanced epithelial ovarian cancer. *Gynecologic Oncology*, 130(2), 377-82. PMID: 23632208. DOI: 10.1016/j.ygyno.2013.04.054
28. Naylor, M. F., Thompson, D. M., Lightfoot, S., **Benbrook, D. M.** (2013). Anti-Cancer Activities and Interaction of Imiquimod and Flex-Het, SHetA2. *Journal of Cancer Therapy*, 4(6A), 7-19. DOI: 10.4236/jct.2013.46A1002
29. Kabirov, K. K., Kapetanovic, I. M., **Benbrook, D. M.**, Dinger, N., Mankovskaya, I., Zakharov, A., Detrisac, C., Pereira, M., Martín-Jiménez, T., Onua, E., Banerjee, A., van Breemen, R. B., Nikolić, D., Chen, L., Lyubimov, A. V. (2013). Oral toxicity and pharmacokinetic studies of SHetA2, a new chemopreventive agent, in rats and dogs. *Drug and Chemical Toxicology*, 36(3), 284-95. PMID: 22947079. DOI: 10.3109/01480545.2012.710632
30. McMeekin, D. S., Sill, M. W., Darcy, K. M., Abulafia, O., Hanjani, P., Pearl, M. L., Rubin, S. C., Rose, P. G., Small, L., **Benbrook, D. M.** (2012). A phase II trial of thalidomide in patients with refractory uterine carcinosarcoma and correlation with biomarkers of angiogenesis: a Gynecologic Oncology Group study. *Gynecologic Oncology*, 127(2), 356-61. PMID: 22796461. DOI: 10.1016/j.ygyno.2012.07.095
31. **Benbrook, D. M.**, Long, A.* (2012). Integration of autophagy, proteasomal degradation, unfolded protein response and apoptosis. *Experimental Oncology*, 34(3), 286-97. PMID: 23070014.

32. Doppalapudi, R. S., Riccio, E. S., Davis, Z., Menda, S., Wang, A., Du, N., Green, C., Kopelovich, L., Rao, C., **Benbrook, D. M.**, Kapetanovic, I. M. (2012). Genotoxicity of the cancer chemopreventive drug candidates CP-31398, SHetA2, and phospho-ibuprofen. *Mutation Research*, 746(1), 78-88. PMID: 22498038. DOI: 10.1016/j.mrgentox.2012.03.009
33. Ramachandran, I., Thavathiru, E.*, Ramalingam, S., Natarajan, G., Mills, W. K., **Benbrook, D. M.**, Zuna, R. E., Lightfoot, S., Reis, A., Anant, S., Queimado, L. (2012). Wnt inhibitory factor 1 induces apoptosis and inhibits cervical cancer growth, invasion and angiogenesis in vivo. *Oncogene*, 31(22), 2725-37. PMID: 22002305. DOI: 10.1038/onc.2011.455
34. Jiang, H., Taggart, J. E., Zhang, X., **Benbrook, D. M.**, Lind, S. E., Ding, W.-Q. (2011). Nitroxoline (8-hydroxy-5-nitroquinoline) is more a potent anti-cancer agent than clioquinol (5-chloro-7-iodo-8-quinoline). *Cancer Letters*, 312(1), 11-7. PMID: 21899946. DOI: 10.1016/j.canlet.2011.06.032
35. Dozmorov, I. M., Jarvis, J., Saban, R., **Benbrook, D. M.**, Wakeland, E., Aksentijevich, I., Ryan, J., Chiorazzi, N., Guthridge, J. M., Drewe, E., Tighe, P. J., Centola, M., Lefkovits, I. (2011). Internal standard-based analysis of microarray data analysis of functional associations between HVE-genes. *Nucleic Acids Research*, 39(18), 7881-99. PMID: 21715372. DOI: 10.1093/nar/gkr503
36. Zheng, J., **Benbrook, D. M.**, Yu, H., Ding, W.-Q. (2011). Clioquinol suppresses cyclin D1 gene expression through transcriptional and post-transcriptional mechanisms. *Anticancer Research*, 31(9), 2739-47. PMID: 21868515.
37. Usha, L., Sill, M. W., Darcy, K. M., **Benbrook, D. M.**, Hurteau, J. A., Michelin, D. P., Mannel, R. S., Hanjani, P., De Geest, K., Godwin, A. K. (2011). A Gynecologic Oncology Group phase II trial of the protein kinase C-beta inhibitor, enzastaurin and evaluation of markers with potential predictive and prognostic value in persistent or recurrent epithelial ovarian and primary peritoneal malignancies. *Gynecologic Oncology*, 121(3), 455-61. PMID: 21414654. DOI: 10.1016/j.ygyno.2011.02.013
38. **Benbrook, D. M.**, Masamha, C. P.* (2011). The pro-survival function of Akt kinase can be overridden or altered to contribute to induction of apoptosis. *Current Cancer Drug Targets*, 11(5), 586-99. PMID: 21486222.
39. Nammalwar, B., Bunce, R. A., **Benbrook, D. M.**, Lu, T., Li, H.-F., Chen, Y.-D., Berlin, K. D. (2011). Synthesis of N-[3,4-Dihydro-4-(acetoxymethyl)-2,2,4-trimethyl-2H-1-benzothiopyran-6-yl]-N'-(4-nitrophenyl)thiourea and N-[3,4-dihydro-4-(hydroxymethyl)-2,2,4-trimethyl-2H-1-benzothiopyran-6-yl]N'-(4-nitrophenyl)thiourea, a Major Metabolite of N-(3,4-Dihydro-2,2,4,4-tetramethyl-2H-1benzothiopyran-6-YL)-N'-(4-nitrophenyl)thiourea. *Phosphorus, Sulfur, and Silicon and the Related Elements*, 186(1), 189-204. DOI: 10.1080/10426507.2010.534521
40. Zheng, J., Lou, J. R., Zhang, X., **Benbrook, D. M.**, Hanigan, M. H., Lind, S. E., Ding, W.-Q. (2010). N-Acetylcysteine interacts with copper to generate hydrogen peroxide and selectively induce cancer cell death. *Cancer Letters*, 298(2), 186-94. PMID: 20667650. DOI: 10.1016/j.canlet.2010.07.003
41. Hurteau, J. A., Brady, M. F., Darcy, K. M., McGuire, W. P., Edmonds, P., Pearl, M. L., Ivanov, I., Tewari, K. S., Mannel, R. S., Zanotti, K., **Benbrook, D. M.** (2010). Randomized phase III trial of tamoxifen versus thalidomide in women with biochemical-recurrent-only epithelial ovarian, fallopian tube or primary peritoneal carcinoma after a complete response to first-line

- platinum/taxane chemotherapy with an evaluation of serum vascular endothelial growth factor (VEGF): A Gynecologic Oncology Group Study. *Gynecologic Oncology*, 119(3), 444-50. PMID: 20846715. DOI: 10.1016/j.ygyno.2010.08.002
42. Chenedza, S.*, **Benbrook, D. M.** (2010). NF-kappaB is involved in SHetA2 circumvention of TNF-alpha resistance, but not induction of intrinsic apoptosis. *Anti-Cancer Drugs*, 21(3), 297-305. PMID: 20032777. DOI: 10.1097/CAD.0b013e3283350e43
 43. Moxley, K. M.*, Chenedza, S.*, **Benbrook, D. M.** (2009). Induction of death receptor ligand-mediated apoptosis in epithelial ovarian carcinoma: The search for sensitizing agents. *Gynecologic Oncology*, 115(3), 438-42. PMID: 19804900. DOI: 10.1016/j.ygyno.2009.09.007
 44. Tuller, E. R.*, Beavers, C. T., Lou, J. R., Ihnat, M. A., **Benbrook, D. M.**, Ding, W.-Q. (2009). Docosahexaenoic acid inhibits superoxide dismutase 1 gene transcription in human cancer cells: the involvement of peroxisome proliferator-activated receptor alpha and hypoxia-inducible factor-2alpha signaling. *Molecular Pharmacology*, 76(3), 588-95. PMID: 19528198. DOI: 10.1124/mol.109.057430
 45. Masamha, C. P.*, **Benbrook, D. M.** (2009). Cyclin D1 degradation is sufficient to induce G1 cell cycle arrest despite constitutive expression of cyclin E2 in ovarian cancer cells. *Cancer Research*, 69(16), 6565-72. PMID: 19638577. DOI: 10.1158/0008-5472.CAN-09-0913
 46. Myers, T.*, Chenedza, S.*, Lightfoot, S., Pan, Y., Dedmond, D.*, Cole, L., Tang, Y., **Benbrook, D. M.** (2009). Flexible heteroarotinoid (Flex-Het) SHetA2 inhibits angiogenesis in vitro and in vivo. *Investigational New Drugs*, 27(4), 304-18. PMID: 18802666. DOI: 10.1007/s10637-008-9175-7
 47. Liu, T.*, Masamha, C. P.*, Chenedza, S.*, Berlin, K. D., Lightfoot, S., He, F.*, **Benbrook, D. M.** (2009). Development of flexible-heteroarotinoids for kidney cancer. *Molecular Cancer Therapeutics*, 8(5), 1227-38. PMID: 19417155. DOI: 10.1158/1535-7163.MCT-08-1069
 48. Tuller, E. R.*, Brock, A. L., Yu, H., Lou, J. R., **Benbrook, D. M.**, Ding, W.-Q. (2009). PPARalpha signaling mediates the synergistic cytotoxicity of clioquinol and docosahexaenoic acid in human cancer cells. *Biochemical Pharmacology*, 77(9), 1480-6. PMID: 19426685. DOI: 10.1016/j.bcp.2009.02.002
 49. Lin, Y., Liu, X., Yue, P., **Benbrook, D. M.**, Berlin, K. D., Khuri, F. R., Sun, S. Y. (2008). Involvement of c-FLIP and survivin down-regulation in flexible heteroarotinoid-induced apoptosis and enhancement of TRAIL-initiated apoptosis in lung cancer cells. *Molecular Cancer Therapeutics*, 7(11), 3556-65. PMID: 19001438. DOI: 10.1158/1535-7163.MCT-08-0648
 50. Liu, Z., Zhang, Y., Hua, Y. F., Covey, J. M., **Benbrook, D. M.**, Chan, K. K. (2008). Metabolism of a sulfur-containing heteroarotinoid antitumor agent, SHetA2, using liquid chromatography/tandem mass spectrometry. *Rapid Communications in Mass Spectrometry : RCM*, 22(21), 3371-81. PMID: 18837006. DOI: 10.1002/rcm.3744
 51. Lin, Y., Chen, S., Yue, P., Zou, W., **Benbrook, D. M.**, Liu, S., Le, T. C., Berlin, K. D., Khuri, F. R., Sun, S. Y. (2008). CAAT/enhancer binding protein homologous protein-dependent death receptor 5 induction is a major component of SHetA2-induced apoptosis in lung cancer cells. *Cancer Research*, 68(13), 5335-44. PMID: 18593935. DOI: 10.1158/0008-5472.CAN-07-6209
 52. Ju, T., Lanneau, G. S., Gautam, T., Wang, Y., Xia, B., Stowell, S. R., Willard, M. T., Wang, W., Xia, J. Y., Zuna, R. E., Laszik, Z., **Benbrook, D. M.**, Hanigan, M. H., Cummings, R. D. (2008). Human tumor antigens Tn and sialyl Tn arise from mutations in Cosmc. *Cancer Research*, 68(6), 1636-46. PMID: 18339842. DOI: 10.1158/0008-5472.CAN-07-2345

53. **Benbrook, D. M.**, Lightfoot, S., Ranger-Moore, J., Liu, T. *, Chengedza, S. *, Berry, W. L. *, Dozmorov, I. (2008). Gene expression analysis of biological systems driving an organotypic model of endometrial carcinogenesis and chemoprevention. *Gene Regulation and Systems Biology*, 2, 21-42. PMID: 19784388.
54. Le, T. C., Berlin, K. D., **Benbrook, D. M.** (2007). Modified heteroarotinoids as potential anticancer agents-improved syntheses of 2-nitrotetralin and 2-aminotetralin. *Journal of the Saudi Chemical Society*, 11, 351-360.
55. Le, T. C., Berlin, K. D., Benson, S. D., Eastman, M. A., Bell-Eunice, G., Nelson, A. C., **Benbrook, D. M.** (2007). Heteroarotinoids with anti-cancer activity against ovarian cancer cells. *The Open Medicinal Chemistry Journal*, 1, 11-23. PMID: 19662136. DOI: 10.2174/1874104500701010011
56. Guruswamy, S. *, **Benbrook, D. M.** (2006). Retinoids chemosensitize ovarian cancer cell lines to cisplatin independent of nuclear receptors and p53. *American Journal of Pharmacology and Toxicology*, 1(4), 87-93. DOI: 10.3844/ajptsp.2006.87.93
57. Lu, S. *, **Benbrook, D. M.** (2006). Role of AP-1 antagonism in growth inhibition of cervical cancer cell lines by retinoids. *American Journal of Pharmacology and Toxicology*, 1(3), 40-47. DOI: 10.3844/ajptsp.2006.40.47
58. Zhang, Y., Hua, Y., **Benbrook, D. M.**, Covey, J. M., Dai, G., Liu, Z., Chan, K. K. (2006). High performance liquid chromatographic analysis and preclinical pharmacokinetics of the heteroarotinoid antitumor agent, SHetA2. *Cancer Chemotherapy and Pharmacology*, 58(5), 561-9. PMID: 16534614. DOI: 10.1007/s00280-006-0211-z
59. **Benbrook, D. M.** (2006). Promise and problems of translational research. *Gynecologic Oncology*, 103(2 Suppl 1), S14-7. PMID: 17027066. DOI: 10.1016/j.ygyno.2006.08.019
60. Matsuzaki, S., Hayes, J. M., **Benbrook, D. M.**, Jankowiak, R. (2006). Nonphotochemical hole-burning study of selectively stained normal and cancerous human ovarian tissues. *The Journal of Physical Chemistry. B*, 110(32), 16124-30. PMID: 16898770. DOI: 10.1021/jp060114i
61. Chiu, P. M., Feng, H. C., **Benbrook, D. M.**, Ngan, H. Y., Khoo, U. S., Xue, W. C., Tsao, S. W., Chan, K. W., Cheung, A. N. (2006). Effect of all-trans retinoic acid on tissue dynamics of choriocarcinoma cell lines: an organotypic model. *Journal of Clinical Pathology*, 59(8), 845-50. PMID: 16461808. DOI: 10.1136/jcp.2005.025833
62. Hyde, J. *, **Benbrook, D. M.** (2006). Sensitivities of uterine adenocarcinoma, mixed mullerian tumor (MMT) and sarcoma cell lines to chemotherapeutic agents and a Flex-Het drug. *American Journal of Pharmacology and Toxicology*, 1(4), 83-86. PMID: 19890461. DOI: 10.3844/ajptsp.2006.83.86
63. **Benbrook, D. M.**, Kamelle, S. A., Guruswamy, S. B. *, Lightfoot, S. A., Rutledge, T. L. *, Gould, N. S. *, Hannafon, B. N. *, Dunn, S. T., Berlin, K. D. (2005). Flexible heteroarotinoids (Flex-Hets) exhibit improved therapeutic ratios as anti-cancer agents over retinoic acid receptor agonists. *Investigational New Drugs*, 23(5), 417-28. PMID: 16133793. DOI: 10.1007/s10637-005-2901-5
64. Tillmanns, T. D. *, Kamelle, S. A. *, Guruswamy, S. *, Gould, N. S. *, Rutledge, T. L. *, **Benbrook, D. M.** (2005). Sensitization of cervical cancer cell lines to low-dose radiation by retinoic acid does not require functional p53. *Gynecologic Oncology*, 97(1), 142-50. PMID: 15790450. DOI: 10.1016/j.ygyno.2004.12.034
65. Berlin, K. D., Subramanian, S., Smith, C. M., Tabatabai, A., Bryan, C. D., Buettner, B., Hale, S.,

- Wakefield, C. A., **Benbrook, D. M.** (2005). Synthesis of novel heteroarotinoids with receptor activation capabilities and TGase activity. Single crystal analysis of (E)-4-[(2,3-dihydro-2,2,4,4-tetramethyl-2H-1-benzo- [b]thiopyran-6-Yl)- 1-propenyl]-2-methylbenzoic acid. *Phosphorus, Sulfur, and Silicon and the Related Elements*, 180(1), 67-77. DOI: 10.1080/104265090507678
66. Brown, C. W., Liu, S., Klucik, J., Berlin, K. D., Brennan, P. J., Kaur, D., **Benbrook, D. M.** (2004). Novel heteroarotinoids as potential antagonists of Mycobacterium bovis BCG. *Journal of Medicinal Chemistry*, 47(4), 1008-17. PMID: 14761203. DOI: 10.1021/jm0303453
 67. Liu, S., Brown, C. W., Berlin, K. D., Dhar, A.*, Guruswamy, S.*, Brown, D., Gardner, G. J., Birrer, M. J., **Benbrook, D. M.** (2004). Synthesis of flexible sulfur-containing heteroarotinoids that induce apoptosis and reactive oxygen species with discrimination between malignant and benign cells. *Journal of Medicinal Chemistry*, 47(4), 999-1007. PMID: 14761202. DOI: 10.1021/jm030346v
 68. Chun, K. H., **Benbrook, D. M.**, Berlin, K. D., Hong, W. K., Lotan, R. (2003). The synthetic heteroarotinoid SHetA2 induces apoptosis in squamous carcinoma cells through a receptor-independent and mitochondria-dependent pathway. *Cancer Research*, 63(13), 3826-32. PMID: 12839980.
 69. Mic, F. A., Molotkov, A., **Benbrook, D. M.**, Duester, G. (2003). Retinoid activation of retinoic acid receptor but not retinoid X receptor is sufficient to rescue lethal defect in retinoic acid synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, 100(12), 7135-40. PMID: 12782789. DOI: 10.1073/pnas.1231422100
 70. Kamelle, S.*, Sienko, A., **Benbrook, D. M.** (2002). Retinoids and steroids regulate menstrual phase histological features in human endometrial organotypic cultures. *Fertility and Sterility*, 78(3), 596-602. PMID: 12215339.
 71. **Benbrook, D. M.** (2002). Refining retinoids with heteroatoms. *Mini Reviews in Medicinal Chemistry*, 2(3), 277-83. PMID: 12370069.
 72. **Benbrook, D. M.** (2002). An ELISA method for detection of human antibodies to an immunotoxin. *Journal of Pharmacological and Toxicological Methods*, 47(3), 169-75. PMID: 12628308. DOI: 10.1016/S1056-8719(02)00232-0
 73. Scribner, Jr, D. R.*, **Benbrook, D. M.** (2002). Retinoids enhance cisplatin-based chemoradiation in cervical cancer cells in vitro. *Gynecologic Oncology*, 85(1), 223-5. PMID: 11925151. DOI: 10.1006/gyno.2002.6590
 74. Simoni, D., Roberti, M., Invidiata, F. P., Rondanin, R., Baruchello, R., Malagutti, C., Mazzali, A., Rossi, M., Grimaudo, S., Capone, F., Dusonchet, L., Meli, M., Raimondi, M. V., Landino, M., D'Alessandro, N., Tolomeo, M., Arindam, D., Lu, S., **Benbrook, D. M.** (2001). Heterocycle-containing retinoids. Discovery of a novel isoxazole arotinoid possessing potent apoptotic activity in multidrug and drug-induced apoptosis-resistant cells. *Journal of Medicinal Chemistry*, 44(14), 2308-18. PMID: 11428925.
 75. Guruswamy, S. *, Lightfoot, S., Gold, M. A.*, Hassan, R.*, Berlin, K. D., Ivey, R. T. *, **Benbrook, D. M.** (2001). Effects of retinoids on cancerous phenotype and apoptosis in organotypic cultures of ovarian carcinoma. *Journal of the National Cancer Institute*, 93(7), 516-25. PMID: 11287445.
 76. Dhar, A.*, Liu, S., Klucik, J., Berlin, K. D., Madler, M. M., Lu, S. *, Ivey, R. T. *, Zacheis, D. *, Brown, C. W., Nelson, E. C., Birckbichler, P. J., **Benbrook, D. M.** (2000). Synthesis, structure-activity relationships, and RARgamma-ligand interactions of nitrogen heteroarotinoids. *Journal of Medicinal Chemistry*, 43(2), 303. PMID: 10650065.

