# STEPHEN D. HURSTING, PhD, MPH

AICR/WCRF Distinguished Professor, Department of Nutrition, Nutrition Research Institute and Lineberger Comprehensive Cancer Center University of North Carolina at Chapel Hill

UNC Gillings School of Global Public Health 135 Dauer Drive, Room 2109 Chapel Hill, NC 27599 919-966-7346 (work) 512-466-6980 (cell) hursting@email.unc.edu

#### **EDUCATION**

Cancer Prevention Fellowship National Cancer Institute, Bethesda, MD (1992-1995)

Project: Diet-gene interactions in lymphoma prevention: Role of p53

(mentor: Dr. J. Phang)

PhD, Nutritional Biochemistry Dept. of Nutrition, University of North Carolina, Chapel Hill (1992)

Dissertation: Diet and leukemia: Epidemiological and experimental

studies (mentor: Dr. B. Switzer)

MPH, Nutrition Dept. of Nutrition, University of North Carolina, Chapel Hill (1984)

BA, Biology Earlham College, Richmond, IN (1980)

#### PROFESSIONAL EXPERIENCE

American Institute for Cancer Research/World Cancer Research Fund (AICR/WCRF)

Distinguished Professor, Department of Nutrition, University of North Carolina, Chapel Hill, NC (2019-present)

Professor, Department of Nutrition, University of North Carolina, Chapel Hill, NC (2014-2019)

Professor, UNC Nutrition Research Institute, Kannapolis, NC (2014-)

**Professor,** Lineberger Comprehensive Cancer Center, University of North Carolina, Chapel Hill, NC (2014-present)

Director, University of North Carolina Nutrition Research Institute, Chapel Hill, NC (2021-24)

Nutrition Coil Director, School of Medicine, University of North Carolina, Chapel Hill, NC (2014-present)

Co-Director, Animal Metabolism Phenotyping Core, UNC Nutrition and Obesity Research Center (2017-present)

**Division of Nutritional Biochemistry Director,** Department of Nutrition, University of North Carolina, Chapel Hill, NC (2015-2017)

# **Adjunct Professor**

- Department of Nutrition and Integrative Physiology, University of Utah (2023-)
- Department of Nutritional Sciences, University of Texas, Austin, TX (2014-2018)
- Department of Epigenetics and Molecular Carcinogenesis, University of Texas-MD Anderson Cancer Center, Smithville, TX (2014-2017)

Academic Chair, Department of Nutritional Sciences, University of Texas, Austin, TX (2008-2014)

**Director**, Division of Nutritional Sciences, Department of Human Ecology, University of Texas, Austin, TX (2006-2008)

Professor and the Margaret McKean Love Endowed Chair of Nutritional, Molecular and Cellular Sciences, Department of Nutritional Sciences, University of Texas, Austin, TX (2005-2014)

**Professor,** Department of Epigenetics and Molecular Carcinogenesis, University of Texas-MD Anderson Cancer Center, Smithville, TX (2005-2014)

**Professor**, Institute for Cell and Molecular Biology, University of Texas, Austin, TX (2005-2014)

# **Adjunct Professor**

- University of Texas School of Public Health, Austin, TX (2010-2014)
- Cancer Development and Progression Research Program, Cancer Therapy and Research Center, Univ. of Texas Health Science Center, San Antonio, TX (2007-2014)
- Division of Pharmacology and Toxicology, College of Pharmacy, University of Texas, Austin, TX (2005-2014)

**Chief**, Nutrition and Molecular Carcinogenesis Section, Laboratory of Biosystems and Cancer, Center for Cancer Research, NCI, Bethesda, MD (2000-2005)

**Deputy Director,** Office of Preventive Oncology, Division of Cancer Prevention, NCI, Bethesda, MD (1999-2005)

**Adjunct Associate Professor,** Dept. of Epidemiology, University of Texas-MD Anderson Cancer Center, Houston, TX (1999-2005)

**Assistant Professor, Tenure-Track**, Dept. of Epidemiology and Dept. of Molecular Carcinogenesis, University of Texas-MD Anderson Cancer Center, Houston, TX (1995-1999)

Biologist, National Institute of Environmental Health Sciences, RTP, NC (1990-1992)

**Research Fellow,** Cancer Prevention Research Program, Fred Hutchinson Cancer Research Center, Seattle, WA (1985-1987)

**Research Assistant,** Department of Pathology, Johns Hopkins School of Medicine, Baltimore, MD (1980-1982)

#### **HONORS AND AWARDS**

#### From Professional Societies

- American Society of Nutrition, Excellence in Nutrition Education Award (2019)
- American Institute for Cancer Research/World Cancer Research Fund Distinguished Professorship (2019)
- American Association for Cancer Research Outstanding Service Award for serving as Vice-Chair of the AACR Annual Meeting (2019)
- AACR "Best of the AACR Journals" Award (2018)
- American College of Nutrition Mark Bieber Research Award (2017)
- American Association for Cancer Research Outstanding Service Award for Co-Chairing AACR Annual Meeting (2016)
- American Society for Preventive Oncology Distinguished Service Award (2014)
- American Association for Cancer Research Outstanding Service Award for Co-Chairing AACR Annual Meeting (2009)
- American Society of Nutritional Sciences/FASEB BioServ Award (2002)
- Plenary Paper (top abstract) American Society of Preventive Oncology (1998, 1999, and 2000)
- Outstanding Abstract and Poster, American Society of Preventive Oncology Ann. Meeting (1997)
- Procter and Gamble Graduate Research Award, American Institute of Nutrition (1992)

# From Academic Centers and NIH

- Jean Andrews Visiting Professorship, University of Texas-Austin (2024)
- Department of Nutrition Impact Award, University of North Carolina-Chapel Hill (2022)
- NIH Stars in Nutrition Award and Lectureship (2019)
- William Hansel Visiting Scientist and Lectureship, LSU Pennington Center (2019)
- Delta Omega Honor Society Faculty Award, University of North Carolina-Chapel Hill (2016)
- NCI Outstanding Investigator Award (2015-2022)
- University of Texas Longhorn Award for Outstanding Leadership and Service (2014)

- NCI Cancer Prevention Fellowship Program Distinguished Alumni Award (2012)
- Research Excellence Award, University of Texas-Austin (2011)
- Russ Klein Memorial Lectureship, Ohio State Univ. (2011)
- Merit Award for Academic Leadership and Excellence, Univ. of Texas-Austin (2010)
- NCI Group Merit Award for Excellence in Research on Serum Biomarkers (2009)
- Malcolm Trout Nutritional Science Award, Michigan State University (2007)
- NCI Group Merit Award for Leadership/Excellence in Obesity & Cancer Research (2005)
- Jean Andrews Visiting Professorship Award, University of Texas-Austin (2004)
- NCI Group Merit Award for Leadership/Excellence in Cancer Training and Research (2004)
- Ruth Pike Outstanding Contributions to Nutrition Res. Award, Penn State University (2003)
- NCI Mentor of Merit Award (2002)
- Outstanding Alumni Award, Department of Nutrition, University of North Carolina (2001)
- Outstanding Research Award, School of Public Health, University of North Carolina (1991)

# BIBLIOGRAPHY (\* current or \*\* previous direct mentee when work was completed) Books and Chapters

- 1. \*O'Flanagan CH, \*\*Bowers LW, \*\*Allott EA, **Hursting SD**. Molecular and metabolic mechanisms underlying the obesity-cancer link. In: Energy Balance and Obesity. I. Romieu, L. Dossus and W. Willett, eds. IARC Press, 2017, pp. 95-104.
- 2. **Hursting SD**, \*\*Rossi EL, \*\*Bowers LW, \*\*Lashinger LM. Energy balance, IGF-1 and cancer: Causal lessons from genetically engineered mice. In: Animal models in Energy Balance and Cancer Research. N. Berger, ed. Springer, NY, 2015, pp. 47-57.
- 3. \*Ford NA, DiGiovanni J, **Hursting SD**. Metabolic perturbations associated with adipose tissue dysfunction and the obesity-cancer link. In: Adipose Tissue and Cancer. M. Kolonin, ed. Springer, NY, 2013, pp.1-14.
- 4. **Hursting SD**, \*Ford NA, \*Dunlap SM, Hursting MJ, \*Lashinger LM. Calorie restriction and cancer prevention: Established and emerging mechanisms. In: Obesity, Inflammation and Cancer. A. Dannenberg and N. Berger, eds. Springer, NY, 2013, Chapter 14, pp. 363-379.
- 5. **Hursting SD**. Obesity, energy balance and cancer: A mechanistic perspective. In: Advances in Nutrition and Cancer 3. V. Zappia, ed. Springer-Verlag, Berlin Heidelberg, 2013, pp.21-34.
- 6. **Hursting SD**, \*Smith SM, \*Harvey AE, \*Lashinger LM. Calories and cancer: The role of insulin-like growth factor-1. In: The IGF System and Cancer. D. Leroith, ed. Springer, NY, 2011, pp.231-243.
- 7. **Hursting SD,** \*Smith SM, \*Nogueira L, \*DeAngel R, \*Lashinger L, Perkins SN. Dietary energy balance, calorie restriction and cancer prevention. In: Nutrition and Health. J. Milner and D. Romagnola, eds. Springer, New York, 2010, pp.147-164.
- 8. **Hursting SD**, \*Lashinger LM, Brown P, Perkins SN. The utility of transgenic mouse models for cancer prevention research. In: Mouse Models in Cancer Research, 2<sup>nd</sup> Edition. B. Teicher, ed. Humana Press, Inc, Totowa, NJ, 2010, pp. 423-443.
- 9. \*\*Rogers CJ, \*\*Colbert LH, Perkins SN, **Hursting SD**. Calorie restriction, exercise and colon cancer prevention: A mechanistic perspective. In: Physical Activity, Dietary Calorie Restriction and Cancer. A. McTiernan, ed. Springer, NY, 2010, pp. 69-98.
- 10. \*\*Lavigne JA, **Hursting SD**. Cancer prevention from the biologist's perspective. In: Essentials for Public Health Biology. Jones and Bartlett Publishing, Boston, 2008, pp.97-129.
- 11. **Hursting SD**, \*\*Rogers CJ, Mahabir S, \*\*Nunez NP, Perkins SN, Forman MR. Energy balance and cancer: A mechanistic perspective. In: Nutritional Oncology, 2<sup>nd</sup> Edition. D. Heber, ed. Elsevier, NY, 2006, pp. 69-83.
- 12. **Hursting SD**, Forman M, \*\*Berrigan D, Umar A, \*\*Nunez N, Barrett JC. Evidence-based cancer prevention research: An interdisciplinary perspective on cancer prevention trials. In: Oncology: An Evidence-Based Approach. AE Chang, PA Ganz, DF Hayes, TJ Kinsella, HI Pass, JH Schiller, RM Stone and V. Strecher, eds. Springer, NY, 2006, pp. 301-316.
- 13. **Hursting SD**, Lubet RA. The utility of transgenic mice in cancer prevention studies. In: Tumor Models in Cancer Research. B. Teicher, ed. Humana Press, Inc, Totowa, NJ, 2001, pp. 263-274.

- 14. **Hursting SD**, Wei Q, Sturgis E, Clinton SK. The cancer-related genes: Oncogenes, tumor suppressor genes and the DNA damage-responsive genes. In: Nutritional Oncology. G. Blackburn and D. Heber, eds. Academic Press, San Diego, 1998, pp. 11-27.
- 15. **Hursting SD**, Fischer SM, Wargovich MW, DiGiovanni J. Nutritional modulation of the carcinogenesis process. In: Nutritional Oncology. G. Blackburn and D. Heber, eds. Academic Press, San Diego, 1998, pp. 91-104.

# Refereed Papers and Articles

### Original Research

- 1. \*\*Coleman MF, Kulkoyluoglu CE, Pfeil AJ, \*Devericks EN, Safdar MH, Chen H, Ho A, Paez SJ, Attar N, \*Kiesel VA, Teegarden D, **Hursting SD**, Wendt MK. Hypoxia-mediated repression of pyruvate carboxylase drives immunosuppression in triple negative breast cancer. *Breast Cancer Res* 2024, in press.
- 2. \*Ho AN, \*Kiesel VA, \*Connelly SP, \*\*Cozzo AJ, \*\*Coleman MF, **Hursting SD**. IGF-1 receptor inhibition combined with autophagy inhibition enhances response to platinum-based chemotherapy in triple negative breast cancer. *Cells* 2024; accepted with minor revision.
- 3. \*Glenny EM, \*Ho AN, \*Chen F, \*Gates CE, \*Paules EM, \*Xu R, \*Holt CA, \*\*Coleman MF, **Hursting SD**. Tirzepatide attenuates mammary tumor progression in diet-induced obese mice. *bioRxiv* (preprint) 2024; doi:10.1101/2024.01.20.576484.
- 4. Zhao Z, Wang J, Kong W, Fang Z, \*\*Coleman MF, Milne GL, Burkett WC, Newton MA, Lara O, Lee D, Deng B, Shen X, Sun W, **Hursting SD**, Zhou C, Bae-Jump VL. Intermittent energy restriction inhibitis tumor growth and enhances paclitaxel response in a transgenic mouse model of endometrial cancer. *Gynecol Oncol* 2024; 186:126-36.
- Kulkoyluoglu CE, Safdar MH, Paez SJ, Kulkarni A, Ayers MG, Lin H, Xianyu Z, Teegarden D, Hursting SD, Wendt MK. FGFR1 signaling facilitates obesity-driven pulmonary outgrowth in metastatic breast cancer. *Mol Cancer Res* 2023; doi: 10.1158/1541-7786.MCR-23-0955.
- 6. \*Camp KK, \*\*Coleman MF, \*McFarlane TL, \*Doerstling SS, \*Khatib SA, Rezeli ET, Lewis AG, \*Pfeil A, \*Smith LW, Fouladi F, Gong W, \*Glenny EM, Parker JS, Milne GL, Carroll IM, Fodor AA, Seeley RJ, **Hursting SD.** Calorie restriction outperforms bariatric surgery in a murine model of obesity and triple negative breast cancer. *JCl Insights* 2023; 8(19):e172868. doi: 10.1172/jci.insight.172868.
- 7. \*\*Bustamante-Marin X, \*Devlin KL, Dave O, \*Merlino JL, \*Grindstaff EJ, \*McDonell SS, Rezeli E, \*\*Coleman MF, **Hursting SD**. Regulation of the insulin-like growth factor receptor-1 by microRNA-15b contributes to the anticancer effects of calorie restriction in a murine model of triple-negative breast cancer. *Cancers* 2023; 15(17):4320. doi: 10.3390/cancers15174320.
- 8. \*\*Cozzo AJ, \*\*Coleman MF, **Hursting SD**. "You Complete Me": Tumor Cell-Myeloid Cell Nuclear Fusion as a Facilitator of Organ-Specific Metastasis. *Front Oncol* 2023; 3:1191332. doi: 10.3389/fonc.2023.1191332. eCollection 2023.
- 9. \*Smith LA, \*Craven DM, \*Rainey MA, \*\*Cozzo AJ, \*Carson MS, \*Glenny EM, \*Sheth N, \*McDonell SB, Rezeli ET, Montgomery SA, \*\*Bowers LW, \*\*Coleman MF, **Hursting SD.** Separate and combined effects of age and obesity on mammary adipose inflammation, immunosuppression and tumor progression in mouse models of triple negative breast cancer. *Front Oncol* 2023; 12:1031174. doi: 10.3389/fonc.2022.1031174. eCollection 2022.
- Olsson LT, Walens A, Hamilton AM, Benefield HC, Fleming JM, Carey LA, Hursting SD, Williams KP, Troester MA. Obesity and breast cancer metastasis across genomic subtypes. *Cancer Epidemiol Biomarkers* Prev 2022; ; EPI-22-0013. doi: 10.1158/1055-9965.EPI-22-0013.
- 11. Green WD, Alwarawrah Y, Al-Shaer AE, Si Q, Armstrong M, Manke J, Reisdorph N, Farrell TM, **Hursting SD**, MacIver NJ, Beck MA, Shaikh SR. Inflammation and metabolism of influenza-stimulated PBMCs from adults with obesity following bariatric surgery. *Infect Dis* 2022; jiac345. doi: 10.1093/infdis/jiac345.
- \*Kiesel VA, Sheeley MP, Donkin SS, Wendt MK, Hursting SD, Teegarden D. Hypoxia-mediated ATF4 induction promotes survival in detached conditions in metastatic murine mammary cancer cells. Frontiers Oncol 2022; 12:767479. DOI:10.389/FONC.2022.767479

