

Curriculum Vitae Maureen Keller-Wood

Current Address: Department of Pharmacodynamics
Box 100487
College of Pharmacy
University of Florida

Phone: 352-273-7687
Fax: 352-273-7705
Email: Kellerwd@cop.health.ufl.edu

Current Position: Professor, Dept of Pharmacodynamics
Associate Dean for Research and Graduate Education,
College of Pharmacy

Education: A.B. Biochemistry, 1977
Vassar College, Poughkeepsie, NY

Ph.D. Endocrinology, 1982
University of California, San Francisco

Research Interests:

My research focuses on effects of glucocorticoids in pregnancy, both in terms of maternal adaptations and effects on the maturing fetus. In particular my lab has focused on two aspects of the effects of maternal corticosteroids: the effect of the normal increase in cortisol on normal cardiovascular adaptations to pregnancy, and the effects of excess glucocorticoids on the maturing fetal heart, including changes in metabolism and function that may predispose some fetuses to cardiac arrhythmias during labor and delivery. Our approach uses transcriptomic, metabolomic and biochemical methods to identify underlying mechanisms by which glucocorticoid exposure alters the normal maturation of the heart, and to identify therapeutic interventions that might prevent the metabolic damage to the heart.

Awards & Honors:

General and Departmental Honors, Vassar College
Phi Beta Kappa
Regents Fellow, Univ. of California, San Francisco, 1977-1978
Predoctoral Traineeship, UC San Francisco, 1979-1980
NRSA Postdoctoral Fellowship, 1984-1985
NIH New Investigator Award
NIH Research Career Development Award
Teaching Improvement Program Awardee, 1999, University of Florida
University of Florida Research Foundation Professorship, 2000-2003, 2012-2015
CVS Professorship, College of Pharmacy, 2013-

Research and Professional Experience

- 1978-1982 Graduate Student (Mary F. Dallman, Ph.D., mentor)
Department of Physiology
University of California, San Francisco
- 1983 Postdoctoral Scholar (Mary F. Dallman, Ph.D., mentor)
Department of Physiology
University of California, San Francisco
- 1983-1985 Postdoctoral Scholar (M. Ian Phillips, Ph.D., mentor)
Department of Physiology
University of Florida
- 1985-1988 Assistant Research Scientist
Department of Physiology
University of Florida
- 1988-1993 Assistant Professor
Department of Pharmacodynamics
University of Florida
- 1993-2000 Associate Professor
Department of Pharmacodynamics
University of Florida
- 2000- present Professor
Department of Pharmacodynamics
University of Florida
- 2002-2017 Chair
Department of Pharmacodynamics
University of Florida

Research Funding:

Present (PI):

NIH Research grant R01 HD087306 12/2016-11/2021
Effects of maternal cortisol on perinatal cardiac metabolism and function

NIH Research grant R21 HD91599 4/2017-3/2019
Therapeutic use of dichloroacetate in treatment of perinatal mitochondrial deficiency
and cardiac dysfunction

Present (co-I):

NIH Program Project Grant 1P01 HD065647 2011-2017
Corpus Luteal Contribution to Maternal Pregnancy Physiology and Outcomes in ART
(Conrad, PI; Keller-Wood, PI of Core C, co-I Project I)

NIH Research Grant R21 AI120195 2016-2018
Modelling the Fetal Microbiome
(Wood and Triplett, co-PIs; Keller-Wood, co-I)

Past (as PI):

AHA Southeastern Affiliate	14GRNT20420048	2014-2016	Increases in maternal cortisol alter the metabolism and function of the fetal heart at term
NIH Research Grant	R01 HD57871-01,	2008-2013 (no cost to 12/15)	Effects of maternal cortisol on fetal and neonatal growth and metabolism"
NIH Research Grant	R01 HD56288-01	2008-2013 (no-cost to 2/15)	The Baroreflex in Pregnancy: effects of adrenal and placental steroids
NIH Research Grant	R01 DK62080	2003-2008	Cortisol at Mineralocorticoid Receptors Mediate Fetal Physiologic/Genomic Effects
NIH Research Grant	R01 DK38114	1987-1996, 1998-2008	Control of Corticotropin during Pregnancy
NIH Research Grant	R03 HD38734	2001-2003	Steroid Effects on Vascular Reactivity and Nitric Oxide
NIH Research Grant	R01 HD35175	1998-2002	Role of Maternal Corticosteroids in Fetal Homeostasis
American Heart Florida Affiliate Grant-In-Aid		1995-1997	Role of Maternal Cortisol in Fetal Cardiovascular Homeostasis
American Heart Florida Affiliate Grant-In-Aid		1992-1994	Estrogen and Progesterone Effects on Vasopressin Secretion
NIH Research Career Development Award	K01 DK01898	1989-1994	Control of Corticotropin during Pregnancy
American Heart Florida Affiliate Grant-In-Aid		1989-1992	Interactions between cardiovascular and noncardiovascular inputs to AVP and ACTH
NIH New Investigator Award	R23AM36039	1985-1989	Temporal Relations in Control of ACTH by Corticosteroids
NIH Postdoctoral Fellowship		1984-1986	