77. Zacheis, D. *, Dhar, A. *, Lu, S. *, Madler, M. M., Klucik, J., Brown, C. W., Liu, S., Clement, F., Subramanian, S., Weerasekare, G. M., Berlin, K. D., Gold, M. A. *, Houck, Jr, J. R., Fountain, K. R., **Benbrook, D. M.** (1999). Heteroarotinoids inhibit head and neck cancer cell lines in vitro and in vivo through both RAR and RXR retinoic acid receptors. *Journal of Medicinal Chemistry*, 42(21), 4434-45. PMID: 10543887.
78. Dhar, A. *, Liu, S., Klucik, J., Berlin, K. D., Madler, M. M., Lu, S. *, Ivey, R. T. *, Zacheis, D. *, Brown, C. W., Nelson, E. C., Birckbichler, P. J., **Benbrook, D. M.** (1999). Synthesis, structure-activity relationships, and RARgamma-ligand interactions of nitrogen heteroarotinoids. *Journal of Medicinal Chemistry*, 42(18), 3602-14. PMID: 10479291. DOI: 10.1021/jm9900974
79. Liu, S., Berlin, K. D., Simms-Kelley, M. D., **Benbrook, D. M.** (1999). Optimization and synthesis of (E)-4-[2-(3,4-Dihydro-4,4-dimethyl-2h-1-benzopyran-6-yl)-1-propenyl]benzoic Acid-11[14C]. *Journal of Labelled Compounds and Radiopharmaceuticals*, 42(8), 789-796. DOI: 10.1002/(SICI)1099-1344(199908)42:83.0.CO;2-#
80. Salsman, S. *, Lu, S. *, **Benbrook, D. M.** (1999). The mechanism of retinoic acid radiosensitization is independent of AP-1 repression in a cervical carcinoma cell line. *Gynecologic Oncology*, 73(2), 253-6. PMID: 10329043. DOI: 10.1006/gyno.1999.5352
81. DiSilvestro, P. A. *, Lightfoot, S. A., **Benbrook, D. M.** (1999). Ki-67 expression in a cervical cancer organotypic model correlates with growth and EGF-R expression. *Journal of Lower Genital Tract Disease*, 3(2), 111-5. PMID: 25950557.
82. Waliszewski, P., Waliszewska, M., Gordon, N., Hurst, R. E., **Benbrook, D. M.**, Dhar, A., Hemstreet, 3rd, G. P. (1999). Retinoid signaling in immortalized and carcinoma-derived human uroepithelial cells. *Molecular and Cellular Endocrinology*, 148(1-2), 55-65. PMID: 10221771.
83. Hurst, R. E., Waliszewski, P., Waliszewska, M., Bonner, R. B., **Benbrook, D. M.**, Dar, A., Hemstreet, 3rd, G. P. (1999). Complexity, retinoid-responsive gene networks, and bladder carcinogenesis. *Advances in Experimental Medicine and Biology*, 462, 449-67. PMID: 10599447.
84. **Benbrook, D. M.**, Subramanian, S., Gale, J. B., Liu, S., Brown, C. W., Boehm, M. F., Berlin, K. D. (1998). Synthesis and characterization of heteroarotinoids demonstrate structure specificity relationships. *Journal of Medicinal Chemistry*, 41(19), 3753-7. PMID: 9733501. DOI: 10.1021/jm980308p
85. **Benbrook, D. M.**, Madler, M. M. *, Spruce, L. W., Birckbichler, P. J., Nelson, E. C., Subramanian, S., Weerasekare, G. M., Gale, J. B., Patterson, Jr, M. K., Wang, B., Wang, W., Lu, S. *, Rowland, T. C. *, DiSivestro, P. *, Lindamood, 3rd, C., Hill, D. L., Berlin, K. D. (1997). Biologically active heteroarotinoids exhibiting anticancer activity and decreased toxicity. *Journal of Medicinal Chemistry*, 40(22), 3567-83. PMID: 9357524. DOI: 10.1021/jm970196m
86. Miller, A. M., Sahl, W. J., Brown, S. A., Young, S. K., Quinlan, C. M., Patel, P. R., **Benbrook, D. M.**, Naylor, M. F. (1997). The role of human papillomavirus in the development of pyogenic granulomas. *International Journal of Dermatology*, 36(9), 673-6. PMID: 9352408.
87. **Benbrook, D. M.**, Lu, S. *, Flanagan, C. *, Shen-Gunther, J. *, Angros, L. H., Lightfoot, S. A. (1997). Biological assay for activity and molecular mechanism of retinoids in cervical tumor cells. *Gynecologic Oncology*, 66(1), 114-21. PMID: 9234931. DOI: 10.1006/gyno.1997.4736
88. **Benbrook, D. M.**, Shen-Gunther, J. *, Nuñez, E. R. *, Dynlacht, J. R. * (1997). Differential retinoic acid radiosensitization of cervical carcinoma cell lines. *Clinical Cancer Research*, 3(6), 939-45. PMID: 9815769.

89. Johnson, G. A., Mannel, R. S., Khalifa, M., Walker, J. L., Wren, M., Min, K. W., **Benbrook, D. M.** (1997). Epidermal growth factor receptor in vulvar malignancies and its relationship to metastasis and patient survival. *Gynecologic Oncology*, 65(3), 425-9. PMID: 9190969. DOI: 10.1006/gyno.1997.4660
90. **Benbrook, D. M.**, Rogers, R. S.*, Medlin, M. A.*, Dunn, S. T. (1995). Immunohistochemical analysis of proliferation and differentiation in organotypic cultures of cervical tumor cell lines. *Tissue & Cell*, 27(3), 269-74. PMID: 7645007.
91. Apfel, R., **Benbrook, D. M.**, Lernhardt, E., Ortiz, M. A., Salbert, G., Pfahl, M. (1994). A novel orphan receptor specific for a subset of thyroid hormone-responsive elements and its interaction with the retinoid/thyroid hormone receptor subfamily. *Molecular and Cellular Biology*, 14(10), 7025-35. PMID: 7935418.
92. **Benbrook, D. M.**, Jones, N. C. (1994). Different binding specificities and transactivation of variant CRE's by CREB complexes. *Nucleic Acids Research*, 22(8), 1463-9. PMID: 8190638.
93. **Benbrook, D. M.**, Jones, N. C. (1990). Heterodimer formation between CREB and JUN proteins. *Oncogene*, 5(3), 295-302. PMID: 2138276.
94. **Benbrook, D. M.**, Lernhardt, E., Pfahl, M. (1988). A new retinoic acid receptor identified from a hepatocellular carcinoma. *Nature*, 333(6174), 669-72. PMID: 2836738. DOI: 10.1038/333669a0
95. Pfahl, M., **Benbrook, D. M.** (1987). Nucleotide sequence of cDNA encoding a novel human thyroid hormone receptor. *Nucleic Acids Research*, 15(22), 9613. PMID: 3684612.
96. **Benbrook, D. M.**, Pfahl, M. (1987). A novel thyroid hormone receptor encoded by a cDNA clone from a human testis library. *Science (New York, N. Y.)*, 238(4828), 788-91. PMID: 3672126.
97. **Benbrook, D. M.**, Miller, R. V. (1986). Effects of norfloxacin on DNA metabolism in *Pseudomonas aeruginosa*. *Antimicrobial Agents and Chemotherapy*, 29(1), 1-6. PMID: 3015000.

Book Chapters

1. **Benbrook, D. M.** (2006). Organotypic cultures represent tumor microenvironment for drug testing. In Tornell, J., Noble, D. (Eds.), *Drug Discovery Today, Disease Models* (2nd ed., vol. 3, pp. 143-148). Elsevier. DOI: 10.1016/j.ddmod.2006.05.005
2. Alberts, D. A., Barakat, R. R., Daly, M., Method, M. W., **Benbrook, D. M.** (2004). Prevention of Gynecologic Malignancies. In Gershenson, D. M., McGuire, W. P., Gore, M., Quinn, M. A., Thomas, G. (Eds.), *Gynecologic Cancer: Controversies in Management*. Philadelphia, PA: Gynecologic Cancer: Controversies in Management. Elsevier, Churchill, Livingston. DOI: 10.1016/B978-0-443-07142-3.50070-1
3. **Benbrook, D. M.**, Tonetti, D. A., Miller, R. V. (1989). DNA gyrase of *Pseudomonas aeruginosa*: Inhibition by quinolones. In Fernandez, P. B. (Ed.), *Proceedings International Telesymposium on Quinolones* (pp. 171-186). J.R. Prous Science Publishers.
4. Pfahl, M., Payne, J., **Benbrook, D. M.**, Wu, K. C. (1988). *Differential activation of a hormone responsive element in various cell lines* (pp. 161-168). Steroid Hormone Action.

Book Reviews

1. **Benbrook, D. M.** (2014). In Ho, J. Y. (Ed.), *Biotechnology and Biopharmaceuticals: Transforming*

Proteins and Genes Into Drugs, 2nd Edition (2nd ed., vol. 60, pp. 331-332). Wiley-Blackwell: Clinical Infectious Diseases. DOI: 10.1093/cid/ciu792

2. **Benbrook, D. M.**, Wilkerson, J. C. (2003). *Nature Reviews Cancer* (8th ed., vol. 289, pp. 1049-1050). JAMA. DOI: 10.1001/jama.289.8.1049

Other

1. Ramraj, S. K.*, **Benbrook, D. M.** (2018). *Synergistic combination of mortalin-targeting and p53 reactivator drugs for ovarian cancer*. Seattle, WA: 12th Biennial Ovarian Cancer Research Symposium.
2. Nugent, E.*, **Benbrook, D. M.**, Long, A.*, Moxley, K. M.*, Wild, R., McMeekin, D. S. (2013). Biomarkers associated with metabolic syndrome, endometrioid adenocarcinoma (EC) of the uterus, and disease prognosis. *Gynecologic Oncology* (1st ed., vol. 130, pp. e86-e87).
3. Slaughter, K., Thai, T. C., Penarozza, S., **Benbrook, D. M.**, Thavathiru, D. M.*, Ding, K., Nelson, T., McMeekin, D. S. (2013). Measurements of adiposity as predictive biomarkers for response to first-line bevacizumab-based chemotherapy in epithelial ovarian cancer. *Gynecologic Oncology* (1st ed., vol. 130, pp. e86-e87). *Gynecologic Oncology*.
4. Moxley, K. M.*, **Benbrook, D. M.**, Moore, K.*, Zuna, R. E. (2013). *The role of single-nucleotide polymorphisms in the ERCC1 gene in predicting the sensitivity of epithelial ovarian carcinoma to platinum-based chemotherapy and overall patient survival* (2nd ed., vol. 130, pp. 377-382). *Gynecologic Oncology*. PMID: 23632208. DOI: 10.1016/j.ygyno.2013.04.054
5. Nugent, E.*, Long, A.*, Mathews, C.*, Bishop, E.*, Moxley, K. M.*, **Benbrook, D. M.**, Wild, R., McMeekin, D. (2012). Biomarkers associated with metabolic syndrome, endometrioid adenocarcinoma (EC) of the uterus, and disease prognosis. *Gynecologic Oncology* (1st ed., vol. 127, pp. S7-S8). *Gynecologic Oncology*. DOI: 10.1016/j.gyno.2012.01.021
6. **Benbrook, D. M.**, Bishop, E.*, Nugent, E.*, Lightfoot, S., Elangovan, T.*, Long, A.*, Zhao, D. (2012). *Modeling effects of diabetes and obesity co-morbidities in endometrial cancer development and progression* (Suppl 3 ed., vol. 6, pp. 56). BMC Proceedings. DOI: 10.1186/1753-6561-6-S3-P56
7. Chenedza, S.*, **Benbrook, D. M.** (2009). *Sensitization of ovarian cancer cell lines to death receptor ligands by the flexible heteroarotinoid (Flex-Het), SHetA2* (3rd ed., vol. 115, pp. 438-442). *Proceedings of the American Association for Cancer Research*. DOI: 10.1016/j.ygyno.2009.09.007
8. Moxley, K. M.*, Dozmorov, I., Lightfoot, S., **Benbrook, D. M.** (2009). Dynamics of DMBA-induced transformation and gene expression in endometrial organotypic cultures. *Proceedings of the American Association for Cancer Research* (9th ed., vol. 69). American Association for Cancer Research Proceedings (AACR).
9. Masamha, P.*, **Benbrook, D. M.** (2009). p21 prevents aberrant cyclin E2 expression from interfering with G1 arrest caused by SHetA2-induced cyclin D1 loss in ovarian cancer cell lines. *Proceedings of the American Association for Cancer Research* (9th ed., vol. 69). American Association for Cancer Research Proceedings (AACR).
10. Masamha, C. P.*, Liu, T.*, **Benbrook, D. M.** (2008). Elucidation of the roles of cyclin D1 and up- and down- stream effectors in the mechanism of SHetA2 induced G1 cell cycle arrest. *The Cell Cycle* (pp. 142). Cold Springs Harbor, New York: The Cell Cycle.
11. Ju, T. Z., Lenneau, G. S., Gautam, T., Wang, Y. C., Xia, B. Y., Stowell, S. R., Willard, M. T., Wang,

- W. Y., Xia, J. Y., Zuna, R. E., Laszik, Z., **Benbrook, D. M.**, Hanigan, M. H., Cummings, R. D. (2008). Human Cancer and Gene Mutations in O-Glycosylation Pathway. *Anticancer Research Journal* (5C ed., vol. 28, pp. 3337). Anticancer Research Journal.
12. Chenedza, S.*, **Benbrook, D. M.** (2007). Effects of SHetA2 on IKappaB and NF-KappaB in Ovarian Cancer. *Molecular Cancer Therapeutics* (12th ed., vol. 6, pp. 3442S). Molecular Cancer Therapeutics.
 13. Masamha, C. P.*, Liu, T.*, **Benbrook, D. M.** (2007). SHetA2 targets cyclin D1 for proteasomal degradation through a GSK3 β -independent mechanism leading to G1 cell cycle arrest. *AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics* (12th ed., vol. 6, pp. 3372S). Molecular Cancer Therapeutics.
 14. Myers, T.*, **Benbrook, D. M.** (2007). Thymidine phosphorylase is a molecular target of SHetA2 antiangiogenesis activity. *Proceedings of the American Association for Cancer Research* (48th ed., pp. 4615). American Association for Cancer Research Proceedings (AACR).
 15. Ju, T., Lenneau, G. S., Gautam, T., Wang, Y., Xia, B., Stowell, S. R., Willard, M. T., **Benbrook, D. M.**, Hannigan, M. H., Cummings, R. D. (2007). Human Tumor Antigens Arising from Mutations in Cosmc. *Proceedings of the American Association for Cancer Research* (9th ed., vol. 67, pp. 406). American Association for Cancer Research Proceedings (AACR).
 16. Ju, T. Z., Lenneau, G., Gautam, T., Wang, Y. C., **Benbrook, D. M.**, Hannigan, M. H., Cummings, R. D. (2006). Expression of Tn and SialylTn antigens in human tumor cell lines raised from mutation in molecular chaperone cosmc. *Glycobiology* (11th ed., vol. 16, pp. 1113). Glycobiology.
 17. Lightfoot, S., Chenedza, S.*, Naylor, M., **Benbrook, D. M.** (2006). Inhibition of thymidine phosphorylase (TP), thrombospondin 4 (TSP4) and angiogenesis by flexible heteroartotinoids (Flex-Het), SHetA2. *Proceedings of the American Association for Cancer Research* (vol. 47, pp. 57). American Association for Cancer Research Proceedings (AACR).
 18. **Benbrook, D. M.**, Lightfoot, S., Ranger-Moore, J. (2006). Karyometric analysis of inhibition of DMBA carcinogenesis by flexible heteroarotinoids (Flex-Het) SHetA2 in an endometrial organotypic model. *Proceedings of the American Association for Cancer Research* (47th ed., pp. 917). American Association for Cancer Research Proceedings (AACR).
 19. Dearnley, D. D.*, Hannafon, B.*, Ding, W. Q., Lind, S., Cook, S., **Benbrook, D. M.** (2005). Regulation of Gene Expression and Vascular Capillary Formation by a Novel Anticancer Compound, SHetA2. *Proceedings of the American Association for Cancer Research* (46th ed.). American Association for Cancer Research Proceedings (AACR).
 20. Kelly, W. J., Gill, L. W.*, Hannafon, B.*, **Benbrook, D. M.** (2005). SHetA2 induces mitochondrial swelling, superoxide formation and apoptosis in human cancer cells. *Abstracts of Papers for the American Chemical Society* (22nd ed., pp. U492 (Part 1)). Abstracts of Papers for the American Chemical Society.
 21. **Benbrook, D. M.**, Lightfoot, S. L. (2004). Reactive Oxygen Species (ROS) are involved in the mechanism of SHetA2-induced apoptosis but not differentiation in ovarian cancer organotypic cultures. *Proceedings of the American Association for Cancer Research* (45th ed.). American Association for Cancer Research Proceedings (AACR).
 22. De Bault, L. E., Lu, S.*, Angros, L. H., **Benbrook, D. M.** (2004). Retinoic acid effects on the expression of EGFreceptor mRNA and its protein in cervical cancer cells in vitro. *Journal of Histochemistry & Cytochemistry* (52nd ed., pp. S36). Journal of Histochemistry & Cytochemistry.