- 13. \*\*Bowers LW, \*Doerstling SS, \*Shamsunder MG, \*Lineberger CG, \*\*Rossi EL, Montgomery SA, \*\*Coleman MF, Gong W, Parker JS, Howell A, Harvie M, **Hursting SD**. Reversing the genomic, epigenetic and triple negative breast cancer-enhancing effects of obesity. *Cancer Prev Res* 2022; DOI:10.1158/1940-6207.CAPR-22-0113.
- 14. Sheeley MP, Kiesel VA, Andolino C,. Lanman NA, Donkin DD, Hursting SD, Wendt MK, Teegarden D. 1α,25-dihydroxyvitamin D reduction of MCF10A-ras cell viability in extracellular matrix detached conditions is dependent on regulation of pyruvate carboxylase. Journal of Nutritional Biochemistry 2022; 109:109116. doi: 10.1016/j.jnutbio.2022.109116.
- 15. \*\*Bowers LW, \*Glenny EM, Punjala A, Lanman NA, Goldbaum A, Himbert C, Montgomery SA, Yang P, Roper J, Ulrich CM, Dannenberg AJ, \*\*Coleman MF, **Hursting SD**. Weight loss and/or sulindac mitigate obesity-associated transcriptome, microbiome and protumor effects in a murine model of colon cancer. *Cancer Prev Res* 2022; doi: 10.1158/1940-6207.CAPR-21-0531.
- 16. Stalnecker CA, \*Grover KR, \*Coleman MF, Yang R, DeLiberty JM, Papke B, Goodwin CM, Pierobon M, Petricoin EF, Gautam P, Wennerberg K, Cox AD, Der CJ, **Hursting SD**, Bryant KL. Concurrent inhibition of IGF1R and ERK increases pancreatic cancer sensitivity to autophagy inhibitors. *Cancer Res* 2022; 82:586-98.
- 17. \*Orenduff M, \*Coleman MF, \*Glenny EM, Huffman KM, Rezeli ET, Bareja A, Pieper CF, Kraus VB, **Hursting SD.** Differential Effects of Calorie Restriction and Rapamycin on Age-Related Molecular and Functional Changes in Skeletal Muscle. *Exp Gerontol* 2022; 111841. doi: 10.1016/j.exger.2022.111841.
- 18. \*Kiesel VA, Sheeley MP, Donkin SS, Wendt MK, **Hursting SD,** Teegarden D. Increased ammonium toxicity in response to exogenous glutamine in metastatic murine breast cancer cells. *Metabolites*, 2022;12:469; doi: 10.3390/metabo12050469.
- 19. Hufnagel S, Xu H, \*Coleman MF, Valdes SA, \*\*Liu KA, **Hursting SD**, Cui Z.4-(N)-docosahexaenoyl2',2'-difluorodeoxycytidine induces immunogenic cell death in colon and pancreatic carcinoma models as a single agent. *Cancer Chemother Pharmacol* 2022; 89:59-69.
- 20. \*Coleman MF, \*Liu KA, \*Pfeil AJ, \*Etigunta SK, \*\*Tang X, Fabela S, \*\*Lashinger LM, Cui Z, **Hursting SD.**\_β-Hydroxy- β-Methylbutyrate supplementation promotes antitumor immunity in an obesity-responsive model of pancreatic ductal adenocarcinoma. *Cancers* 2021; doi: 10.3390/cancers13246359. PMCID:PMC8699071.
- 21. Fabian CL, Befort CA, Phillips TA Nydegger JL, Kreutzjans AL, Powers KR, Metheny T, Klemp JR, Carlson SE, Sullivan DK, Zalles CM, Giles ED, Hursting SD, Hu J, Kimler BF. Change in blood and benign breast biomarkers in women undergoing weight loss intervention randomized to high dose n-3 fatty acids vs. placebo. Cancer Prev Res 2021; 14:893-904.
- 22. \*Coleman MF, \*O'Flanagan CH, \*Pfeil AJ, \*Chen X, \*Pearce JB, Sumner S, Krupenko SA, **Hursting SD.** Metabolic response of triple-negative breast cancer to folate restriction. *Nutrients* 2021; 13:1637. Doi:10/3390/nu13051637.
- 23. \*Orenduff M, Rezeli E, **Hursting SD**, Pieper CF. Psychometrics of the balance beam test in mice. *Comparative Med* 2021; 71:302-8.
- 24. Fabian CJ, Klemp JR, Marchello NJ, Vidoni ED, Sullivan DK, Nydegger JL Phillips TA, Kreutzjans AL, Hendry B, Befort CA, Nye L, Powers KR, **Hursting SD**, Giles ED, Hamilton-Reeves JM, Li B, Kimler BF. Rapid escalation of high-volume exercise during caloric restriction: change in visceral adipose tissue and adipocytokines in obese sedentary breast cancer survivors. *Cancers* 2021; 13:4871.doi:10.3390/cancers13194871.
- 25. \*Kiesel VA, Sheeley MP, \*Coleman MF, Cotul EK, Donkin SS, **Hursting SD**, Wendt MK, Teegarden D. Pyruvate carboxylase and breast cancer progression. *Cancer Metab* 2021; 9:20. doi: 10.1186/s40170-021-00256-7.
- 26. Olsson LT, Walens A, Hamilton AM, Benefield HC, Fleming JM, Carey LA, **Hursting SD**, Williams KP, Troester MA. Obesity and breast cancer metastasis across genomic subtypes. *Cancer Epidemiol Biomarkers* Prev 2022; in press.
- 27. \*\*Bowers LW, \*Doerstling SS, \*Shamsunder MG, \*Lineberger CG, \*Rossi EL, Montgomery SA, \*Coleman MF, \*Gong W, Parker JS, Howell A, Harvie M, **Hursting SD**. Reversing the genomic, epigenetic and triple negative breast cancer-enhancing effects of obesity. *Cancer Prev Res* 2022; in press.

- 28. Fabian CL, Khan SA, Garber JE, Dooley WC, Yee LD, Klemp JR, Nydegger JL, Powers KR, Kreutzjans AL, Zalles CM, Metheny T, Phillips TA, Hu J, Koestler DC, Chalise P, Yellapu NK, Jernigan C, Petroff BK, **Hursting SD**, Kimler BF. Randomized phase IIB trial of the lignan secoisolariciresinol diglucoside in premenopausal women at increased risk for development of breast cancer. *Cancer Prev Res* 2020; 13:623-34.
- 29. Fabian CJ, Klemp JR, Marchello N, Vidoni ED, Sullivan DK, Nydegger JL, Phillips TA, Kreutzjans AL, Hendry B, Befort C, Nye L, Powers KR, **Hursting SD**, Giles ED, Hamilton-Reeves JM, Li B, Kimler BF. Change in visceral fat and adipocytokines in sedentatry obese breast cancer survivors after caloric restriction and rapid escalation of high-volume exercise. *Cancer Prev Res 2020*, accepted with revision.
- 30. Holowatyj AN, Haffa M, Lin T, Gigic B, Ose J, Warby CA, Himbert C, Abbenhardt-Martin C, Boehm J, Boucher K, von Knebel-Doeberitz M, Haberman N, Herpel E, Kauczor HU, Kloor M, Nattenmüller J, Scherer D, Schirmacher P,Schneider M, Schrotz-King P, Simon T, Ulrich A, \*Bowers LW, Hursting SD, Ulrich CM. Multi-omics analysis reveals adipose-tumor crosstalk in patients with colorectal cancer. *Cancer Prev Res* 2020, 13:817-28..
- 31. Kok DE, \*\*O'Flanagan CH, \*Coleman MF, Ashkavand Z, **Hursting SD**, Krupenko SA. Effects of folic acid withdrawal on transcriptomic profiles in murine triple-negative breast cancer cell lines. *Biochimie* 2020, 173:114-22.
- 32. Sirois I, Aguilar-Mahecha A, Lafleur J, Fowler E, Vu V, Scriver M, Buchanan M, Chabot C, Ramanathan A, Balachandran B, Légaré S, Przybytkowski E, Lan C, Krzemien U, Cavallone L, Aleynikova O, Ferrario C, Guilbert M, Benlimame N, Saad A, Alaoui-Jamali M, Saragovi H, Josephy S, \*\*O'Flanagan C, Hursting S, Richard V, Zahedi R, Borchers C, Bareke E, Nabavi S, Tonellato P, Roy JA, Robidoux A, Marcus E, Mihalcioiu C, Majewski J, Basik M. A unique morphological phenotype in chemoresistant triple-negative breast cancer reveals metabolic reprogramming and PLIN4 expression as a molecular vulnerability. *Mol Cancer Res* 2019; 17:2492-2507.
- 33. Li X, Valdes SA, Alzhani RF, Hufnagel S, **Hursting SD**, Cui Z. Zoledronic acid-containing nanoparticles with minimum premature release show enhanced activity against extraskeletal tumors. *ACS Appl Mater Interfaces* 2019; 11:7311-19.
- 34. \*\*Bowers LW, \*\*Lineberger CG, \*\*Ford NA, \*\*Rossi EL, \*\*Punjala A, \*Kimler BK, Fabian CJ, **Hursting SD**. The flaxseed lignan secoisolariciresinol diglucoside decreases local inflammation, suppresses NFkB signaling, and inhibits mammary tumor growth. *Breast Cancer Res Treat* 2019; 173:545-557.
- 35. Himbert C, Ose J, Nattenmuller J, Warby CA, Holowatyj AN, Bohm J, Lin T, Haffa M, Gigic B, Hardikar S, Scherer D, Zielske L, Schrotz-King P, Kolsch T, Siegel E, Shibata D, Ulrich A, Schneider M, **Hursting SD**, Kauczor HU, Ulrich CM. Body fatness, adipose tissue compartments, and biomarkers of inflammation and angiogenesis in colorectal cancer: The ColoCare Study. *Cancer Epidemiol Biomarkers Prev* 2019; 28:76-82.
- 36. \*\*Bowers LW, \*\*Rossi EL, \*McDonell SB, \*\*Doerstling SS, \*\*Khatib SA, \*\*Lineberger CG, Albright JE, Tang X, deGraffenried LA, **Hursting SD**. Leptin signaling mediates obesity-associated CSC enrichment and EMT in preclinical TNBC models. *Mol Cancer Res* 2018; 16:869-879.
- 37. Sun X, Gupta K, Wu B, Zhang D, Yuan B, Zhang X, Chiang HC, Zhang C, Curiel TJ, Bendeck MP, **Hursting SD**, Hu Y, Li R. Tumor-extrinsic discoidin domain receptor 1 promotes mammary tumor growth by regulating adipocyte stromal interleukin 6 production in mice. *J Biol Chem* 2018; 293:2841-2849.
- 38. \*\*Rossi EL, \*\*Khatib SA, \*\*Doerstling SS, \*\*Bowers LW, Pruski M, \*\*Ford NA, Glickman R, Niu M, Yang P, Cui Z, DiGiovanni J, **Hursting SD**. Resveratrol inhibits obesity-associated adipose tissue dysfunction and tumor growth in a mouse model of postmenopausal claudin-low breast cancer. *Mol Carcinog* 2018; 57:393-407.
- 39. Lambertz IU, Luo L, Berton TR, Schwartz SL, **Hursting SD**, Conti CJ, Fuchs-Young R. Early exposure to a high fat/high sugar diet increases the mammary stem cell compartment and mammary tumor risk in female mice. *Cancer Prev Res* 2017; 10:553-562.

- 40. Lyons A, \*Coleman M, Riis S, Favre C, \*\*O'Flanagan CH, Zhadanov A, Papkovsky DB, **Hursting SD**, O'Connor R. Insulin-like growth factor 1 signaling is essential for mitochondrial biogenesis and mitophagy in cancer cells. *J Biol Chem* 2017; 292:16983-16998.
- \*\*O'Flanagan CH, \*\*Rossi EL, \*McDonell SB, \*Chen X, Tsai YH, Parker JS, Usary J, Perou CM, Hursting SD. Metabolic reprogramming underlies metastatic potential in an obesity-responsive model of metastatic triple-negative breast cancer. NPJ Breast Cancer 2017; 3:26. doi: 10.1038/s41523-017-0027-5.
- 42. \*\*Rossi EL, \*\*Dunlap SM, \*\*Bowers LW, \*\*Khatib SA, \*\*Doerstling SS, \*\*Smith LA, \*\*Ford NA, Holley D, Brown PH, Estecio MR, Kusewitt DF, deGraffenried LA, Bultman SJ, **Hursting SD**. Energy balance modulation impacts epigenetic reprogramming, ERα and ERβ expression, and mammary tumor development in MMTV-neu transgenic mice. *Cancer Res* 2017; 77:2500-2511.
- 43. \*\*Allott EH, Macias E, Sanders S, Knudsen BS, Thomas GV, **Hursting SD**, Freedland SJ. Impact of carbohydrate restriction in the context of obesity on prostate tumor growth in the Hi-Myc transgenic mouse model. *Prostate Cancer Prostatic Dis* 2017; 20:165-71.
- 44. Ashkavand Z, \*\*O'Flanagan CH, Hennig M, Du X, **Hursting SD**, Krupenko SA. Metabolic reprogramming by folate restriction leads to a less aggressive cancer phenotype. *Mol Cancer Res* 2017; 15:189-200.
- 45. \*\*Devlin KL, Sanford T, Harrison LM, LeBourgeois P, \*\*Lashinger LM, Mambo E, **Hursting SD**. Stage-specific microRNAs and their role in the anticancer effects of calorie restriction in a rat model of ER-positive luminal breast cancer. *PLoS One* 2016; 11(7):e0159686. doi: 10.1371/journal.pone.0159686.
- 46. \*\*Lashinger LM, \*\*O'Flanagan CH, \*\*Dunlap SM, Rasmussen AJ, Sweeney S, Guo JY, Lodi A, Tiziani S, White E, **Hursting SD**. Starving cancer cells from the outside and inside: Separate and combined effects of calorie restriction and autophagy inhibition on Ras-driven tumors. *Cancer Metab* 2016; Sep 16;4:18. doi: 10.1186/s40170-016-0158-4.
- 47. Chen CH, Fabian C, **Hursting SD**, deGraffenried LA. Breast cancer genetic and molecular subtype impacts response to omega-3 fatty acid ethyl esters. *Nutr Cancer* 2016; 68:1021-33.
- 48. \*\*Rossi EL, \*\*deAngel RE, \*\*Bowers LW, \*\*Khatib SA, \*Smith LA, VanBuren E, Bhardwaj P, Giri D, Estecio MR, Troester MA, Hair BY, Kirk EL, Gong T, Shen J, Dannenberg AJ, **Hursting SD**. Obesity-associated alterations in inflammation, epigenetics, and mammary tumor growth persist in formerly obese mice. *Cancer Prev Res* 2016; 9:339-48.
- 49. Niu M, Valdes S, Naguib Y, **Hursting SD**, Cui Z. Tumor-associated macrophage-mediated targeted therapy of triple-negative breast cancer. *Mol Pharm* 2016; 13:1833-42.
- 50. McCampbell AS, Mittelstadt ML, Dere R, Kim S, Zhou L, Djordjevic B, Soliman PT, Zhang Q, Wei C, **Hursting SD**, Lu KH, Broaddus RR, Walker CL. Loss of p27 associated with risk of endometrial carcinoma arising in the setting of obesity. *Curr Mol Med* 2016; 16:252-65.
- 51. Naguib YW, Lansakara PD, \*\*Lashinger LM, Rodriguez BL, Valdes S, Niu M, Aldayel AM, Peng L, **Hursting SD**, Cui Z. Synthesis, characterization, and in vitro and in vivo evaluations of 4-(N)-docosahexaenoyl 2', 2'-difluorodeoxycytidine with potent and broad-spectrum antitumor activity. *Neoplasia* 2016; 18:33-48.
- 52. \*\*Ford NA, \*\*Rossi EL, \*\*Barnett K, Yang P, \*\*Bowers LW, Hideka B, Kimler BF, Carlson SE, Shureiqi I, deGraffenried LA, Fabian CJ, **Hursting SD**. Omega-3 acid ethyl esters block the protumorigenic effects of obesity in mouse models of postmenopausal basal-like and claudin-low breast cancer. *Cancer Prev Res* 2015; 8:796-806.
- 53. Fabian CJ, Kimler BF, Phillips TA, Nydegger JL, Kreutzjans AL, Carlson SE, Hidaka BH, Metheny T, Zalles CM, Mills GB, Powers KR, Sullivan DK, Petroff BK, Hensing WL, Fridley BL, **Hursting SD**. Modulation of breast cancer risk biomarkers by high-dose omega-3 fatty acids: Phase II pilot study in postmenopausal women. *Cancer Prev Res* 2015; 8:922-31.
- 54. Fabian CJ, Kimler BF, Phillips TA, Box JA, Kreutzjans AL, Carlson SE, Hidaka BH, Metheny T, Zalles CM, Mills GB, Powers KR, Sullivan DK, Petroff BK, Hensing WL, Fridley BL, **Hursting SD**. Modulation of breast cancer risk biomarkers by high-dose omega-3 fatty acids: Phase II pilot study in premenopausal women. *Cancer Prev Res* 2015; 8:912-21.

- 55. \*\*Bowers LW, Wiese M, Brenner AJ, \*\*Rossi EL, Tekmal R, **Hursting SD**, deGraffenried LA. Obesity suppresses estrogen receptor-beta expression in breast cancer cells via a HER2-mediated pathway. *PLoS One* 2015; 10 (12):e0145452. doi: 10.1371/journal. pone.0145452.
- 56. \*\*Cifarrelli V, \*\*Lashinger LM, \*\*Devlin K, \*\*Dunlap SM, Huang J, Kaaks R, Pollak M, **Hursting SD**. Metformin and rapamycin inhibit pancreatic cancer growth in obese prediabetic mice by distinct microRNA-regulated mechanisms. *Diabetes* 2015; 64:1632-42.
- 57. \*\*Bowers LW, Brenner AJ, **Hursting SD**, Tekmal RR, deGraffenried LA. Obesity-associated systemic interleukin-6 promotes pre-adipocyte aromatase expression via increased breast cancer cell prostaglandin E2 production. *Breast Cancer Res Treat* 2015; 149:49-57.
- 58. Jung SY, Vitolins MZ, \*\*Fenton JI, Frazier-Wood AC, **Hursting SD**, \*\*Chang S. Risk profiles for weight gain among postmenopausal women: A classification and regression tree analysis approach. *PLoS One* 2015; 10(3):e0121430. doi: 10.1371/journal.pone.0121430.
- 59. Paxton RJ, Jung SJ, Vitolins MZ, \*\*Fenton J, Paskett E, Pollak M, Hays-Grudo J, **Hursting SD**, \*\*Chang S. Associations between time spent sitting and cancer-related biomarkers in postmenopausal women: An exploration of effect biomarkers. *Cancer Causes Control* 2014; 25:1427-37.
- 60. Niu M, Naguib YW, Aldayel AM, Shi YC, **Hursting SD**, Hersh MA, Cui Z. Biodistribution and in vivo activities of tumor-associated macrophage-targeting nanoparticles incorporated with doxorubicin. *Mol Pharm* 2014;11:4425-36.
- 61. \*\*Lashinger LM, \*\*Rossi EL, **Hursting SD**. Obesity and resistance to chemotherapy: interacting roles of inflammation and metabolic dysregulation. *Clin Pharmacol Ther* 2014; 96:458-63.
- 62. \*\*Bowers LW, Maximo IX, Brenner AJ, Beeram M, **Hursting SD**, Price RS, Tekmal RR, Jolly CA, deGraffenried LA. NSAID use attenuates breast cancer recurrence in overweight and obese women: Role of prostaglandin-aromatase interactions. *Cancer Res* 2014; 74:4446-57.
- 63. \*\*Harvey A, \*\*Lashinger L, \*\*Hays D, Harrison LM, Lewis K, Fischer SM, **Hursting SD**. Calorie restriction decreases murine and human pancreatic tumor growth, nuclear factor-κB activation, and inflammation-related gene expression in an insulin-like growth factor-1–dependent manner. *PLoS One* 2014; 9(5):e94151. doi: 10.1371/journal.pone.0094151.
- 64. Jung SY, **Hursting SD**, Guindani M, Vitolins M, Paskett E, \*\*Chang S. Bioavailable insulin-like growth factor-1 inversely related to weight gain in postmenopausal women regardless of exogenous estrogen exposure. *Cancer Epidemiol Biomarkers Prev* 2014; 23:534-44.
- 65. Naguib Y, Rodriguez B, Li X, **Hursting SD**, Williams R, Cui Z. Solid lipid nanoparticle formulations of docetaxel prepared with high-melting point triglycerides: In vitro and in vivo evaluation. *Mol Pharm* 2014; 11:1239-49.
- 66. \*\*Olivo-Marston SE, **Hursting SD**, Perkins SN, Schetter A, Khan M, Croce C, Harris CC, \*\*Lavigne J. Effects of calorie restriction and diet-induced obesity on murine colon carcinogenesis, growth and inflammatory factors, and microRNA expression. *PLoS One* 2014; 9(4):e94765. doi: 10.1371/journal.pone.0094765.
- 67. \*\*Liu K, \*\*Lashinger LM, Rasmussen AJ, **Hursting SD**. Leucine supplementation differentially enhances pancreatic cancer growth in lean and overweight mice. *Cancer Metab* 2014; 2(1):6. doi: 10.1186/2049-3002-2-6.
- 68. Checkley LA, Rho O, Angel JM, Cho J, Blando J, Beltran L, **Hursting SD**, DiGiovanni J. Metformin inhibits skin tumor promotion in overweight and obese mice. *Cancer Prev Res* 2014; 7:54-64.
- 69. \*\*Bowers LW, Cavazos DA, Maximo IX, Brenner AJ, **Hursting SD**, deGraffenried LA. Obesity enhances nongenomic estrogen receptor crosstalk with the Pl3K/Akt and MAPK pathways to promote in vitro measures of breast cancer progression. *Breast Cancer Res* 2013; 15(4):R39. doi: 10.1186/bcr3453.
- 70. Fabian CJ, Kimler BF, Donnelly JE, Sullivan DK, Klemp JR, Petroff BK, Phillips TA, Metheny T, Aversman S, Yeh HW, Zalles CM, Mills GB, **Hursting SD**. Favorable modulation of benign breast tissue and serum risk biomarkers is associated with >10% weight loss in postmenopausal women. *Breast Cancer Res Treat* 2013; 142:119-32.

