
BIOGRAPHICAL SKETCH

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NAME: Janzen, Carla

eRA COMMONS USER NAME (credential, e.g., agency login): JANZEN2

POSITION TITLE: Associate Professor, I

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

| INSTITUTION AND LOCATION | DEGREE (if applicable) | Completion Date MM/YYYY | FIELD OF STUDY |
|---|---------------------------|----------------------------|------------------------------------|
| City College of New York | B.A | 06/94 | Philosophy |
| Dartmouth-Brown University School of Medicine | M.D. | 05/98 | Medicine |
| University of California, Los Angeles | Residency | 06/02 | Obstetrics and Gynecology |
| University of California, Los Angeles | Ph.D. | 06/09 | Molecular and Medical Pharmacology |
| University of California, Los Angeles | Fellowship | 06/10 | Maternal-Fetal Medicine |

A. Personal Statement

As a physician-scientist in the Division of Maternal Fetal Medicine my work comprises both an active clinical practice in addition to research. My research focuses on the mechanisms of placental disease, in particular as they relate to both preterm labor and intrauterine growth restriction. In addition to my background in basic science and translational research, I have experience in study design, patient recruitment, collection and analysis of biospecimens.

B. Positions and Honors

1998-2002 Resident Physician UCLA Dept of Ob/Gyn
2002-2009 Clinical Instructor UCLA Dept of Ob/Gyn
2007-2010 Fellow, UCLA Fellowship in Maternal-Fetal Medicine
2009-2016 Assistant Professor UCLA Dept of Ob/Gyn
2017-present Associate Professor UCLA Dept of Ob/Gyn
2007-2014 Lecture Coordinator, Gender-Related Issues in Medicine, K30 UCLA Mentored Clinical Pharmacology Program
2004-2014 Lecturer, K30 UCLA Mentored Clinical Pharmacology Program
2010-2015 Lecturer, UCLA Graduate course, Neurobiology M227
2013-2017 Appointee, Advisory Committee for the new UCLA Center for World Health (CWH)
2016-2017 Program Director, UCLA Maternal-Fetal Medicine Fellowship training program
2012-present Member, UCLA Executive Advisory Committee for Brazilian Studies
2015-present Medical Director, Claris Health Nonprofit Community-based Clinics
2015-present Medical Director of Maternal Fetal Medicine, Northridge Hospital Medical Center

Other Experience and Professional Memberships

2004-2012 Medical Director, Women's Clinic and Family Counseling Center, Los Angeles, C.A.
2012-present Fellow, American Congress of Obstetricians and Gynecologists
2013-present Diplomate, Maternal-Fetal Medicine

Honors

| | |
|-----------|--|
| 1993 | Starkweather Award for Excellence in Philosophy (CCNY) |
| 1994 | Frederick W. Sperling Prize in Philosophy (CCNY) |
| 1994 | Phi Beta Kappa |
| 1998 | Saphier Prize in Obstetrics and Gynecology (Brown University) |
| 2001 | Ortho-McNeil Research Award for Outstanding Resident Research Project (UCLA) |
| 2002-2007 | K12 Fellow, UCLA Mentored Clinical Pharmacology Research Scholars Program (MCPRSP) |
| 2002-2009 | Fellow, UCLA Specialty Training and Advanced Research (STAR) Program |
| 2010-2011 | National Institutes of Health Office of Women's Health Research (WRHR) Scholar |
| 2016 | Executive Leadership Team, March of Dimes 2016 Signature Chefs Event |