23. Lightfoot, S. L., **Benbrook, D. M.** (2004). Effects of steroids and retinoids in an organotypic model of endometrial carcinogenesis. *Proceedings of the American Association for Cancer Research* (vol. 45). American Association for Cancer Research Proceedings (AACR).
24. **Benbrook, D. M.**, Kamelle, S.*, Joyce, K., Guruswamy, S.*, Tillmanns, T.*, Gould, N.*, Rutledge, T.* (2002). Evaluation of Human Papillomavirus and p53 transcriptional activation in the mechanism of 9-cisretinoic acid radiosensitization of squamous gynecologic cancer cell lines. *Proceedings of the American Association for Cancer Research* (43rd ed., pp. 433). American Association for Cancer Research Proceedings (AACR).
25. Guruswamy, S.*, **Benbrook, D. M.** (2002). The Roles of p53, retinoid receptors, and DNA damager response genes in the mechanism of retinoid sensitization of OVCAR-3 to cisplatin. *Proceedings of the American Association for Cancer Research* (43rd ed.). American Association for Cancer Research Proceedings (AACR).
26. **Benbrook, D. M.**, Sienko, A. (2001). A hormonally responsive organotypic model of cycling endometrium. *Proceedings of the American Association for Cancer Research* (vol. 42, pp. 547). American Association for Cancer Research Proceedings (AACR).
27. Guruswamy, S.*, Berlin, K. D., **Benbrook, D. M.** (2001). Chemosensitization of two ovarian carcinoma cell lines to cisplatin by heteroarotinoids. *Proceedings of the American Association for Cancer Research* (vol. 42, pp. 953-954). American Association for Cancer Research Proceedings (AACR).
28. Ju, K. H., **Benbrook, D. M.**, Berlin, K. D., Hong, W. K., Lotan, R. (2001). Induction of apoptosis in head and neck squamous cell carcinoma cell (HNSCC) lines by selected heteroarotinoids. *Proceedings of the American Association for Cancer Research* (vol. 42, pp. 548-549). American Association for Cancer Research Proceedings (AACR).
29. Berlin, K. D., Brown, C. W., **Benbrook, D. M.** (2001). Modified heteroarotinoids-anticancer activity. *Abstracts of Papers for the American Chemical Society* (221st ed., pp. U54). Abstracts of Papers for the American Chemical Society.
30. Lu, S.*, **Benbrook, D. M.** (2000). Anti-AP-1 activity of retinoids may not be a contribution to their growth inhibition activity in some tumor cell lines. *Proceedings of the American Association for Cancer Research* (41st ed., pp. 851). American Association for Cancer Research Proceedings (AACR).
31. Patrick, S. D., Waugh, K., Subramanian, S., Simms-Kelley, M. D., **Benbrook, D. M.**, Berlin, K. D., Nelson, E. C. (2000). Synthetic retinoids induce differentiation in F9 cells. *The FASEB Journal* (4th ed., vol. 14, pp. A245). The FASEB Journal.
32. Simms-Kelley, M. D., Subramanian, S., Madler, M. M., Patrick, S. D., Klucik, J., Browth, C. E., Liu, S., Lemire, T. D., **Benbrook, D. M.**, Birckbichler, P. J., Berlin, K. D., Nelson, E. C. (1999). Heteroarotinoids promote growth in vitamin A-deficient rats. *The FASEB Journal* (5th ed., vol. 13, pp. A896). The FASEB Journal.
33. Liu, S., Berlin, K. D., Madler, M. M., **Benbrook, D. M.**, Nelson, E. C. (1999). Synthesis and structure-activity relationships of nitrogen heteroarotinoids. *Abstracts of Papers for the American Chemical Society* (vol. 217, pp. U1169). Abstracts of Papers for the American Chemical Society.
34. Lu, S.*, Dhar, A.*, Ivey, R. T.*, Berlin, K. D., **Benbrook, D. M.** (1998). Heteroarotinoid structure affects receptor specificity and growth inhibitory activities. *Proceedings of the American Association for Cancer Research* (107th ed., vol. 39, pp. abstract #723). American Association for Cancer

Research Proceedings (AACR).

35. Simms-Kelley, M. D., Subramanian, S., Spruce, L. W., Madler, M. M., Patrick, S. D., Grummer, R., Lemire, T. D., **Benbrook, D. M.**, Birckbichler, P. J., Berlin, K. D., Nelson, E. C. (1998). Growth promoting activity of heteroarotinoids in vitamin A deficient rats. *The FASEB Journal* (5th ed., vol. 12, pp. A840). The FASEB Journal.
36. Lu, S. *, Flanagan, C. W. *, Shen-Gunther, J. *, **Benbrook, D. M.** (1997). Biological assay for activity and molecular mechanism of retinoids in cervical tumor cells. *Gynecologic Oncology* (2nd ed., vol. 64, pp. 312). Gynecologic Oncology.
37. Flanagan, C. *, Fishburne, V. H. *, DiSilvestro, P. *, Nuñez, E. R. *, **Benbrook, D. M.** (1997). Mechanism of retinoid and cartenoid growth inhibition of a cervical tumor cell line. *Gynecologic Oncology* (2nd ed., vol. 64, pp. 357). Gynecologic Oncology.
38. Qian, X., **Benbrook, D. M.**, Berlin, K. D., Cushman, J. C., Madler, M. M., Patrick, S. D., Simms, M. D., Nelson, E. S. (1996). Comparative effects of a diaryl heteroarotinoid and all-trans-retinoic acid on induction of differentiation. *The FASEB Journal* (10th ed., pp. 4390). The FASEB Journal.
39. Nuñez, E. R. *, **Benbrook, D. M.**, Berlin, K. D., Nelson, E. C. (1995). A heteroarotinoid affects growth and transactivation of a retinoic acid response element in cervical carcinoma cell lines. *The FASEB Journal* ((3 , part 1) ed., vol. 9, pp. 985). The FASEB Journal.

Intellectual Property

Patents

1. **Benbrook, D. M.** "CHROMAN- AND TETRAHYDROQUINOLINE-DERIVED HETEROAROTINOIDS AS AGENTS TO TREAT HUMAN OVARIAN CANCER." (Submitted: 2018).
2. **Benbrook, D. M.**, Ramraj, S. "Drug Combinations with Synergistic Activity Against Cancer and Methods of Use." (Submitted: 2018).
3. **Benbrook, D. M.**, Ramraj, S. "Treatment of Cancer with Synergistic Combinations of p53-Targeted Drugs." (Application: 2018).
4. Garcia-Contreras, L., Hatipoglu, S. M., **Benbrook, D. M.** "Nanocrystal Microparticles of Poorly Soluble Drugs and Methods of Use." (Submitted: 2017).
5. Garcia-Contreras, L., Hatipoglu, S. M., **Benbrook, D. M.** "Nanocrystal Microparticles of Poorly Soluble Drugs and Methods of Use." (Application: November 9, 2017).
6. **Benbrook, D. M.** "Protection of Healthy Cells and Treatment of Diseases by Binding Heat Shock Proteins." (Application: February 27, 2012).
7. **Benbrook, D. M.**, Guruswamy, S., Turman, M. A. "Treatment and inhibition of disease conditions using flexible heteroarotinoids." (Approved: November 3, 2009).
8. **Benbrook, D. M.**, Turman, M. A., Guruswamy, S. "Treatment and Inhibition of Disease Conditions (Angiogenesis) Using Flexible Heteroarotinoids." (Application: October 29, 2009).
9. Berlin, K. D., **Benbrook, D. M.**, Nelson, E. C. "Heteroarotinoid containing urea or thiourea linker." (Approved: July 1, 2003).

PRESENTATIONS

Abstracts

* indicates mentee

National/International

1. Ramraj, S. K., **Benbrook, D. M.**, "Synergistic combination of mortalin-targeting and p53 reactivator drugs for ovarian cancer", 12th Biennial Ovarian Cancer Research Symposium, University of Washington, Seattle, WA, Abstract. September 15, 2018.
2. Razaq, W., Tanaka, T., Carlson, B., Wenger, M., Friedman, J., **Benbrook, D. M.**, Craft, M., "Diagnosing cognitive impairment ("Chemo brain") in breast cancer survivors", San Antonio Breast Cancer Symposium, Cancer Therapy & Research Center and American Association for Cancer Research (CTRC-AACR), San Antonio, TX, Abstract. December 2016.
3. **Benbrook, D. M.**, Bishop, E., Nugent, E., Lightfoot, S., Elangovan, T., Long, A., Zhao, D., "Modeling effects of diabetes and obesity co-morbidities in endometrial cancer development and progression", 2012 Metabolism, Diet & Disease Meeting, BMC, Washington, DC, Abstract. May 2012.
4. Moxley, K. M., **Benbrook, D. M.**, Moore, K., Zuna, R. E., "The role of single-nucleotide polymorphisms in the ERCC1 gene in predicting the sensitivity of epithelial ovarian carcinoma to platinum-based chemotherapy and overall patient survival", 41st Annual SGO Meeting, Society of Gynecologic Oncology (SGO), San Francisco, CA, Abstract. March 2010.
5. Moxley, K. M., Dozmorov, I., Lightfoot, S., **Benbrook, D. M.**, "Dynamics of DMBA-induced transformation and gene expression in endometrial organotypic cultures", 100th AACR Annual Meeting, American Association for Cancer Research (AACR), Denver, CO, Abstract. April 2009.
6. Masamha, P., **Benbrook, D. M.**, "p21 prevents aberrant cyclin E2 expression from interfering with G1 arrest caused by SHetA2-induced cyclin D1 loss in ovarian cancer cell lines", 100th AACR Annual Meeting, American Association for Cancer Research (AACR), Denver, CO, Abstract. April 2009.
7. Chenedza, S., **Benbrook, D. M.**, "Sensitization of ovarian cancer cell lines to death receptor ligands by the flexible heteroarotinoid (Flex-Het), SHetA2", 100th AACR Annual Meeting, American Association for Cancer Research (AACR), Denver, CO, Abstract. April 2009.
8. Chenedza, S., **Benbrook, D. M.**, "Effects of SHetA2 on I κ B α and NF- κ B in Ovarian Cancer", NF κ B Keystone Symposia, Keystone Symposia on Molecular and Cellular Biology, Banff, Alberta, Canada, Abstract. December 2007.
9. Ju, T., Lenneau, G. S., Gautam, T., Wang, Y., Xia, B., Stowell, S. R., Willard, M. T., **Benbrook, D. M.**, Hannigan, M. H., Cummings, R. D., "Human Tumor Antigens Arising from Mutations in Cosmc", 98th Annual American Association for Cancer Research Meeting, American Association for Cancer Research (AACR), Los Angeles, CA, Abstract. 2007.
10. Myers, T., **Benbrook, D. M.**, "Thymidine phosphorylase is a molecular target of SHetA2 antiangiogenesis activit", 98th Annual American Association for Cancer Research Meeting, American Association for Cancer Research (AACR), Los Angeles, CA, Abstract. 2007.
11. Liu, T., Masamha, C. P., Chenedza, S., **Benbrook, D. M.**, "Regulation of apoptosis, cell cycle progression and differentiation by SHetA2 in renal cancer cells is associated with alterations in Bcl-2, Cyclin D1 and E-Cadherin proteins", AACR-NCI-EORTC International Conference on

Molecular Targets and Cancer Therapeutics, AACR, NCI, EORTC, San Francisco, CA, Abstract. October 2007.

12. Chenedza, S., Liu, T., **Benbrook, D. M.**, "SHetA2 Effects on Thymidine Phosphorylase and NF- κ B activity", AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, AACR, NCI, EORTC, San Francisco, CA, Abstract. October 2007.
13. Masamha, C. P., Liu, T., **Benbrook, D. M.**, "SHetA2 Targets cyclin D1 for proteasomal degradation through a GSK3 β -independent mechanism leading to G1 cell cycle arrest", AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics, AACR, NCI, EORTC, San Francisco, CA, Abstract. October 2007.
14. Lightfoot, S., Chenedza, S., Naylor, M., **Benbrook, D. M.**, "Inhibition of thymidine phosphorylase (TP), thrombospondin 4 (TSP4) and angiogenesis by flexible heteroarotinoids (Flex-Het), SHetA2", 97th AACR Annual Meeting, American Association for Cancer Research (AACR), Washington, DC, Abstract. 2006.
15. **Benbrook, D. M.**, Lightfoot, S., Ranger-Moore, J., "Karyometric analysis of inhibition of DMBA carcinogenesis by flexible heteroarotinoids (Flex-Het) SHetA2 in an endometrial organotypic model", 97th AACR Annual Meeting, American Association for Cancer Research (AACR), Washington, DC, Abstract. 2006.
16. Dearnley, D. D., Hannafon, B., Ding, W. Q., Lind, S., Cook, S., **Benbrook, D. M.**, "Regulation of Gene Expression and Vascular Capillary Formation by a Novel Anticancer Compound, SHetA2", 96th AACR Annual Meeting, American Association for Cancer Research (AACR), Anaheim, CA, Abstract. 2005.
17. Kelly, W. J., Gill, L. W., Hannafon, B., **Benbrook, D. M.**, "SHetA2 induces mitochondrial swelling, superoxide formation and apoptosis in human cancer cells", American Chemical Society Annual Meeting, American Chemical Society, Abstract. 2005.
18. Lightfoot, S. L., **Benbrook, D. M.**, "Effects of steroids and retinoids in an organotypic model of endometrial carcinogenesis", 95th Annual American Association of Cancer Research Meeting, American Association of Cancer Research, Orlando, FL, Abstract. 2004.
19. **Benbrook, D. M.**, Lightfoot, S. L., "Reactive Oxygen Species (ROS) are involved in the mechanism of SHetA2-induced apoptosis but not differentiation in ovarian cancer organotypic cultures", 95th Annual American Association of Cancer Research Meeting, American Association of Cancer Research, Orlando, FL, Abstract. 2004.
20. **Benbrook, D. M.**, "Both receptor-active and receptor-independent retinoids regulate of growth, differentiation and apoptosis without toxicity in an ovarian cancer xenograft model", 94th Annual American Association of Cancer Research, American Association of Cancer Research (AACR), Washington, DC, Abstract. 2003.
21. Berlin, K. D., Brown, C. W., **Benbrook, D. M.**, "Modified heteroarotinoids-anticancer activity", American Chemical Society Annual Meeting, American Chemical Society, Abstract. April 1, 2001.
22. **Benbrook, D. M.**, Sienko, A., "A hormonally responsive organotypic model of cycling endometrium", 92nd AACR Annual Meeting, American Association of Cancer Research, New Orleans, LA, Abstract. March 2001.
23. Guruswamy, S., Berlin, K. D., **Benbrook, D. M.**, "Chemosensitization of two ovarian carcinoma cell lines to cisplatin by heteroarotinoids", 92nd AACR Annual Meeting, American Association of Cancer Research, New Orleans, LA, Abstract. March 2001.

24. Ju, K. H., **Benbrook, D. M.**, Berlin, K. D., Hong, W. K., Lotan, R., "Induction of apoptosis in head and neck squamous cell carcinoma cell (HNSCC) lines by selected heteroarotinoids", 92nd AACR Annual Meeting, American Association of Cancer Research, New Orleans, LA, Abstract. March 2001.
25. Lu, S., **Benbrook, D. M.**, "Anti-AP-1 activity of retinoids may not be a contribution to their growth inhibition activity in some tumor cell lines", 91st American Association for Cancer Research Annual Meeting, American Association for Cancer Research (AACR), San Francisco, CA, Abstract. April 2000.
26. Patrick, S. D., Waugh, K., Subramanian, S., Simms-Kelley, M. D., **Benbrook, D. M.**, Berlin, K. D., Nelson, E. C., "Synthetic retinoids induce differentiation in F9 cells", Federation of American Society of Experimental Biology Meeting (FASEB), Federation of American Society of Experimental Biology (FASEB), Bethesda, MD, Abstract. March 15, 2000.
27. Kamelle, S., Sienko, A., **Benbrook, D. M.**, "In vitro representation of endometrium using organotypic culture: A future model for the study of endometrial carcinogenesis", Society of Gynecologic Oncologists 31st Annual Meeting, Society of Gynecologic Oncologists (SGO), San Diego, CA, Abstract. February 2000.
28. Lu, S., Dhar, A., Ivey, R. T., Berlin, K. D., **Benbrook, D. M.**, "Heteroarotinoid structure affects receptor specificity and growth inhibitory activities", 89th Annual American Association for Cancer Research Meeting, American Association for Cancer Research, New Orleans, LA, Abstract. 1998.
29. Zacheis, D., Houck, J. R., Berlin, K. D., **Benbrook, D. M.**, "Inhibition of the growth of head and neck squamous cell carcinoma by heteroarotinoids", Fifth Research Workshop on the Biology, Prevention, and Treatment of Head and Neck Cancer, Head & Neck Cancer Research, McLean, VA, Abstract. 1998.
30. Ivey, R. T., Brown, D., Berlin, K. D., **Benbrook, D. M.**, "Retinoid response of two ovarian carcinoma cell lines", 89th Annual American Association for Cancer Research Meeting, American Association for Cancer Research, Abstract. 1998.
31. **Benbrook, D. M.**, Berlin, K. D., Birckbichler, P. J., "Correlation of transactivation with growth inhibition and transglutaminase induction by heteroarotinoids", 88th Annual Meeting of the American Association for Cancer Research, American Association for Cancer Research, Abstract. 1997.
32. DiSilvestro, P., Flanagan, C., Angros, L., **Benbrook, D. M.**, "Decrease in Ki-67 and epidermal growth factor receptor expression correlates with retinoic acid induced growth inhibition in a cervical cancer cell line", 88th Annual Meeting of the American Association for Cancer Research, American Association for Cancer Research, Abstract. 1997.
33. **Benbrook, D. M.**, Nuñez, E. R., "Differences in radiosensitization and cell cycle progression of cervical carcinoma cell lines", 88th Annual Meeting of the American Association for Cancer Research, American Association for Cancer Research, Abstract. 1997.
34. **Benbrook, D. M.**, Lu, S., "Retinoid regulation of endogenous receptors, growth and EGF-R in a cervical carcinoma cell line", 88th Annual Meeting of the American Association for Cancer Research, American Association for Cancer Research, Abstract. 1997.
35. Madler, M., **Benbrook, D. M.**, Birckbichler, P. J., Nelson, E. C., Berlin, K. D., "Biologically active heteroarotinoids", Annual Meeting of the Medicinal Chemistry Division of the American Chemical Society, American Chemical Society, Abstract. August 1996.

