

• **Name:** WILLIAM W. HAY, JR., M.D.

• **Current Position:** Professor
Department of Pediatrics
University of Colorado School of Medicine

• **Country:** USA

• **Educational Background:**

College B.A., Dartmouth College, 1967
Cum Laude, Phi Beta Kappa, Senior Fellow

Medical School M.D., Yale University School of Medicine, 1971

Internship University of Colorado Health Sciences Center
Denver, Colorado, Pediatrics, 1971-1972

Residency University of Colorado Health Sciences Center
Denver, Colorado, Pediatrics, 1972-1974

Fellowship University of Colorado Health Sciences Center
Denver, Colorado
Research - Perinatal Medicine, 1976-1978

• **Professional Experiences:**

Clinical Associate, Department of Pediatrics
University of North Dakota School of Medicine, 1975-1976

Clinical Associate, Department of Family Medicine
University of North Dakota School of Medicine, 1975-1976

Assistant Professor, Department of Pediatrics
University of Colorado Health Sciences Center, 1978-1983

Associate Professor, Department of Pediatrics
University of Colorado Health Sciences Center, 1983-1988

Tenure, University of Colorado School of Medicine, 1987

Faculty/Affiliate, Department of Food Science and Human
Nutrition, Colorado State University, Ft. Collins, Colorado, 2001

Professor, Department of Pediatrics
University of Colorado School of Medicine, 1988-present

Member, Faculty of the Graduate School,
University of Colorado Health Sciences Center, 1990-present, (at different times, not permanent)

• **Professional Organizations:**

Honor

- Member, Medical Advisory Board, Denver Metro Chapter, Juvenile Diabetes Foundation, 1980-1981
- Member, Advisory Board, Mothers Milk Bank, Denver, Colorado, 1982-1990
- Chairman, Human Embryology and Development Study Section 1, National Institutes of Health, 1993-1995.
- Member, Advisory Council, Perinatal Research Society, 1992-1997.
- President, Perinatal Research Society, 1996.
- President, Perinatal Nutrition and Metabolism Club, 1997-1998
- Secretary-Treasurer, American Pediatric Society, 1998-2004
- Chairman, Human Embryology and Development Study Section 1, National Institutes of Health, 2001-2004.
- Chairman, Pregnancy & Neonatology Study Section, NIH, 2004-2005.
- Member, American Clinical and Climatological Association, 2004-present
- Vice President/President Elect of the American Pediatric Society, 2006-2007
- Member, NCTR Institutional Clinical Translational Science Award (CTSA) Center Special Emphasis Review Panels, July 20-21, 2006; May 15-16, 2007; February 16-16, 2011
- President, American Pediatric Society, 2007-2008
- Past President, American Pediatric Society, 2008-2009
- President Elect/President/Past President, Western Society for Pediatric Research, 2009-2012
- "Of Counsel" Member by invitation, WSPR Council, 2012-present
- Invited Member, International Perinatal Collegium, 2015-present

Professional Society Memberships

- American Academy of Pediatrics
- Section of Perinatal Pediatrics of the American Academy of Pediatrics
- American Pediatric Society
- Society for Pediatric Research
- Western Society for Pediatric Research
- Perinatal Research Society
- American Physiological Society
- American Diabetes Association (including Council on Diabetes in Pregnancy)
- Society for Experimental Biology and Medicine
- Society for Gynecologic Investigation
- The Nutrition Society (United Kingdom)
- American Institute of Nutrition and the American Society for Clinical Nutrition
- International Federation of Placenta Associations
- Society for the Study of Fetal Physiology
- The Endocrine Society
- American Society for Nutritional Sciences
- World Association of Perinatal Medicine

- Placental Association of the Americas
- International Society for Developmental Origins of Health and Disease
- Society of Clinical Research Associates
- Society for Reproductive Investigation

• **Main Scientific Publications:** [\(See details\)](#)

Brown L, Rozance P, Friedman J, Hay WW Jr., Wesolowski SR. Limited capacity for glucose oxidation in fetal sheep with intrauterine growth restriction. *Am J Physiol Regul Integr Comp Physiol* 2015;309:R920-R928.

Barry JS, Rozance PJ, Brown LD, Anthony RV, Thornburg KL, Hay WW Jr. Increased fetal myocardial sensitivity to insulin-stimulated glucose metabolism during ovine fetal growth restriction. *Experimental Biology and Medicine* 2016; 241: 839–847.

Culpepper C, Wesolowski SR, Benjamin J, Bruce JL, Brown LD, Jonker SS, Wilkening RB, Hay WW Jr., Rozance PJ. Chronic anemic hypoxemia increases plasma glucagon and hepatic PEPCK in late gestation fetal sheep. *Am J Physiol Regul Integr Comp Physiol* 2016;311:R200-R208.

Brown LD, Wesolowski SR, Kailey J, Bourque S, Wilson A, Andrews SE, Hay WW Jr., Rozance PJ. Chronic hyperinsulinemia increases myoblast proliferation in fetal sheep skeletal muscle. *Endocrinology* 2016;157:2447-2460.

Qiao L, Watez J-S, Lee S, Guo Z, Schaack J, Hay WW Jr., Zita MM, Parast M, Shao J. Knockout of maternal adiponectin increases fetal growth in mice: potential role for trophoblast IGFBP1. *Diabetologia* 2016;59:2417-2425.

Brown LD, Davis M, Wai S, Wesolowski SR, Hay WW Jr, Limesand SW, Rozance PJ. Chronically increased amino acids improve insulin secretion, pancreatic vascularity, and islet size in growth restricted fetal sheep. *Endocrinology*. 2016;157:3788-3799.

Soto SM, Blake AC, Wesolowski SR, Rozance PJ, Barthels KB, Gao B, Hetrick B, McCurdy CE, Garza NG, Hay WW Jr, Leinwand LA, Friedman JE, Brown LD. Myoblast replication is reduced in the IUGR fetus despite maintained proliferative capacity in vitro. *J Endocrinol* 2017;232:475-491.

Qiao L, Watez J-S, Lee S, Nguyen A, Schaack J, Hay WW Jr., Shao J. Adiponectin deficiency impairs maternal metabolic adaptation to pregnancy in mice. *Diabetes*, 2017, Jan 10. pii: db161096. doi: 10.2337/db16-1096. [Epub ahead of print] PMID: 28073830

Benjamin JS, Culpepper CB, Brown LD, Wesolowski SR, Jonker SJ, MA, Limesand SW, Wilkening RB, Hay WW Jr., Rozance PJ. Chronic anemic hypoxemia attenuates glucose-stimulated insulin secretion in fetal sheep. *Am J Physiol Regul Integr Comp Physiol* 2017;312:R492-R500.

Brown LD, Kohn J, Rozance PJ, Hay WW Jr., Wesolowski SR. Exogenous amino acids suppress glucose oxidation and potentiate hepatic glucose production in late gestation fetal sheep. *Am J Physiol Regul Integr Comp Physiol*. 2017 Feb 8:ajpregu.00502.2016.

Camacho LE, Chen X, Hay WW Jr., Limesand SW. Enhanced insulin secretion and insulin sensitivity in young lambs with placental insufficiency-induced intrauterine growth restriction. *Am J Physiol Regul Integr Comp Physiol*, in press, 2017.