- 71. Zheng Q, Banaszak L, Fracci S, Basali D, \*Dunlap SM, **Hursting SD**, Rich JN, Hjelmeland AB, Vasanji A, Berger NA. Lathia JD, Reizes O. Leptin receptor maintains cancer stem-like properties in triple negative breast cancer cells. *Endocr Relat Cancer* 2013; 20:797-808.
- 72. \*\*Lashinger LM, Harrison L, Rasmussen A, Logsdon C, Fischer S, McArthur M, **Hursting SD**. Dietary energy balance modulation of Kras- and Ink4A/Arf\*/-driven pancreatic cancer: The role of insulin-like growth factor-1. *Cancer Prev Res* 2013; 6:1046-55.
- 73. \*Ford NA, \*\*Dunlap SM, \*Wheatley KE, **Hursting SD**. Obesity, independent of p53 gene dosage, promotes mammary tumor progression and upregulates the p53 regulator microRNA-504. *PLoS One* 2013; 8(6):e68089. doi: 10.1371/journal.pone.0068089.
- 74. \*De Angel RE, Conti CJ, \*Wheatley KE, Brenner AJ, Otto G, deGraffenried LA, **Hursting SD**. The enhancing effects of obesity on mammary tumor growth and Akt/mTOR pathway activation persist after weight loss and are reversed by Rad001. *Mol Carcinog* 2013; 52:446-58.
- 75. \*Ford NA, \*\*Nunez NP, Holcomb VB, **Hursting SD**. IGF1 dependence of dietary energy balance effects on murine Met1 mammary tumor progression, epithelial-to-mesenchymal transition, and chemokine expression. *Endocr Rel Cancer* 2013, 20:39-51.
- 76. \*De Angel RE, Blando J, Hogan MG, Sandoval MA, Lansakara PDS, \*Dunlap SM, **Hursting SD**, Cui Z. Stearoyl gemcitabine nanoparticles overcome obesity-induced cancer cell resistance to gemcitabine in a mouse postmenopausal breast cancer model. *Cancer Biol Ther* 2013; 14:357-64.
- 77. \*Harvey A, \*\*Lashinger L, Otto G, \*\*Nunez NP, **Hursting SD**. Decreased systemic IGF-1 in response to calorie restriction modulates tumor cell growth, nuclear factor-kB activation, and inflammation-related gene expression. *Mol Carcinog* 2013; 52:997-1006.
- 78. Moore T, Beltran L, Carbajal S, **Hursting SD**, DiGiovanni J. Energy balance modulates mouse skin tumor promotion through altered IGF-1R and EGFR crosstalk. *Cancer Prev Res* 2012; 5:1236-46.
- 79. Zheng Q, **Hursting SD**, Reizes O. Leptin regulates cyclin D1 in luminal epithelial cells of mouse MMTV-Wnt-1 mammary tumors. *J Cancer Res Clin Oncol* 2012; 138:1607-12.
- 80. \*Nogueira LM, \*Lavigne JA, Chandramouli GVR, Lui H, Barrett JC, **Hursting SD**. Dose-dependent effects of calorie restriction on gene expression, metabolism, and tumor progression are partially mediated by insulin-like growth factor-1. *Cancer Med* 2012; 1:275-288.
- 81. \*\*Dunlap SM, Chiao LJ, \*\*Nogueira L, Usary J, Perou CM, Varticovski L, **Hursting SD**. Dietary energy balance modulates epithelial-to-mesenchymal transition and tumor progression in murine claudin-low and basal-like mammary tumor models. *Cancer Prev Res* 2012; 5:930-42.
- 82. \*\*Nogueira LM, \*\*Dunlap SM, \*\*Ford NA, **Hursting SD**. Calorie restriction and rapamycin inhibit MMTV-Wnt-1 mammary tumor growth in a mouse model of postmenopausal obesity. *Endocr Relat Cancer* 2012; 19:57-68.
- 83. Price RS, Cavazaos D, \*De Angel RE, **Hursting SD**, deGraffenried LA. Obesity-related systemic factors promote an invasive phenotype in prostate cancer cells. *Prostate Cancer Prostatic Dis* 2012; 15:135-43.
- 84. \*\*Hudson TS, Perkins SN, **Hursting SD**, Young HA, Kim YS, Wang TC, Wang TTY. Inhibition of androgen-responsive LNCaP prostate cancer cell tumor xenograft growth by dietary phenethyl isothiocyanate correlates with decreased angiogenesis and inhibition of cell attachment. *Int J Oncol* 2012; 40:1113-21.
- 85. Blando J, Moore T, **Hursting SD**, Jiang G, Saha A, Beltran, L, Shen J, Repass J, Strom S, DiGiovanni J. Dietary energy balance modulates prostate cancer progression in Hi-Myc mice. *Cancer Prev Res* 2011; 4:2002-14.
- 86. Zheng Q, \*Dunlap SM, Zhu J, Downs-Kelly E, Rich JN, **Hursting SD**, Berger NA. Reizes O. Leptin deficiency suppresses MMV-Wnt-1 mammary tumor growth in obese mice and abrogates tumor initiating cell survival. *Endocr Relat Cancer* 2011; 18:491-503.
- 87. \*Lashinger LM, Malone LM, Brown GW, \*Daniels EA, \*Goldberg JA, Otto G, Fischer SM, **Hursting SD**. Rapamycin partially mimics the anticancer effects of calorie restriction in a murine model of pancreatic cancer. *Cancer Prev Res* 2011; 4:1041-51.
- 88. \*Lashinger LM, Malone LM, MacArthur MJ, \*Goldberg JA, \*Daniels EA, Pavone A, Colby JK, Smith NC, Perkins SN, Fischer SM, **Hursting SD**. Genetic reduction of insulin-like growth factor-1 mimics

- the anticancer effects of calorie restriction on cyclooxygenase-2-driven pancreatic neoplasia. *Cancer Prev Res* 2011; 4: 1030-40.
- 89. Checkley LA, Rho O, Moore T, **Hursting SD**, DiGiovanni J. Rapamycin is a potent inhibitor of skin tumor promotion by 12-O-tetradecanoylphorbol-13-acetate. *Cancer Prev Res* 2011; 4:1011-20.
- 90. \*Wheatley KE, \*Nogueira LM, Perkins SN, **Hursting SD**. Differential effects of calorie restriction and exercise on the adipose transcriptome in diet-induced obese mice. *J Obes* 2011; 2011:265417. doi: 10.115/2011/265417.
- 91. Fuchs-Young R, Shirley SH, Lambertz I, Colby JK, Tian J, Johnston D, Gimenez-Conti IB, Donehower LA, Conti CJ, **Hursting SD**. p53 genotype as a determinant of ER expression and tamoxifen response in the MMTV-Wnt-1 model of mammary carcinogenesis. *Breast Cancer Res Treat* 2011; 30:399-408.
- 92. Rondini EA, \*Harvey AE, Steibel JP, **Hursting SD**, \*\*Fenton JI. Energy balance modulates colon tumor growth: interactive roles of insulin and estrogen. *Mol Carcinog* 2011; 50:370-82.
- 93. \*DeAngel RE, \*Smith SM, Glickman R, Perkins SN, **Hursting SD**. Antitumor effects of ursolic acid in a mouse model of postmenopausal breast cancer. *Nutr Cancer* 2010; 62:1074-86.
- 94. Buschemeyer WC, Klink JC, Mavropoulos JC, Poulton SH, Demark-Wahnefried W, **Hursting SD**, Cohen P, Hwang D, Johnson TL, Freedland SJ. Effect of intermittent fasting with or without calorie restriction on prostate cancer growth and survival in SCID mice. *Prostate* 2010; 70:1037-43.
- 95. Padovani M, \*\*Lavigne JA, Chandramouli GVR, Perkins SN, Barrett JC, **Hursting SD**, Bennett LM, \*\*Berrigan D. Distinct effects of calorie restriction and exercise on mammary gland gene expression in C57BL/6 mice. *Cancer Prev Res* 2009; 2:1076-87.
- 96. \*\*Olivo-Marston S, **Hursting SD**, \*\*Lavigne J, Perkins SN, Maarouf R, Yakar S, Harris CC. Genetic reduction of circulating insulin-like growth factor-1 inhibits azoxymethane-induced colon tumorigenesis in mice. *Mol Carcinog* 2009, 48:1071-6.
- 97. **Hursting SD**, Perkins SN, \*\*Lavigne JA, Beltran L, Haines DC, Hill HL, Alvord WG, Barrett JC, DiGiovanni J. Urothelial overexpression of insulin-like growth factor-1 increases susceptibility to *p*-cresidine-induced bladder carcinogenesis in transgenic mice. *Mol Carcinog* 2009; 48:671-7.
- 98. \*\*Colbert LH, Westerlind KC, Perkins SN, Haines DC, \*\*Berrigan D, Donehower LA, Fuchs-Young R, **Hursting SD**. Exercise effects on tumorigenesis in a p53-deficient mouse model of breast cancer. *Med Sci Sports Exerc* 2009; 41:1597-605.
- 99. \*DeAngel RE, \*\*Berrigan D, \*\*Nunez NP, **Hursting SD**, Perkins SN. Dietary calcium source influences body composition, glucose metabolism and hormone levels in a mouse model of postmenopausal obesity. *In Vivo* 2009; 23:527-35.
- 100. Ghosh R, Schoolfield J, Yeh I, Smith ML, **Hursting SD**, Chan D, Lucia MS, Kumar A. Loss of NADPH quinone oxidoreductase in the prostate and enhanced serum levels of cytokine-induced neutrophil chemoattractant-2alpha in hormone stimulated Noble rats: potential role in prostatic intraepithelial neoplasia development. *Transl Oncol* 2009, 2:65-72.
- 101. \*\*Berrigan D, Potischman N, Dodd K, **Hursting SD**, \*\*Lavigne J, Barrett JC, Ballard-Barbash R. Race/ethnic variation in serum levels of IGF-1 and IGFBP-3 in US adults. *Growth Horm IGF Res* 2009; 19:146-55.
- 102. \*\*Fenton JI, \*\*Nunez N, Yakar S, Perkins S, Hord NG, **Hursting SD**. Diet-induced adiposity alters the serum profile of inflammation in C57BL/6N mice as measured by antibody array. *Diabetes Obes Metab* 2009; 11:343-54.
- 103. \*\*Eng-Wong J, Perkins SN, Bondy M, Li D, Singletary SE, \*\*Nuñez NP, **Hursting SD**, \*\*Chang S. Premenopausal breast cancer: estrogen receptor status and insulin-like growth factor-1, insulin-like growth factor binding protein-3 and leptin. *Breast J*, 2009; 15:426-8.
- 104. Staiger J, Lueben MJ, \*\*Berrigan D, Malik R, Perkins SN, **Hursting SD**, Johnson PF. C/EBP{beta} regulates body composition, energy balance-related hormones and tumor growth. *Carcinogenesis* 2009; 30:832-40.
- 105. \*\*Rogers CJ, Zaharoff DA, Hance KW, Perkins SN, **Hursting SD**, Schlom J, Greiner JW. Exercise enhances vaccine-induced antigen specific T-cell responses. *Vaccine* 2008, 26:5407-15.

- 106. Wang TT, \*\*Hudson TS, Wang TC, Remsberg CM, Davies NM, Takahashi Y, Kim YS, Seifried H, Vinyard B, Perkins SN, **Hursting SD**. Differential effects of resveratrol on androgen-responsive LNCaP human prostate cancer cells in vitro and in vivo. *Carcinogenesis* 2008; 29:2001-10.
- 107. \*\*Fenton JI, Birmingham J, Hursting SD, Hord NG. Adiponectin blocks multiple signaling cascades associated with leptin-induced cell proliferation in ApcMin/+ colon epithelial cells. Int J Cancer 2008; 122:2437-45.
- 108. Moore T, Beltran LD, Carbajal S, Strom S, Traag J, **Hursting SD**, DiGiovanni J. Dietary energy balance modulates signaling through the Akt/mammalian target of rapamycin pathway in multiple epithelial tissues. *Cancer Prev Res* 2008; 1:65-76. Erratum: 2009, 2:999.
- 109. \*\*Nunez NP, Perkins SN, Smith NC, \*\*Berrigan D, Berendes DM, Varticovski L, Barrett JC, **Hursting SD**. Obesity accelerates mouse mammary tumor growth in the absence of ovarian hormones. *Nutr Cancer* 2008, 60:534-41.
- 110. Moore T, Carbajal S, Beltran L, Perkins SN, Yakar S, Leroith D, **Hursting SD**, DiGiovanni J. Reduced susceptibility to two-stage skin carcinogenesis in mice with low circulating insulin-like growth factor-1 levels. *Cancer Res* 2008; 68:3680-8.
- 111. \*\*Lavigne JA, Takahashi Y, Chandramouli GV, Liu H, Perkins SN, **Hursting SD**, Wang TTY. Concentration-dependent effects of genistein on global gene expression in MCF-7 breast cancer cells: an oligo microarray study. *Breast Cancer Res Treat* 2008; 110:85-98.
- 112. \*Wheatley KE, \*Williams EA, Smith NC, Dillard AC, Park EY, \*\*Nunez NP, **Hursting SD**, Lane MA. Low-carbohydrate diet versus calorie restriction: effects on weight loss, hormones and colon tumor growth in obese mice. *Nutr Cancer* 2008; 60:61-68.
- 113. \*\*Fenton JI, \*\*Lavigne J, Perkins SN, Liu H, Chandramouli G, Shih JH, Hord NG, **Hursting SD**. Microarray analysis reveals that leptin induces autocrine/paracrine cascades to promote survival and proliferation of colon epithelial cells in Apc genotype-dependent fashion. *Mol Carcinog* 2008; 47:9-21.
- 114. \*\*Rogers CJ, \*\*Berrigan D, Zaharoff DA, Hance KW, Patel AC, Perkins SN, Schlom J, Greiner JW, Hursting SD. Energy restriction and exercise differentially enhance components of systemic and mucosal immunity in mice. J Nutr 2008; 138:115-122.
- 115. \*\*Nunez, NP, Carpenter CL, Perkins SN, \*\*Berrigan D, Jaque SV, Ingles SA, Bernstein L, Forman MR, Barrett JC, **Hursting SD.** Extreme obesity reduces bone mineral density: complementary evidence from mice and women. *Obesity* 2007; 15:1980-7.
- 116. Hudson TS, Hartle DK, **Hursting SD**, \*\*Nunez NP, Wang TT, Young HA, Arany P, Green JE. Inhibition of prostate cancer growth by muscadine grape skin extract and resveratrol through distinct mechanisms. *Cancer Res* 2007; 67:8396-405.
- 117. \*\*Williams E, Perkins SN, Smith N, **Hursting SD**, Lane MA. Carbohydrate versus energy restriction: effects on weight loss, body composition and metabolism. *Ann Nutr Metab* 2007; 51:232-243.
- 118. Varticovski L, Hollingshead MG, Robles AI, Wu X, Cherry J, Munroe DJ, Lukes L, Anver MR, Carter JP, Borgel SD, Stotler H, Bonomi CA, \*\*Nunez NP, Hursting SD, Qiao W, Deng CX, Green JE, Hunter KW, Merlino G, Steeg PS, Wakefield LM, Barrett JC. Accelerated preclinical testing using transplanted tumors from genetically engineered mouse breast cancer models. *Clin Cancer Res* 2007; 13:2168-77.
- 119. Takahashi Y, Perkins SN, **Hursting SD**, Wang TT. 17-beta-Estradiol differentially regulates androgen-responsive genes through estrogen receptor-beta- and extracellular-signal regulated kinase-dependent pathways in LNCaP human prostate cancer cells. *Mol Carcinog* 2007; 46:117-29.
- 120. \*\*Fenton JI, **Hursting SD**, Perkins SN, Hord NG. Leptin induces an Apc genotype-associated colon epithelial cell chemokine production pattern associated with macrophage chemotaxis and activation. *Carcinogenesis* 2007; 28:455-64.
- 121. \*\*Mai V, \*\*Colbert LH, Perkins SN, Schatzkin A, **Hursting SD**. Intestinal microbiota: a potential diet-responsive prevention target in Apc(Min) mice. *Mol Carcinog* 2007; 46:42-8.