36. Waliszewski, P., **Benbrook, D. M.**, Nasim, M., Hurst, R. E., "Human uroepithelial cells contain retinoid signaling pathways", American Association for Cancer Research, 86th Annual American Association for Cancer Research, Toronto, Ontario, Canada, Abstract. 1995.
37. Waliszewski, P., **Benbrook, D. M.**, Blaszewski, M. K., Gupta, M., Drews, M., Hurst, R. E., "The retinoic acid signaling pathway in normal and transformed human intestinal epithelial cells", American Association for Cancer Research, 86th Annual American Association for Cancer Research, Toronto, Ontario, Canada, Abstract. 1995.
38. **Benbrook, D. M.**, Heldermon, C., "Retinoic acid receptors bind to HPV16LCR sequence and repress transcription indirectly through AP1 sites", 13th International Papillomavirus Conference, International Papillomavirus Society, Amsterdam, The Netherlands, Abstract. 1994.
39. Rogers, R. S., **Benbrook, D. M.**, Walker, J. L., Lord, B. J., Haas, G. G., "Silent" carriers of human papillomavirus (HPV) identified in sperm bank donor population", American Fertility Society, 48th Annual Meeting, American Fertility Society, Abstract. 1992.
40. **Benbrook, D. M.**, Miller, R., "The effects of Norfloxacin, A pyriconecarboxylic acid-derivative, on DNA replication and DNA gyrase activity in *Pseudomonas aeruginosa*", Federation of American Society of Experimental Biology Meeting, Federation of American Society of Experimental Biology, Accepted, Abstract. 1982.

Other Presentations

* indicates mentee

National/International

1. **Benbrook, D. M.**, "Development of an Oklahoma Made Drug", 2019 John C. Krantz Jr. Memorial Lectureship, University of Maryland, Invited, Keynote/Plenary Address. April 16, 2019.
2. **Benbrook, D. M.**, "Serum vitamin D levels and treatment-related morbidity in ovarian, primary peritoneal, and Fallopian tube cancer: A prospective study", Society of Gynecologic Oncologists Annual Meeting, SGO, Honolulu, HI, Accepted, Abstract. March 19, 2019.
3. Carlson, B. W., Jones, K. R., Carlson, J. R., Craft, M., **Benbrook, D. M.**, Coleman-Jackson, R., Hershey, L. A., "Cerebral Oxigenation and Sleep Disordered Breathing in Adults and Mild Cognitive Impairment", 2018 Annual Scientific Meeting of the Gerontological Society of America, Gerontological Society of America, Boston, MA, Abstract. November 2018.
4. Watts, F. M., Berlin, K. D., **Benbrook, D. M.**, Bunce, R. A., 26th Meeting of the International Society of Heterocyclic Chemists - ISHC, International Society of Heterocyclic Chemists - ISHC, Regensburg, Germany, Oral Presentation. September 2017.
5. Chandra, V., Long, A., Masamha, C. P., **Benbrook, D. M.**, "Mitophagy induction and interference with cancer-specific apoptosis in SHetA2-treated cells", 108th American Association for Cancer Research (AACR) Annual Meeting, American Association for Cancer Research (AACR), Washington, DC, Oral Presentation. April 2017.
6. Thavathiru, E., Chandra, V., Rai, R., **Benbrook, D. M.**, "Mortalin precursor as potential marker for chemoprevention with SHetA2", 108th American Association for Cancer Research (AACR) Annual Meeting, American Association for Cancer Research (AACR), Washington, DC, Oral Presentation. April 2017.
7. Ramraj, S. K., Pelikan, R., Chandra, V., **Benbrook, D. M.**, "SHetA2 targets mortalin-p53

- interaction in differential induction of apoptosis in ovarian cancer over normal cells", 108th American Association for Cancer Research (AACR) Annual Meeting, American Association for Cancer Research (AACR), Washington, DC, Oral Presentation. April 2017.
8. Watts, F. M., Berlin, K. D., **Benbrook, D. M.**, Bunce, R. A., "Synthesis of Oxygen Analogues of a Promising Anticancer Drug", The 62nd Annual Oklahoma Pentasectional Meeting of the American Chemical Society, American Chemical Society, Cameron University, Lawton, OK, Oral Presentation. March 25, 2017.
 9. Hatipoglu, M. K., Mahjabeen, S., **Benbrook, D. M.**, Garcia-Contreras, L., "Development and Validation of Reverse Phase HPLC Method for SHetA2 in Gynecological Tissue for Treatment of Cervical Dysplasia", American Association for Pharmaceutical Scientists 2016 Meeting, American Association for Pharmaceutical Scientists (AAPS), Denver, CO, Abstract. November 2016.
 10. Mahjabeen, S., Chandra, V., Hatipoglu, M. K., **Benbrook, D. M.**, Garcia-Contreras, L., "Formulation of SHetA2 in a Vaginal Suppository for Chemoprevention Against Cervical Dysplasia", American Association for Pharmaceutical Scientists 2016 Meeting, American Association for Pharmaceutical Scientists (AAPS), Denver, CO, Abstract. November 2016.
 11. Pouland, T., Bunce, R., Berlin, K. D., **Benbrook, D. M.**, "Structure Activity Relationship of Analogs of a Cancer-Selective Small Molecule, OK-1", International Ovarian Cancer Research Symposium, Stephenson Cancer Center, Oklahoma City, OK, Abstract. August 2016.
 12. Carlson, B. W., Wenger, M. J., Craft, M. A., Crudden, G., DeStefano, L., Deardeuff, K., Curran, K. A., Daji, S., Byerly, R., Mooney, E., **Benbrook, D. M.**, Carlson, J. R., Hershey, L. A., "Cerebral Oxygenation during Afternoon Naps and Memory Consolidation in Older Adults with Mild Cognitive Impairment", 2016 Annual Scientific Meeting of the Associated Professional Sleep Societies (APSS), Associated Professional Sleep Societies (APSS), Denver, CO, Podium Presentation. June 2016.
 13. Craft, M., Carlson, B., Wenger, M., Friedman, J., **Benbrook, D. M.**, Razaq, W., Carlson, J., Curran, K. A., Mooney, E., Byerly, R., Daji, S., Crudden, G., "Descriptive study of perceived persistent declines in memory in older breast cancer survivors", International Ovarian Cancer Research Symposium, Stephenson Cancer Center, Oklahoma City, OK, Abstract. January 2016.
 14. Craft, M., Wenger, M., Carlson, J., Razaq, W., **Benbrook, D. M.**, Curran, K. A., Crudden, G., Carlson, B., "Descriptive study of cognitive disturbances in older adult breast cancer survivors", Sigma Theta Tau 43rd Biennial Conference, Sigma Theta Tau International Honor Society of Nursing, Las Vegas, NV, Podium Presentation. November 2015.
 15. Ibrahim, M., **Benbrook, D. M.**, Garcia-Contreras, L., "Optimization of Inhalable SHetA2 Microparticles for Tuberculosis Treatment", 2015 American Association of Pharmaceutical Sciences (AAPS) Annual Meeting & Exposition, American Association of Pharmaceutical Sciences (AAPS), Orlando, FL, Abstract. October 2015.
 16. Sharma, A., Thavathiru, E., **Benbrook, D. M.**, Woo, S., "Physiologically-Based PHarmacokinetic Models for SHetA2 in Orthotopic Murine Model of Ovarian Cancer (Awarded 2016 AAiPS Research Award in PPDM section)", 2015 American Association of Pharmaceutical Sciences (AAPS) Annual Meeting & Exposition, American Association of Pharmaceutical Sciences (AAPS), Orlando, FL, Abstract. October 2015.
 17. **Benbrook, D. M.**, "Targeting mortalin in ovarian cancer chemoprevention", 2nd Annual Meeting of the International Ovarian Cancer Consortium and the Symposium on Tumor Microenvironment and Therapeutic Resistance, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. August 17, 2015.

18. Ibrahim, M., **Benbrook, D. M.**, Garcia-Contreras, L., "Development of a Powder-Filled Capsule Formulation for SHetA2, a Novel Anticancer Drug", 2014 American Association of Pharmaceutical Sciences (AAPS) Annual Meeting & Exposition, American Association of Pharmaceutical Sciences (AAPS), San Diego, CA, Poster. November 2014.
19. Gunderson, C. C., **Benbrook, D. M.**, Farris, R., Butler, J. L., Ding, K., Smith, K. M., "Factors Affecting Differential Incidence of Adenocarcinoma of the Cervix", Society of Colposcopy and Cervical Pathology Biennial Meeting, Society of Colposcopy and Cervical Pathology, Scottsdale, AZ, Accepted, Oral Presentation. April 2014.
20. **Benbrook, D. M.**, "Drug-conjugated nanoparticles reveal mechanism of SHetA2 drug activity", 2nd International BAU Drug Design Congress, Istanbul, Turkey, Invited, Lecture. April 15, 2014.
21. **Benbrook, D. M.**, "How cancer cells use ER stress and autophagy to eat stroma", Annual Meeting of the International Ovarian Cancer Consortium: Tumor Microenvironment and Drug Discovery, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. February 10, 2014.
22. Sharma, A., **Benbrook, D. M.**, Woo, S., "First-in-Human Dose Determination for a Phase 0 Study of SHetA2, a Novel Anticancer Agent Using the Interspecies Scaling", 2013 AAPS Annual Meeting and Exposition, American Association of Pharmaceutical Scientists (AAPS), San Antonio, TX, Abstract. 2013.
23. Ibrahim, M., **Benbrook, D. M.**, Garcia-Contreras, L., "Formulation and Characterization of SHetA2 Capsules for Phase 0 Clinical Trials", 2013 AAPS Annual Meeting and Exposition, American Association of Pharmaceutical Scientists (AAPS), San Antonio, TX, Abstract. 2013.
24. Lightfoot, S., Zhao, D., Thavathiru, E., **Benbrook, D. M.**, "SHetA2 decreases mitoses and growth, and alters pathology of MNU-induced rat mammary tumors", 104th AACR Annual Meeting, American Association for Cancer Research, Washington, DC, Abstract. April 2013.
25. **Benbrook, D. M.**, "Cancer prevention", Women's Enrichment Fellowship Talk Show, Forward in Faith Ministries International, Farmers Branch, TX, Invited, Lecture. March 16, 2013.
26. Zhakharov, A. D., Kabirov, K. K., Nickolic, D., Chen, L., Mankovskaya, I., van Breemen, R. B., **Benbrook, D. M.**, Kapetanovic, I. M., Lyubimov, A. V., "Analysis of a new chemo preventative agent SHetA2 and its metabolites in Beagle dog liver", 103rd AACR Annual Meeting, American Association for Cancer Research (AACR), Chicago, IL, Oral Presentation. 2012.
27. **Benbrook, D. M.**, "Before you can shoot, you need to know what the target is", Symposium on drug design and molecular pharmacology, University of Southern California, Los Angeles, CA, Invited, Oral Presentation. May 17, 2011.
28. **Benbrook, D. M.**, "Development of a Flex-Het drug and biomarkers for chemoprevention clinical trial", International Cancer Research Symposium 2010: Defining & Translating Science Behind Disease, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, Kerala, India, Invited, Lecture. December 10, 2010.
29. **Benbrook, D. M.**, "Development of Flex-Het drugs for prevention and treatment of cancer: From basic laboratory science to clinical trials", University of Cape Town, Cape Town, South Africa, Invited, Lecture. June 23, 2010.
30. Hurteau, J., McGuire, W., Darcy, K., Pearl, M. L., Ivanov, L., Tewari, K., Mannel, R. S., Zanotti, K. M., **Benbrook, D. M.**, "A Randomized Phase III Trial of Tamoxifen versus Thalidomide in Women with Biochemical-Recurrent Only Epithelial Ovarian, Fallopian Tube or Primary Peritoneal

Carcinoma with an Evaluation of Serum Vascular Endotelial Growth Factor: A Gynecologic Oncology Group Study", 41st Annual SGO Meeting, Society of Gynecologic Oncology (SGO), San Francisco, CA, Abstract. March 2010.

31. McDaniel, S., **Benbrook, D. M.**, "Deciphering Structural Features Important for Heteroarotinoid Growth Inhibition Activity in Normal and Cancerous Ovarian Cells", 2008 Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) National Conference, American Association for the Advancement of Science (AAAS), Atlanta, GA, Poster. October 2008.
32. Chenedza, S., **Benbrook, D. M.**, "Inhibition of NF- κ B Activity By SHetA2 Overcomes Tumor Necrosis Factor-Alpha Resistance in Ovarian Cancer Cells", Third Annual NIH National Graduate Student Research Festival, National Institute of Health (NIH), Bethesda, MD, Poster. September 2008.
33. Myers, T., **Benbrook, D. M.**, "Thymidine phosphorylase is a molecular target of SHetA2 antiangiogenesis activit", 2nd Annual Angiogenesis Research & Therapeutics, Angiogenesis Research & Therapeutics, Philadelphia, PA, Oral Presentation. February 2007.
34. **Benbrook, D. M.**, "Flex-Het regulation of gene expression, angiogenesis and apoptosis", Conference on Retinoids, Federation for the American Association of Experimental Biology (FASEB), Indian Wells, CA, Invited, Lecture. 2006.
35. **Benbrook, D. M.**, "Molecular mechanisms of apoptosis and angiogenesis regulation by Flex-Het drugs", University of Maryland, Baltimore, MD, Invited, Lecture. December 11, 2006.
36. **Benbrook, D. M.**, "Angiogenesis targeting in ovarian cancer", 7th Annual International Conference on Ovarian Cancer, MD Anderson Cancer Center, Houston, TX, Invited, Lecture. November 30, 2006.
37. **Benbrook, D. M.**, "Angiogenesis biomarkers in GOG thalidomide trials", GOG Semi-Annual Meeting, Gynecologic Oncology Group (GOG), San Diego, CA, Invited, Lecture. January 21, 2006.
38. Hannafon, B. N., Dearnley, D. D., **Benbrook, D. M.**, "Gene Expression of the Angiogenic Factor Thrombospondin 4 can be inhibited by SHetA2 in Ovarian Cancer Cells", Fifth International Conference on Ovarian Cancer, MD Anderson Cancer Center, Houston, Texas. December 2004.
39. Dearnley, D. D., Hannafon, B. N., **Benbrook, D. M.**, "A Novel Chemotherapeutic Agent, SHetA2, Inhibits Expression of Platelet Derived Endothelial Cell Growth Factor (PD-ECGF) in Ovarian Cancer and Angiogenesis In Vitro", Fifth International Conference on Ovarian Cancer, MD Anderson Cancer Center, Houston, Texas, Oral Presentation. December 2004.
40. Liu, Z., Covey, J., **Benbrook, D. M.**, Chan, K., "Pharmacokinetic and Metabolism Study of SHetA2 (NSC 683864), an dNew Heteroarotinoid Antitumor Agent in the Reat", American Association for Pharmaceutical Scientists 2004 Meeting, American Association for Pharmaceutical Scientists (AAPS), Baltimore, MD, Oral Presentation. November 2004.
41. **Benbrook, D. M.**, "Mechanism of differentiation of apoptosis induction in cancer cells by a retinoid receptor-independent heteroarotinoid, SHetA2", Summer Research Conference on Retinoids, Federation of the American Association of Experimental Biology (FASEB), Callaway Gardens, GA, Invited, Lecture. June 12, 2004.
42. **Benbrook, D. M.**, "Preclinical development of SHetA2 for cancer", Huntsman Cancer Center, Ovarian Cancer Research Group, Salt Lake City, UT, Invited, Lecture. October 10, 2003.
43. Arendse, C. E., Brennan, M., **Benbrook, D. M.**, Hendricks, D. T., "Characterisation of

heteroarotinoids as potential agents in the treatment of oesophageal cancer", IUBMB conference, International Union of Biochemistry and Molecular Biology (IUBMB), Toronto, Ontario, Canada, Oral Presentation. July 2003.