Current Teaching

PHA5560/PHA5561, Pathophysiology and Patient Assessment (formerly Physiological Basis of Disease) 1998-

Cardiovascular Physiology/Pathophysiology
Reproductive Physiology/Pathophysiology
Endocrine Control of Metabolism/Pathophysiology

PHA5578 Patient Care III: Introduction to Cardiovascular and Pulmonary Diseases-

Module 1: General Cardiovascular Pathophysiology
Pathophysiology of Hypertension
Hypertension Q and A (faculty team member)
Hypertension TBL (faculty team member)

Module 3: Pathophysiology of Ischemic Heart Disease
IHD TBL (faculty team member)

Module 5: Pathophysiology of Heart Failure
Pharmacology of Inotropic Agents, Glycosides, Nephilysin
Inhibitors, Aldosterone Antagonists
Pathophysiology of HF TBL (lead)

Module 6: Pathophysiology of Arrhythmias
Arrhythmia Q and A (faculty team member)
Arrhythmia TBL (faculty team member)

PHA5587 Patient Care V: Endocrinology and Women and Men's Health

Module1: Adrenal Pathophysiology and Pharmacology
Adrenal and Thyroid Disorders TBL (faculty team member)

Module 3: Pharmacology of estrogens and progestins
Contraceptives TBL (faculty team member)

Module 5: Pharmacology of SERMs
Women's Health in Mid to late life TBL (faculty team member)

PHA 6894 Introduction to Graduate Studies (course coordinator, 2016-2017)

Lecture on role of IDPs in graduate mentorship

PHA6905L Research Methods in Pharmaceutical Sciences

Supervised students in laboratory rotations, 1990-

Research Mentorship

Professional student summer research training (Pharm D. students) 1998-2003, 2013-

Minority High School Research Training Program, (1991-1996)

Student Science Training Program, University of Florida (1987, 1992, 1995)

NIH Summer Professional Student Training Program (2000, 2002)

NIH Minority Summer Student training Program (2001, 2002, 2013, 2014)

Foreign Pharmacy student research projects (2003, 2004, 2009)

Doctoral Research Committees, as Chair

Melanie Pecins-Thompson, Pharmacodynamics (graduated 1993)
Eun-Kyung Kim, Pharmacodynamics (graduated 1996)
Darren Roesch, Pharmacodynamics (graduated 1998)
Helen Yi Hua, Physiology/Pharmacology concentration, IDP (Co-Chair, graduated 2002)
Feng Li , Pharmacodynamics (graduated 2003)
Seth Reini, Physiology/Pharmacology concentration, IDP (graduated 2008)
Melissa Landen Lingis, Pharmacodynamics (graduated 2009)
Xiaodi Feng, Pharmacodynamics (graduated 2013)
Andrew Antolic, Pharmacodynamics
Jacquelyn Walejko, Biochemistry concentration, Biomedical Sciences Program; (Co-Chair)
Serene Joseph, Pharmacodynamics
MengChen LI, Physiology concentration, Biomedical Sciences Program