- 122. Takahashi Y, \*\*Lavigne JA, **Hursting SD**, Chandramouli GV, Perkins SN, Kim YS, Wang TT. Molecular signatures of soy-derived phytochemicals in androgen-responsive prostate cancer cells: a comparison study using DNA microarray. *Mol Carcinog* 2006; 45:943-56.
- 123. \*\*Fenton JI, **Hursting SD**, Perkins SN, Hord NG. Interleukin-6 production induced by leptin treatment promotes cell proliferation in an APC<sup>min/+</sup> colonic epithelial cell line. *Carcinogenesis* 2006; 27:1507-15.
- 124. Yakar S, \*\*Nunez NP, Pennisi P, Brodt P, Sun H, Fallavollita L, Zhao H, Scavo L, Novosyadlyy R, Kurshan N, Stannard B, East-Palmer J, Smith NC, Perkins SN, Fuchs-Young R, Barrett JC, Hursting SD, LeRoith D. Increased tumor growth in mice with diet-induced obesity: impact of ovarian hormones. *Endocrinology* 2006; 147:5826-34.
- 125. \*Colbert LH, \*Mai V, Tooze JA, Perkins SN, \*Berrigan D, **Hursting SD**. Negative energy balance induced by voluntary wheel running inhibits polyp development in APC<sup>min</sup> mice. *Carcinogenesis* 2006, 27:2103-7.
- 126. \*Nunez N, Oh W, Rozenberg J, Perella C, Anver M, Barrett JC, Perkins SN, \*Berrigan D, Moitra J, Varticovski L, **Hursting SD**, Vinson C. Accelerated tumor formation in a fatless mouse with type 2 diabetes and inflammation. *Cancer Res* 2006; 66:5469-76.
- 127. Dores GM, \*\*Chang S, Berger V, Perkins SN, **Hursting SD**, Weed DL. Evaluating research training outcomes: experience from the Cancer Prevention Fellowship Program at the National Cancer Institute. *Acad Med* 2006; 81:535-41.
- 128. Mostoslavsky R, Chua KF, Lombard DB, Pang WW, Fischer MR, Gellon L, Liu P, Mostoslavsky G, Franco S, Murphy M, Mills KD, Patel P, Hsu JT, Hong AL, Ford E, Cheng H, Kennedy C, \*Nunez N, Bronson R, Frendeway D, Auerbach W, Valenzuela D, Karow M, Hottiger MO, **Hursting SD**, Barrett JC, Guarente L, Mulligan R, Demple B, Yancopoulos GD, Alt FW. Genomic instability and aging-like phenotype in the absence of mammalian SIRT6. *Cell* 2006; 124:315-29.
- 129. Takahashi Y, **Hursting SD**, Perkins SN, Wang TC, Wang TTY. Genistein affects androgen-responsive genes through both androgen- and estrogen-induced signaling pathways. *Mol Carcinog* 2006; 45:18-25.
- 130. \*Fenton JI, Hord NG, \*Lavigne JA, Perkins SN, **Hursting SD**. Leptin, insulin-like growth factor-1 and insulin-like growth factor-2 are mitogens in Apc<sup>Min/+</sup> but not Apc<sup>+/+</sup> colonic epithelial cell lines. *Cancer Epidemiol Biomarkers Prev* 2005; 14:1646-52.
- 131. \*Lavigne JA, Baer DJ, Wimbrow HH, Albert PS, Brown ED, Judd JT, Campbell WS, Giffen CA, Dorgan JF, Hartman TJ, Barrett JC, **Hursting SD**, Taylor PR. Effects of alcohol on insulin-like growth factor 1 and insulin-like growth factor binding protein 3 in postmenopausal women. *Am J Clin Nutr* 2005; 81:503-7.
- 132. \*\*Chang S, Erdman JW, Clinton SK, Vadiveloo M, Strom S, Yamamura Y, Duphorne C, Spitz MR, Amos CI, \*\*Contois JH, Gu X, Babaian RJ, Scardino PT, **Hursting SD**. Relationship between plasma carotenoids and prostate cancer. *Nutr Cancer* 2005; 53:127-34.
- 133. \*Berrigan D, \*Lavigne JA, Perkins SN, Nagy TR, Barrett JC, **Hursting SD.** Phenotypic effects of calorie restriction and insulin-like growth factor-1 treatment on body composition and bone mineral density of C57BL/6 mice: implications for cancer preventions. *In Vivo* 2005; 19:667-74.
- 134. Palmieri D, Halverson D, Ouatas T, Horak C, Salerno M, Johnson J, Figg WD, Hollingshead M, **Hursting SD**, \*Berrigan D, Steinberg S, Merino MJ, Steeg PS. Medroxyprogesterone acetate elevation of Nm23-H1 metastasis suppressor expression in hormone receptor-negative breast cancer. *J Natl Cancer Inst* 2005; 97:632-42.
- 135. \*\*Chang S, **Hursting SD**, Perkins SN, Dores GM, Weed DL. Adapting postdoctoral training to interdisciplinary science in the 21<sup>st</sup> century: the Cancer Prevention Fellowship Program at the National Cancer Institute. *Acad Med* 2005; 80:261-5.
- 136. Lubet RA, Christov K, \*Nunez N, **Hursting SD**, Steele VE, Juliana MM, Eto I, Grubbs CJ. Effects of targretin on methylnitrosourea-induced mammary cancers: prevention and therapy doseresponse curves and effects on proliferation and apoptosis. *Carcinogenesis* 2005; 26:441-8.
- 137. \*Lavigne JA, Wimbrow HH, Clevidence BA, Albert PS, Reichman ME, Campbell WS, Barrett JC, **Hursting SD**, Judd JT, Taylor PR. Effects of alcohol and menstrual cycle on insulin-like growth

- factor-1 and insulin-like growth factor binding protein-3. *Cancer Epidemiol Biomarkers Prev* 2004; 13:2264-7.
- 138. Takahashi Y, \*Lavigne JA, **Hursting SD**, Chandramouli GVR, Perkins SN, Barrett JC, Wang TTY. Using DNA microarray analyses to elucidate the effects of genistein in androgen-responsive prostate cancer cells: identification of novel targets. *Mol Carcinog* 2004; 41:108-119.
- 139. \*Nunez NP, Jelovac D, Macedo L, \*\*Berrigan D, Perkins SN, **Hursting SD**, Barrett JC, Brodie A. Effects of the antiestrogen tamoxifen and the aromatase inhibitor letrozole on serum hormones and bone characteristics in a preclinical tumor model for breast cancer. *Clin Cancer Res* 2004; 10:5375-80.
- 140. Zeytin HE, Patel A, \*Rogers CJ, Canter D, **Hursting SD**, Schlom J, Greiner JW. Combination of a poxvirus-based vaccine with a cyclooxygenase-2 inhibitor (celecoxib) elicits antitumor immunity and long-term survival in CEA.Tg/Min mice. *Cancer Res* 2004; 64:3668-78.
- 141. \*Eng-Wong J, **Hursting SD**, Venzon D, Perkins SN, Zujewski J. Effect of raloxifene on insulin-like growth factor-1, insulin-like growth factor binding protein-3, and leptin in premenopausal women at high risk for developing breast cancer. *Cancer Epidemiol Biomarkers Prev* 2003; 12:1468-73.
- 142. \*Colbert LH, \*Mai V, Perkins SN, \*Berrigan D, \*Lavigne JA, Wimbrow HH, Alvord WG, Haines DC, Srinivas P, **Hursting SD**. Exercise and intestinal polyp development in APC<sup>Min</sup> mice. *Med Sci Sports Exerc* 2003; 35:1662-9.
- 143. \*Mai V, \*Colbert L, \*Berrigan D, Perkins S, Pfeiffer R, \*Lavigne J, Lanza E, Haines D, Schatzkin A, **Hursting SD**. Calorie restriction and diet composition modulate spontaneous intestinal tumorigenesis in APC<sup>Min</sup> mice through different mechanisms. *Cancer Res* 2003; 63:1752-55.
- 144. Misra RR, **Hursting SD**, Perkins SN, Sathyamoorthy N, Mirsalis JC, Riccio ES, Crowell JA. Genotoxicity and carcinogenicity studies of soy isoflavones. *Int J Toxicol* 2002; 21:277-85.
- 145. \*Berrigan DA, Perkins SN, Haines DC, **Hursting SD**. Adult-onset calorie restriction and fasting delay spontaneous tumorigenesis in p53-deficient mice. *Carcinogenesis* 2002; 23:817-22.
- 146. **Hursting SD**, \*\*Shen JC, Sun XY, Wang TTY, Phang JM, Perkins SN. Modulation of cyclophilin gene expression by N-4-(hydroxyphenyl)retinamide: association with reactive oxygen species generation and apoptosis. *Mol Carcinog* 2002; 33:16-24.
- 147. \*\*Chang S, **Hursting SD**, \*\*Contois JH, Strom SS, Yamamura Y, Babaian R, Troncoso P, Scardino PS, Wheeler T, Amos CI, Spitz MR. Leptin and prostate cancer. *Prostate* 2001; 46:62-67.
- 148. Poetschke HL, Klug DB, Perkins SN, Wang TT, Richie ER, **Hursting SD**. Effects of calorie restriction on thymocyte growth, death and maturation. *Carcinogenesis* 2000; 21:1959-64
- 149. \*Shen JC, Klein RD, Wei Q, Guan Y, \*Contois JH, Wang TT, Chang S, **Hursting SD**. Low-dose genistein induces endogenous cyclin-dependent kinase inhibitors and G1 cell-cycle arrest in human prostate cancer cells. *Mol Carcinog* 2000; 29:92-102.
- 150. Strom SS, Yamamura Y, Duphorne CM, Spitz MR, Babaian RJ, Pillow PC, **Hursting SD**. Phytoestrogen intake and prostate cancer: a cancer-control study using a new database. *Nutr Cancer* 1999; 33:20-25. Erratum: 1999; 36:243.
- 151. Pillow PC, Duphorne CM, \*Chang S, \*Contois J, Strom SS, Spitz MR, **Hursting SD**. Development of a database for assessing dietary phytoestrogen intake. *Nutr Cancer* 1999; 33:3-19.
- 152. Ward J, Taddesse-Heath L, Perkins S, Chattopadhyay S, **Hursting SD**, Morse H. Splenic marginal zone B-cell and thymic T-cell lymphomas in p53-deficient mice. *Lab Invest* 1999; 79: 3-14.
- 153. \*Shen JC, Wang TT, \*Chang S, Hursting SD. Mechanistic studies of the effects of the retinoid N-(4-hydroxyphenyl)retinamide on prostate cancer cell growth and apoptosis. *Mol Carcinog* 1999; 24:160-68.
- 154. \*Chang S, Buzdar AU, **Hursting SD**. Inflammatory breast cancer and body mass index. *J Clin Oncol* 1998; 16:3731-35.
- 155. Mei JJ, **Hursting SD**, Perkins SN, Phang JM. p53-independent inhibition of nitric oxide generation by cancer preventive intervention in ex vivo mouse peritoneal macrophages. *Cancer Lett* 1998; 129:191-7.
- 156. \*Chang S, Parker SL, Pham T, Buzdar A, **Hursting SD**. Inflammatory breast carcinoma incidence and survival: the surveillance, epidemiology and end results program of the National Cancer Institute, 1975-1992. *Cancer* 1998; 82:2366-72.

- 157. Perkins SN, **Hursting SD**. Phang JM, Haines DC. Calorie restriction reduces ulcerative dermatitis and infection-related mortality in p53-deficient and wild-type mice. *J Invest Dermatol* 1998; 111:292-6.
- 158. Weed DL, **Hursting SD**. Biological plausibility in causal inference: current method and practice. *Am J Epidemiol* 1998; 147:415-25.
- 159. \*Shen JC, Zhau HE, **Hursting SD**, Chung LK. Androgen regulation of the human pseudoautosomal gene MIC2, a potential marker for prostate cancer. *Mol Carcinog* 1998; 23:13-19.
- Pillow P, Hursting SD, Duphorne CM, Jiang H, Honn S, \*Chang S, Spitz MR. Case-control assessment of diet and lung cancer risk in African Americans and Mexican Americans. *Nutr Cancer* 1997; 29:169-73.
- 161. **Hursting SD**, Perkins SN, Brown C, Haines DN, Phang JM. Calorie restriction induces a p53-independent delay of spontaneous tumorigenesis in p53-deficient and wild-type mice. *Cancer Res* 1997; 57:2843-6.
- 162. Wang TTY, **Hursting SD**, Perkins SN, Phang JM. Effects of dehydroepiandrosterone and calorie restriction on the Bcl-2/Bax-mediated apoptotic pathway in p53-deficient mice. *Cancer Lett* 1997; 116:61-69.
- 163. Perkins SN, **Hursting SD**, Haines DC, James SJ, Miller BJ, Phang JM. Chemoprevention of spontaneous tumorigenesis in nullizygous p53-deficient mice by dehydroepiandrosterone and its analog, 16-alpha-fluoro-5-androsten-17-one. *Carcinogenesis* 1997; 18:989-94.
- 164. **Hursting SD**, Perkins SN, Haines DC, Ward JM, Phang JM. Chemoprevention of spontaneous tumorigenesis in p53-knockout mice. *Cancer Res* 1995; 55:3949-53.
- 165. Houn F, Bober MA, Huerta EE, **Hursting SD**, Lemon S, Weed, DL. The association between alcohol and breast cancer: popular press coverage of research. *Am J Public Health* 1995; 85 (8 part 1):1082-86.
- 166. **Hursting SD**, Perkins SN, Phang JM. Calorie restriction delays spontaneous tumorigenesis in p53-knockout mice. *Proc Natl Acad Sci USA* 1994; 91:7036-40.
- 167. **Hursting SD**, Switzer BR, French JE, Kari FW. Inhibition of rat mononuclear cell leukemia by corn oil gavage: in vivo, in situ and immune competence studies. *Carcinogenesis* 1994; 15:193-9.
- 168. **Hursting SD**, Margolin BH, Switzer BR. Diet and human leukemia: an analysis of international data. *Prev Med* 1993; 22:409-22.
- 169. **Hursting SD**, Switzer BR, French JE, Kari F. The growth hormone:insulin-like growth factor 1 axis is a mediator of diet restriction-induced inhibition of mononuclear cell leukemia in Fischer rats. *Cancer Res* 1993; 53:2750-7.
- 170. **Hursting SD**, Thornquist MD, Henderson MM. Types of dietary fat and the incidence of cancer at five sites. *Prev Med* 1990; 19:242-53.
- 171. Kakar F, Thornquist MD, Henderson MM, Klein RD, Santisteban BA, **Hursting SD**, Urban ND. The effect of dietary sugar and dietary antioxidants on mammary tumor growth and lethality in BALB/c mice. *Clin Nutr* 1990; 9:62-7.
- 172. Kakar F, **Hursting SD**, Henderson MM, Thornquist MD. Dietary sugar and breast cancer mortality: epidemiologic evidence. *Clin Nutr* 1990; 9:68-71.
- 173. Prentice RL, Kakar F, **Hursting SD**, Sheppard L, Klein RD, Kushi LH. Aspects of the rationale for the Women's Health Trial. *J Natl Cancer Inst* 1988; 80:802-14.

#### Other Peer-Reviewed Articles

- Garcia MB, Schadler KL, Chandra J, Clinton SK, Courneya KS, Cruz-Monserrate Z, Daniel CR, Dannenberg AJ, Demark-Wahnefried W, Dewhirst MW, Fabian CJ, **Hursting SD**, Irwin ML, Iyengar NM, McQuade JL, Schmitz KH, Basen-Engquist K. Translating energy balance research from bench to the clinic to the community: Parallel animal-human studies in cancer. *CA Cancer J Clin* 2023; DOI: 10.3322/caac.21773.
- 2. Kalam F, James DL, Li YR, \*\*Coleman MF, \*Kiesel VA, Cespedes Feliano EM, **Hursting SD**, Sears DD. Intermittent fasting interventions to leverage metabolic and circadian mechanisms for cancer treatment and supportive care outcomes. J Natl Cancer Inst Monogr. 2023; 61:84-103.