44. **Benbrook, D. M.**, "SHetA2 regulation of growth, differentiation and apoptosis in cancer cells and tumors without evidence of toxicity", National Cancer Access to Intervention and Development (RAID) Program, National Cancer Institute, Bethesda, MD, Invited, Lecture. April 1, 2003.
45. **Benbrook, D. M.**, Kamelle, S., Joyce, K., Guruswamy, S., Tillmanns, T., Gould, N., Rutledge, T., "Evaluation of Human Papillomavirus and p53 transcriptional activation in the mechanism of 9-cisretinoic acid radiosensitization of squamous gynecologic cancer cells", 93rd Annual American Association for Cancer Research Meeting, American Association for Cancer Research, San Francisco, CA, Abstract. 2002.
46. Guruswamy, S., **Benbrook, D. M.**, "The roles of p53, retinoid receptors, and DNA damager response genes in the mechanism of retinoid sensitization of OVCAR-3 to cisplatin", 93rd Annual American Association for Cancer Research Meeting, American Association for Cancer Research, San Francisco, CA, Abstract. 2002.
47. **Benbrook, D. M.**, "Molecular biology of endometrial cancer", Controversies in the Management of Gynecologic Malignancies Conference 3, Washington, DC, Invited, Lecture. December 5, 2002.
48. DuPont, N., **Benbrook, D. M.**, "The Clinical Significance of MUC-1 Expression in Ovarian Cancer", American College of Obstetricians and Gynecologists (ACOG) District VII Meeting, American College of Obstetricians and Gynecologists (ACOG), New Orleans, LA, Oral Presentation. October 11, 2002.
49. **Benbrook, D. M.**, "Relations of differentiation, apoptosis and MUC1 in retinoid growth inhibition of ovarian cancer", Summer Research Conference, Federation of the American Association of Experimental Biology (FASEB), Tucson, AZ, Lecture. June 24, 2002.
50. **Benbrook, D. M.**, "Refining retinoids with heteroatoms", Proctor & Gamble, Cincinnati, OH, Invited, Lecture. March 14, 2002.
51. DuPont, N., **Benbrook, D. M.**, "MUC-1 as an indicator of cellular differentiation in ovarian cancer", American College of Obstetricians and Gynecologists (ACOG) District VII Meeting, American College of Obstetricians and Gynecologists (ACOG), Tulsa, OK, Oral Presentation. September 25, 2001.
52. **Benbrook, D. M.**, "Development of retinoids for chemoprevention", Dip. Sc. Farmaceutiche, Ferrara, Italy, Invited, Lecture. June 21, 2001.
53. **Benbrook, D. M.**, "Retinoids, apoptosis and cancer", Policlinico P. Giaccone, Palermo, Italy, Invited, Lecture. June 7, 2001.
54. Kamelle, S. A., Sienko, A., **Benbrook, D. M.**, "An in vitro model of normal endometrium using organotypic culture: The first step in producing a model to study endometrial carcinogenesis", Society of Gynecologic Oncology Annual Meeting 2000, Society of Gynecologic Oncology (SGO), Oral Presentation. 2000.
55. Spencer, C., **Benbrook, D. M.**, "Retinoids induce apoptosis in ovarian organotypic cultures", American Society of Clinical Oncologists 2000 Annual Meeting, American Society of Clinical Oncologists (ASCO), Oral Presentation. 2000.
56. Patrick, S. D., Waugh, K., Subramanian, S., Simms-Kelley, M. D., **Benbrook, D. M.**, Berlin, K. D.,

- Nelson, E. C., "Synthetic retinoids induce differentiation in F9 cells", FASEB, FASEB, Oral Presentation. 2000.
57. **Benbrook, D. M.**, "Molecular mechanisms of retinoid drugs", Shanghai Institute of Biochemistry, Shanghai, China, Invited, Lecture. October 2000.
 58. Simoni, D., Roberti, M., Rondanin, R., Rossi, M., Baruchello, R., Grimaudo, S., Tolomeo, M., Arindam, D., **Benbrook, D. M.**, "A New Class of HeterocyclicContaining Arotinoids Endowed with Potent Differentiating and Apoptotic Activity", XVIth International Symposium on Medicinal Chemistry, International Symposium on Medicinal Chemistry, Bologna, Italy, Oral Presentation. September 2000.
 59. **Benbrook, D. M.**, "Molecular mechanisms of retinoids against gynecologic cancers", Special Meeting on Retinoids, Federation of the American Association of Experimental Biology (FASEB), Copper Mountain, CO, Invited, Lecture. June 2000.
 60. Hassan, **Benbrook, D. M.**, Lightfoot, S. A., Lerner, M. R., Brackett, D. J., Chowdhury, P. S., Pastan, I., "SS1(DSFV)-PE38, A recombinant anti-mesothelin immunotoxin targets human gynecologic tumors overexpressing mesothelin", The 36th Annual American Society of Clinical Oncology Meeting, American Society of Clinical Oncology (ASCO), New Orleans, LA, Oral Presentation. May 2000.
 61. Guruswamy, S., **Benbrook, D. M.**, "Retinoids induce differentiation and apoptosis in ovarian adenocarcinoma organotypic culture", 91st American Association for Cancer Research Annual Meeting, American Association for Cancer Research (AACR), San Francisco, CA, Oral Presentation. April 2000.
 62. Dhar, A., Berlin, K. D., **Benbrook, D. M.**, "Structural Features of Synthetic Retinoids Confer Receptor Selectivity and Refined Biological Activities", 91st American Association for Cancer Research Annual Meeting, American Association for Cancer Research (AACR), San Francisco, CA, Oral Presentation. April 2000.
 63. Dhar, A., Berlin, K. D., Madler, M. M., Ivey, R. T., Birckbichler, P. J., Lu, S., Zacheis, D., **Benbrook, D. M.**, "Flexible Nitrogen Heteroarotinoids: Receptor specificity and Therapeutic Potential in Epithelial Cancers", 90th American Association for Cancer Research Annual Meeting, American Association for Cancer Research (AACR), Philadelphia, PA, Abstract. April 1999.
 64. **Benbrook, D. M.**, "Translational research to develop retinoids for gynecological cancers", University of Ottawa Department of Cellular and Molecular Medicine, Ottawa, Ontario, Invited, Lecture. September 1998.
 65. **Benbrook, D. M.**, "Potential and molecular markers for 4HPR in chemoprevention of ovarian cancer", GOG Semi-Annual Meeting, Gynecologic Oncology Group, Toronto, Ontario, Invited, Lecture. July 1998.
 66. Nuñez, E. R., Jordan, T. L., **Benbrook, D. M.**, "13-Cis acid is a radiosensitizer of SiHa cervical carcinoma cell line", 87th Annual American Association for Cancer Research Meeting, American Association for Cancer Research, Washington, DC, Abstract. 1996.
 67. **Benbrook, D. M.**, Lu, S., Flanagan, C. W., Jordan, T. L., "Retinoids inhibit growth and activate endogenous receptors in a cervical tumor cell line", FASEB Summer Research Conference on Retinoids, Federation of American Societies for Experimental Biology (FASEB), Oral Presentation. 1996.
 68. **Benbrook, D. M.**, Jordan, T. L., Heldermon, C., Robinson, K., "Evaluation of endogenous retinoic

acid receptor function in cervical tumor cells", 6th Annual Research Conference, American Institute for Cancer Research, Washington, DC, Abstract. 1995.

69. Nuñez, E. R., Heldermon, C., **Benbrook, D. M.**, "Restoration of RAR expression and function in RAR-deficient cervical tumor cell lines has different effects depending on the intercellular environment", American Association for Cancer Research Special Conference "Mechanism of Action of Retinoids, Vitamin D, and Steroid Hormones", American Association for Cancer Research, Oral Presentation. 1995.
70. Nuñez, E. R., **Benbrook, D. M.**, "Retinoic acid receptor expression effects growth and retinoid sensitivity in cervical tumor cell lines", American Association for Cancer Research Conference "Molecular Biology of Cancer: Implications for Prevention and Therapy", American Association for Cancer Research, Oral Presentation. 1995.
71. Mannel, R. S., Khalifa, M., Wren, M., Walker, J. L., Min, K. W., **Benbrook, D. M.**, "Epidermal growth factor receptor in vulvar malignancies and its relationship to metastasis and patient survival", 26th Annual Society of Gynecologic Oncologists' Meeting, Society of Gynecologic Oncologists, Abstract. 1994.
72. **Benbrook, D. M.**, Heldermon, C., Nunez, E. R., Waliszewski, P., "Retinoic acid receptor (RAR) effects in cervical tumor cell lines", Diet and Cancer: Molecular Mechanisms of Interactions, American Institute of Cancer Research, Abstract. 1994.
73. **Benbrook, D. M.**, Medlin, M., Rogers, R., Ahern-Moore, J., Dunn, S. T., Lord, B., Walker, J. L., ""Retinoid effects on tumor cells in organotypic culture"", American Association for Cancer Research Special Conference "Mechanism of Action of Retinoids, Vitamin D, and Steroid Hormones", American Association for Cancer Research, Oral Presentation. 1993.
74. **Benbrook, D. M.**, Miller, R., "The effects of Norfloxacin on Pseudomonas aeruginosa and its DNA Gyrase", American Society of Microbiology, 84th Annual Meeting, American Society of Microbiology, Accepted, Oral Presentation. 1984.

Local/Regional

1. Docker, L. E., Ward, J. M., Vesely, S. K., Thavathiru, E., **Benbrook, D. M.**, Moore, K., Holman, L. L., "Vitamin D, Leptin, Vitamin D Receptor (VDR) Single Nucleotide Polymorphism (SNP) and Treatment-Related Morbidity in Ovarian, Primary Peritoneal, and Fallopian Tube Cancer", Western Association for Gynecologic Oncologists Annual Meeting, WAGO, Park City, UT, Accepted, Abstract. June 2018.
2. **Benbrook, D. M.**, "How we are trying to prevent & kill cancer without harming you", Gynecologic Cancers Survivors' Workshop, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. September 16, 2017.
3. **Benbrook, D. M.**, "Bringing an Oklahoma-made drug to clinical trial", Annual Stephenson Cancer Center Symposium, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. January 27, 2017.
4. **Benbrook, D. M.**, "Identifying and validating molecular targets for development of cancer prevention and treatment drugs", OB/GYN Grand Rounds, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. September 9, 2016.
5. **Benbrook, D. M.**, OKC Chamber of Commerce Annual Breakfast, Oklahoma City, OK, Invited, Speaker and Panel Member. September 7, 2016.

6. **Benbrook, D. M.**, "An ounce of prevention costs more than a pound of cure", Hematology Oncology Grand Rounds, Stephenson Cancer Center, University of Oklahoma, Oklahoma City, OK, Invited, Lecture. August 19, 2016.
7. **Benbrook, D. M.**, "Why an ounce of prevention costs more than a pound of cure", Annual Stephenson Cancer Center Board of Advocates Meeting, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. August 12, 2016.
8. **Benbrook, D. M.**, "Finding and fighting the origins of cancer", Central Travel Club, Oklahoma City, OK, Invited, Lecture. April 15, 2016.
9. **Benbrook, D. M.**, "Ovarian Cancer Prevention", HOPE Ovarian Cancer Survival Group, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. April 4, 2016.
10. Craft, M. A., Carlson, B. W., **Benbrook, D. M.**, Friedman, J. R., Razaq, W., Wenger, M. J., Curran, K. A., Crudden, G. M., "Descriptive study of cognitive disturbances in older breast cancer survivors", 2016 Midwest Nursing Research Society Conference, Midwest Nursing Research Society Foundation, Milwaukee, WI, Abstract. March 2016.
11. **Benbrook, D. M.**, "Finding and fighting the origins of cancer", Physiology Seminar Series, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. February 25, 2016.
12. Mahjabeen, S., Sanjida, Chandra, Vishal, Hatipoglu, M. K., **Benbrook, D. M.**, Garcia-Contreras, L., "Formulation of SHetA2 in a Vaginal Suppository for Chemoprevention Against Cervical Dysplasia", 2016 Stephenson Cancer Center Research Symposium, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Abstract. January 29, 2016.
13. Yari, Hooman, Hatipoglu, M. K., **Benbrook, D. M.**, Garcia-Contreras, L., "Formulation of SHetA2 Nanoparticles for the Treatment of Lung Cancer", 2016 Stephenson Cancer Center Research Symposium, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Abstract. January 29, 2016.
14. Sharma, A., Thavathiru, E., Ramraj, S. K., **Benbrook, D. M.**, Woo, S., "Physiologically-Based PHarmacokinetic Models for SHetA2 in Orthotopic Murine Model of Ovarian Cancer (Awarded 2016 AAiPS Research Award in PPDM section)", 2016 Stephenson Cancer Center Research Symposium, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Abstract. January 29, 2016.
15. Ramraj, S. K., Thavathiru, E., Toal, C., Smith, K., Crouse, E., **Benbrook, D. M.**, "Targeting mortalin-p53 interaction in differential induction of apoptosis in cancer over normal cells", 2016 Stephenson Cancer Center Research Symposium, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Abstract. January 29, 2016.
16. Eschiti, V., **Benbrook, D. M.**, Sanford, S., Rhoades, D., Doescher, M., Warson, E., Lauderdale, J., Matzo, M., "Art Interventions for Palliative Care Symptom Management in Comanche Cancer Survivors", Partners in Quality: Evidence-based Practice and Quality Improvement, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Oral Presentation. 2015.
17. **Benbrook, D. M.**, "Ovarian cancer", National Ovarian Cancer Philanthropy Event, OU Student Organization, Lambda Delta Psi, Norman, OK, Invited, Lecture. September 17, 2015.
18. **Benbrook, D. M.**, "A journey from vitamin A to mortalin in a quest to prevent cancer", Institute for Natural Products Applications & Research Technologies (INPART) Seminar, University of

- Oklahoma, Norman, OK, Invited, Lecture. April 16, 2015.
19. **Benbrook, D. M.**, "Integration of autophagy and apoptosis in the tumor microenvironment and downstream of mortalin/client protein disruption", Eppley Seminar Series, University of Nebraska, Omaha, NE, Invited, Lecture. September 5, 2014.
 20. **Benbrook, D. M.**, "Autophagy and immunology in ovarian cancer", MD Anderson Cancer Center/Stephenson Cancer Center (MDACC/SCC) Collaboration, Oklahoma City, OK, Invited, Lecture. August 28, 2014.
 21. **Benbrook, D. M.**, "Phase 0 trial of SHetA2 for ovarian cancer chemoprevention", Gynecologic Cancers Program Meeting, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. May 28, 2014.
 22. **Benbrook, D. M.**, "Bringing our small molecule drug over the pharmaceutical wall into clinical trial", University of Oklahoma Department of Pharmaceutical Sciences, Oklahoma City, OK, Invited, Lecture. January 28, 2014.
 23. **Benbrook, D. M.**, "Mechanism of SHetA2 differential effects on cancer over normal cells", Experimental Therapeutics Program Monthly Meeting, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. December 12, 2013.
 24. **Benbrook, D. M.**, "Phase 0 trial of SHetA2", Women's Cancer Program Monthly Meeting, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. October 26, 2013.
 25. **Benbrook, D. M.**, "Development of a cancer drug: From tubes to tissues to treatments", Texas Tech University Department of Cell Biology and Biochemistry, Lubbock, TX, Invited, Lecture. September 24, 2013.
 26. Sharma, A., **Benbrook, D. M.**, Woo, S., "Application of interspecies scaling to predict SHetA2 pharmacokinetics in humans", 38th Annual GREAT Symposium, OU Health Science Center, Oklahoma City, OK, Abstract. April 2013.
 27. **Benbrook, D. M.**, "Curing cancer with chemistry", Chemistry Club Meeting, University of Central Oklahoma, Edmond, OK, Invited, Lecture. March 7, 2013.
 28. **Benbrook, D. M.**, "Translating mechanistic and pharmacokinetic studies into S-Het-A2 drug clinical trials", Monthly Research Seminar Series, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. February 1, 2013.
 29. **Benbrook, D. M.**, "Leveraging cell stress response pathways in drug discovery", Tumor Microenvironment and Drug Discovery Conference, Stephenson Cancer Center, Oklahoma City, OK, Invited, Lecture. December 3, 2012.
 30. **Benbrook, D. M.**, "Heat shock proteins and stress response pathways in cancer drug development", Oklahoma State University Department of Biochemistry, Stillwater, OK, Invited, Lecture. October 12, 2012.
 31. **Benbrook, D. M.**, "Stress response in ovarian cancer resistance", MD Anderson Cancer Center and Stephenson Cancer Center Collaborative Retreat, MD Anderson Cancer Center, Houston, TX, Invited, Lecture. September 29, 2012.
 32. **Benbrook, D. M.**, "Development of a cancer prevention pill", Ovarian Cancer Support Group, Bartlesville, OK, Invited, Lecture. October 22, 2011.

33. **Benbrook, D. M.**, "How to know which targets to hit in the fight against cancer", Departments of Biochemistry & Molecular Biology and Cell Biology Seminar Series, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. June 15, 2011.
34. **Benbrook, D. M.**, "Collaboration in drug discovery and translation to clinical trials", 14th Annual Rall Symposium for Undergraduate Research, North Central College, Naperville, IL, Invited, Lecture. May 17, 2011.
35. **Benbrook, D. M.**, "Before you can shoot, you need to know what the target is", Symposium on Drug Design and Molecular Pharmacology, University of Southern California, Invited, Lecture. February 9, 2011.
36. **Benbrook, D. M.**, "Progress report on development of SHetA2 for chemoprevention", HOPE Ovarian Cancer Survivor Group, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. April 3, 2010.
37. **Benbrook, D. M.**, "Preclinical development of SHetA2", Oklahoma State University College of Veterinary Sciences, Stillwater, OK, Invited, Oral Presentation. February 10, 2010.
38. **Benbrook, D. M.**, "Preclinical Development of SHetA2", Oklahoma State University, College of Veterinary Sciences, Stillwater, OK, Invited, Lecture. February 4, 2010.
39. **Benbrook, D. M.**, "Translation of biological systems driving experimental carcinogenesis and chemoprevention to clinical application", University of Louisiana Shreveport Cancer Center, Shreveport, LA, Invited, Lecture. April 30, 2009.
40. **Benbrook, D. M.**, "Systems biology and translation of an organotypic model of carcinogenesis and chemoprevention", University of Oklahoma Department of Physiology, Oklahoma City, OK, Invited, Lecture. September 11, 2008.
41. **Benbrook, D. M.**, "Systems biology of Flex-Het drugs and cancer biomarkers in experimental models and clinical trials", Notre Dame, Notre Dame, IN, Invited, Lecture. May 13, 2008.
42. **Benbrook, D. M.**, "Signal transduction mechanisms of Flex-Het therapeutic and chemoprevention activity", University of Illinois at Chicago, Chicago, IL, Invited, Lecture. March 18, 2008.
43. **Benbrook, D. M.**, "Translating Flex-Het drug and biomarker research to clinical application", College of Pharmacy Research Seminar, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. November 8, 2007.
44. **Benbrook, D. M.**, "Translating Flex-Het drug and biomarker research to clinical application", Gynecologic Oncology Grand Rounds, MD Anderson Cancer Center, Houston, TX, Invited, Lecture. November 7, 2007.
45. **Benbrook, D. M.**, "Reversal of abnormal differentiation in cancer and polycystic kidney disease by Flex-Hets", Pathology Grand Rounds, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. October 1, 2007.
46. **Benbrook, D. M.**, "Developing drugs and biomarkers for cancer", Biochemistry and Cell Biology Seminar Series, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Oral Presentation. May 10, 2006.
47. **Benbrook, D. M.**, "Glycoproteins in cervical cancer metastases", OU Cancer Cell Biology Program, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture.

November 8, 2005.