Doctoral Research Committees, as member

Hong-gen Chen, Physiology (graduated 1991)
Christine Saoud, Physiology (graduated 1995)
Hiyan Tong, Physiology (graduated 1998)
Gail Danek, Nursing (graduated 1998)
Patti Green, Pharmacodynamics (graduated 1999)
Kelly Gridley, Pharmacodynamics (graduated 1999)
Scott Purinton, Physiology (graduated 1999)
Pini Orbach, Physiology (graduated 1999)
Robin Martin, Pharmacodynamics (graduated 2000)
Denise McGuire, Nursing (graduated 2000)
Alok Pachori, Pharmacodynamics (graduated 2001)
Damien Giroux, Physiology/Pharmacology concentration, IDP (graduated 2002)
Sharon Reimsnider, Physiology/ Pharmacology concentration, IDP (graduated 2004)
Evelyn Perez, Pharmacodynamics (graduated 2004)
Amanda Shaw, Pharmacodynamics (graduated 2004)
Caren Beck, Pharmacodynamics (graduated 2006)
Christine Schaub, Physiology/Pharmacology concentration, IDP (graduated 2005)
Justin Grobe, Pharmacodynamics (graduated 2006)
Jason Gersting, Physiology/Pharmacology concentration, IDP (graduated 2007)
Melanie Powers, Physiology/Pharmacology concentration, IDP (graduated (2006)
Chinki Bhatia, Pharmacodynamics (graduated 2009)
YanFei Qi, Pharmacodynamics (graduated 2009)
Vinayak Shenoy, Pharmacodynamics (graduated 2009)
Jay Schaub, Pharmacodynamics (graduated 2011)
Erica Haslach, Pharmacodynamics (graduated 2011)
Garima Dutta, Pharmacodynamics (graduated 2012)
Erin Bruce, Pharmacodynamics (graduated 2013)
Anandharajan Rathinasabapathy, Pharmacodynamics (graduated 2015)
Dipanwita Pati, Pharmacodynamics (graduated 2015)
Lei Wang, Pharmacodynamics (graduating 2016)

Justin Smith, Pharmacodynamics (graduating 2016)
Francis Kannampuzha, Animal Molecular and Cellular Biology
Sofia Ortega, Animal Molecular and Cellular Biology

Master's committees

Zuan Yun, Pharmacodynamics (Chair, graduated 2002)
Jarret McCartney, Physiology (Chair, graduated 2010)
Ashley Grapes, Animal Molecular and Cellular Biology (graduated 2013)

University Service

College Committee membership:

Committee for Honors Program in the B.S in Pharmaceutical Sciences, 1989
Task Force on Education of Problem Solving Professionals, 1990
Task Force on Performance Measures, 1992
Curriculum Committee, College of Pharmacy 1995-1998
College of Pharmacy self-study committee (accreditation review), 1999-2001, 2011-2013
Space Committee, 2003-2011
Research Committee, 2012-

Department Committee membership:

Graduate Student Admissions committee, 1992, 1998-2002
Chair, Graduate Student Admissions Committee, 1993-1997

University committee membership:

Committee on Conflict of Interest, 1991
Reviewer, Division of Sponsored Research Career Development Awards, 1991, 2001, 2004
Reviewer, ORTGE Incentive Funds Awards, 2000
Animal Care Advisory Committee 1996-1999
Institutional Animal Use and Care Committee 1998-2001
CTSI TL1 Advisory Committee, 2009-2015

Search Committee membership:

Department of Pharmacodynamics, Chair of committee: 1990; 1994; 2001-2
Department of Pharmaceutics, College of Pharmacy, 1990 and 1992
Department of Physiology, College of Medicine, 1990, 1994
Department of Medicinal Chemistry, 1998, 2004
College of Pharmacy Dean search committee, 2013
College of Pharmacy Preeminence Search in Drug Discovery, 2014-2016

Professional Services

Study section service

Special Reviewer, Endocrinology Study Section, NIH, 1991
External Reviewer, NIH 1993
Special Reviewer, NIH site visit team, 1994

Reviewer, NIH Special Study sections, 1998 and 1999
Reviewer, American Heart association Florida Affiliate, 1995-97
Reviewer, Sun Coast Cardiovascular Research and Education Foundation, 1998-2000
Reviewer, American Heart Assoc Florida Affiliate, Medical Student Training Program, 1998
Study section member, NIDDK Subcommittee B, 1998-2000
Ad hoc reviewer, NIH study section HED-1, October 2000, June 2003
Ad hoc reviewer, NIH special study sections, July 2001 and March 2002
Ad hoc reviewer, Fogarty Awards, NIH, July 2001
Study section member, Perinatology and Pregnancy (PN), 2004-2008
AD hoc reviewer, Perinatology and Pregnancy (PN), 2017