- 3. \*Devericks EN, \*Carson MS, McCullough LE, \*\*Coleman MF, **Hursting SD**. The obesity-breast cancer link: A multidisciplinary perspective. *Cancer Met Reviews* 2022; DOI:10.1007/s10555-022-10043-5.
- 4. \*Glenny EM, \*\*Coleman MF, Giles ED, Wellberg EA, **Hursting SD**. Designing relevant preclinical models for studying links between nutrition, obesity, metabolism and cancer. *Ann Rev Nutr* 2021; 41:253-282.
- 5. Shaikh SR, Stephensen CB, **Hursting SD**, Comstock SS. The 2021 FASEB Virtual Science Research Conference on Nutrition, Immunity and Inflammation. From Mouse Models to Human Trials. *FASEB J* 2021; 35:e21978. doi: 10.1096/fj.202101509.
- 6. \*Kiesel VA, Sheeley MP, \*Coleman MF, Cotul EK, Donkin SS, **Hursting SD**, Wendt MK, Teegarden D. Pyruvate carboxylase and cancer preogression. *Cancer Metab* 2021; 20. doi: 10.1186/s40170-021-00256-7.
- 7. \*Cozzo AJ, \*Coleman MF, \*Pearce JB, \*Pfeil AJ, \*Etigunta SK, **Hursting SD**. Autophagy, dietary energy modulation, and hormonal/metabolic energy sensing: Exploiting metabolic vulnerabilities in cancer. *Front Cell Dev Biol* 2020; 8:590192. doi: 10.3389/fcell.2020.590192. eCollection 2020.
- 8. \*Bustamante-Marin X, \*Carson M, \*Devericks E, \*Merlino J, **Hursting SD**, Stewart D. Mechanistic targets and intervention strategies to break the obesity-cancer link. *Front Oncol* 2021; doi: 10.3389/fendo.2021.632284. eCollection
- 9. \*Coleman MF, \*Cozzo AJ, \*Pfeil AJ, \*Etigunta SK, **Hursting SD**. Cell intrinsic and systemic metabolism in tumor immunity and immunotherapy. *Cancers* 2020; 12:852-91.
- Clinton SK, Giovannucci EL, Hursting SD. The World Cancer Research Fund/American Institute for Cancer Research Third Expert Report on Diet, Nutrition, Physical Activity and Cancer: Impact and future directions. J Nutr 2020; 150:663-71.
- 11. Ulrich CM, Himbert C, Holowatyj AN, **Hursting SD**. Energy balance and gastrointestinal cancer: Risk, interventions, outcomes and mechanisms. *Nat Rev Gastroenterol Hepatol* 2018; 15:683-98.
- \*Smith LA, \*O'Flanagan CH, \*Bowers L, \*\*Allot EH, Hursting SD. Translating mechanism based strategies to break the obesity-cancer link: A narrative review. J Acad Nutr Diet 2018; 118:652-667.
- 13. \*O'Flanagan CH, \*Smith LA, \*McDonell SB, **Hursting SD**. When less may be more: Calorie restriction and response to chemotherapy. *BMC Med* 2017; May 24;15(1):106. doi: 10.1186/s12916-017-0873-x.
- 14. Mahabir S, Willett WC, Friedenreich CM, Lai GY, Boushey CJ, Matthews CE, Sinha R, Colditz GA, Rothwell JA, Reedy J, Patel AV, Leitzman MF, Fraser GE, Ross S, Hursting SD, Abnet CC, Kushi LH, Taylor PR, Prentice RL. Research strategies for nutritional and physical activity epidemiology and cancer prevention. *Cancer Epidemiol Biomarkers Prev* 2018; 27:233-44.
- 15. Romieu I, Dossus L, Barquera S, Blottiere HM, Franks PM, Gunter M, Hwalla N, **Hursting SD**, Leitzmann M, Margetts B, Nishida C, Potischman N, Seidell J, Stepien M, Wang Y, Westerterp K, Winichagoon P, Wiseman M, Willett WC for the IARC Working Group on Energy Balance and Obesity. Energy balance and obesity: What are the main drivers? *Cancer Causes Control* 2017; 28:247-258
- Himbert C, Delphan M, Scherer D, \*Bowers LW, Hursting SD, Ulrich CM. Signals from the adipose microenvironment and the obesity-cancer link: A systematic review. Cancer Prev Res 2017; 10:494-506.
- 17. \*Doerstling SS, \*O'Flanagan CH, **Hursting SD**. Obesity and cancer metabolism: A perspective on interacting tumor-intrinsic and extrinsic factors. *Front Oncol* 2017; Sep 14;7:216. doi: 10.3389/fonc.2017.00216.
- 18. Lauby-Secretan B for the International Agency for Research on Cancer Handbook Working Group (Anderson A S, Baker JL, Bianchini F, Breda J, Byers T, Cleary MP, Colditz G, Di Cesare M, Gapstur SM, Grosse Y, Gunter MJ, Herbert RA, **Hursting SD**, Kaaks R, Leitzmann M, Ligibel J, Loomis D, Renehan A, Romieu I, Scoccianti C, Shimokawa I, Straif K, Thompson HJ, Ulrich CM, Wae K, Weiderpass E). Body fatness and cancer: Viewpoint of the IARC Working Group. *N Engl J Med* 2016; 375:794-8.

- 19. \*Khatib SA, \*Rossi EL, \*Bowers LW, **Hursting SD**. Reducing the burden of obesity-associated cancers with anti-inflammatory long-chain omega-3 polyunsaturated fatty acids. *Prostaglandins Other Lipid Mediat* 2016; 125:100-7.
- 20. Bandera EV on behalf of the World Cancer Research Fund International Continuous Update Panel (Clinton S, Fay SH, Giovannucci E, **Hursting SD**, Jackson A, Leitzmann MF, Marklew R, McTiernan A, Mullee A, Powers H, Romieu I, Thune I, Uauy R, Wiseman MJ). The use and interpretation of anthropometric measures in cancer epidemiology: A perspective from the World Cancer Research Fund International Continuous Update Project. *Int J Cancer* 2016; 139:2391-7.
- \*Bowers LW, \*Rossi E, \*O'Flanagan C, DeGraffenried LA, Hursting SD. The role of the insulin/IGF system in cancer: Lessons learned from clinical trials and the energy balance-cancer link. Front Endocrinol 2015; May 15;6:77. doi: 10.3389/fendo.2015.00077.
- 22. \*Allott EH, **Hursting SD**. Obesity and cancer: Mechanistic insights from transdisciplinary studies. *Endocr Relat Cancer* 2015; 22:R365-86.
- 23. \*Cifarelli V and **Hursting SD**. Obesity, diabetes and cancer: A mechanistic perspective. *Int J Diabetol Vasc Dis Res* 2015; S4001:1-7.
- 24. Fabian CJ, Kimler BF, **Hursting SD**. Omega-3 fatty acids for breast cancer prevention and survivorship. *Breast Cancer Res* 2015; 17(1);62. doi:10.1186/s13058-015-057-6.
- 25. \*O'Flanagan C, \*Bowers LW, **Hursting SD**. A weighty problem: Metabolic perturbations and the obesity-cancer link. *Horm Mol Biol Clin Invest* 2015; 23:47-57.
- 26. \*\*Lashinger LM, \*Ford NA, **Hursting SD.** Interacting inflammatory and growth factor signals underlie the obesity-cancer link. *J Nutr* 2014; 144:109-13.
- 27. \*\*Lashinger LM, \*Rossi EL, **Hursting SD**. Obesity and resistance to cancer chemotherapy: Interacting roles of inflammation and metabolic dysregulation. *Clin Pharmacol Ther* 2014; 96(4):458-63.
- 28. **Hursting SD**. Obesity, energy balance and cancer: A mechanistic perspective. *Cancer Treat Res* 2014; 159:21-33.
- 29. **Hursting SD**, \*Dunlap SM, \*Ford NA, Hursting MJ, \*\*Lashinger LM. Calorie restriction and cancer prevention: A mechanistic perspective. *Cancer Metab* 2013; 1:10. doi: 10.1186/2049-3002-1-10.
- 30. \*Ford NA, \*Devlin K, \*\*Lashinger LM, **Hursting SD**. Deconvoluting the obesity and breast cancer link: secretome, soil and seed interactions. *J Mammary Gland Biol Neoplasia* 2013;18:267-75.
- 31. \*Ford NA, \*\*Lashinger LM, \*\*Allott E, **Hursting SD**. Mechanistic targets and phytochemical strategies for breaking the obesity-cancer link. *Front Oncol* 2013; 3:209. doi: 10.3389/fonc.2013.00209.
- 32. Mayne ST, Giovannucci E, Manson JE, **Hursting SD**, Clinton, SK. Food, nutrition, physical activity and cancer: contributions of different types of research to the totality of the evidence. *Nutr Today* 2013; 48:33-37.
- 33. **Hursting SD**, Hursting MJ. Growth signals, inflammation and vascular perturbations: mechanistic links between obesity, metabolic syndrome and cancer. *Arterioscler Thromb Vasc Biol* 2012; 32:1766-70.
- 34. **Hursting SD**, \*Dunlap SM. Obesity, metabolic dysregulation and cancer: a growing concern and an inflammatory (and microenvironmental) issue. *Ann NY Acad Sci* 2012; 1271:82-87.
- 35. **Hursting SD**. Minireview: the year in obesity and cancer. *Mol Endocrinol* 2012:26:1961-6.
- 36. **Hursting SD**, DiGiovanni J, Dannenberg AJ, Azrad M, LeRoith D, Demark-Wahnefried W, Kakarala M, Brodie A, Berger NA. Obesity, energy balance and cancer: new opportunities for prevention. *Cancer Prev Res* 2012; 5:1260-72.
- 37. \*Harvey AE, \*Lashinger LM, **Hursting SD**. The growing challenge of obesity and cancer: an inflammatory subject. *Ann NY Acad Sci* 2011; 1229:45-52.
- 38. **Hursting SD**, Berger N. Energy balance, host-related factors and cancer progression. *J Clin Oncol* 2010; 28:4058-65.
- 39. Goodwin PJ, Meyerhardt J, **Hursting SD**. Host factors and cancer outcome. *J Clin Oncol* 2010; 28:4019-21.

- 40. **Hursting SD**, \*Smith SM, \*Lashinger LM, \*Harvey AE, Perkins SN. Calories and carcinogenesis: lessons learned from 30 years of calorie restriction research. *Carcinogenesis* 2010; 31:83-9.
- 41. \*\*Nunez NP, **Hursting SD**, Yakar S, Vinson C. Obesity provides a permissive milieu in inflammation-associated carcinogenesis: analysis of insulin and IGF pathways. *Methods Mol Biol* 2009; 512:29-37.
- 42. Brown PH, Viner JH, Brewster A, Heckman CJ, **Hursting SD**, Johnson K, Mao JT. Conference Report: Seventh Annual AACR International Conference on Frontiers in Cancer Prevention Research. *Cancer Prev Res* 2009; 2:995-8.
- 43. Hawk ET, Greenwood A, Gritz ER, McTiernan A, Sellers T, **Hursting SD**, Leischow S, Grad O. The Translational Research Working Group developmental pathway for lifestyle alterations. *Clin Cancer Res* 2008; 14:5707-13.
- 44. \*\*Rogers CJ, \*\*Colbert LH, Greiner JW, Perkins SN, **Hursting SD**. Physical activity and cancer prevention: pathways and targets for intervention. *Sports Med* 2008; 38:271-96.
- 45. **Hursting SD**, \*Lashinger LM, \*Wheatley KW, \*\*Rogers CJ, \*\*Colbert LH, \*\*Nunez NP, Perkins SN. Reducing the weight of cancer: mechanistic targets for breaking the obesity-carcinogenesis link. *Best Pract Res Clin Endocrinol Metab* 2008, 22:659-669.
- 46. Hance KW, \*\*Rogers CJ, **Hursting SD**, Greiner JW. Combination of physical activity, nutrition, or other metabolic factors and vaccine response. *Front Biosci* 2007; 12:4997-5029.
- 47. **Hursting SD**, \*Lashinger L, \*\*Colbert LH, \*\*Rogers CJ, \*Wheatley K, \*\*Nunez N, Mahabir S, Barrett JC, Forman MR, Perkins SN. Energy balance and carcinogenesis: underlying pathways and targets for intervention. *Curr Cancer Drug Targets* 2007; 7:484-91.
- 48. **Hursting SD**, \*\*Nunez NP, Varticovski L, Vinson C. The obesity-cancer link: lessons learned from a fatless mouse. *Cancer Res* 2007; 67:2391-3.
- 49. **Hursting SD**, Cantwell MM, Sansbury LB, Forman MR. Nutrition and cancer prevention: targets, strategies, and the importance of early life interventions. *Nestles Nutr Workshop Ser Pediatr Program* 2006; 57:153-202.
- 50. **Hursting SD**, \*Nunez NP, Patel A, Perkins SN, Lubet RA, Barrett JC. The utility of genetically altered mouse models for nutrition and cancer chemoprevention research. *Mutat Res* 2005; 576:80-92.
- 51. Donehower LA, French JE, **Hursting SD**. The utility of genetically altered mouse models for cancer research. *Mutat Res* 2005:576:1-3.
- 52. Nebeling L, \*Rogers CJ, \*\*Berrigan D, Hursting SD, Ballard-Barbash R. Weight cycling and immunocompetence. *J Am Diet Assoc* 2004; 104(6):892-4.
- 53. **Hursting SD**, \*Lavigne JA, \*Berrigan D, Donehower L, Davis BJ, Phang JM, Barrett JC, Perkins SN. Diet-gene interactions in p53-deficient mice: insulin-like growth factor-1 as a mechanistic target. *J Nutr* 2004; 134:2482S-2486S.
- 54. Patel AC, \*Nunez NP, Perkins SN, Barrett JC, **Hursting SD**. Effects of energy balance on cancer in genetically altered mice. *J Nutr* 2004; 134 (12 Suppl):3394S-8S.
- 55. Forman MR, **Hursting SD**, Umar A, Barrett JC. Nutrition and cancer prevention: a multidisciplinary perspective on human trials. *Annu Rev Nutr* 2004; 24:223-54.
- 56. **Hursting SD.** \*Lavigne JA, \*Berrigan DA, Perkins SN, Barrett JC. Calorie restriction, aging and cancer prevention: mechanisms of action and applicability to humans. *Annu Rev Med* 2003; 54:131-52.
- 57. Li S, **Hursting SD**, Davis BJ, McLachlan J, Barrett JC. Environmental exposure, DNA methylation and gene regulation: lessons from diethylstilbesterol-induced cancers. *Ann NY Acad Sci* 2003; 983:161-69.
- 58. **Hursting SD**, Perkins SN, Phang JM, Barrett JC. Diet and cancer prevention studies in p53-deficient mice. *J Nutr* 2001; 131 (11 Suppl):3092S-94S.
- 59. **Hursting SD**, Perkins S, Donehower LA, Davis BJ. Cancer prevention studies in p53-deficient mice. *Toxicol Pathol* 2001; 29:137-41.
- 60. **Hursting SD**. Nutritional modulation of the carcinogenesis process: targets and examples. *Nestle Nutr Workshop Ser Clin Perform Programme* 2000; 4:1-21.

- 61. **Hursting SD**, Kari FW. The anti-carcinogenic effects of dietary restriction: mechanisms and future directions. *Mutat Res* 1999; 443:235-49.
- 62. **Hursting SD**, Slaga TJ, Fischer SM, DiGiovanni J, Phang JM. Mechanism-based cancer prevention approaches: targets, examples and the use of transgenic mice. *J Natl Cancer Inst* 1999; 91:215-225.
- 63. **Hursting SD**. Experimental models of gene-environment interaction for cancer chemoprevention studies. *Curr Opin Oncol* 1997; 9:487-91.
- 64. **Hursting SD**, Kari FW. Inhibition of tumorigenesis by calorie restriction: a review. *Cancer Bulletin* 1996: 47:505-10.

# Editorials or Letters

- 65. \*Cifarelli VI, \*Hays D, **Hursting SD**. Insulin, insulin-like growth factor-1 and neurodegeneration. *Int J Endocrinol Metab* 2011; 9:422-4.
- 66. **Hursting SD**. Inflammatory talk: linking obesity, NF-kB and aromatase. *Cancer Prev Res* 2011; 4:285-7.
- 67. **Hursting SD.** Mechanistic insights into reducing the weight of breast cancer. *Cancer Prev Res* 2009; 2:295-7.
- 68. **Hursting SD**, Forman MR. Cancer risk from extreme stressors: lessons from European Jewish survivors of World War II. *J Natl Cancer Inst* 2009; 101:1436-7.
- 69. Weed DL, **Hursting SD**. The Authors Reply: Biologic plausibility in causal inference: current method and practice. *Am J Epidemiol* 1999; 150:217-9.
- 70. King TM, **Hursting S**, \*\*Contois JH, Wu X, Spitz MR, Hsu TC. Correspondence re: MT Goodman, et al. Effects of beta-carotene and alpha-tocopherol on bleomycin-induced chromosomal damage. *Cancer Epidemiol Biomarkers Prev* 1998; 7:729.

#### **TEACHING RECORD**

# Course Directorships

Course Co-Director, UNC-Chapel Hill

- Nutrition 714, Introduction to Nutritional Biochemistry and Health (Spring 2020-present; 30-40 MPH students/class)
- Nutrition 400, Nutritional Biochemistry (Spring 2019; 84 undergrad and grad students)
- Nutrition 600, Advanced Nutritional Biochemistry and Metabolism (Fall 2016; 71 grad students)
- Nutrition 868, Nutrition and Cancer (Spring 2016; 12 grad students)
- Nutrition 885, Nutrition Doctoral Seminar (Spring 2016; 38 grad students)

Nutrition Coil Director, UNC School of Medicine (2014-21; 10 class sessions/year, ~180 medical students/class)

#### Course Director, University of Texas at Austin

- Nutrition 390.7, Advances in Nutritional Science II (Spring, 2014; 8 grad students)
- Nutrition 390.9, Nutrition and Disease Prevention (Fall, 2010; Fall, 2011, Fall 2012; 10-12 grad students/semester)
- Nutrition 390.4, Nutritional Epidemiology (Spring, 2012; Co-Director; 14 grad students)
- Undergraduate Studies 302, Science of Healthy Eating (Fall, 2008-10; 25 undergraduates/ semester)
- Nutrition 342, Advanced Nutritional Biochemistry (Spring, 2006-10; 90-120 undergrad students/semester)
- Nutrition 338W, Current Issues in Nutritional Science (Fall, 2007; 25 undergrad students)
- Nutrition 390.6, Nutrition and Cancer (Fall, 2006; 12 grad students)
- Nutrition 126L, Nutritional Biochemistry Laboratory (Fall, 2005-06; 48 undergrad students/semester)

Course Director, NCI Summer Curriculum in Cancer Prevention, Bethesda, MD

(Participants: ~200 physicians, scientists and grad students each year; 1999-2005)

- Principles and Practices of Cancer Prevention Course
- Molecular Prevention Course
- Molecular Prevention Laboratory Course
- Cancer Prevention Grants and Grantsmanship Workshop

Course Co-Director, Univ. of Texas Graduate School of Biomedical Sciences, Houston, TX

- Cancer Prevention Module, Cancer Biology Course (1997-1999; 30 grad students/ semester)
- Nutrition Module, Topics in Cancer Prevention Course (1995-1999; 20-30 grad students/ semester)

#### Other Classroom Lectures

# At UNC-Chapel Hill

- School of Medicine, Translational Education at Carolina (Fall 2014-present; 4 lectures and 2 small group sessions/year)
- Nutrition 600 (Fall 2014-2015, 2017-2019; 2 lectures on cancer metabolism)
- Nutrition 845, Nutritional Metabolism (Spring 2014, 2016, 2018; 2 lectures)
- Nutrition 620, Human Metabolism: Micronutrients (each Spring present lecture on nutrition and cancer; 2014-present)
- Nutrition 813, Nutritional Epidemiology (cancer lecture; 2018)
- Pathology 725, Cancer Pathobiology (each Spring present lecture on nutrition and cancer; 2014present)

#### Prior to UNC-Chapel Hill

- Pharmacy 390, Molecular Toxicology. Univ. of Texas-Austin (Fall 2006-2014)
- Biochemistry 339, Biochemistry II, University of Texas (2012, 2013)
- Biochemistry 340, Biochemistry and Metabolism, University of Texas (2011, 2012, 2013)
- Topics in Cancer Prevention, MD Anderson Division of Cancer Prevention (2011)
- NCI Summer Curriculum in Cancer Prevention, Bethesda, MD (2006, 2008, 2010, 2011)
- Etiology & Prevention of Chronic Disease, UT-School of Public Health (1995-1999)
- Molecular Epidemiology Course, UT-School of Public Health (Spring, 1995-1999)
- MD Anderson Cancer Center Prevention and Early Detection Course (1995-1999)