48. **Benbrook, D. M.**, "Mitochondria and gene expression in Flex-Het induction of apoptosis in cancer versus normal cells", Winship Cancer Center, Emory University, Atlanta, GA, Invited, Lecture. July 15, 2005.
49. **Benbrook, D. M.**, "How to make a chemical into a drug", Chemistry Club, Southwestern Oklahoma State University, Weatherford, OK, Invited, Lecture. March 10, 2005.
50. **Benbrook, D. M.**, "Flex-Hets", Meet the Scientist, i2E, Oklahoma City, OK, Invited, Lecture. January 26, 2005.
51. **Benbrook, D. M.**, "Development of drugs that target mitochondria", Oklahoma State University Department of Microbiology, Stillwater, OK, Invited, Lecture. January 10, 2005.
52. **Benbrook, D. M.**, "Preclinical development of Flex-Hets", Section of Endocrinology Grand Rounds, University of Oklahoma Department of Medicine, Oklahoma City, OK, Invited, Lecture. December 16, 2004.
53. **Benbrook, D. M.**, "Preclinical development of SHetA2 for cancer", Department of Medicine Grand Rounds, University of Oklahoma Health, Oklahoma City, OK, Invited, Lecture. August 23, 2004.
54. **Benbrook, D. M.**, "How to get an NCI grant", Grant Writing Workshop, OU Cancer Center, Oklahoma City, OK, Invited, Lecture. September 5, 2003.
55. **Benbrook, D. M.**, "Development of heteroarotinoids for chemoprevention", Encore Site Visit, Free Radical Biology Section, Oklahoma Medical Research Foundation (OMRF), Oklahoma City, OK, Invited, Lecture. May 19, 2003.
56. **Benbrook, D. M.**, "Translational research and the Dawn Hope Tissue Bank", Aventis Site Visit, University of Oklahoma, Section of Gynecologic Oncology, Department of Obstetrics and Gynecology, Oklahoma City, OK, Invited, Lecture. May 12, 2003.
57. **Benbrook, D. M.**, "Development of chemoprevention drugs that regulate growth, apoptosis and differentiation in cancer cells without toxicity", Breast Cancer Program of the OU Cancer Center Meeting, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. May 6, 2003.
58. **Benbrook, D. M.**, "Carcinogenesis and chemoprevention of gynecologic cancers", University of Oklahoma Department of Biochemistry and Molecular Biology, Oklahoma City, OK, Invited, Lecture. April 30, 2003.
59. **Benbrook, D. M.**, "Understanding cancer and developing new prevention and treatment strategies", Women's Health Center Research Meeting, University of Oklahoma Health Sciences Center, Oklahoma City, OK, Invited, Lecture. February 21, 2003.
60. **Benbrook, D. M.**, "Biomarkers, histology & stem cells in endometrial cycling & cancer", Gynecologic Oncology Program, OU Cancer Center, Oklahoma City, OK, Invited, Lecture. February 19, 2003.
61. **Benbrook, D. M.**, "Organotypic models of carcinogenesis", Cancer Group, Oklahoma Memorial Research Foundation, Oklahoma City, OK, Invited, Lecture. December 13, 2002.
62. **Benbrook, D. M.**, "Tumor suppressor genes and DNA tumor viruses", Annual Spring Meeting, Texas Section of the American Association for Clinical Chemistry, Norman, OK, Invited, Lecture.

April 2001.

63. **Benbrook, D. M.**, "Retinoids, not just for acne anymore", Oklahoma Memorial Research Foundation, Oklahoma City, OK, Invited, Lecture. September 2000.
64. Kamelle, S., Sienko, A., Berlin, K. D., **Benbrook, D. M.**, "Retinoid inhibition of ovarian cancer xenograft growth", Western Association of Gynecologic Oncologists 2000 Annual Meeting, Western Association of Gynecologic Oncologists (WAGO), Motteray, CA, Oral Presentation. May 2000.
65. **Benbrook, D. M.**, "Molecular advances in cancer therapy", Academy of Medicine, Oklahoma City, OK, Invited, Lecture. March 2000.
66. **Benbrook, D. M.**, "Molecular biological techniques", OB/GYN Grand Rounds, University of Oklahoma Department of OB/GYN, Oklahoma City, OK, Invited, Lecture. February 2000.
67. Spencer, C., **Benbrook, D. M.**, "Retinoids induce apoptosis in ovarian organotypic cultures", Western Association for Gynecologic Oncologists 1999 Annual Meeting, Western Association of Gynecology Oncologists (WAGO), Victoria, British Columbia, Canada, Abstract. June 1999.
68. **Benbrook, D. M.**, "Organotypic culture models of gynecological cancer and disease", OB/GYN Grand Rounds, University of Oklahoma Department of OB/GYN, Oklahoma City, OK, Invited, Lecture. March 1999.
69. **Benbrook, D. M.**, "Anti-AP1 activity of retinoids: Correlation with growth inhibition and radiosensitization", Steroid Hormone Receptor Group, Oklahoma City, OK, Invited, Lecture. February 1999.
70. **Benbrook, D. M.**, "Translational research to develop retinoids for gynecological cancers", Oklahoma Memorial Research Foundation, Oklahoma City, OK, Invited, Lecture. October 1998.
71. **Benbrook, D. M.**, "Translational research to develop retinoids for gynecological cancers", Louisiana State University Department of Cellular Biology, Shreveport, LA, Invited, Lecture. September 1998.
72. **Benbrook, D. M.**, "Translational research to develop retinoids for gynecological cancers", University of Oklahoma Department of Biochemistry and Molecular Biology, Oklahoma City, OK, Invited, Lecture. September 1998.
73. **Benbrook, D. M.**, "The food you eat can change you", The Science Forum, Oklahoma Memorial Research Foundation, Oklahoma City, OK, Invited, Lecture. November 1997.
74. **Benbrook, D. M.**, "Cancer genetics", Women's Health Symposium, Oklahoma City, OK, Invited, Lecture. October 1997.
75. **Benbrook, D. M.**, "Prevention and treatment of cervical cancer with synthetic retinoids", Drug Dynamic Institute, University of Texas, Austin, TX, Invited, Lecture. July 1997.
76. **Benbrook, D. M.**, "Oncogenes and tumor suppressor genes", Cancer Conference, Integris Baptist Medical Center, Oklahoma City, OK, Invited, Lecture. June 1997.
77. **Benbrook, D. M.**, "Oncogenes and tumor suppressor genes", University of Oklahoma OB/GYN Grand Rounds, Oklahoma City, OK, Invited, Lecture. May 1997.
78. **Benbrook, D. M.**, "Translational research: Studying the relationship between nutrition and

cancer", University of Oklahoma OB/GYN Grand Rounds, Oklahoma City, OK, Invited, Lecture. November 1995.

79. **Benbrook, D. M.**, "Drug discovery and design", Premed Club, University of Oklahoma Undergraduate School, Norman, OK, Invited, Lecture. 1994.
80. **Benbrook, D. M.**, "Radiation and retinoid effects on cervical cancer", University of Oklahoma Department of Pathology, Oklahoma City, OK, Invited, Lecture. 1994.
81. **Benbrook, D. M.**, "Effects of retinoids on organotypically grown tumors", Oklahoma State University Department of Biochemistry and Molecular Biology, Stillwater, OK, Invited, Lecture. 1993.
82. **Benbrook, D. M.**, "Retinoid effects on organotypically grown cervical tumor tissue", University of Oklahoma Department of Anatomy, Oklahoma City, OK, Invited, Lecture. 1993.
83. **Benbrook, D. M.**, "The influence of diet and retinoic acid on cancer", Science Forum, Combined NIH Training Grants Meeting, Oklahoma Memorial Research Foundation, Invited, Lecture. 1993.
84. **Benbrook, D. M.**, "Interaction of CREB and Jun transcription factors", Oklahoma State University Department of Microbiology, Stillwater, OK, Invited, Lecture. September 1991.
85. **Benbrook, D. M.**, "Interaction of CREB and Jun transcription factors", University of Oklahoma Department of Biochemistry and Molecular Biology, Oklahoma City, OK, Invited, Lecture. September 1991.

TEACHING AND INSTRUCTION

Teaching and Course Instruction – OUHSC/SCM

Year(s) of Instruction	Course ID	Course/Lecture Title	Role	Avg. Contact Hrs/Year	Primary Learner Audience
2014 - Present	CTS 5133	Foundations in Translational Research Course	Course Director and Instructor	30	
2012 - Present		CSI and CSII, Cellular Systems, Integration of Cell Death and Survival Pathways	Instructor	4.5	
2007 - Present		Clinical and Translational Science Award (CTSA) Summer Scholar Program: Clinical and Translation Science (2 hours) The University of Oklahoma Cancer Institute (1 hour)	Instructor		
2005 - Present	BMSC 5221	Cancer Journal Club	Instructor	4	

Year(s) of Instruction	Course ID	Course/Lecture Title	Role	Avg. Contact Hrs/Year	Primary Learner Audience
2005 - Present		Clinical Bioinformatics (RADI5403, RADI5413): Assisted in development of this new course in 2005 and lectured in: •Structural Biology (1.5 hrs) •Carcinogenesis, Chemoprevention and Cancer Genetics (1.5 hrs) •Angiogenesis, molecular targets for treatment, diagnosis, monitoring & imaging (1.5 hrs) •Cancer Metastasis and Immunity, treatment, diagnosis, monitoring & imaging (1.5 hrs) • Lunch and Learn (2 hrs)	Lecturer	8	
2005 - Present	BMSB 6100	Laboratory Rotations		20	
2005 - Present	BMSB 6121	Molecular Mechanisms of Disease			
2004 - Present	CELL 6331	Cancer Genetics/Biomarkers	Instructor	1.5	
Spring 2018	CTS 5133	Foundations in Translational Research: I directed this course and personally developed online curriculum and lectured for 3 of the 3 credit hour class sessions.	Course Director	17	Graduate
Fall 2017	CS 2	Cellular Systems: (CSII-18) Mechanisms Controlling Cell Death in Health and Diseases (CSII-19) Mechanisms Controlling Survival in Health and Diseases (CSII-20) Targeting the Integration of Cell Death and Survival Networks in the Development of Disease Prevention and Treatment Strategies	Lecturer	6	Graduate
Spring 2017	CTS 5133	Foundations in Translational Research: I directed this course and personally developed online curriculum and lectured for 3 of the 3 credit hour class sessions.	Course Director	17	Graduate
Fall 2016	CS 2	Cellular Systems: (CSII-18) Mechanisms Controlling Cell Death in Health and Diseases (CSII-19) Mechanisms Controlling Survival in Health and Diseases (CSII-20) Targeting the Integration of Cell Death and Survival Networks in the Development of Disease Prevention and Treatment Strategies	Lecturer	6	Graduate
Spring 2016	CTS 5133	Foundations in Translational Research: I directed this course and personally developed online curriculum and lectured for 3 of the 3 credit hour class sessions.	Lecturer	17	Graduate
2011		Cell Death	Instructor	2	
2007 - 2009		CSI and CSII, Cellular Systems, Apoptosis		1.5	
2006		Molecular Mechanisms of Cancer	Instructor	1	
2004 - 2006		Carcinogenesis and Chemoprevention	Instructor	2	

Year(s) of Instruction	Course ID	Course/Lecture Title	Role	Avg. Contact Hrs/Year	Primary Learner Audience
1993 - 2004		Oncogenes and Tumor Suppressor Genes: Departments of Pathology and Radiological Sciences	Lecturer		
2002 - 2003	BMSC 5221	Cancer Journal Club	Instructor	4	
2002 - 2003		Regulation of Gene Expression	Instructor	4.5	
2001 - 2003		Oncogenes and Tumor Suppressor Genes	Instructor	4	
2000 - 2003		Current Issues in Biomedical Research: Clinical Trials	Instructor	2	
1999 - 2001		Dental Biochemistry: Carcinogenesis	Instructor	1	
2000		Biochemistry 5224: DNA Sequencing and EMSA	Instructor	2	
2000		Biochemistry 5970: Student Research Seminar	Instructor	1	
2000		Biochemistry 6224: 7 week laboratory rotations for Graduate Students	Instructor		
2000		Biochemistry 6234: DNA tumor viruses and Chemical Carcinogenesis	Instructor	4	
2000		Biochemistry 6502: Advanced Topics in Human Molecular Genetics	Instructor	2	
2000		Nucleic Acids: RNA Splicing Mechanisms	Instructor	4	

Graduate or Research Oversight Committee Membership

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2018 - Present	Amy Bosley, BA	Doctoral Student, Pathology/Medicine	Advisor	
2018 - Present	Zitha Isingizwe, BS	Doctoral Student, Pharmaceutical Sciences/Pharmacy	Advisor	
2017 - Present	John Wood, BS	Graduate Student, Department of Physiology, College of Medicine	Doctoral Advisory Committee Member	
2016 - Present	Taleah Farasyn, BS	Pharmaceutical Sciences/ College of Pharmacy, Graduate College	Doctoral Advisory Committee Member	
2015 - Present	Joshua Corbin, BS	Graduate Student, Pathology/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2015 - Present	Yifan Xu, BS	Doctoral Student, Pathology Department/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2015 - 2018	Sanjida Mahjabeen, BS	Doctoral Student, Pharmaceutical Sciences/ College of Pharmacy, Graduate College	Doctoral Advisory Committee Member	
2017	Ankur Sharma	MD/PhD Student, Pharmaceutical Sciences	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2017

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2017	Dhawal Raghuvanshi	MD/PhD Student, Pharmaceutical Sciences	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD transferred 2017
2016 - 2017	Lauren Dockery, MD	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Member	
2015 - 2017	Alexandra Crowe, PhD	Doctoral Student, Pharmaceutical Sciences, College of Pharmacy	Doctoral Advisory Committee Member	PhD earned 2017
2015 - 2017	Christa DeVette, BS	MD/PhD Student, Microbiology and Immunology Department/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2015 - 2017	Rachel Ruskin, MD	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program	Master's Advisory Committee Member	
2014 - 2017	Mariam Ibrahim, BS	Doctoral Student, Pharmaceutical Sciences/ College of Pharmacy, Graduate College	Doctoral Advisory Committee Member	
2013 - 2017	Ankur Sharma, BS	Graduate Student	Doctoral Advisory Committee Member	
2016	Angelica Harper	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2016
2014 - 2016	Camille Gunderson, MD	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Chair	
2013 - 2016	Adam Walter, MD	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Member	
2013 - 2016	Katrina Slaughter, BS	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Member	

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2012 - 2016	Angelica Harper, BS	Graduate Student, Cell Biology Department/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2015	Andrea Patterson	MD/PhD Student, Microbiology and Immunology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2015
2015	Matthew Caleb Martin	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2015
2012 - 2015	Andrea Patternson, BS	Graduate Student, Microbiology and Immunology Department/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2011 - 2015	Matthew Caleb Martin, BS	Graduate Student, Biochemistry and Cell Biology Department/College of Medicine, Graduate College	Doctoral Advisory Committee Member	
2014	Shuai Wang	MD/PhD Student, Pathology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2014
2014	LaToya Perry, MD	Master's Student, Gynecologic Oncology Section/Obstetrics and Gynecology Department, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Chair	
2013	Feng He	MD/PhD Student, Biochemistry	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2013
2013	Ravilha Durgadevi	MD/PhD Student, Pathology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2013
2013	William Berry	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2013
2011	Jason Kesinger	PharmD/MS, Pharmacy	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PharmD/MS earned 2011
2011	Wei Wu	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2011
2010	Amy Knoll	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2010
2010	Bin Zhang	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2010
2010	Feng Li	MD/PhD Student, Biochemistry	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2010

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2010	Krysten Farjo	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2010
2010	Madhu Unnikrishanan	MD/PhD Student, Pathology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD transferred 2010
2010	Monica Draper	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD transferred 2010
2009	Ann Howell	PharmD/MS, Pharmacy	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PharmD/MS earned 2009
2008	Liao Xiaoyun	MD/PhD Student, Pathology, University of Hong Kong	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2008
2007	Chaitali Tophkhane	MD/PhD Student, Pathology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2007
2007	Mathew Gibson	MD/PhD Student, Cell Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2007
2006	Richard Langeras	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD transferred 2006
2005	Dustin Smith	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2005
2003	Stephanie Si Liu	MD/PhD Student, Biochemistry, University of Hong Kong	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2003
2002	Suresh Guruswamy, PhD	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Chair - Biochemistry 6980: Chair of PhD thesis committee	Currently Academic Faculty
2001	Shennan Lu, PhD	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Chair - Biochemistry 6980: Chair of PhD thesis committee	Currently NIH Employee
2000	Ahmed Mohamed Mahmoud Abou-Eisha	MD/PhD Student, Cairo University	Master's Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 2000
1997	Shankar Sachithanandam	MD/PhD Student, Radiological Sciences	Master's Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 1997
1996	Kim Kyker	Master's Student, Biochemistry and Molecular Biology	Master's Advisory Committee Member - Service on other dissertation/thesis committee	MS earned 1996
1995	Todd Corn	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Member - Service on other dissertation/thesis committee	PhD earned 1995

Mentoring and Advising

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2017 - Present	Kathleen Essel, MD	Postgraduate Fellow, Gynecologic Oncology, Stephenson Cancer Center	Mentor - Mentored experimental design and interpretation of results. Trained to submit IACUC applications and interpret mass spec data using bioinformatic approaches. Taught about drug development.	Documented efficacy of a natural compound, Sulfurophane, as an anticancer compound for endometrial cancer. Studied mechanism of action, designed an animal model to confirm the results in vivo and is working on development of a sulfurophane clinical trial.
2016 - Present	Rajani Rai, PhD	Postgraduate Fellow, Gynecologic Oncology, Stephenson Cancer Center	Mentor - Guide experimental design; interpretation, presentation and publication of results; teaching skills and grant writing. Taught about drug development and cervical cancer.	Co-PI on a PREVENT grant and corresponding task order. Learned to use aperio to quantify immunohistochemical stains.
2015 - Present	Satish Ramraj, PhD	Postgraduate Fellow, Gynecologic Oncology, Stephenson Cancer Center	Mentor - Guide experimental design; interpretation, presentation and publication of results; teaching skills and grant writing. Taught about drug development, p53 and ovarian cancer.	Demonstrated synergy and mechanism between two anti-cancer drugs. Established over 50 human fallopian tube secretory epithelium cell cultures. Two manuscripts and one grant under review. Presented national and local posters. Taught in one graduate student class.
2016 - 2017	Joy Oshomuvwe	Oklahoma School of Math and Science	High School Student/Teacher Research Project Mentoring	
2014 - 2017	Alexander Quaas, MD	Master's Student, Obstetrics and Gynecology, Clinical and Translational Sciences Program/Graduate College	Master's Advisory Committee Member	
2015 - 2017	Vishal Chandra, PhD	Postgraduate Fellow, Gynecologic Oncology, Stephenson Cancer Center	Mentor - Guide experimental design; interpretation, presentation and publication of results; teaching skills and grant writing. Taught about drug development, ovarian cancer, autophagy and p53.	Co-PI in and NIH PREVENT grant and corresponding Task Order. Publication of a review article. Taught a lecture. Presented results at a national meeting. Promoted to Assistant Professor of Research in October 2017.
2017	Hanna Schaeffer	Undergraduate Student, Native American Research Center for Health (NARCH), Summer Research Scholar	Mentor - Studied the role of a CCL2 single nucleotide polymorphism (SNP) in regulation of the CCL2 protein expression and ovarian cancer survival. Taught about the science behind the project and ovarian cancer.	Evaluated CCL2 SNP status and protein expression in patient samples. Tested the CCL2 SNP effect on protein expression in a tissue culture model. Presented the results at a research symposium.