C. Contribution to Science

1. The focus of my early work studied the mechanisms by which estrogens and cytokines affect the inhibition or initiation of atherosclerosis in women, and the means by which cytokines such as TNF α promote apoptosis in the vascular endothelium. These publications found that exogenous estrogens are associated with decreased circulating levels of soluble vascular cell adhesion molecule-1 in women and that endothelial cell survival is promoted by the activity of protein phosphatase 2A. These publications may provide the basis for future development of prevention strategies for atherosclerosis in women, a disease with a high rate of mortality. I served as the primary investigator or co-investigator in these studies.
 - a. Souter I, Janzen C, Martinez-Maza O, Breen EC, Stanczyk F, Chaudhuri G, Nathan L. Serum levels of soluble vascular cell adhesion molecule-1 are decreased in women receiving oral contraceptives compared with normally menstruating women: implications in atherosclerosis. *Fertil Steril*. 2005 May;83(5):1480-8. PubMed PMID: 15866588.
 - b. Janzen C, Sen S, Cuevas J, Reddy ST, Chaudhuri G. Protein phosphatase 2A promotes endothelial survival via stabilization of translational inhibitor 4E-BP1 following exposure to tumor necrosis factor- α . *Arterioscler Thromb Vasc Biol*. 2011 Nov;31(11):2586-94. doi: 10.1161/ATVBAHA.111.230946. PubMed PMID: 21903942; PubMed Central PMCID: PMC3206633.
2. In addition to the contributions described above, I have established a human placental tissue bank, mainly of placenta from normal pregnancies of early and full-term gestational ages and from pregnancies affected by diseases of poor placental function. In collaboration with others, whose research demonstrated the developmental pattern of glucose transporter gene expression in the mouse placenta, I directly documented increased protein expression of GLUT3 in the placenta of pregnancies affected by IUGR. We have also observed that epithelial membrane protein-2 (EMP2) was significantly down-expressed in placenta affected with IUGR and were surprised to find EMP2 contributes to endothelial cell migration. Also, I served as the primary investigator in a study providing a novel mechanism for understanding premature preterm rupture of the amniotic membrane. This research furthers the understanding of how dysfunction of the fetoplacental unit contributes to preterm labor.
 - a. Janzen C, Lei MY, Cho J, Sullivan P, Shin BC, Devaskar SU. Placental glucose transporter 3 (GLUT3) is up-regulated in human pregnancies complicated by late-onset intrauterine growth restriction. *Placenta*. 2013 Nov;34(11):1072-8. doi: 10.1016/j.placenta.2013.08.010. Epub 2013 Aug 28. PubMed PMID: 24011442; PubMed Central PMCID: PMC3843645.
 - b. Williams CJ, Chu A, Jefferson WN, Casero D, Sudhakar D, Khurana N, Hogue CP, Aryasomayajula A, Patel P, Sullivan P, Padilla-Banks E, Mohandessi S, Janzen C, and Wadehra M. Epithelial Membrane Protein 2 (EMP2) alters placental angiogenesis mimicking features of human placental insufficiency. *J Pathology*. *J Pathol* 2017. PMID:28295343. DOI: 10.1002/path.4893.
 - c. Janzen C, Sen S, Lei MYY, Gagliardi de Assumpcao M, Chalis J, and Chaudhuri G. The Role of Epithelial to Mesenchymal Transition in Human Amniotic Membrane Rupture. *JCEM* 2016, December. PMID: 27992249 DOI:10.1210/jc.2016-3150