Editorial service

Associate Editor, American Journal of Physiology, regulatory, Integrative and Comparative: 2013-
Editorial Board, American Journal of Physiology: Endocrinology and Metabolism, 2007-2014
Ad hoc Reviewer: Endocrinology, Pediatric Research, Reproductive Sciences, Journal of Physiology

Professional Societies

American Physiological Society
Endocrine Society
Sigma Xi (President, UF Chapter 2010-2011)
Society for Reproductive Investigation

Publications (refereed)

Keller-Wood, ME, Shinsako J, Keil LC and Dallman MF. Insulin-Induced Hypoglycemia in Conscious Dogs: I. Dose-Related Pituitary and Adrenal Responses. *Endocrinology* 109:818-824, 1981.

Keller-Wood ME, Wade C, Shinsako J, Keil, L C, Van Loon GR and Dallman MF. Insulin-Induced Hypoglycemia in Conscious Dogs: Effect of Maintaining Carotid Arterial Glucose Concentrations on the ACTH, Epinephrine and Vasopressin Responses. *Endocrinology* 112:624-632, 1982.

Keller-Wood ME, Shinsako J and Dallman MF. Feedback Inhibition of Adrenocorticotrophic Hormone by Physiological Increases in Plasma Corticosteroids in Conscious Dogs. *J. Clin. Invest.* 71:859-866, 1983.

Keller-Wood ME, Shinsako J and Dallman MF. Integral as well as Proportional Adrenal Responses to ACTH. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 245:R53-R59, 1983.

Keller-Wood ME, Shinsako J and Dallman MF. Inhibition of the ACTH and Corticosteroid Responses to Hypoglycemia after Prior Stress. *Endocrinology* 113:491-496, 1983.

Keller-Wood ME, Shinsako J and Dallman MF. Interaction Between Stimulus Intensity and Corticosteroid Feedback in Control of ACTH. *Am. J. Physiol. (Endo. Met.)* 247:E489-E-494, 1984.

Keller-Wood ME, Kimura B, Shinako J and Phillips MI. Interaction between CRF and angiotensin II in control of ACTH and adrenal steroids. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 250:R396-R402, 1986.

Keller-Wood ME, Kimura B and Phillips MI. Angiotensin II does not alter ACTH responses to hypoglycemia in conscious dogs. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 252:R526-R530, 1987.

Keller-Wood ME. Control of Canine ACTH by corticosteroids: Interaction between dose and time. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 245:R23-R26, 1988.

Keller-Wood M and Bell ME. Evidence for rapid inhibition of ACTH by corticosteroids in dogs. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 255:R344-R349, 1988.

Keller-Wood M, Leeman E, Shinsako J and Dallman MF. Steroid inhibition of canine ACTH: in vivo evidence for feedback at the corticotrope. *Am. J. Physiol (Endocrinol. Metab.)* 255: E241-246, 1988.

Keller-Wood M, Silbiger J and Wood C. Progesterone attenuates the inhibition of adrenocorticotropin responses by cortisol in nonpregnant ewes. *Endocrinology* 123: 647-651, 1988.

Keller-Wood M., Control of canine ACTH by corticosteroids: an integral feedback effect of steroids *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 257: R427-R430, 1989.

Keller-Wood M. Fast Feedback inhibition of canine corticotropin. *Endocrinology* 126:1959-1966, 1990.

Keller-Wood M, Silbiger J and Wood CE. Progesterone-cortisol interaction in control of renin activity but not aldosterone. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 259:R350-356, 1990.

Keller-Wood M and Wood CE. Does the ovine placenta secrete ACTH under normoxic or hypoxic conditions? *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 260:R389-R395, 1991.

Bell M E, Wood CE and **Keller-Wood M**. Influence of Reproductive Activity on Pituitary-Adrenal Activity in the Ewe. *Domestic Animal Endocrinology* 8:245-254, 1991

Keller-Wood M and Wood CE. Effect of ovariectomy on vasopressin, ACTH, and renin activity responses to hypotension. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)*, 261:233-230, 1991

Keller-Wood M and Wood CE. Corticotropin-releasing factor in the ovine fetus and pregnant ewe: role of the placenta. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)*, 261:R995-1002, 1991

Wood CE and **Keller-Wood M.** Induction of parturition by cortisol: effects on negative feedback sensitivity and plasma CRF *J. Develop. Physiol.* 16:287-292, 1991.