# Grand Rounds/ Continuing Education Lectures/ Other Major Invited Oral Presentations (truncated to include those since 2006)

# International

- 1. Cancer Research UK/Ludwig Cancer Center Conference on Obesity, Physical and Cancer Prevention. "Physical activity and cancer links: Mechanisms and provocative questions". Remote (2021)
- 2. National Cancer Research Institute (UK) Cancer, Nutrition and Physical Activity Workshop Keynote. "Implications of the AICR/WCRF Expert Report for mechanism-based nutrition and cancer research." London, UK (2020)
- 3. National Cancer Research Institute (UK) Annual Meeting Keynote. "Breaking the obesity-cancer: New target and strategies." Glasgow, Scotland (2019)
- 4. National Cancer Research Institute (UK) Annual Meeting. "Nutritional factors in oncogenesis and treatment response: Preclinical and clinical approaches." Glasgow, Scotland (2019)
- 5. Centre for Cancer Research and Cell Biology, Queens University Belfast. "Obesity, metabolism and breast cancer metastasis." Belfast, Northern Ireland (2019)
- 6. Breast Cancer Center Grand Rounds, University of Manchester. "Targeted Interventions to break the obesity-breast cancer link." Manchester, UK (2019)
- 7. World Cancer Research Fund Nutrition and Cancer Masterclass, Wageningen University and Research. "Nutrition, obesity and cancer prevention: Lessons learned from the 3<sup>rd</sup> AICR/WCRF Expert Report." Wageningen, Netherlands (2019)

- 8. Nutrition and Cancer Masterclass Keynote, Wageningen University and Research. "Mechanisms underlying the obesity-cancer link." Wageningen, Netherlands (2019)
- 9. Cancer Research UK/Ludwig Cancer Center Conference on Nutrition and Cancer Prevention. "Breaking the obesity-cancer link: Targeting metabolism." London, UK (2018)
- 11<sup>th</sup> International Conference on Sarcopenia, Cachexia and Muscle Wasting. "β-Hydroxy-β-methylbutyrate supplementation inhibits pancreatic tumor growth and preserves muscle mass." Maastricht, Netherlands (2018)
- 11. International Society of Cancer Metabolism Annual Meeting. "Starving cancer from the outside and inside: Separate and combined effects of dietary energy restriction and autophagy inhibition on Kras-driven pancreatic adenocarcinomas." Bratislava, Slovakia (2018)
- 12. Nutrition, Autophagy and Cancer Conference. "Anticancer effects of calorie restriction, fasting and other metabolic reprogramming interventions." Bad Homburg, Germany (2018)
- 13. 11<sup>th</sup> TCDM Symposium on Disease Modeling: Cancer and Metabolism. "Obesity and cancer: Where systemic metabolism meets cancer cell metabolism." Turku, Finland (2016)
- 14. World Obesity Federation Meeting. "Energy balance, adiposity and cancer: Mechanistic evidence from preclinical studies." London, England (2016)
- 15. WHO International Agency for Research on Cancer, Energy Balance and Obesity Workshop. "Mechanisms underlying the obesity-cancer link." Lyon, France (2015)
- 16. Congress of the Federation of Latin American Nutrition Societies. "Nutrition, physical activity and cancer prevention: Underlying mechanisms." Punta Cana, Dominican Republic (2015)
- 17. VIB Metabolism and Cancer Conference, Leuven Belgium. "Obesity and cancer: Metabolic mechanisms." Leuven, Belgium (2015)
- 18. University College Cork Cancer Center Grand Rounds. "Obesity and cancer metastases: The role of EMT." Cork, Ireland (2015)
- 19. University of Manchester Cancer Center Grand Rounds. "Epigenetic and metabolic targets for breaking the obesity and breast cancer link." Manchester, England (2015)
- 20. International Conference on Obesity, Diabetes and Cancer: The Role of Insulin-like Growth Factors. "Obesity, metabolism and pancreatic cancer: The role of IGF-1." Taormina, Italy (2013)
- 21. Institute of Cancer Sciences Seminar, University of Manchester. "Obesity, metabolism and cancer: Translational studies." Manchester, England (2013)
- 22. Word Cancer Research Fund/American Institute for Cancer Research Expert Panel Annual Meeting. "TOR pathway: An emerging molecular target for cancer prevention." London, England (2013)
- 23. 39<sup>th</sup> Taiwan Nutrition Society Annual Meeting, Keynote Lecture. "Obesity, metabolism and cancer: A mechanistic perspective." Taichung, Taiwan (2013)
- 24. International Conference on Obesity, Physical Activity and Cancer. "Calorie restriction and exercise exert differential effects on metabolism, cell signaling and breast cancer risk." Taichung, Taiwan (2013)
- 25. World Cancer Research Fund/International Agency for the Study of Obesity Joint Conference on Obesity, Physical Activity and Cancer, Keynote Lecture. "Obesity, metabolism and cancer: Mechanistic insights from preclinical studies." London, UK (2013)
- 26. World Cancer Research Fund/International Agency for the Study of Obesity Joint Conference on Obesity, Physical Activity and Cancer. "Energy balance and pancreatic cancer: A mechanistic perspective." London, UK (2013)
- 27. 3<sup>rd</sup> International Conference on Advances in Nutrition and Cancer. "Obesity, physical activity and cancer: Mechanistic insights from transdisciplinary studies." Naples, Italy (2012)
- 28. Word Cancer Research Fund/American Institute for Cancer Research Expert Panel Annual Meeting. "Mechanisms protocol development: Progress report." London, UK (2012)
- 29. 3<sup>rd</sup> International Conference on Nutrition and Physical Activity in Aging, Obesity and Cancer. "Obesity, metabolism and cancer: An inflammatory (and growth factor) issue." Seoul, Korea (2012)
- 30. 18<sup>th</sup> Journees Jean Claude Dreyfus Obesity, Diabetes and Cancer Symposium. "Calorie restriction and cancer prevention: Mechanistic insights from transdisciplinary studies." Paris, France (2011)

- 31. Visiting Professor Lecture, German Cancer Research Center. "Obesity, metabolism and cancer: Lessons from mutant mice." Heidelberg, Germany (2011)
- 32. 18<sup>th</sup> European Congress on Obesity. "Obesity, metabolism and cancer prevention: transdisciplinary approaches." Istanbul, Turkey (2011)
- 33. 2<sup>nd</sup> International Conference on Nutrition and Physical Activity in Aging, Obesity and Cancer. "Obesity, physical activity and cancer: mechanistic targets from transdisciplinary studies." Gyeongju, South Korea (2011)
- 34. International Association for the Study of Obesity-Cancer and Obesity Conference. "Energy balance, metabolism and cancer prevention: transdisciplinary approaches." Valencia, Spain (2010)
- 35. European Congress: From Prevention to Treatment of Cancer. "Energy balance and cancer prevention: Targets and pathways for interventions." Bologna, Italy (2010)
- 36. International Conference on Nutrition, and Physical Activity in Aging, Obesity and Cancer. "Calorie restriction, physical activity and cancer: lessons from mutant mice." Jeju Island, South Korea (2009)
- 37. 39<sup>th</sup> International Symposium of the Princess Takamatsu Cancer Research Fund. "Obesity, metabolism and cancer: Trends, targets and transgenics." Tokyo, Japan (2008)
- 38. Association for the Study of Obesity Annual Meeting. "Mechanistic targets for preventing obesity-related cancers". London, England (2008)
- 39. All-Ireland 2006 Cancer Conference Keynote. "Obesity and cancer: A mechanistic perspective." Belfast, Northern Ireland (2006)

#### National

- 40. American Association for Cancer Research (AACR) Annual Meeting. Breaking the Obesity-Cancer Link: Role of Incretim Mimetics. San Diego, CA April 8, 2024.
- 41. University of Texas Jean Andrews Award Lecture. "Food for Thought: Nutritional Stategies for the Prevention of Cancer". Austin, TX February 22, 2024.
- 42. AACR-San Antonio Breast Cancer Symposium. "Breaking the Obesity-Breast Cancer Link: Diet, Drug and Surgical Strategies. San Antonio, TX December 6, 2023
- 43. University of Colorado Cancer Center, Cancer Metabolism Workshop Keynote Talk. "Breaking the Obesity-Cancer Link: Preclinical Studies of Dietary, Drug and Surgical Approaches". Denver, CO August 8, 2023.
- 44. NCI/Yale Transdisciplinary Research on Energetics and Cancer Shortcourse. "Designing Relevant Preclinical Rodent Models for Studying Links Between Nutrition, Obesity, Metabolism, and Cancer". Westbrook, CT July 2023.
- 45. Fred Hutchinson Cancer Research Center PHS Seminar. "New Approaches to the Obesity-Cancer Problem: Inspirations from Dr. Alan Kristal". Seattle, WA June 2023.
- 46. Massey Cancer Center, Virginia Commonwealth University Ginder Symposium Keynote Talk. "New Strategies for Breaking the Obesity-Breast Cancer Link". Richmond, VA March 2023.
- 47. Livestrong Cancer Institute Grand Rounds, University of Texas at Austin. "New Mechanistic Targets and Approaches to Break the Obesity-Breast Cancer Link". Austin, TX, March 2023.
- 48. UNC Translational Research in Endometrial Cancer Grand Rounds. "Breaking the Obesity- Cancer Link: Lessons from Preclinical Research on Breast and Endometrial Cancer". Chapel Hill, NC October 2022.
- 49. Wake Forest University Comprehensive Cancer Center Grand Rounds. "Breaking the Obesity-Breast Cancer Link: New Targets and Strategies". Winston-Salem, NC September 2022.
- 50. NCI/Yale Transdisciplinary Research on Energetics and Cancer Shortcourse. "Future directions in preclinical research on obesity and cancer." Westbrook, CT July 2022.
- 51. AACR Annual Meeting-oral-major symposia presentation "Disrupting the Adipose-Tumor Link in Experimental Models of Obesity-Driven Breast and Colon Cancer"., New Orleans, LA 4/10/22.
- 52. Nutrition and Breast Cancer Prevention: Current Evidence and Provocative Questions. International Lifestyle Medicine Conference (Virtual). 9/20/21. Oral.
- 53. UT-MD Anderson Cancer Center Grand Rounds. "Transdisciplinary Obesity and Cancer Research: Key Unanswered Questions". Virtual Breaking the Obesity-Cancer Link: A Mechanistic Perspective.

- 54. FASEB Summer Conference on Nutrition, Immunity and Inflammation. From Mouse Models to Human Trials (Virtual). 7/29/21. Oral-keynote presentation.
- 55. NCI Transdisciplinary Research on Energetics and Cancer Shortcourse. "Designing relevant preclinical models for studying links between nutrition, obesity, metabolism and cancer." Virtual (2021)
- 56. 2<sup>nd</sup> Annual UNC Interdisciplinary Nutritional Science Symposium. New targets and strategies for breaking obesity-cancer links: Lessons from human-animal cotrials. Virtual (2021)
- 57. Northwestern University Lurie Cancer Center Annual Retreat Kenote: "Mechanistic targets and intervention strategies for breaking the obresity-cancer link". Virtual. 2021
- 58. Fifth Annual UNC Nutrigenetics, Nutrigenomics and Precision Nutrition Short Course. "Precision nutrition and cancer prevention." Virtual (2021)
- 59. Obesity Society 2020 Obesity Week Meeting (virtual). "Breaking the obesity-prostate cancer link: mechanistic targets and interventions". (2020)
- 60. AACR Special Conference: Endometrial Cancer (virtual): New Biology Driving Reserch and Treatment. "Breaking the obesity-endometrial cancer link: Lesons from preclinical studies". (2020)
- 61. NCI Transdisciplinary Research on Energetics and Cancer Shortcourse. "Future directions in preclinical research on obesity and cancer." Westbrook, CT (2020)
- 62. American Society for Parenteral and Enteral Nutrition Annual Meeting. Dudrick Symposium Keynote. "Nutritional stategies for breaking the obesity-cancer link." Tampa, FL (2020)
- 63. Johns Hopkins University Kimmel Cancer Center Seminar. "Mechanism-based nutritional strategies for reducing the burden of obesity on breast cancer." Baltimore, MD (2020)
- 64. LSU/Pennington Center Annual Research Symposium. "Breaking the obesity-cancer link: A preclinical perspective." Baton Rouge, LA (2019)
- 65. Texas A&M Annual Nutrition Science Symposium Keynote. "Nutrition, physical acitivity and breast cancer prevention: A mechanistic perspective." College Station, TX (2019)
- 66. University of Georgia College of Pharmacy Grand Rounds. "Obesity, metabolism and breast cancer prevention." Athens, GA (2019)
- 67. Mammary Gland Biology Gordon Conference. "Mechanism-based approaches for preventing or intercepting obesity-associated breast cancers." Newry, Maine (2019)
- 68. NCI Transdisciplinary Research on Energetics and Cancer Shortcourse. "Preclinical research on energetics and cancer: Unanswered questions." Westbrook, CT (2019)
- 69. Metavivor Metastatic Breast Cancer National Stakeholder Engagement Conference. "Lifestyle approaches to reducing obesity-associated cancer risk and metastatic burden." Chapel Hill, NC (2019)
- 70. American College of Sports Medicine Annual Meeting Presidential Lecture. "Molecular and metabolic mechanisms underlying the anticancer effects of increased physical activity." Orlando, FL (2019)
- 71. Research Conference, American Institute for Cancer Research. "Obesity and cancer: When systemic metabolism meets cancer cell-intrinsic metabolism." Chapel Hill, NC (2019)
- 72. Research Conference, American Institute for Cancer Research. "Methodological approaches to energy balance, metabolism and cancer research." Chapel Hill, NC (2019)
- 73. William Hansel Visiting Scientist Seminar Series, Pennington Biomedical Research Center. "Nutrition, obesity and cancer: Current status and future directions." Baton Rouge, LA (2019)
- 74. Fourth Annual UNC Nutrigenetics, Nutrigenomics and Precision Nutrition Short Course. "Precision nutrition and cancer prevention." Kannapolis, NC (2019)
- 75. University of Colorado Cancer Center Cancer Prevention Seminar. "Preventing obesity-associated breast cancers metastasis: Lessons from preclinical studies." Denver, CO (2019)
- 76. National Cancer Institute, National Institutes of Health Stars in Nutrition and Cancer Lecture. "Breaking the obesity-cancer link: New targets and strategies." Bethesda, MD (2019)
- 77. Mays Cancer Center Annual Cancer Center Symposium, University of Texas Health Sciences Center at San Antonio "Preventing obesity-associated cancers: Lessons from human-mouse cotrials." San Antonio, TX (2018)

- 78. National Academy of Medicine Workshop on Influence of Lifestyle and Obesity on Cancer Risk. "Breaking the obesity-cancer link: New targets and strategies." Washington, DC (2018)
- 79. Mayo Clinic Grand Rounds. "Breaking the obesity-pancreatic link: Lessons from translational studies." Jacksonville, FL (2018)
- 80. University of Pittsburgh Cancer Institute Pancreasfest 2018. "The obesity and pancreatic cancer link." Pittsburgh, PA (2018)
- 81. NCI Transdisciplinary Research on Energetics and Cancer Shortcourse. "Preclinical research on energetics and cancer: Unanswered questions." New Haven, CT (2018)
- 82. American Society of Nutrition Annual Meeting. "Targeting inflammation to break the obesity:breast cancer link." Boston, MA (2018)
- 83. American Society of Nutrition Annual Meeting. "The AICR-WCRF 3<sup>rd</sup> Expert Report on Diet, Nutrition, Physical Activity and the Prevention of Cancer: Mechanistic considerations." Boston, MA (2018)
- 84. Third Annual UNC Nutrigenetics, Nutrigenomics and Precision Nutrition Short Course. "Nutrigenomics and cancer." Kannapolis, NC (2018)
- 85. AICR/WCRF Expert Report Launch. "A blueprint for cancer prevention." National Press Club, Washington, DC (2018)
- 86. AACR Obesity and Cancer Conference: Mechanisms Underlying Etiology and Outcomes. "Prevention of obesity-related cancer at the population level." Austin, TX (2018)
- 87. Virginia Commonwealth University Massey Cancer Center Annual Retreat Keynote. "Breaking the obesity-cancer link: Mechanistic targets and intervention strategies." Richmond, VA (2018)
- 88. American College of Nutrition Annual Meeting. "Breaking the obesity-breast cancer link: New targets and strategies." Alexandria, VA (2017)
- 89. Obesity Society Meeting. "Fanning the flames of cancer with obesity." Washington, DC (2017)
- 90. American Society for Metabolic and Bariatric Surgery. "Obesity as a cancer risk factor." Washington, DC (2017)
- 91. Huntsman Cancer Center, University of Utah School of Medicine Seminar Series. "Obesity, metabolic reprogramming and breast cancer: The role of adipose tissue." Salt Lake City, UT (2017)
- 92. UNC Department of Pathology and Laboratory Medicine Grand Rounds. "Obesity and breast cancer: New molecular targets and intervention strategies." Chapel Hill, NC (2017)
- 93. Second Annual UNC Nutrigenetics, Nutrigenomics and Precision Nutrition Short Course. "Nutrigenomics and cancer." Kannapolis, NC (2017)
- 94. University of Arizona Nutrition and Health Conference. "Calorie restriction, fasting and cancer: Where are we now?" Phoenix, AZ (2017)
- 95. University of Pennsylvania Abramson Cancer Center Annual Retreat. "Breaking the obesity-breast cancer link: Molecular targets and intervention strategies." Philadelphia, PA (2017)
- 96. Purdue University Cancer Symposium. "Breaking the obesity-cancer link: Mechanistic targets and strategies." W. Lafayette, IN (2017)
- 97. American Assocation for Cancer Research Annual Meeting. "The obesity-cancer link: Is it reversible?" Washington, DC (2017)
- 98. International Life Sciences Institute North America Annual Meeting. "What is cancer, and how can it be prevented? La Jolla, CA (2017)
- 99. University of Kansas Cancer Center Grand Rounds. "Breaking the obesity-breast cancer link: Molecular targets and intervention strategies." Kansas City, KS (2016)
- 100. American Institute for Cancer Research Annual Research Conference. "Nutrition and cancer: Mechanisms and biomarkers in the "omics era." Washington, DC (2016)
- 101. University of Illinois Division of Nutritional Sciences Seminar: "Obesity, metabolism and breast cancer: Mechanistic insights from transdisciplinary studies." Champaign-Urbana, IL (2016)
- 102. National Cancer Institute. "Strategies for nutritional and physical activity: Epidemiology and cancer prevention research." Bethesda, MD (2016)
- 103. American Association for Cancer Research Metabolism and Cancer Conference. "Obesity, metabolism and cancer: Where host factors meet cancer cell-intrinsic factors." Seattle, WA (2015)