3. My current goal, within the field of Maternal-Fetal Medicine, is to pursue clinical research opportunities related to the study of the physiology of the placenta and the placental contribution to pregnancy pathology. To that end, I have collaborated with physician scientists to understand the patterns of adverse pregnancy outcomes in the clinical setting documented in these publications.
- a. Kelley-Quon LI, Tseng CH, Janzen C, Shew SB. Congenital malformations associated with assisted reproductive technology: a California statewide analysis. *J Pediatr Surg*. 2013 Jun;48(6):1218-24. doi:10.1016/j.jpedsurg.2013.03.017. PubMed PMID: 23845610.
 - b. Arnold CW, Nguyen T, Janzen C. BabySTEPS: a sugar tracking electronic portal system for gestational diabetes. *Stud Health Technol Inform*. 2013;192:1123. PubMed PMID: 23920897.
 - c. Edling KL, Korenman SG, Janzen C, Sohsman MY, Apple SK, Bhuta S, Yeh MW. A pregnant dilemma: primary hyperparathyroidism due to parathyromatosis in pregnancy. *Endocr Pract*. 2014 Feb;20(2):e14-7. doi: 10.4158/EP13105.CR. PubMed PMID: 24013984.
 - d. Brasil P, Pereira JP Jr, Moreira ME, Ribeiro Nogueira RM, Damasceno L, Wakimoto M, Rabello RS, Valderramos SG, Halai UA, Salles TS, Zin AA, Horovitz D, Daltro P, Boechat M, Raja Gabaglia C, Carvalho de Sequeira P, Pilotto JH, Medialdea-Carrera R, Cotrim da Cunha D, Abreu de Carvalho LM, Pone M, Machado Siqueira A, Calvet GA, Rodrigues Baião AE, Neves ES, Nassar de Carvalho PR, Hasue RH, Marschik PB, Einspieler C, Janzen C, Cherry JD, Bispo de Filippis AM, Nielsen-Saines K. Zika Virus Infection in Pregnant Women in Rio de Janeiro. *NEJM*. 2016 Dec;375(24):2321-2334. PMID: 26943629
 - e. Thamocharan S, Chu A, Kempf K, Janzen C, Grogan T, Elashoff DA, Devaskar SU. Differential microRNA expression in human placentas of term intra-uterine growth restriction that regulates target genes mediating angiogenesis and amino acid transport. *PLoS One* 2017. PMID: 28463968. DOI:10.1371.
 - f. Chen PY, Chu A, Liao WW, Rubbi L, Janzen C, Hsu FM, Thamocharan S, Ganguly A, Lam L, Montoya D, Pellegrini M, Devaskar SU. Prenatal Growth Patterns and Birthweight are Associated with Differential DNA Methylation and Gene Expression of Cardiometabolic Risk Genes in Human Placentas: A Discovery-Based Approach. *Reprod Sci* 2017. PMID: 28693373. doi: 10.1177/1933719117716779.
 - g. Shao X, Liu D, Martin T, Chanlaw T, Devaskar SU, Janzen C, Murphy AM, Margolis D, Sung K, and Wang DJJ. Measuring human placental blood flow with multi-delay 3D GRASE pseudo-continuous arterial spin labeling at 3 Tesla. Shao X, Liu D, Martin T, Chanlaw T, Devaskar SU, Janzen C, Murphy AM, Margolis D, Sung K, and Wang DJJ. *Journal of Magnetic Resonance Imaging* (In Press).

Complete list of Published Work in MyBibliography: <http://www.ncbi.nlm.nih.gov/sites/myncbi/1tW-kofN8s5Qz/bibliography/48043694/public/?sort=date&direction=ascending>

D. Research Support

Ongoing Research Support

9/17/15-8/31/19 NICHD 1U01HD087221-01 Janzen, Devaskar, Sung (Multiple-PI)
Imaging Innovations for Placental Assessment in Response to Environmental Pollution
Role: Principal Investigator

9/20/16-6/30/21 R01HD089714, NIH/NICHD Devaskar (PI)
Biomarkers and Genes Associated with Placental Development and Function in Response to Environmental Pollution.
Role: Co-Investigator

6/01/14-5/31/19 NICHD HHSN275201300003C Deville (PI)
NICHD International and Domestic Pediatric and Maternal HIV Studies Network
Role: Co-Investigator

Completed Research Support

UCLA Translational Research Fund 7/01/11-6/31/12
Determination of EMP2 in IUGR and preeclampsia
Role: Co-Principal Investigator

K12 WRHR HD-001281 Chaudhuri (PI) 7/01/10- 6/30/11
UCLA NICHD Women's Reproductive Health Research (WRHR) Career Development Program
Role: Research Scholar

K12 RR17611-01 Licinio (PI) 1/01/03-12/31/08
UCLA Mentored Clinical Pharmacology Research Scholar Program
Role: Research Scholar