Keller-Wood M. Corticotropin responses to hypoglycemia and hypotension during ovine pregnancy. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 266:R180-187, 1994.

Keller-Wood M. Vasopressin responses to hyperosmolality and hypotension during ovine pregnancy. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 266:R187-193, 1994.

Pecins-Thompson M and **Keller-Wood M.** Chronic ovariectomy in the ewe reduces the ACTH response to hypotension, but not hypoglycemia or corticotropin-releasing factors. *Endocrinology* 134:678-684, 1994.

Cudd TA, LeBlanc M, Silver M, Norman W, Madison J, **Keller-Wood M.** and Wood CE. Ontogeny and Ultradian rhythms of adrenocorticotropin and cortisol in the late gestation fetal horse. *J. Endocrinol.* 144:271-283, 1995.

Kim, E-K, Wood CE and **Keller-Wood M.** Characterization of 11 β -hydroxysteroid dehydrogenase activity in fetal and adult ovine tissues. *Reprod. Fert. Dev.* 7:377-383, 1995.

Keller-Wood M. Inhibition of basal and stimulated ACTH by cortisol during ovine pregnancy. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 271:R130-136, 1996.

Roesch DM and **Keller-Wood M.** Progesterone rapidly reduces arterial pressure in ewes. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 272:H386-H391, 1997.

Pecins-Thompson M. and **M. Keller-Wood.** Progesterone effects on blood pressure, plasma volume and responses to hypotension. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 272:R377-R385, 1997.

Keller-Wood M. ACTH responses to hypotension and feedback inhibition of ACTH are increased by chronic progesterone treatment. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 274:R81-87, 1998

Keller-Wood M. Evidence of reset of regulated ACTH in pregnancy: studies in adrenalectomized ewes. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 274: R145-151, 1998

Keller-Wood M. ACTH responses to CRF and AVP in pregnant and nonpregnant ewes. *Am. J. Physiol. (Reg., Int., Comp. Physiol.)* 274:R1762-1768, 1998

Keller-Wood M., Cudd TA, Norman W, Caldwell SM, and Wood CE. A model in sheep for the study of maternal adrenal function during pregnancy. *Laboratory Animal Science* 48:507-512, 1998

Roesch DM and **Keller-Wood M**. Differential effects of pregnancy on mineralocorticoid and glucocorticoid receptor availability and immunoreactivity in cortisol feedback sites. *Neuroendocrinology* 70:55-62, 1999

Keller-Wood M. Effects of a simulated estrous cycle on sodium, volume, ACTH and AVP in sheep. *Domestic Animal Endocrinology* 18:31-40, 2000

Wood CE, Saoud CJ, Stoner TA and **Keller-Wood M**. Estrogen and androgen influence hypothalamic AVP and CRF concentrations in fetal and adult sheep. *Regul Pept.* 98:63-8, 2001

Keller-Wood M and Wood CE. Pregnancy alters cortisol feedback inhibition of stimulated ACTH: studies in adrenalectomized ewes. *Am. J. Physiol.* 280:R1790-8, 2001.

Orbach P, Wood CE and **Keller-Wood M**. Nitric Oxide reduces pressor responsiveness during ovine hypoadrenocorticism. *Clin Exp. Pharm. Physiol* 28: 459-462, 2001

Dandrea J, Cooper S, Ramsay MM, **Keller-Wood M**, Broughton-Pipkin F, Symonds ME, and Stephensen T. The effects of pregnancy and maternal nutrition on the maternal renin-angiotensin system in sheep. *Experimental Physiology* 87:353-359, 2002.

Jensen E, Wood C and **Keller-Wood M**. The normal increase in adrenal secretion during pregnancy contributes to maternal volume expansion and fetal homeostasis. *Journal of the Society for Gynecologic Investigation* 9(6):362-71, 2002

Richards EM, Hua Y, and **Keller-Wood M**. Pharmacology and physiology of ovine corticosteroid receptors. *Neuroendocrinology*.77:2-14, 2003.

Wood CE, Gridley KE and **Keller-Wood M**. Biological activity of 17beta-estradiol-3-sulfate in ovine fetal plasma and uptake in fetal brain. *Endocrinology* 144:599-604, 2003.