- 104. American Association for Cancer Research Annual Meeting, Obesity and Cancer Symposium (Chair and Speaker). "Mechanistic targets and intervention strategies for breaking the obesity-cancer link." Philadelphia, PA (2015)
- 105. Texas Academy of Medicine, Engineering, Science and Technology Annual Meeting. "Obesity, metabolism and cancer: Mechanistic insights from transdisciplinary studies." Houston, TX (2015)
- 106. University of Texas MD Anderson Cancer Center Grand Rounds. "Mechanistic targets for reducing the burden of obesity on cancer." Houston, TX (2015)
- 107. The Obesity Society Annual Meeting. "Debate: For cancer prevention, if I stay lean, does it matter what I eat?" Boston, MA (2014)
- 108. NCI-Southwest Oncology Annual Meeting Keynote. "Preventing obesity-related cancers: Insights from transdisciplinary studies." Chicago, IL (2014)
- 109. University of Illinois Symposium on Obesity and Cancer. "Preventing obesity-related cancers: Mechanistic targets." Chicago, IL (2014)
- 110. AACR International Conference Frontiers in Cancer Prevention Research (session chair and speaker). "Obesity, IGF-1 and cancer prevention." New Orleans, LA (2014)
- 111. East Carolina University School of Medicine Taft Diabetes Symposium Keynote Lecture. "Obesity, diabetes and cancer: Underlying mechanisms." Greenville, NC (2014)
- 112. 2014 Oncology Nutrition Symposium Keynote. "Hot topics in obesity, metabolism and cancer." Orlando, FL (2014)
- 113. University of Pittsburgh Cancer Institute, Obesity and Cancer Scientific Retreat Keynote. "Obesity and cancer prevention: Emerging mechanistic targets and intervention strategies." Pittsburgh, PA (2014)
- 114. University of Texas-MD Anderson Cancer Translational Public Health and Genomics First Annual Symposium. "Obesity and cancer prevention: Lessons from translational studies." Houston, TX (2014)
- 115. National Cancer Institute Webinar. "Nutrition at the intersection of cancer and aging." Bethesda, MD (2013)
- 116. American Institute for Cancer Research Annual Research Conference. "Obesity, energy balance and cancer: Underlying mechanisms." Bethesda, MD (2013)
- 117. American Institute for Cancer Research Annual Research Conference. "Systematic reviews of preclinical and mechanistic human studies: Opportunities and challenges." Bethesda, MD (2013)
- 118. National Cancer Institute Frontiers in Cancer Prevention Webinar Series: Nutrition at the Interface of Aging and Cancer. "Mechanisms linking energy balance, aging and cancer." Bethesda, MD (2013)
- 119. NIH Conference on Inflammation, Microbiota and Cancer. "Obesity, inflammation and cancer: Mechanistic insights from preclinical studies." Bethesda, MD (2013)
- 120. Trans-NIH Angiogenesis Workshop. "Energy balance and cancer prevention: Growth factor, inflammatory and angiogenic interactions." Bethesda, MD (2013)
- 121. Medical College of Georgia Cancer Center Grand Rounds. "Obesity, metabolism and cancer: Adipocyte, macrophage and epithelial cell interactions." Augusta, GA (2013)
- 122. Oncology Nursing Society/American Association for Cancer Research Bench to Bedside Lecture. "Nutrition, obesity and cancer prevention." Washington, DC (2013)
- 123. American Association for Cancer Research Annual Meeting. "Obesity and cancer: Mechanistic insights from transdisciplinary studies." Washington, DC (2013)
- 124. NCI Transdisciplinary Research on Energetics and Cancer Annual Scientific Meeting. "Obesity and cancer: Mechanistic insights from preclinical studies." Seattle, WA (2013)
- 125. Insulin-like Growth Factors in Physiology and Diseases Gordon Research Conference. "Obesity, metabolism and cancer: The role of IGF-1." Ventura, CA (2013)
- 126. Susan G. Komen Annual Scholars Meeting. "Integrated human-mouse studies of Brevail®." Dallas, TX (2013)
- 127. University of North Carolina at Chapel Hill, Department of Nutritional Sciences Seminar. "Obesity and cancer: Mechanistic Insights from transdisciplinary studies." Chapel Hill, NC (2013)

- 128. The Obesity Society Annual Meeting. "Obesity, metabolism and cancer: Mechanistic insights from transdisciplinary approaches." San Antonio, TX (2012)
- 129. American Association of Clinical Endocrinology Annual Meeting. "Obesity, metabolism and cancer: Mechanistic insights." New York, NY (2012)
- 130. UT-MD Anderson Cancer, Department of Molecular Carcinogenesis Seminar. "Obesity, metabolism and cancer: Molecular targets and intervention strategies." Smithville, TX (2012)
- 131. Purdue University Center for Cancer Research, Obesity and Cancer Discovery Group Annual Retreat Keynote. "Obesity, metabolism and cancer: Mechanistic insights from transdisciplinary studies." W. Lafayette, IN (2012)
- 132. National Institutes of Health, Workshop on Inflammation and Nutritional Science for Programs/Policies and Interpretation of Experimental Research Evidence (INSPIRE). "Obesity, inflammation and chronic disease." Bethesda, MD (2012)
- 133. National Cancer Institute, Cancer Prevention Fellowship Program Distinguished Alumni Award Colloquium. "Calories and cancer: 20 years in review." Bethesda, MD (2012)
- 134. American Association for Cancer Research Annual Conference on the Science of Health Disparities. "Obesity and cancer: Mechanistic insights from transdisciplinary studies." San Diego, CA (2012)
- 135. American Association for Cancer Research, Annual International Conference on Frontiers in Cancer Prevention Research. Educational Session Chair and Speaker. "How to establish transdisciplinary cancer prevention research teams." Anaheim, CA (2012)
- 136. American Association for Cancer Research/ Minorities in Cancer Research Symposium. "Obesity, metabolism and cancer: Mechanistic insights from transdisciplinary approaches." Nashville, TN (2012)
- 137. 94<sup>th</sup> Endocrine Society Annual Meeting Keynote. "Obesity and cancer: The year in review." Houston, TX (2012)
- 138. USDA Human Nutrition Research Center on Aging, Tufts University. "Obesity, metabolism and cancer: Mechanistic insights from transdisciplinary approaches." Boston, MA (2012)
- 139. University of Texas Southwestern School of Medicine Grand Rounds. "Obesity, metabolism and cancer prevention." Dallas, TX (2012)
- 140. American Association for Cancer Research Annual Meeting. "Obesity and cancer: A mechanistic perspective." Chicago, IL (2012)
- 141. American Society for Preventive Oncology Annual Meeting. "Diet and intestinal polyp prevention: Lessons from animal models." Washington, DC (2012)
- 142. University of Arizona New Frontiers in Nutritional Science Conference. "Obesity, metabolism and cancer prevention: Transdisciplinary approaches." Tucson, AZ (2012)
- 143. Susan G. Komen for the Cure, Komen Scholars Annual Meeting. "Effects of Brevail® on estrogen receptor-negative mammary tumor growth and inflammation." Dallas, TX (2012)
- 144. National Cancer Institute, Cancer Immunology Program Workshop Keynote. "Obesity, inflammation and cancer risk." Bethesda, MD (2011)
- 145. National Cancer Institute/US Department of Agriculture Workshop on the Application of Nanotechnology to Nutrition and Disease Prevention Research. "Preclinical models for nutrition and disease prevention research." Bethesda, MD (2011)
- 146. American Institute for Cancer Research Annual Conference on Food, Nutrition, Physical Activity and Cancer. Plenary session chair and speaker. "Diet and cancer: Integrating animal and translational studies." Washington, DC (2011)
- 147. Institute of Medicine/National Cancer Policy Forum, Workshop on the Role of Obesity in Cancer Survival and Recurrence. Workshop Co-Chair and Speaker. "Dissecting the obesity-cancer link." Washington, DC (2011)
- 148. American Association for Cancer Research, Frontiers in Cancer Prevention Research Meeting. Plenary session chair and speaker. "Energy balance and cancer prevention: From bench to bedside to community." Boston, MA (2011)
- 149. West Virginia University Cancer Cell Biology Seminar Series. "Energy balance, metabolism and cancer: transdisciplinary Studies." Morgantown, WV (2011)

- 150. Kansas University Medical Center Cancer Symposium Keynote. "Obesity and cancer prevention: Mechanistic insights from transdisciplinary studies." Kansas City, KS (2011)
- 151. American Diabetes Association Annual Scientific Sessions Symposium. "Obesity, metabolism and cancer: Lessons from mutant mice." San Diego, CA (2011)
- 152. Russell Klein Memorial Lectureship. "Obesity, metabolism and cancer: Insights from transdisciplinary studies." Ohio State University, Columbus, OH (2011)
- 153. National Breast Cancer Coalition Workshop. "Emerging Issues in the preempting breast cancer progression and metastases." Washington, DC (2011)
- 154. American Society for Preventive Oncology 35<sup>th</sup> Annual Meeting. "Transdisciplinary cancer prevention research: Linking animal models and human studies." Las Vegas, NV (2011)
- 155. Johns Hopkins University Breast Cancer Program Retreat Keynote. "Obesity, metabolism and breast cancer prevention: Transdisciplinary approaches." Baltimore, MD (2010)
- 156. Endocrine Society Annual Meeting. "Energy balance, IGF-1 and cancer: Lessons from mutant mice." San Diego, CA (2010)
- 157. National Cancer Institute Summer Curriculum in Cancer Prevention. "Obesity, metabolism and cancer prevention: Transdisciplinary approaches." Bethesda, MD (2010)
- 158. American Association for Cancer Research Annual Meeting, Symposia chair and speaker. "Transdisciplinary research on energy balance and cancer." Washington, DC (2010)
- 159. American Society for Preventive Oncology Annual Meeting, Session chair and speaker. "Nutrition and cancer prevention." Bethesda, MD (2010)
- 160. National Cancer Institute Workshop on Microbiota and Cancer. "Obesity, metabolism and cancer: The emerging role of the gut microbiome." Bethesda, MD (2009)
- 161. American Institute for Cancer Research Annual Meeting. "Energy balance, metabolism and cancer: Lessons from mutant mice." Washington, DC (2009)
- 162. Obesity Society Annual Meeting. "Obesity, diet-gene interactions, and cancer prevention". Washington, DC (2009)
- 163. Frontiers of Nutritional Science Biannual Conference. "Calorie restriction, physical activity and cancer prevention: Underlying mechanisms." Tucson, AZ (2009)
- 164. NCI/Fred Hutchinson Cancer Research Center Conference on Energy Balance and Cancer Prognosis. "Energy balance, metabolism and cancer prognosis." Seattle, WA (2009)
- 165. Department of Nutritional Sciences Seminar Series, Purdue University. "Energy balance, metabolism and cancer: Lessons from mutant mice." W. Lafayette, IN (2009)
- 166. Aspen Cancer Conference. Session chair and speaker. "Role of microbiota in obesity and cancer." Aspen, CO (2009)
- 167. National Institutes of Health Workshop on Cancer Cell Metabolism. "Energy balance, metabolism and cancer prevention: The role of IGF-1." Bethesda, MD (2009)
- 168. Department of Human Nutrition Seminar Series. "Obesity, metabolism and cancer prevention." Texas A&M University, College Station, TX (2009)
- 169. MD Anderson Cancer Center Annual Symposium. "Calories and cancer: Trends, targets and transgenics." Houston, TX (2009)
- 170. American Society for Preventive Oncology Annual Meeting. "The NCI's Transdisciplinary Research on Energetics and Cancer Program: What have we learned?" Tampa, FL (2009)
- 171. 7<sup>th</sup> Annual AACR International Conference on Frontiers in Cancer Prevention Research. Symposia chair and speaker. "Mechanistic targets for preventing obesity-related cancers." Washington, DC (2008)
- 172. Aspen Cancer Conference. "Calories and carcinogenesis: Trends, targets and transgenics." Aspen, CO (2008)
- 173. Era of Hope Meeting, Department of Defense Breast Cancer Research Program. "Differential effects of calorie restriction and treadmill exercise in a mouse model of postmenopausal obesity." Baltimore, MD (2008)
- 174. Era of Hope Meeting, DOD Breast Cancer Research Program. "Obesity accelerates mouse mammary tumor growth in the absence of ovarian hormones." Baltimore, MD (2008)

- 175. American Society of Clinical Oncology Annual Meeting. Clinical Science Symposium Chair and speaker. "Energy balance and cancer risk: The expanding body of evidence." Chicago, IL (2008)
- 176. American Association for Cancer Research Annual Meeting. Associate Members Grant Writing Workshop. "Grant targets and grantsmanship." San Diego, CA (2008)
- 177. USDA-Children's Nutrition Research Center at Baylor College of Med. "Differential effects of exercise and dietary energy restriction on metabolism and cancer." Houston, TX (2008)
- 178. AACR/NCI Transdisciplinary Research on Energetics and Cancer Conf. on Energy Balance and Cancer. "Calories and cancer: Mechanisms and mediators." Leesburg, VA (2008)
- 179. Sixth AACR Conference on Frontiers in Cancer Prevention. "Obesity, metabolism and cancer: Trends, targets and transgenics." Philadelphia, PA (2007)
- 180. Thirteenth Annual Penn State Cancer Institute Symposium. "Obesity, metabolism and cancer." Hershey, PA (2007)
- 181. Hematology/Oncology Lecture Series, Case Western Reserve University and Cleveland Clinic. "Obesity, metabolism and cancer prevention." Cleveland, OH (2007)
- Dan L. Duncan Cancer Center Annual Lecture. "Obesity, metabolism and cancer prevention."
   Houston, TX (2007)
- 183. G. Malcom Trout Annual Lectureship, Michigan State University. "Nutrition and cancer prevention." East Lansing, MI (2007)
- 184. McCabe Annual Lecture, University of Texas Medical Branch. "Obesity, diabetes and cancer prevention." Galveston, TX (2007)
- 185. FASEB Summer Conference on Obesity, Energy Balance and Disease. "Calories and cancer: Trends, targets and transgenics." Indian Wells, CA (2007)
- 186. National Cancer Institute, Cancer and Leukemia Group B National Meeting. "Obesity, energy balance and cancer." Baltimore, MD (2007)
- 187. American Association for Cancer Research Annual Meeting. Symposium Chair and Speaker. "Obesity, metabolism and cancer." Los Angeles, CA (2007)
- 188. American Society for Preventive Oncology Annual Meeting. "Obesity, energy balance and cancer prevention." Houston, TX (2007)
- 189. American Association for the Advancement of Science Annual Meeting. "Impact of obesity on chemical carcinogenesis." San Francisco, CA (2007)
- 190. Aspen Cancer Conference. "Obesity, energy balance and cancer: Trends, targets and transgenics." Aspen, CO (2006)
- 191. Society of Toxicology Annual Meeting "Obesity, energy balance and carcinogenesis: Experimental approaches." San Diego, CA (2006)
- 192. National Cancer Institute Summer Curriculum in Cancer Prevention. "Obesity, energy balance and carcinogenesis: A mechanistic perspective." Bethesda, MD (2006)
- 193. University of North Carolina Department of Nutrition Seminar Series. "Obesity and cancer: A mechanistic perspective." Chapel Hill, NC (2006)

# Local / Regional

- 194. Healthy Charlotte Alliance Lunch and Learn Seminar. Food for Thought: The Role of Nutrition in the Prevention of Cancer. Charlotte, NC (2024).
- 195. Appetite for Life Seminar. Nutritional Strategies for the Prevention of Cancer. Kannapolis, NC (2024)
- 196. Triangle Oncology Nursing Society. "Nutritional Strategies for Breaking the Obesity-Cancer Link." Research Triangle Park, NC (2019)
- 197. UNC Nutrition Research Institute Appetite for Life. "Breast cancer: Could diet be a factor?" Kannapolis, NC (2016)
- 198. UNC Breast SPORE Seminar. "Breaking the obesity and breast cancer link: New targets and strategies." Chapel Hill, NC (2016)
- 199. Charlotte Area Cancer Survivors Network. "Diet, physical activity and cancer prevention." Charlotte, NC (2015)

- 200. UNC Nutrition Research Institute Appetite for Life. "Diet and cancer prevention." Kannapolis, NC (2015)
- 201. University of Texas Department of Nutritional Sciences Seminar Series. "Obesity and cancer: The year in review." Austin, TX (2012)
- 202. Rotary Club of Austin. "Nutrition and cancer prevention." Austin, TX (2012)
- 203. Texas Exes of San Angelo. "Nutrition and cancer prevention: What do we know and what can you do?" San Angelo, TX (2012)
- 204. University of Texas Development Board. "Nutrition and cancer research at the University of Texas." Austin, TX (2012)
- 205. University of TX Center for Cancer Research Working Group. "Update on the Texas-TREC initiative." Austin, TX (2012)
- 206. Univeristy of TX/Cornell Inflammation and Cancer Group. "Obesity, inflammation and cancer." Austin, TX (2011)
- 207. UT School of Human Ecology Advisory Council. "Research initiatives in the Department of Nutritional Sciences." Austin, TX (2011)
- 208. Univ. of TX Alumni College. "Nutrition and cancer prevention: What do we know and what can you do?" Austin, TX (2011)
- 209. UT-MD Anderson Cancer Center GI Oncology Grand Rounds. "Energy balance, metabolism and pancreatic cancer prevention: Transdisciplinary approaches." Houston, TX (2010)
- 210. Waggoner Center Symposium. "Serum-based biomarker assessment in studies of mice and men." Austin, TX (2010)
- 211. University of TX Alumni College. "Nutrition and cancer prevention." Austin, TX (2010)
- 212. UT-MD Anderson Clinical Cancer Prevention Retreat. "Molecular targets for preventing obesity-related cancer." Houston, TX (2010)
- 213. Symposium on Energy Balance & Cancer, UT-MD Anderson Cancer Center Science Park-Res. Division, "Obesity and cancer prevention: Mechanistic targets." Smithville, TX (2009)
- 214. UT-Health Sciences Center Seminar Series. "Obesity, energy metabolism and cancer." San Antonio, TX (2009)
- 215. University of Texas MD Anderson Cancer Center Division of Cancer Prevention Grand Rounds. "Obesity, energy balance and cancer prevention: Trends, targets and transgenics." Houston, TX (2006)
- 216. UT College of Natural Sciences Colloquium. "Obesity and cancer: Underlying mechanisms." Austin, TX (2006)
- 217. San Antonio Cancer Institute Colloquium. "Obesity, energy balance and cancer: Experimental approaches." San Antonio, TX (2006)