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2016 - 2017	Joy Oshomuvwe	High School Student, Oklahoma School of Math and Science, OSSM Science Research Experience	Mentor - Mentored experimental design, data management and interpretation and presentation of results. Taught about drug development and cervical cancer.	Learned to test anticancer drugs on cancer cells and to determine their potency. Learned about cervical cancer and how it is caused by human papillomavirus.
2016 - 2017	Timothy Pouland, BS	MD/PhD Student, Pharmaceutical Sciences, Department of Pharmaceutical Sciences/ College of Pharmacy	Doctoral Advisory Committee Chair - Training in Drug Discovery methods, experimental design and interpretation of results. Teaching about cancer and molecular biology. Mentoring career goals.	Performed drug modeling and evaluated compound potency and efficacy against cancer cells. Completed graduate school courses. Presented results at the Stephenson Cancer Center Annual Symposium
2016	Abigail Jebaraj	Medical Student, CTS Summer Research Training Program (S RTP)	Medical Student Research Projects Mentoring	
2016	Coralee Toal	Medical Student, CTS Summer Research Training Program (S RTP)	Medical Student Research Projects Mentoring	
2016	Amy Bosley	Summer Undergraduate Research Experience (SURE)	Undergraduate Student Research Project Mentoring	
2016	Cassadie Holybee	IDEA Network for Biomedical Research Excellence (INBRE)	Undergraduate Student Research Project Mentoring	
2016	Julie Nguyen	Stephenson Cancer Center C.U.R.E. Summer Program	Undergraduate Student Research Project Mentoring	
2014	Pham Trung	Medical Student, Medical Student Academic Year Shadow	Medical Student Research Projects Mentoring	
2013	Andrew Long, PhD	PostDoctoral Fellow, Biochemistry and Molecular Biology	Doctoral Advisory Committee Chair	Currently Postdoc. Fellow
2010 - 2013	Franklin Hays, MD	Biochemistry, Assistant Professor	Clinical Faculty Mentoring	
2007 - 2013	Wei-Qun Ding, MD	Pathology, Assistant Professor	Clinical Faculty Mentoring	
2007 - 2012	Kathleen Moore, MD	Gynecologic Oncology, Assistant Professor	Clinical Faculty Mentoring	
2011	Xiaolei Liu	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2010 - 2011	Erin Bishop, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2010	Nasim Maryam Niroumand	Medical Student, Medical Student Summer Research Project	Medical Student Research Projects Mentoring	
2006 - 2010	Chioniso Patience Masamha, PhD	PostDoctoral Fellow, Biochemistry and Molecular Biology	Doctoral Advisory Committee Chair	Currently Assistant Professor, Butler University
2009	Shylet Chendedza, PhD	MD/PhD Student, Biochemistry and Molecular Biology	Doctoral Advisory Committee Chair	Currently Academic Faculty
2009	Christina Highley	Medical Student, Clinical and Translational Summer Scholar	Medical Student Research Projects Mentoring	

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2009	Mira Georgey	Medical Student, Clinical and Translational Summer Scholar	Medical Student Research Projects Mentoring	
2008 - 2009	Kathleen Moxley, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2005 - 2009	Tongzu Liu, MD, PhD	Postdoctoral Fellow	Postdoctoral Research Supervision - Postdoctoral Fellow in Dr. Benbrook's Lab Currently in Faculty at Wuhan University, Wuhan, China	
2008	Frank Han	Oklahoma School of Math and Science, Fall Semester	High School Student/Teacher Research Project Mentoring	
2008	Margaret Wang	Oklahoma School of Math and Science, Fall Semester	High School Student/Teacher Research Project Mentoring	
2008	Larissa Hines	Medical Student, Clinical and Translational Summer Scholar	Medical Student Research Projects Mentoring	
2008	Sheree McDaniel	Langston's Integrated Network College (LINC)	Undergraduate Student Research Project Mentoring	
2007 - 2008	Feng He	Graduate Student, Biochemistry Research Rotation	Graduate Research Project Mentoring	
2007 - 2008	Erin Tuller, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2007	Alysha Ann Rauhauser	Graduate Student, University of Central Oklahoma	Graduate Research Project Mentoring	
2007	Yanfang Pan	Graduate Student, Biochemistry Research Rotation	Graduate Research Project Mentoring	
2007	Oba Hughes	Oklahoma Biomedical Research Infrastructure Network	Undergraduate Student Research Project Mentoring	
2006 - 2007	Tashana Myers, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2006	Laura Russell	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2006	Patience Masamha	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2006	William Berry	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2006	Lauren Ritterhouse	MD/PhD Student, MD/PhD Program Research Rotation	Medical Student Research Projects Mentoring	
2005 - 2006	Granger Lanneau, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2005 - 2006	Johnny Hyde, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2005 - 2006	Ann Nelson	Oklahoma Biomedical Research Infrastructure Network	Undergraduate Student Research Project Mentoring	
2003 - 2006	Karl Hanson, MD	Reproductive Endocrinology, Assistant Professor	Clinical Faculty Mentoring	
2005	Shylet Chenedza	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2005	Margaret P. O'Connell	Medical Student, Medical Student Summer Research Project	Medical Student Research Projects Mentoring	
2005	Chasity Jackson	Undergraduate Biomedical Education Program (UBEP)	Undergraduate Student Research Project Mentoring	
2004 - 2005	Mark Naylor, MD	Dermatology, Member OMRF	Clinical Faculty Mentoring	
2004 - 2005	Daynelle Dearnley, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2004 - 2005	Lance Gill	Oklahoma Biomedical Research Infrastructure Network	Undergraduate Student Research Project Mentoring	
2004	Barbara Jeske	Summer Undergraduate Research Experience (SURE)	Undergraduate Student Research Project Mentoring	
2003 - 2004	Abbas Shoberi, MD	Urogynecology, Assistant Professor	Clinical Faculty Mentoring	
2002 - 2004	Camille Falkner, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2003	Anne Murray	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2003	Bahara Ebadifar	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2003	Julie Scott	Graduate Student, Biomedical Sciences Research Rotation	Graduate Research Project Mentoring	
2003	Kelsie Brooks	Science Fair Project, Regional Winner	High School Student/Teacher Research Project Mentoring	
2003	Amy Noll, BS	Summer Pre-graduate Student	Undergraduate Student Research Project Mentoring	
2003	Ashley Hopkins	Summer Undergraduate Research Experience (SURE)	Undergraduate Student Research Project Mentoring	
2003	Jen'nea Ose, BS	Biomedical Research Infrastructure Network (BRIN)	Undergraduate Student Research Project Mentoring	
1999 - 2003	Nefertiti DuPont, MD	Resident, Obstetrics and Gynecology	Resident Research Projects Mentoring	
2001 - 2002	Natalie Gould, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2001 - 2002	Teresa Rutledge, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
2001 - 2002	Shennan Lu, PhD	Postdoctoral Fellow	Postdoctoral Research Supervision	Postdoctoral Fellow in Dr. Benbrook's Lab, 2001-2002 Currently NIH Employee
1999 - 2002	Raffit Hassan, MD	Hematology Oncology, Assistant Professor	Clinical Faculty Mentoring	Senior Investigator National Cancer Institute, Thoracic and Gastrointestinal Malignancies Branch
2001	Kayla Brooks	Science Fair Project, Regional Winner	High School Student/Teacher Research Project Mentoring	
2000 - 2001	Dennis Scribner, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
2000 - 2001	Todd Tillmanns, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1999 - 2000	Avi Khafif, MD	Orthynolaryngology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1999 - 2000	Scott Kamelle, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1997 - 2000	Arindam Dhar, PhD	Postdoctoral Fellow	Postdoctoral Research Supervision	Postdoctoral Fellow in Dr. Benbrook's Lab, 1997 - 2000 Fellow, Interagency Oncology Task Force, NCI/FDA, 2005-2008 Cancer Research Training Associate, NCI, 2000-2005 GaxoSmithKlein, Phase I Trial Director, 2008-present
1998 - 1999	Michael Gold, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1998 - 1999	Carla Spencer, MD	Resident, Obstetrics and Gynecology	Resident Research Projects Mentoring	
1998	Marylin Webster	Medical Student, Medical Student Summer Research Project	Medical Student Research Projects Mentoring	
1997 - 1998	Todd Ivey, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1997 - 1998	Dana Stone, MD	Resident, Obstetrics and Gynecology	Resident Research Projects Mentoring	
1997	Suresh Guruswamy	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1997	Xiaohong Zhong	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1997	Virginia Fishburne	Medical Student, Medical Student Summer Research Project	Medical Student Research Projects Mentoring	
1996 - 1997	Jane Shen-Gunther, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1996 - 1997	Paul DiSilvestro, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1996	Hai Ying Qui	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1996	Shennan Lu	Graduate Student, Biochemistry	Graduate Research Project Mentoring	

Date	Mentee Name	Mentee Level/Program	Role/Involvement Type	Mentee Outcomes
1996	Ebony Allen	Summer Minority Program	High School Student/Teacher Research Project Mentoring	
1996	Jacqueline Maliwat	Summer Minority Program	High School Student/Teacher Research Project Mentoring	
1995 - 1996	Cole Flanagan, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1995 - 1996	Janet Larsen, MD	Maternal Fetal Medicine	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1995 - 1996	Tim Zacheis, MD	Orthynolaryngology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1994 - 1995	Evelyn Rosas Nuñez, MD	Gynecologic Oncology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1994 - 1995	Rick Erickson, MD	Orthynolaryngology	Mentor - Clinical Fellow Research Mentored (40% Currently in Academia)	
1994	Terry Kay Epperson	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1994	Regina Harper	High School Student, Summer Academy	High School Student/Teacher Research Project Mentoring	
1993	Kent Rodgers	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1993	Kelly Jester	High School Student, Summer Academy	High School Student/Teacher Research Project Mentoring	
1993	Mary Ruth Boone	Minority Program, High School Teacher, Summer	High School Student/Teacher Research Project Mentoring	
1993	Cassandra Onofre	Medical Student, Medical Student Summer Research Project	Medical Student Research Projects Mentoring	
1992	Coy Heldermon	Graduate Student, Biochemistry	Graduate Research Project Mentoring	
1992	Anjan Shah	School of Math and Science, Winter Semester	High School Student/Teacher Research Project Mentoring	
1992	Anjan Shah	High School Student, Summer Academy	High School Student/Teacher Research Project Mentoring	
1992	Lulla Moore Wilson	Minority Program, High School Teacher, Summer	High School Student/Teacher Research Project Mentoring	
1992	Rod Rogers	Medical Student, Medical Student Research Project	Medical Student Research Projects Mentoring	

ORGANIZATIONAL SERVICE

Organizational Administration and Leadership

Campus/University

Co-Director, "Med into Grad" PhD Specialization Program, OU Clinical and Translational Science Award (CTSA), 2009

Chair, Research and Graduate Student Affairs Committee, University of Oklahoma, 2006 - 2009

Co-Chair, Scientific Advisory Committee, Stephenson Cancer Center, 2006 - 2009

Chair, Data Safety and Monitoring Board, Laser and TLR-Agonist Immunotherapy: A Novel Autologous Melanoma Vaccine Strategy, 2005 - 2009

Chancellor, Clinical and Translational Science Society (CTSS), OU Clinical and Translational Science Award (CTSA), 2007 - 2008

Chair, Internal Review Committee of the Epidemiology Graduate Program, University of Oklahoma, 2006

Vice Chair, Institutional Biosafety Committee (IBC), University of Oklahoma, 1995 - 2006

Co-Chair, Translational Working Group, Clinical & Translational Science Awards (CTSA), University of Oklahoma, 2005

Department

Member, Promotions Committee, Obstetrics & Gynecology, 2003 - Present

Chair, Promotions Committee, Obstetrics & Gynecology, 2007 - 2015

Organizational Committee Service

Campus/University

Member, Stephenson Cancer Center Steering Committee, Stephenson Cancer Center, 2017 - Present

Member, Executive Committee, CTS Master's Program, OU Clinical and Translational Science Award, 2008 - Present

Member, Faculty Appeals Board, University of Oklahoma Health Sciences Center, 2018 - 2022

Member, Scientific Review Committee, Stephenson Cancer Center, University of Oklahoma, 2002 - 2018

Member, OUCI Biospecimen Core Operations Committee, OU Cancer Institute, 2006 - 2014

Member, CTS Masters Program Executive Committee, Clinical and Translational Sciences Program, 2006 - 2008

Member, Search Committee of Deputy Director of the Basic and Translational Cancer Research Center, University of Oklahoma, 2007

Member, Clinical & Translational Science Awards (CTSA) Degree and Curriculum Committee, University of Oklahoma, 2006

Member, Faculty Advisory Committee for the Core Laboratories, University of Oklahoma, 2006

Member, Search Committee for Cancer Genetics Endowed Chair, University of Oklahoma, 2005 - 2006

Member, Search Committee for Children's Medical Research Institute Endowed Chair, University of Oklahoma, 2005 - 2006

Member, Outstanding Thesis/Dissertation Committee, University of Oklahoma, 2000 - 2001

College

Member, Medical School Curriculum, Molecular and Cellular Systems, Committee, College of Medicine, 2007 - 2008

Member, Recruitment Committee, Pharmaceutical Sciences Department Chair, University of Oklahoma, College of Pharmacy, 2007

Department

Member, Graduate Student Awards Committee, Biochemistry Department, 2007 - 2013

Member, Faculty Search Committee, Biochemistry Department, 2008 - 2010

Member, Student Admissions & Recruitment Committee, Biochemistry Department, 2004 - 2007

Member, Dental/Pharmacy Course Curriculum Committee, Biochemistry Department, 2003 - 2004

Member, Student Admissions & Advisory Committee, Biochemistry Department, 2002 - 2003

Member, General Examination Committee, Biochemistry Department, 2001 - 2002

Member, Student Advisory Committee, Biochemistry Department, 2001 - 2002

Member, Student Recruitment Committee, Biochemistry Department, 2000 - 2001

Member, Adjunct Faculty Review and Evaluation Committee, Biochemistry Department, 1997 - 2000

Member, Graduate Program Curriculum/Review Committee, Biochemistry Department, 1995 - 1997

PROFESSIONAL SERVICE

National/International

Reviewer, Oak Ridge Associated Universities (ORAU) Center for Excellence Award Reviews, ORAU, 2007 - Present

Member, Biology Sciences Research Council UK, 2002 - Present

Referee, Italian Research Council, Italian Research Council, 2002 - Present

Member, Chemoprevention Committee, Gynecologic Oncology Group (GOG), 2000 - Present

NCI Reviewer SPORE, EDNRN, SBIR, AREA, Onc Fellowships, SBIR/STTR, 1999 - Present

Reviewer, Ad-Hoc, Department of Veterans Affairs' Medical Research Branch ad hoc grant reviewer, Department of Veterans Affairs' Medical Research Branch, 1992 - Present

Member, Experimental Medicine Committee (CEM), Gynecologic Oncology Group (GOG), 1992 - Present

Reviewer, Clinical and Translational Exploratory/Developmental Studies meeting, NIH/National Cancer Institute, 2018

Reviewer, Ad-Hoc, Drug Discovery and Metabolic Pharmacology Study Section, NIH, Center for Scientific Review, 2018

Reviewer, Genetic Basis of Disease Grant Review Committee, King Abdulaziz City for Science and Technology (KACST), 2018

Reviewer, Health and Medical Research Fund (HMRF), Food and Health Bureau (FHB) of the Government of Hong Kong SAR, 2018

Reviewer, Ad-Hoc, NIH Oncological Science Fellowship F09B Study Section, NIH/National Cancer Institute, 2018

Reviewer, PreCancer Atlas (PCA) Research Centers (U2C) Review Committee, NIH/National Cancer Institute, 2018

Reviewer, PRIN 2017, MIUR (the Italian Ministry for Education, University and Research), 2018

Reviewer, NCI Outstanding Investigator Awards, National Cancer Institute, 2017

Chair, NIH/NCI Clinical and Translational Omnibus Special Emphasis Panel, National Institutes of Health/National Cancer Institute, 2017

Chair, NCI Program Project Review Committee ZCA1 R{RB-C M1, National Cancer Institute, 2016

Chair, NCI R21/R03 Review Committee ZCA1 SRB-8 (M1), National Cancer Institute, 2016

Reviewer, Bankhead-Coley Cancer Research Program Proposal Review, December 2015

Reviewer, CDMRP Clinical and Experimental Therapeutics - 1 Review Panel, Congressionally Directed Medical Research Programs (CDMRP), October 2015

Member, State of Florida Department of Health and Oak Ridge Associated Universities (ORAU), October 2015

Member, AREA R15 Review Panel, ZRG1 OTC-N (80), Academic Research Enhancement Awards, September 2015

Reviewer, NCI R21/R01 Omnibus ZRG1-OTC-B (80) Study Section, National Cancer Institute, September 2015

Co-Chair, NCI SPORE Review Panel ZCA1 RPRB-C (O1), National Cancer Institute, June 8, 2015 - June 9, 2015

Reviewer, Hong Kong, Health and Medical Research Fund (HMRF), May 2015

Member, CDC Special Emphasis Panel on Global Health Research, Center for Disease Control, April 1, 2015

Member, Review Panel for NCI Innovative Molecular Analysis Technologies (IMAT) Program, National Cancer Institute, March 17, 2015

Chair, NCI SPORE Review Panel ZCA1 RPRB-C M1 P, February 3, 2015 - February 4, 2015

Chair, AREA R15 Grant Review Panel. 2015/01 Council ZRG1 OTC-N 80, Academic Research Enhancement Awards, January 29, 2015

Reviewer, CDMRP/DOD Reviewer Ovarian Cancer Academy - Dean/Assistant Dean (OCA-D) Awards, Congressionally Directed Medical Research Programs/Department of Defense, 2014

Chair, Drug Discovery and Molecular Pharmacology (DMP) Special Emphasis Panel, Drug Discovery and Molecular Pharmacology (DMP), 2014

Reviewer, NCI Review Panel of Cancer Detection, Diagnosis and Treatment Technologies for Global Health, National Cancer Institute, 2014

Reviewer, NCI Reviewer for Innovative Molecular Analysis Technologies Program (IMAT), National Cancer Institute, 2014