Jensen E, Wood CE and **Keller-Wood M**. Alterations in maternal corticosteroid levels influence fetal urine and lung liquid production. *J Soc Gynecol Investig.* 10:480-9, 2003

Jensen E, Wood CE and **Keller-Wood M**. Chronic alterations in ovine maternal corticosteroids influence uterine blood flow and placental and fetal growth. *Am J Physiol (Regul Integr Comp Physiol)* 288(1):R54-61, 2005

Keller-Wood M, Wood CE, Hua HY and Zhang D. Expression of Mineralocorticoid receptors in late gestation ovine fetal lung. *J Soc Gynecol Investig.* 12(2):84-91, 2005.

Ali N, **Keller-Wood M**, and Wood CE. Ontogenetic changes in extrapituitary expression of pro-opiomelanocortin in the developing ovine fetus. *Peptides* 26(2):301-6, 2005

Wood CE, Chen GF and **Keller-Wood M.** Expression of Nitric Oxide Synthase isoforms is reduced in late-gestation ovine fetal brainstem. *Am. J. Physiol. Reg., Int., Comp. Physiol.* 289(2):R613-R619, 2005.

Wood CE, Cousins R, Zhang D, and **Keller-Wood M.** Ontogeny of Expression of Organic Anion Transporters 1 and 3 in Ovine Fetal and Neonatal Kidney. *Exp. Biol. Med.* 230:668-673, 2005.

Keller-Wood M, Powers M, Gersting J, Ali N, and Wood CE. A Genomic Analysis of the Neuroendocrine Development of the Fetal Brain-Pituitary-Adrenal Axis in Late Gestation. *Physiol Genomics* 24:218-24, 2006.

Reini SA, Wood CE, Jensen E and **Keller-Wood M.** Increased maternal cortisol in late gestation ewes decreases fetal cardiac expression of 11 β -HSD2 mRNA and the ratio of AT1 to AT2 receptor mRNA. *Am J Physiol Regul Integr Comp Physiol.* 291(6):R1708-16, 2006.

Jensen E, Wood CE, and **Keller-Wood M.** Reduction of maternal adrenal steroids results in increased VEGF protein without increased eNOS in the ovine placenta. *Placenta.* 28:658-67, 2007

Li F, Wood CE and **Keller-Wood M.** Adrenalectomy alters regulation of blood pressure and endothelial nitric oxide synthase in sheep: modulation by estradiol. *Am J Physiol Regul Integr Comp Physiol* 293: R257-66, 2007.

Keller-Wood M and Wood CE. Regulation of maternal ACTH in ovine pregnancy: does progesterone play a role? *Am J Physiol Endocrinol Metab.* 295:E913-20, 2008

Reini S, Dutta G, Wood C, and **Keller-Wood M.** Cardiac corticosteroid receptors mediate the enlargement of the ovine fetal heart induced by chronic increases in maternal cortisol. *J Endocrinol.* 198: 419-27, 2008

Gersting J, Schaub CE, **Keller-Wood M,** Wood CE. Inhibition of Brain PGHS-2 Prevents the Parturient Increase in Fetal ACTH Secretion in the Sheep Fetus. *Endocrinology* 149:4128-36, 2008.

Schaub CE, Gersting JA, **Keller-Wood M,** Wood CE. Development of ER-alpha and ER-beta expression in the developing ovine brain and pituitary. *Gene Expr Patterns* 8:457-63, 2008.

Keller-Wood, M., vonReitzenstein M, and McCartney J. Is the fetal lung a mineralocorticoid receptor target organ?: Induction of cortisol-regulated genes in the fetal lung, kidney and small intestine. *Neonatology* 95: 47-60, 2008.

Keller-Wood M and Wood CE. Regulation of maternal ACTH in ovine pregnancy: does progesterone play a role? *Am J Physiol Endocrinol Metab.* 295:E913-20, 2008

Reini SA, Wood CE and **Keller-Wood M.** The ontogeny of genes related to ovine fetal cardiac growth. *Gene Expr Patterns.* 9:122-8, 2009.

Jesse NM, McCartney J, Feng X, Richards EM, Wood CE and **Keller-Wood M**. Expression of ENaC subunits, chloride channels, and aquaporins in ovine fetal lung: ontogeny of expression and effects of altered fetal cortisol concentrations. *Am J Physiol Regul Integr Comp Physiol*. 2009 Aug;297(2):R453-61.

