



Major Research Interests:

- Mechanism of Steroid Hormone Action in Normal and Neoplastic Cells
- Genomics and Proteomics of Cancer in Women
- Physicochemical and Immunologic Properties of Steroid and Peptide Hormone Receptors
- Assessment of Environmental and Therapeutic Estrogen Mimics and Their Role in Human Health
- Application of Biochemical Techniques and Concepts to the Detection and Treatment of Human Malignant Disease
- Development of Quality Control Measures for Clinical Biochemical Assays
- Laser Capture Microdissection and Its Use in Proteomics and Genomics of Cancer

Publications:

Kerr II DA, **Wittliff JL**. A Five-Gene Model Predicts Clinical Outcome in ER+/PR+, Early-Stage Breast Cancers Treated with Adjuvant Tamoxifen. *Horm Cancer* 2 (5):261-71, 2011. PMID: 21826535

Andres SA, **Wittliff JL**. Relationships of ESR1 and XBP1 Expression in Human Breast Carcinoma and Stromal Cells Isolated by Laser Capture Microdissection. *Endocrine* 40:212-221, 2011. PMID: 21858728

Andres SA, Edwards, AB, **Wittliff JL**. Expression of Urokinase-Type Plasminogen Activator (uPA), Its Receptor (uPAR) and Inhibitor (PAI-1) in Human Breast Carcinomas and Their Clinical Relevance. *J Clin Lab Anal* 26:93-103, 2012. PMID: 22467324

Andres SA, **Wittliff JL**. Co-expression of Genes with Estrogen Receptor- α and Progesterone Receptor in Human Breast Carcinoma Tissue.

Wittliff JL, Andres SA. Estrogens & Their Conjugates. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Wittliff JL, Andres SA. Catechol Estrogens. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Wittliff JL, Andres SA. Phytoestrogens & Mycoestrogens. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Wittliff JL, Andres SA. Estrogen-like Pharmaceuticals. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Wittliff JL, Andres SA. Xenoestrogens. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Wittliff JL, Andres SA. Progesterone and Progestin Mimics. *Encyclopedia of Toxicology*, 3rd Edition. Wexler P. (ed.) Elsevier Press. in press, 2013.

Andres SA, Bumpus SB, **Wittliff JL**. Assessment of Phytoestrogen and Mycoestrogen Recognition by Recombinant Human Estrogen Receptor- α Using Ligand Titration Arrays. , 2013.

Andres SA, **Wittliff JL**, Cheng A. Protein Tyrosine Phosphatase 4A2 Expression Predicts Overall and Disease-Free Survival of Human Breast Cancer and Is Associated with Estrogen and Progesterone Receptor Status. *Horm Cancer* 2013 [Epub ahead of print] PMID: 23568563

Andres SA, Brock GN, **Wittliff JL**. Interrogating Differences in Expression of Targeted Gene Sets to Predict Breast Cancer Outcome. Submitted, 2012.

Clinical Laboratory License

1976-present Founder/Director, Hormone Receptor Laboratory, University of Louisville

Commonwealth of Kentucky (State License #200078 Endocrinology & Chemistry)

Health Care Financing Administration (Federal License – CLIA #18D0648476, Endocrinology)

1984-present Fellow of the National Academy of Clinical Biochemistry (FACB/ AACC), Clinical Laboratory Medicine

Honors and Awards

2011 Claude P. Brown Memorial Lecture, Association of Clinical Scientists

National and International Scientific Committee Memberships

2010-11 Expert Panel Member, Interagency Coordinating Committee on the Validation of Alternative Methods (ICCVAM), National Toxicology Program (NTP) Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), NIEHS/NIH, Bethesda, MD

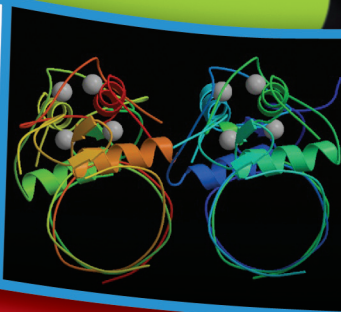
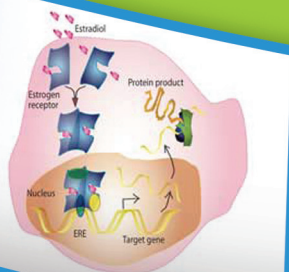
2010-11 Organizing Committee, International Meeting, Association of Clinical Scientists

2010-12 Publications Committee, The Journal of Histochemistry & Cytochemistry

2012-13 Proof of Concept Program: Commercialization Gap Grants, Office of the President, University of California System

James L. Wittliff, Ph. D., M.D. hc, FACB

Professor, Department of Biochemistry & Molecular Biology
University of Louisville Schools of Medicine and Dentistry



Patents & Licenses

James L. Wittliff, Traci L. Kruer and Bernadette Vago. **Functional Characterization of an ERE-Binding Protein as a Clinically Relevant Biomarker of Breast Cancer Behavior.** Research Disclosure ULRF#10032, 2011

Editorial Board Memberships

Current:

Journal of Clinical Laboratory Analysis, Associate Editor
Journal of Ovarian Research (Founding Member)

Expert Commentaries:

Female Sex Hormones & Their Mimics in Health & Disease: Friends & Foes, Kentucky Health Television, Host: Dr. Wayne Tuckson, February 2, 2011

Oral Scientific and Clinical Presentations: Regional, National & International 2011-2012

Association of Clinical Scientists, entitled "Deciphering the Genomics of Cancer to Predict Clinical Behavior", Louisville, KY, May 19, 2011.

CertiChem Inc., entitled "Multi-tiered System using Recombinant Human Estrogen Receptor for Detection of Estrogen Mimics", Austin, TX, July 2011.

Peptides International, entitled "Resources & Technologies for Interrogating the Genomics of Human Cancer", Louisville, KY, August 17, 2011

PlastiPure/CertiChem, entitled "Genomics of Human Cancer", Austin, TX, October 2011.

Peptides International, entitled "Technologies and Resources for Assessing Estrogens and their Mimics", Louisville, KY 2012.

Althea Dx, entitled "A Rosetta Stone for Deciphering Cancer Genomics: Molecular Targets & Diagnostics", San Diego, CA August 14, 2012.

Trainees of James L. Wittliff 2011-2012 Hormone Receptor Laboratory

Ph.D. Students

Traci Lynne Kruer 2011, University of Louisville;
Characterization of DNA-Binding Proteins as Clinically Relevant Biomarkers of Breast Cancer Behavior

D. Alan Kerr II 2010, University of Louisville; Molecular Subtypes of Estrogen Receptor Positive Breast Cancers Predict Clinical Behavior

Sarah Alane Andres 2009, University of Louisville;
A Genomic Approach for Assessing Clinical Outcome of Cancer

Medical Student Research Fellows 2011-2012

Brian Dong, First Year Medical Student Research Fellow, University of Louisville, 2012.

Undergraduate Research Fellows 2011-2012

Jesse Wilson, Undergraduate Honors Thesis Student, University of Louisville, 2011.

Adrienne Bushau, University of Louisville, 2012. 3rd Place Award at Research!Louisville

High School Student Research Fellows 2011-2012

Sachin Jain, Fort Wayne, Indiana, Brown Cancer Center Summer Fellow, 2010. 2nd Place Award at Research!Louisville in the Engineering Collaboration Category

Kinsey Morrison, St. Francis High School, Louisville, KY, 2012. 1st Place Award at Research!Louisville