Chair, NCI SPORE Programs, National Cancer Institute, 2014

Chair, AREA R15: Oncological Sciences Application Review Panel, ZRG1 OTC-X (80) A, Academic Research Enhancement Awards, May 2014

Chair, Cancer Therapeutics Area Grant Applications Review Panel, National Institutes of Health, Center of Scientific Review, 2013

Expert Scientific Witness, Patent Infringement Case, Haynes and Boone, LLP, Dallas, TX, United States of America, 2012 - 2013

Reviewer, Drug Discovery and Molecular Pharmacology (DMP) Study Section, Drug Discovery and Molecular Pharmacology (DMP), 2009 - 2013

Reviewer, World Cancer Research Fund International, World Cancer Research Fund International, 2010 - 2011

Chair, SBIR/STTR SEP Reviews, 2007 - 2010

Chair, Session on Functional genomics, proteomics and signalomics in cancer at the International Cancer Research Symposium 2010: Defining & Translating Science Behind Disease, Thiruvananthapuram, Kerala, India, December 21, 2010

Chair, Cancer Diagnostics and Therapeutics SBIR/STTR AED Review, Cancer Diagnostics and Therapeutics, 2009

Reviewer, Mock Study Session in Grant Writing Workshop for Clinicians, AACR Professional Advancement Series Section, American Association for Cancer Research (AACR), 2009

Chair, Review Committee of NIH SBIR Topics 238, 237 and 270, National Institutes of Health, 2009

Reviewer, Drug Discovery and Molecular Pharmacology (DMP) Study Section, Drug Discovery and Molecular Pharmacology (DMP), 2008 - 2009

Reviewer, NCI Oncology Fellowship and AREA grants, NIH CSR, VED, National Cancer Institutes, 2005 - 2009

Member, Experimental Medicine & Cancer Prevention Committees, Gynecologic Oncology Group, 1992 - 2009

Chair, NCI oncology Fellowship and AREA grants, NIH CSR, VED, National Cancer Institutes, June 2008 - August 2009

Participant, NCI Clinical Development of Small Molecules Workshop, National Cancer Institute, Bethesda, MD, 2008

Chair, Review Committee of NIH SBIR Topics 242 and 243, National Institutes of Health, 2008

Chair, Developmental Therapeutics Subcommittee of the GOG CEM Committee, Gynecologic Oncology Group (GOG), 2006 - 2008

Member, NCI ZRG1 Cancer Biomarkers Study Section (CBSS), National Cancer Institute, 2004 - 2008

Member, Improving Public Health Practice through Translation Research, (R18), Center for Disease Control (CDC), 2007

Chair, Review Committee of NIH SBIR Topics 238 and 239, National Institutes of Health, 2007

Reviewer, U.S. Civilian Research & Development Foundation (CRDF) Cooperative Grants Program (CGP) Competition, U.S. Civilian Research & Development Foundation (CRDF), 2007

Reviewer, Phillip Morris External Research Program, Phillip Morris, 2003 - 2007

Referee, Biotechnology and Biological Sciences Research Council, Biotechnology and Biological Sciences Research Council (BBSRC), Swindon, United Kingdom, 2006

Reviewer, Drug Discovery and Molecular Pharmacology (DMP) Study Section, Drug Discovery and Molecular Pharmacology (DMP), 2006

Reviewer, Mock Study Session in Grant Writing Workshop for Clinicians, AACR Professional Advancement Series Section, American Association for Cancer Research (AACR), 2006

Reviewer, Ad-Hoc, NCI Chemoprevention Committee, Subcommittee E, Cancer Epidemiology, Prevention and Control, National Cancer Institute, 2006

Reviewer, NCI SBIR grants (ZCA1 SRRB-U (C1)), National Cancer Institute, 2006

Session Chair, Retinoids and Cancer, FASEB Retinoid Meeting, FASEB, 2006

Reviewer, University Grants Committee, University of Hong Kong, Hong Kong, China, 2006

Substitute Chair and Reviewer, SPORE in Ovarian-GYN Cancer, Specialized Programs of Research Excellence (SPORE), 2005

Co-Chair, Translation Research Session of the Ovarian Cancer State of the Art Meeting, CTEP and GOG, 2005

Chair, NCI Chemoprevention Committee, Subcommittee E, Cancer Epidemiology, Prevention and Control, National Cancer Institute, 2003 - 2005

Member, NCI Chemoprevention Committee, Subcommittee E, Cancer Epidemiology, Prevention and Control, National Cancer Institute, 2000 - 2005

Substitute Chair and Reviewer, Early Detection Research Network, Clinical Epidemiology and Validation Centers, Early Detection Research Network, 2004

Reviewer, Department of Defense Ovarian Cancer Grants, Department of Defense, 2002 - 2004

Reviewer, Eppley NCI - Designated Cancer Center Site Visit, National Cancer Institute, January 2004

Reviewer, Grant Reviewer, Cancer Research UK, United Kingdom, 2002

Nominee, National Advisory Committee, Department of Veterans Affairs' Medical Research Branch, 2002

Consultant, Procter & Gamble, 1999 - 2002

Reviewer, Clinical Nutrition Research Units, National Cancer Institute, December 2001

Cancer Genetics Trainer, American Society of Clinical Oncologists (ASCO), Cancer Genetics Trainer, ASCO, 2000

Reviewer, Chemoprevention in Genetically-Identified High-Risk Groups: Interactive Research and Development Projects, National Cancer Institute, 2000

Reviewer, Molecular Target Drug Discovery, National Cancer Institute, 2000

Chair, State Legislative Committee, American Association for Cancer Research, 2000

Reviewer, The Early Detection Network - Clinical Epidemiologic Centers, National Cancer Institute, 2000

Co-Chair, Chemoprevention Workshop, Gynecologic Cancer Translational Research Retreat II, Chantilly, VA, US, May 5, 2000 - May 7, 2000

Temporary Member, Scientific Review Group, Subcommittee E, Cancer Epidemiology, Prevention and Control, National Cancer Institute, April 2000

Reviewer, Chemoprevention Committee Site Visit, National Cancer Institute, January 2000

Reviewer, Chemoprevention Committee Site Visit, National Cancer Institute, June 1999

Local/Regional

Reviewer, External Advisory Board, New Mexico Cancer Center, 2009

Reviewer, Ad-Hoc, Drug Discovery and Metabolic Pathology (DMP) Study Section, NIH CSR, 2006 - 2008

Editor, Editorial Board, Journal Reviewer

Editor-in-Chief, Biologics: Targets & Therapy, 2008 - Present

Editorial Board Member, Journal of Cell Death, 2008 - Present

Editorial Board Member, Open Access Journal of Clinical Trials, 2008 - Present

Editorial Board Member, Biochemical Journal and Biochemical Society Transactions, 2007 - Present

Editorial Board Member, Bioinformatics and Biology Insights, 2007 - Present

Editorial Board Member, Open Medicinal Chemistry Journal, 2007 - Present

Editorial Board Member, Open Reproductive Science Journal, 2007 - Present

Editorial Board Member, Current Medicinal Chemistry, 2006 - Present

Editorial Board Member, Cancer Research, 2010 - 2012

Editorial Board Member, Cancer Epidemiology, Biomarkers & Prevention, 2002 - 2009

Advisory Board Member, Native Americans in Biological Sciences Advisory Board (NABS), Oklahoma State University, 2005 - 2007

Ad-Hoc Reviewer:

American Journal of Pathology
Analytica Chimica Acta
Analytical Methods
Anticancer Agents in Medicinal Chemistry
BBA - Molecular Cell Research
BBA-Gene Regulatory Mechanisms
Biochemical Journal
Biochimie
Bioinformatics and Biology
Biomarkers & Prevention
Biomed Central Cancer
Bioorganic and Medicinal Chemistry
Bioscience Reports
Blood
British Journal of Cancer
Cancer
Cancer Biology
Cancer Cell
Cancer Chemoprevention and Pharmacology
Cancer Cytopathology
Cancer Epidemiology
Cancer Investigation
Cancer Letters
Cancer Prevention Research
Cancer Research
Cellular & Molecular Biology Letters
Chemistry Central Journal
Clinical Cancer Research
Clinical Ovarian Cancer
CRC Press
Current Cancer Therapy Reviews
Current Medicinal Chemistry
European Journal of Cancer
Experimental Cell Research
Expert Opinion on Therapeutic Patents
Fertility and Sterility
Gene
Gynecologic and Obstetrics Investigations
Gynecologic Oncology
International Journal of Biochemistry and Cell Biology
International Journal of Cancer
International Journal of Molecular Science
Journal of Biochemistry

Journal of Biological Chemistry
Journal of Cancer Research and Therapeutics
Journal of Cell Death
Journal of Geriatric Oncology
Journal of Neurochemistry
Journal of Nutritional Biochemistry
Journal of Reproductive Medicine
Journal of Surgical Oncology
Journal of the National Cancer Institute
Metallomics
Mini Reviews in Medicinal Chemistry
Molecular and Cellular Endocrinology
Molecular and Cellular Endocrinology
Molecular Biosystems
Molecular Cancer Therapeutics
Molecules
Nature
Nutrition and Cancer
Oncogene
Oncotarget
Oncotarget Pharmaceutical Research
Open Medicinal Chemistry Journal
Oxidative Medicine and Cellular Longevity
PLOSOne
Targets and Therapy
The American Journal of Obstetrics and Gynecology

PERSONAL COMMUNITY SERVICE

Speaker, Cancer Research Fundraiser, Ford AV, Denver, CO, September 17, 2017

Speaker, Gynecologic Cancers Survivor Workshop, Stephenson Cancer Center, Oklahoma City, OK, USA, September 16, 2017

Speaker, How We Are Trying to Prevent & Kill Cancer Without Harming You, Gynecologic Cancer's Survivors Workshop, Stephenson Cancer Center, Oklahoma City, OK, September 16, 2017

Speaker, Panel Member, OKC Chamber of Commerce Annual Breakfast,, Oklahoma City, OK, September 7, 2016

Speaker, Why an Ounce of Prevention Costs More than a Pound of Cure, Annual Stephenson Cancer Center Board of Advocates Meeting,, Oklahoma City, OK, August 12, 2016

Speaker, Finding and Fighting the Origins of Cancer, Central Travel Club, Oklahoma City, OK, April 15, 2016

Speaker, Ovarian Cancer Prevention, OPE Ovarian Cancer Survival Group, Stephenson Cancer Center, Oklahoma City, OK, April 4, 2016

Speaker, Ovarian Cancer, National Ovarian Cancer Philanthropy Event organized by OU Student Organization, Lambda Delta Psi, University of Oklahoma, Norman, OK, September 17, 2015

Speaker, How to make a chemical into a drug, Chemistry Club, Southwestern Oklahoma State University, Weatherford, OK, March 10, 2015

Speaker, Panel Member, Women's Enrichment Fellowship Talk Show, Forward in Faith Ministries International,, Farmers Branch, TX, March 16, 2013

Speaker, Curing Cancer with Chemistry, Chemistry Club, University of Central Oklahoma, Edmond, OK, March 7, 2013

Speaker, Development of a Cancer Prevention Pill, Ovarian Cancer Support Group, Bartlesville, OK, October 22, 2011

Speaker, Collaboration in Drug Discovery and Translation to Clinical Trials, The 14th annual Rall Symposium for Undergraduate Research, Naperville, IL, May 17, 2011

Speaker, Progress Report on Development of SHetA2 for Chemoprevention, HOPE Ovarian Cancer Survivor Group, Stephenson Cancer Center, Oklahoma City, OK, April 3, 2010

Speaker, Cancer Genetics, Womens Health Symposium, Oklahoma City, OK, USA, 1997

Speaker, Oncogenes and Tumor Suppressor Genes, INTEGRIS Baptist Medical Center, Oklahoma City, OK, 1997

Speaker, Drug Discovery and Design, University of Oklahoma Undergraduate School, Norman, OK, 1994

MEDIA CONTRIBUTIONS

Interviewed Expert, KOCO News 5, Doctors working on drug that could prevent cervical cancer, Targeting HPV in a Cervical Cancer Clinical Trial

Doctors at OU Medical Center's Stephenson Cancer Center are working on medicine that could help prevent cervical center.

<http://www.koco.com/news/doctors-working-on-drug-that-could-prevent-cervical-cancer/40242428>, June 27, 2016

Interviewed Expert, Stephenson Cancer Center News, New \$2.2 Million NIH Grant Targets Cervical Cancer Prevention, Targeting HPV in a Cervical Cancer Clinical Trial

<http://stephensoncancercenter.org/News/Article/TabId/6745/ArtMID/17400/ArticleID/839/New-22-Million-on-NIH-Grant-Targets-Cervical-Cancer-Prevention.aspx>, June 22, 2016

Interviewed Expert, University Hospitals Trust News: Media and releases, Oklahoma Drug May Halt Cervical Cancer, Targeting HPV in a Cervical Cancer Clinical Trial

<http://www.uhatok.com/news/video-news-releases/757-cervical-vnr>, June 22, 2016

Interviewed Expert, Fox25 News, Researchers develop drug that targets HPV at OU Medical Center, Targeting HPV in a Cervical Cancer Clinical Trial

<http://okcfox.com/news/local/researchers-develop-drug-that-targets-hpv-at-ou-medical-center>, June 22, 2016

Interviewed Expert, Oklahoma's News 4, Stephenson Cancer Center gets 2.2 million grant to fund cervical cancer prevention, Ovarian Cancer Chemoprevention and Targeting HPV in a Cervical Cancer Clinical Trial

<http://kfor.com/2016/06/22/stephenson-cancer-center-gets-2-2-million-grant-to-fund-cervical-cancer-prevention/>, June 22, 2016

Interviewed Expert, The Oklahoman, \$2.2 million grant will fund trials for locally developed cervical cancer drug, Targeting HPV in a Cervical Cancer Clinical Trial and Ovarian Cancer Chemoprevention

<http://www.oklahoman.com/login?referer=/2.2-million-grant-will-fund-trials-for-locally-developed-cervical-cancer-drug/article/5505833>, June 22, 2016

Interviewed Expert, The Journal Record, OU researcher receives funding for drug to stop cervical cancer, Targeting HPV in a Cervical Cancer Clinical Trial

<http://journalrecord.com/2016/06/22/ou-researcher-receives-funding-for-drug-to-stop-cervical-cancer-health-care/>, June 22, 2016

Interviewed Expert, The Edmond Sun, OU researcher's drug targets ovarian cancer prevention, Ovarian Cancer Chemoprevention

http://www.edmondsun.com/news/education/ou-researcher-s-drug-targets-ovarian-cancer-prevention/article_7a6ea6b6-3d54-11e5-9b3e-db076858d268.html, August 7, 2015

Interviewed Expert, Oklahoma's News 4, Oklahoma doctor testing supplement that may prevent ovarian cancer, Ovarian Cancer Chemoprevention

<http://kfor.com/2015/08/06/oklahoma-doctor-testing-supplement-that-may-prevent-ovarian-cancer/>, August 6, 2015

Interviewed Expert, University Hospitals Trust News: Media and releases, OU Researcher's Drug Targets Ovarian Cancer Prevention, Ovarian Cancer Chemoprevention

<http://www.uhatok.com/news/video-news-releases/672-ovarian-cancer-drug>, August 6, 2015

Interviewed Expert, Stephenson Cancer Center News, OU Researcher's Drug Targets Ovarian Cancer Prevention, Ovarian Cancer Chemoprevention

<http://stephensoncancercenter.org/News/Article/TabId/6745/ArtMID/17400/ArticleID/164/OU-Researcher%E2%80%99s-Drug-Targets-Ovarian-Cancer-Prevention.aspx>, August 6, 2015

Guest, Various Outlets (in additional information), OU Medicine Minute, 82. "OU Medicine Minute", 04/08/09 06:06:15AM Oklahoma City (KWTv) 01:00 News 9 This Morning; 04/08/09 05:17:19PM Oklahoma City (KWTv) 01:00 News 9 @ 5pm; 04/09/09 04:43:56PM Oklahoma City (KWTv) 01:00 News 9 @ 4pm; 04/10/09 12:04:09PM Oklahoma City (KWTv) 01:00 News 9 @ Noon; 04/10/09 06:03:24PM Oklahoma City (KWTv) 01:00 News 9 @ 6pm; 04/11/09 06:12:05AM Oklahoma City (KWTv) 01:00 News 9 Saturday Morning; 04/12/09 10:06:14PM Oklahoma City (KWTv) 01:00 News 9 @ 10pm Sunday, 2009

Author, The Oklahoman, Developing a Pill for Cancer Prevention, 2008

Author, The Tulsa World, Developing a Pill for Cancer Prevention, 2008

Author, News Channel 9 (KWTv), Developing a Pill for Cancer Prevention, 2008

Interviewed Expert, KTLR AM890, Community Talk Radio with Robing Decken-Kite, Research, September 30, 2008

Interviewed Expert, Oklahoma Sunday Magazine, aired by Citadel Radio on various stations, including KATTFM, KYIS-FM, WWLS-FM & AM, and KKWD, August 24, 2008

Author, Edmond Sun, Developing a Pill for Cancer Prevention, February 11, 2008

Author, Tulsa World Editorial, Developing a Pill for Cancer Prevention, February 3, 2008

Author, OETA, Developing a Pill for Cancer Prevention, February 1, 2008

Author, News Channel 4 (KFOR), Developing a Pill for Cancer Prevention, January 31, 2008

Guest, KCCU, KLCU, KYCU, KTOK, KRMG AND KMCU Oklahoma and Texas (AM and FM), Oklahoma Innovations Radio Show, Drug Development in Oklahoma, January 5, 2005 - January 6, 2005

Author, Graphics illustrating adenoviral p53 gene therapy for ovarian cancer, "Health Check" presented on News Channel 4, February 2000

Guest, News Channel 4, Health Check, Adenoviral p53 Gene Therapy for Ovarian Cancer, February 2000

PROFESSIONAL MEMBERSHIPS

American Association for Cancer Research (AACR)
NRG Oncology (NRG)

January 1, 1994 - Present
January 1, 1992 - Present

PROFESSIONAL GROWTH AND DEVELOPMENT

Formal Course Work

BMSC 5011: Interdisciplinary Special Topics Experimental Design and Applied Statistics, University Of Oklahoma Health Sciences Center, 1 Credit Hours, May 2017 - June 2017

Seminars, Workshops, and Other Training

Clinical Development of Small Molecules, National Cancer Institute, USA, January 15, 2008

Phase 0 Trials in Oncologic Drug Development, National Cancer Institute, USA, September 5, 2007