Jensen EC, Rochette M, Bennet L, Wood CE, Gunn AJ and **Keller-Wood M**. Physiological changes in maternal cortisol do not alter expression of growth-related genes in the ovine placenta. *Placenta*. 2010 Dec;31(12):1064-9.

Lingis M, Richards EM and **Keller-Wood M**. Differential effects of mineralocorticoid blockade on the hypothalamo-pituitary-adrenal axis in pregnant and nonpregnant ewes. *Am J Physiol Endocrinol Metab*. 2011 Mar;300:E592-9.

Keller-Wood, M, Wood CE, McCartney J, Jesse NM, and Perrone D. A Role for Mineralocorticoid Receptors in the Physiology of the Ovine Fetus: Effects on ACTH and Lung Liquid Composition, *Pediatric Research* 2011 Jun; 69:491-6.

Jensen EC, Bennet L, Wood C, Vickers M, Breier B, Gunn AJ and **Keller-Wood M**. Loss of the pregnancy-induced rise in cortisol concentrations in the ewe impairs the fetal insulin-like growth factor axis. *Reprod Fertil Dev*. 2011; 23:665-72.

Lingis M, Richards EM, Perrone D and **Keller-Wood M**. Serotonergic Effects on Feeding, but not Hypothalamo-Pituitary-Adrenal Secretion, are Altered in Ovine Pregnancy. *Am J Physiol Endocrinol Metab* 2012, 302(10):E1231-8.

Rabaglino MB, Richards E, Denslow N, **Keller-Wood M**, Wood CE. Genomics of estradiol-3-sulfate action in the ovine fetal hypothalamus. *Physiol Genomics*. 2012 Jul 3;44(13):669-77.

Wood CE, Rabaglino MB, Chang EI, Denslow N, **Keller-Wood M**, Richards E. Genomics of the fetal hypothalamic cellular response to transient hypoxia: endocrine, immune, and metabolic responses. *Physiol Genomics*. 2013. 45(13):521-7.

Feng X, Reini S, Richards E, Wood CE, **Keller-Wood M**. Cortisol stimulates proliferation and apoptosis in the late gestation fetal heart: differential effects of mineralocorticoid and glucocorticoid receptors. *Am J Physiol Regul Integr Comp Physiol*. 2013 Aug 15;305(4):R343-50.
Keller-Wood M., Feng X, Wood CE, Richards E, Anthony RV, Dahl GE, Tao S. Elevated maternal cortisol leads to relative maternal hyperglycemia and increased stillbirth in ovine pregnancy. *Am J Physiol Regul Integr Comp Physiol*. 2014 Aug 15;307(4):R405-13.

Richards E, Wood CE, Rabaglino MB, Antolic A, **Keller-Wood M**. Mechanisms of the adverse effects of late gestational increases in maternal cortisol on the fetal heart revealed by transcriptomic analysis of the fetal septum. *Physiol Genomics*. 2014 Aug 1;46(15):547-59.

McCartney J, Richards EM, Wood CE, **Keller-Wood M**. Mineralocorticoid effects in the late gestation ovine fetal lung. *Physiol Rep*. 2014 Jul 16;2(7). pii: e12066. doi: 10.14814/phy2.12066.

Rabaglino MB, **Keller-Wood M**, Wood CE. Transcriptomics of the late gestation ovine fetal brain: modeling the co-expression of immune marker genes. *BMC Genomics*. 2014 Nov 19;15:1001. doi: 10.1186/1471-2164-15-1001.

Antolic A, Feng X, Wood CE, Richards EM, **Keller-Wood M**. Increased maternal nighttime cortisol concentrations in late gestation alter glucose and insulin in the neonatal lamb. *Physiol Rep*. 2015 Sep;3(9).

Chang EI, Zárate MA, Rabaglino MB, Richards EM, **Keller-Wood M**, Wood CE. Ketamine suppresses hypoxia-induced inflammatory responses in the late-gestation ovine fetal kidney cortex. *J Physiol*. 2016 Mar 1;594(5):1295-310.