### Training Grant Directorship

Deputy Director, NCI Cancer Prevention Fellowship Program, Bethesda, MD (1999-2005)

Co-Director, Cancer Prevention and Research Institute of Texas-Funded Cancer Training Grant to the University of Texas, Austin, TX (2011-2014)

# Pre- and Postdoctoral Research Teaching/Mentorship

#### **Current Direct Trainees**

Name	Training	Start	Research Topic	Funding Source
A. Clontz	Predoc	2022	Obesity, weight loss via GLP-1/GIP receptor agonist, and breast cancer	UNC Translational Science T32
E. Paules	Postdoc	2022	Obesity and one-carbon metabolism in breast and liver CA	Balchem Postdoctoral Fellowship
H. Malian	Predoc	2022	Obesity, immunotherapy response and triple negative breast cancer	UNC TNBC Center

Name	Training	Start	Research Topic	Funding Source
E. Glenny	Postdoc	2020	Obesity and colon cancer: Adipose-epithlial crosstalk	NCI R01
M. Carson	Predoc	2020	Obesity, microbial dysbiosis and breast cancer progression	BCRF grant
E. Devericks	Predoc	2019	Obesity and breast cancer metastasis	NCI F31 Predoctoral Fellowship

# Previous Direct Trainees

Name	Training	Years	Research Topic	Current Position
S. McDonell	MS	2022-23	Obesity, inflammation, and breast cancer metastasis	UNC Medical School
V. Kiesel	Postdoc	2021-23	Obesity, hypoxia and breast cancer metastasis	Sr. Medical Writer, Open Health
M. Coleman	Postdoc	2017-22	Obesity, immunometabolism and pancreatic and breast cancer	Asst Prof, Nutrition, UNC
K. Camp	Predoc	2017-22	Obesity, bariatric surgery and the microbiome	Director of Regulatory Affairs, Boehringer- Ingelheim
L. Smith	Predoc	2016-21	Obesity, aging & breast cancer	Research Scientist, IQVIA
A. Ho	MS	2020-21	Metabolic reprogramming inhibitors in cancer	Research Tech, UNC Dept of Nutrition
L. Eisenbeis	MS	2020-21	Obesity, adipose reprogramming and breast cancer metastasis	Research Scientist, Boston Medical
T. McFarlane	MS	2021-22	Obesity, microbiome and response to immunotherapy in a mouse model of triple negative breast cancer	Research technican, UNC Department of Nutrition
A. Pfeil	MS	2021-22	Obesity, pyruvate carboxylase and metabolic reprogramming in triple-negative breast cancer	Med School, UNC
M. Orenduff	Predoc	2016-21	Role of IGF system in sarcopenia and cancer cachexia	Postdoc, Duke Molecular Physiology Institute
A. Cozzo	Postdoc	2018-19	Obesity, immunity and cancer	Med School, Duke
M. Rainey	MS	2017-18	Obesity, aging and chemotherapy response	Med School, Cleveland Clinic/Case Western
J. Pearce	MS	2018-19	IGF-1-autophagy interations in breast cancer chemotherapy	Med School, Wake Forest University
L. Bowers	Postdoc	2014-18	Translational breast cancer prevention studies	Asst Professor, Purdue University
E. Allott	Postdoc/ Asst Prof	2015-18	Obesity, lipid metabolism and prostate cancer	Assoc Professor, Queens Univ, Belfast
E. Rossi	Predoc	2012-17	Obesity, epigenetics and breast cancer	Sr. Bioinformatics Specialist, Abbvie Pharma

Name	Training	Years	Research Topic	Current Position
K. Liu	Predoc	2011-16	Branched-chain amino acids & pancreatic cancer	Application Scientist, Genohub
K. Devlin	Predoc	2011-16	Energy balance modulation of miRNA in breast cancer	Research Associate, Oregon Health and Science Univ
S. Dunlap	Postdoc	2008-13	Obesity, EMT and breast cancer stem cells	Global Director, Early Cancer Detection, Astra- Zenica
N. Ford	Postdoc	2010-13	Bioactive food components & breast cancer prevention	Dir. of Nutrition, Hass Avocado Board
D. Hays	MS	2010-12	Obesity, inflammation and pancreatic cancer	Asst Prof, Dept Nutritional Science, UT-Austin
V. Cifarelli	Postdoc	2011-12	Diabetes and pancreatic cancer	Asst Prof, Medicine and Nutrition, St. Louis Univ
A. Harvey	PhD	2006-11	Obesity, NF-kB, and pancreatic cancer	Dir, Med Affairs, Sight Sciences, Inc
L. Lashinger	Postdoc	2006-10	Obesity, pancreatic cancer, and IGF-1	Assoc Prof, UT-Austin
R. DeAngel	PhD	2006-10	Obesity and endocrine therapy	Sr. Director, Strategic Partnerships, Precise Diagnstics Oncology
L. Nogueira	PhD	2006-10	Obesity, exercise, mTOR, and breast cancer	Director, Health Services Research, American Cancer Society
K. Wheatley	PhD	2005-10	Obesity, p53 and breast cancer	Biomedical Litigation Attorney, Houston, TX
L. Daniels	MS	2007-09	IGF-1 and pancreatic cancer	Pediatrician, Fort Worth, TX
J. Goldberg	MS	2008-09	mTOR, microRNA and pancreatic cancer	Pediatrician, Houston, TX
C. Rogers	Postdoc	2004-06	Exercise, immunity and colon cancer	Professor and Chair, Department of Nutrition, Univ. of Georgia
J. Fenton	Postdoc	2003-07	Obesity, colon cancer and leptin/adiponectin	Professor, Nutrition, Michigan State Univ.
N. Nunez	Postdoc	2002-05	IGF1 and breast cancer	Science Teacher, Oakland, CA
V. Mai	Postdoc	2001-03	Diet, gut microbiota and colon cancer	Professor, Univ. of Florida
J. Lavigne	Postdoc	2001-04	Calorie restriction, cancer, and microarrays	Chief, Office of Education, DCEG, NCI
L. Colbert	Postdoc	2001-03	Exercise and colon cancer prevention	Associate Professor, Univ. of Wisconsin (retired)
D. Berrigan	Postdoc	2000-02	IGF-1 and biomarkers	Program Director, NCI

Name	Training	Years	Research Topic	Current Position
J. Contois	Postdoc	1998-99	Diet, hormones and cancer	CEO, SunDiagnostics
J.Shen	Postdoc	1995-98	Diet and prostate cancer	Physician, Kaiser Found Hosp, Sacramento, CA
S. Chang	Postdoc	1995-98	Obesity and risk of breast and prostate cancer	Professor, UT-MD Anderson Cancer Center

# Additional Postdoctoral Teaching/Mentoring

Co-mentored 92 Cancer Prevention Postdoctoral Fellows, NCI, Bethesda, MD (1999-2005)

# Additional Graduate Supervision/Committees

- 23 Doctoral Dissertation Committees, Department of Nutrition and Department of Pathology, UNC-Chapel Hill (2014-present)
- 9 Masters Thesis Committees, Dept. of Nutrition, UNC (2014-present)
- 29 Doctoral Dissertation Committees, Depts. of Nutritional Sciences, Cell & Molecular Biology, Kinesiology, Pharmacology/Toxicology; Graduate School of Biological Sciences; and School of Public Health, University of Texas (2005-2014)
- 9 Masters Thesis Committees, Dept. of Nutritional Sciences, University of Texas (2005-2014)

# Undergraduate and High School Supervision/Mentoring

- 44 Honors Undergraduate Independent Research Mentorships, UNC (2014-present)
- 17 Honors Undergraduate Independent Research Mentorships, Univ. Texas (2005-2014)
- 6 High School Scholar Independent Study Mentorships, Austin, TX (2005-2014)

# Other Current Supervision/Mentoring

- Supervising 3 Research Assistant Professors or Staff Scientists in my laboratory
- Formally mentoring 4 Assistant Professors; informally mentoring 4 others
- Supervising 3 research assistants/technicians

#### **GRANTS AND OTHER SUPPORT**

# Ongoing Research Support

NIH/NCI R01CA232589 \$499,000/year Teegarden, Hursting (dual-Pl's) 2/1/19-1/31/25 **Obesity, Metabolism and Breast Cancer Metastasis** 

The primary purpose of this preclinical project is to evaluate the mechanistic basis by which pyruvate carboxylase regulates obesity-driven breast cancer metastasis. Effort: 10%

NIH/NCI R01CA254108 \$434,100/year Ulrich, Hursting (dual-Pl's) 9/23/21-8/31/26 Adipose Tissue-Colorectal Tumor Crosstalk: New Targets for Breaking the Obesity-Cancer Link

The primary purpose of this translational project incorporating genomic, secretomic and metabolomic analysis of paired colon tumor and adipose tissue from the ColoCare Cohort with preclinical studies to elucidate the crosstalk between obesity-associated adipose signals and the colonic epithelium. Effort: 10%

NIH/NCI R01CA271597 \$499,000/year Teegarden, Hursting (dual-Pl's) 2/1/22-1/31/27 Impact of Hypoxia on Lipid Metabolism in Obesity-driven Breast Cancer Progression

The goals are to define the interactions between obesity, hypoxia signals and breast cancer metastasis and establish contributions of obesity-associated alterations in lipid metabolism. Effort: 10%

BCRF-19-073 \$225,000/year Hursting (PI) 10/01/2019-09/30/2024 **Breast Cancer Research Foundation Grant: Obesity, Weight Loss and Breast Cancer:** Aims are to determine the combined effects of moderate weight-loss and dietary supplementation with anti-inflammatory agents as bariatric surgery mimics in mouse models of obesity-driven breast cancer. Effort: 20%.

WCRF Grant Program \$117,785/year J. Thorne PI (Hursting Co-I) 10/1/21-3/30/25 Nutrient-Metabolic Gene Pathways Predict and Modify Responses to Chemotherapy in Breast Cancer. Effort: 5% (cost shared).

NIDDK P30DK056350. UNC Nutrition Obesity Research Center. E. Mayer-Davis, PI (Hursting Role: **Director of Animal Metabolism Phenotyping Core**). 4/1/22-3/31/27 The goal of this center is to provide expertise and support to scientists studying the role of nutrition and obesity in public health. Effort: 10%.

UNC Faculty Recruitment and Retention Fund Hursting (PI) 06/01/14, ongoing Salary support to lead a nutrition and cancer prevention research program linking the UNC Department of Nutrition in the Gillings School of Global Public Health, the UNC Lineberger Comprehensive Cancer Center, and the UNC Nutrition Research Institute. Effort: 20%

#### PROFESSIONAL SERVICE

#### To Discipline

State, National, International Offices or Committees

International Society of Cancer Metabolism (member, 2018-present)

Society on Sarcopenia, Cachexia and Wasting Disorders (member, 2018-present)

American Institute for Cancer Research / World Cancer Research Fund

- Co-Chair, 2019 AICR Annual Research Conference (in Chapel Hill, NC)
- Planning Committee, 2013 WCRF Conference on Obesity, Metabolism and Cancer
- Planning Committee, 2011, 2016 and 2019 AICR Annual Research Conferences
- Expert Report, Food, Nutrition, Physical Activity and the Prevention of Cancer: A Global Perspective (Panel Member: 2004-present; Mechanisms Chair: 2009-present)

Institute of Medicine, National Cancer Policy Forum on Obesity in Cancer Survival and Recurrence (member, 2011)

American Society for Nutrition (member, 2007-present)

American Society of Clinical Oncology

- Annual Meeting Symposium Chair (2008)
- Translational Research Working Group (2007-present)

American Society of Preventive Oncology (member, 1992-present)

- Executive Committee (2002-2017)
- Chair, Diet and Nutrition Special Interest Group (2002-2011)
- Annual Meeting Co-Chair (2006)
- Fellowship Selection Committee (2003-2010)

Annual Meeting Symposium Chair (2003, 2007, 2010, 2011)

American Association for Cancer Research (member, 1990-present)

- Annual AACR Meeting Vice-Chair (2019)
- Annual AACR Meeting Program Committee Co-Chair (2009, 2017, 2021, 2024)
- AACR Science of Cancer Health Disparities Conference Program Co-Chair (2016)
- AACR-American Cancer Society Award for Research Excellence in Cancer Epidemiology and Prevention Selection Committee (2013-present)
- AACR Frontiers in Cancer Prevention Annual Meeting Co-Chair (2012)
- Annual Meeting Education Session Chair (2011, 2012)
- Annual Meeting Symposium Chair (2007, 2010, 2014, 2017, 2019)
- Associate Members' Grant Writing Workshop (2007-present)

# **Consultancies**

# External Scientific Advisory Boards

- Yale University, Transdisciplinary Research in Energetics and Cancer Education Program, Faculty (2017-present)
- WHO International Agency for Research on Cancer, Mechanisms Co-Chair, Handbook on Obesity and Cancer (2015-2018)
- American Cancer Society Council for Extramural Grants (2014-2019)
- American Cancer Society Advisory Committee (Nutrition/Physical Activity Co-Chair, 2013-2018)
- Board of Scientific Counselors, National Cancer Institute (2012-2017)
- UT-MD Anderson Cancer Center, Center for Energy Balance in Cancer Prevention and Survivorship (2012-present)
- University of Hawaii Cancer Center Multiethnic Cohort External Scientific Advisory Committee (2012-present)
- Purdue University Cancer Prevention Program (2012-present)
- Cancer Research Institute, Seoul National University, Korea (2010-2018)
- DOD Gyn. Cancer Translational Center of Excellence, Washington, DC (2008-2013)
- Child Health and Solutions to Obesity Conference, UT School of Public Health, Austin, TX (2010)
- Cancer Prevention Research Program, LSU Pennington Biomedical Research Center, Baton Rouge, LA (2010-present)

### **Editorial Appointments**

### **Editorial Boards**

- Cancer and Metabolism (2012-2019)
- Cancer Medicine (2012-present)
- Cancer Prevention Research (2008-present)
- Molecular Carcinogenesis (2006-2019)

Invited Reviewer: Nature, Am J Clin Nutr, Cancer Epidemiol Biomarkers Prev, Cancer Metab, Cancer Prev Res, Cancer Res, Carcinogenesis, Clin Cancer Res, Endocr Relat Cancer, Int J Obes, J Am Diet Assoc, J Biol Chem, J Clin Oncol, J Mol Endocrinol, J Natl Cancer Inst, J Nutr, Metabolism, Mol Carcinog, Mutat Res, Nature Rev Cancer, NPJ Breast Cancer, Nutr Biochem, Nutr Cancer, Obesity, Prev Med, Proc Natl Acad Sci, PLoS Med, PLoS One

#### Within UNC-Chapel Hill

#### Committees

- Doctoral Committee, Department of Nutrition (member; 2014-23; Chair, 2017-22)
- Curriculum Committee, Department of Nutrition (member, 2016-2018)
- Interdisciplinary Nutrition Sciences Symposium Planning Committee (2019, 2020)
- Advancement Committee, Department of Nutrition (member, 2017-present)

- Foundation Phase Task Force and Application Phase Committee, Translational Education at Carolina, UNC School of Medicine (Nutrition Coil Director, 2015-21)
- Shared Resource Committee, Lineberger Comprehensive Cancer Center (member; 2015present)
- Faculty Search Committee, 3 Nutrigenomics Positions, Nutrition Research Institute (2016-2020)
- Faculty Search Committee Chair, 3 Translational Positions, Department of Nutrition (2015-2017)
- Faculty Search Committee Chair, Energy Metabolism position, Nutrition Research Institute (2015-2016)
- Faculty Search Committee, member, Microbiome position, Nutrition Research Institute (2015)
- UNC Nutrition and Obesity Research Center Internal Advisory Committee (2014-present)

#### Other Administrative Activities

- Co-Director, Animal Metabolism Phenotyping Core, Nutrition and Obesity Research Center, UNC-Chapel Hill (2015-present)
- Director, Division of Nutritional Biochemistry, Department of Nutrition (2015-2017)
- Director, UNC Nutrition Research Institute (2021-24)

#### Other Service

#### **Grant Review Committees**

- NIH Cancer Prevention Study Section (standing member 2018-22)
- NIH Chemo/Dietary Prevention Study Section (ad hoc, 2008-2018)
- Susan G Komen for the Cure, Prevention/Early Detection Study Section (2012-2014)
- NIH Division of Cancer Prevention, R03 Study Section (2011-2012)
- UK Breast Cancer Campaign, London (2008-present)
- Prevent Cancer Foundation (2005-present)
- Am Cancer Soc Carcinogenesis, Nutrition and Environment Study Section (2005-2015)
- American Institute for Cancer Research (2004-2016)
- Department of Defense Breast Cancer Research Program (1995-2010)
- NIH American Recovery and Reinvestment Act, NCI (2009)
- Clinical Nutrition Research Center at Harvard (1997-2005)
- Chemoprevention Agent Development, NCI (ad hoc, 1995-2005)

#### Research Centers Outside UNC-Chapel Hill

University of Texas, Austin, TX

- Dell Pediatric Research Institute Director Search Committee (2010-2012)
- University Faculty Grievance Committee (2009-2014)
- College of Natural Sciences Dean's Council (2007-2014)
- Dell Pediatric Research Institute Executive Committee (2007-2014)
- University Faculty Research Award Committee (2006-2014)
- School of Human Ecology Executive Committee (2005-2014)

#### National Cancer Institute, Bethesda, MD

- Ireland-Northern Ireland-NCI Cancer Consortium, Scientific Advisor (2003-2007)
- Cancer Prevention Scientific Education Committee (1995-2006)
- Energy Balance Working Group Mechanisms Chair (2002-2005)
- Center for Cancer Research-Cancer Prevention Faculty, Co-Chair (2001-2005)
- Training Commission, Deputy Commissioner (2003-2005)
- Division of Cancer Prevention Scientific Advances Symposium, Chair (2003)

#### MD Anderson Cancer Center, Houston, TX

- Faculty Senator (1996-1999)
- Institutional Animal Care and Use Committee (1996-1999)
- Institutional Review Board, Clinical Protocol Review (1996-1999)