Wood CE, Chang EI, Richards EM, Rabaglino MB, **Keller-Wood M**. Transcriptomics Modeling of the Late-Gestation Fetal Pituitary Response to Transient Hypoxia. *PLoS One*. 2016 Feb 9;11(2):e 0148465

Chang EI, Zárate MA, Rabaglino MB, Richards EM, Arndt TJ, **Keller-Wood M**, Wood CE. Ketamine decreases inflammatory and immune pathways after transient hypoxia in late gestation fetal cerebral cortex. *Physiol Rep*. 2016 Mar;4(6).

Rabaglino MB, Chang EI, Richards EM, James MO, **Keller-Wood M**, Wood CE. Genomic Effect of Triclosan on the Fetal Hypothalamus: Evidence for Altered Neuropeptide Regulation. *Endocrinology*. 2016 Jul;157(7):2686-97.

Zarate MA, Rodriguez MD, Chang EI, Russell JT, Arndt TJ, Richards EM, Ocasio BA, Aranda E, Gordon EM, Yu K, Neu J, **Keller-Wood M**, Triplett EW, Wood CE. Post-hypoxia Invasion of the fetal brain by multidrug resistant *Staphylococcus*. *Sci Rep*. 2017 Jul 25;7(1):6458.

Antolic A, Wood CE, **Keller-Wood M**. Use of radiotelemetry to assess perinatal cardiac function in the ovine fetus and newborn. *Am J Physiol Regul Integr Comp Physiol*. 2017 Aug 30:

Antolic A, Wood CE, **Keller-Wood M**. Chronic Maternal Hypercortisolemia in Late Gestation Alters Fetal Cardiac Function at Birth. *Am J Physiol Regul Integr Comp Physiol*. 2017 Nov:

Reviews (Refereed)

Keller-Wood ME and Dallman MF. Corticosteroid Inhibition of ACTH secretion. *Endocrine Rev*. 5:1-24, 1984.

Keller-Wood M. Review: Reflex regulation of hormonal responses during pregnancy. *Clinical and Experimental Pharmacology and Physiology* 22:143-151, 1995.

Keller-Wood M and Wood CE. Pituitary-Adrenal Physiology during Pregnancy. *The Endocrinologist* 11:159-170, 2001

Keller-Wood M. Hypothalamic-Pituitary--Adrenal Axis-Feedback Control. *Compr Physiol.* 2015 Jul 1;5(3):1161-82.

Wood CE, **Keller-Wood M.** The critical importance of the fetal hypothalamus-pituitary-adrenal axis. *F1000Res.* 2016 Jan 28;5. pii: F1000 Faculty Rev-115.

Non-refereed Publications

Keller-Wood M and Wood CE. Animal research is integral to our society. *Endocrine News* 19:2, 1994

Book Chapters (non-refereed)

Keller-Wood M and Bland KI. Breast Physiology: Normal, Lactating and diseases states. In: *The Breast* (bland, K.I. and Copeland, E.M., eds.)Saunders, New York, 1991.

Keller-Wood M and Wood CE. Maternal-fetal physiology. In: *Physiology Secrets.* (Raff, H., ed) Hanley and Belfry, Philadelphia, 1999 and 2002

Wood CE and **Keller-Wood M.** Fetal endocrinology, In: *Clinical Obstetrics, The Fetus and Mother* (Reece, E.A. and Hobbins J.C.) Blackwell Publishing, 2007.

Invited Talks

Using systems biology to understand maternal fetal physiology; Liley lecture at Perinatal Research Society, September 2017

Cortisol and the maturing heart: effects of cortisol on cardiac metabolism and dysfunction Oregon Health Sciences Center, July 2016

Role of maternal corticosteroids in fetal growth. Society for Gynecologic Investigation Satellite Meeting, Fetal Physiology Symposium. March 2007.

Effects of maternal cortisol on the fetal heart. Loma Linda University Obstetrics and Gynecology Grand rounds, Perinatal research group meeting, November 2007

Why is maternal cortisol elevated in pregnancy? Loma Linda University, Integrated Biomedical Sciences Seminar, November 2007

Visiting Scientist, Loma Linda University, Obstetrics and Gynecology Grand Rounds, November 2007

Reflex Regulation of Hormonal Responses During Pregnancy, Experimental Biology Meeting, symposium entitled "What Happens to Cardiovascular and Renal Homeostasis During Pregnancy?", Anaheim, CA, April 1994

Role of Reproductive Status in Control of ACTH responses to Stress. Seminar in Physiology and Pharmacology, Auburn University, Auburn, AB, November 1991