Timothy R H Regnault

List of Publications by Year
in descending order

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102 papers	3,357 citations	147801 31 h-index	155660 55 g-index
114 all docs	114 docs citations	114 times ranked	5686 citing authors

#	Article	IF	Citations
1	Sex-specific alterations in hepatic cholesterol metabolism in low birth weight adult guinea pigs. Pediatric Research, 2022, 91, 1078-1089.	2.3	2
2	Placental insufficiency induces a sexually dimorphic response in the expression of cardiac growth and metabolic signalling molecules upon exposure to a postnatal western diet in guinea pigs. Journal of Developmental Origins of Health and Disease, 2022, 13, 345-357.	1.4	4
3	Gestational age impacts birth to placental weight ratio and umbilical cord oxygen values with implications for the fetal oxygen margin of safety. Early Human Development, 2022, 164, 105511.	1.8	4
4	Maternal Fructose Intake Causes Developmental Reprogramming of Hepatic Mitochondrial Catalytic Activity and Lipid Metabolism in Weanling and Young Adult Offspring. International Journal of Molecular Sciences, 2022, 23, 999.	4.1	5
5	Fetal sex impacts birth to placental weight ratio and umbilical cord oxygen values with implications for regulatory mechanisms. Biology of Sex Differences, 2022, 13, .	4.1	5
6	Translating developmental origins of health and disease in practice: health care providersâ€™ perspectives. Journal of Developmental Origins of Health and Disease, 2021, 12, 404-410.	1.4	7
7	Seeing the fetus from a DOHaD perspective: discussion paper from the advanced imaging techniques of DOHaD applications workshop held at the 2019 DOHaD World Congress. Journal of Developmental Origins of Health and Disease, 2021, 12, 153-167.	1.4	4
8	Species-specific metabolic responses of songbird, shorebird, and murine cultured myotubes to n-3 polyunsaturated fatty acids. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R362-R376.	1.8	6
9	In Vivo Magnetic Resonance Spectroscopy of Hyperpolarized [<scp>1â€¹³C</scp>]Pyruvate and Proton Density Fat Fraction in a Guinea Pig Model of Nonâ€Alcoholic Fatty Liver Disease Development After Lifeâ€Long Western Diet Consumption. Journal of Magnetic Resonance Imaging, 2021, 54, 1404-1414.	3.4	3
10	Dimming the Powerhouse: Mitochondrial Dysfunction in the Liver and Skeletal Muscle of Intrauterine Growth Restricted Fetuses. Frontiers in Endocrinology, 2021, 12, 612888.	3.5	28
11	Extraordinarily rapid proliferation of cultured muscle satellite cells from migratory birds. Biology Letters, 2021, 17, 20210200.	2.3	4
12	Time Mating Guinea Pigs by Monitoring Changes to the Vaginal Membrane throughout the Estrus Cycle and with Ultrasound Confirmation. Methods and Protocols, 2021, 4, 58.	2.0	3
13	Syncytialization and prolonged exposure to palmitate impacts BeWo respiration. Reproduction, 2021, 161, 73-88.	2.6	6
14	Differential and Synergistic Effects of Low Birth Weight and Western Diet on Skeletal Muscle Vasculature, Mitochondrial Lipid Metabolism and Insulin Signaling in Male Guinea Pigs. Nutrients, 2021, 13, 4315.	4.1	1
15	Hepatic cytochrome P450 function is reduced by life-long Western diet consumption in guinea pig independent of birth weight. Life Sciences, 2021, 287, 120133.	4.3	4
16	The Impact of Maternal Body Composition and Dietary Fat Consumption upon Placental Lipid Processing and Offspring Metabolic Health. Nutrients, 2020, 12, 3031.	4.1	10
17	Microalgae supplementation to late gestation sows and its effects on the health status of weaned piglets fed diets containing high- or low-quality protein sources. Veterinary Immunology and Immunopathology, 2019, 218, 109937.	1.2	9
18	Surgical technique for developing a rabbit model of congenital diaphragmatic hernia and tracheal occlusion. MethodsX, 2019, 6, 594-600.	1.6	1

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19	Systematic review: Impact of resveratrol exposure during pregnancy on maternal and fetal outcomes in animal models of human pregnancy complicationsâ€"Are we ready for the clinic?. Pharmacological Research, 2019, 144, 264-278.	7.1	28
20	Health Benefits of Supplementing Nursery Pig Diets with Microalgae or Fish Oil. Animals, 2019, 9, 80.	2.3	25
21	Western diet consumption through early life induces microvesicular hepatic steatosis in association with an altered metabolome in low birth weight Guinea pigs. Journal of Nutritional Biochemistry, 2019, 67, 219-233.	4.2	9
22	The effects of tracheal occlusion on Wnt signaling in a rabbit model of congenital diaphragmatic hernia. Journal of Pediatric Surgery, 2019, 54, 937-944.	1.6	15
23	Maternal Undernourishment in Guinea Pigs Leads to Fetal Growth Restriction with Increased Hypoxic Cells and Oxidative Stress in the Brain. Developmental Neuroscience, 2019, 41, 290-299.	2.0	3
24	Guinea pig models for translation of the developmental origins of health and disease hypothesis into the clinic. Journal of Physiology, 2018, 596, 5535-5569.	2.9	105
25	Improving pregnancy outcomes in humans through studies in sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 315, R1123-R1153.	1.8	111
26	Maternal nutrient restriction in guinea pigs as an animal model for studying growth-restricted offspring with postnatal catch-up growth. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 314, R647-R654.	1.8	11
27	Altered maternal and placental lipid metabolism and fetal fat development in obesity: Current knowledge and advances in non-invasive assessment. Placenta, 2018, 69, 118-124.	1.5	52
28	The lifelong impact of fetal growth restriction on cardiac development. Pediatric Research, 2018, 84, 537-544.	2.3	17
29	Quantification of fetal organ volume and fat deposition following in utero exposure to maternal Western Diet using MRI. PLoS ONE, 2018, 13, e0192900.	2.5	15
30	Maternal nutrient restriction in guinea pigs leads to fetal growth restriction with evidence for chronic hypoxia. Pediatric Research, 2017, 82, 141-147.	2.3	27
31	Maternal body mass index impacts fetal-placental size at birth and umbilical cord oxygen values with implications for regulatory mechanisms. Early Human Development, 2017, 112, 42-47.	1.8	18
32	O-OBS-MFM-MD-070 Imaging Fetal Subcutaneous Fat Development Using 3D Water-Fat MRI. Journal of Obstetrics and Gynaecology Canada, 2017, 39, 387.	0.7	0
33	Fetal Requirements and Placental Transfer of Nitrogenous Compounds. , 2017, , 444-458.e4.		7
34	Impact of birth weight and postnatal diet on the gut microbiota of young adult guinea pigs. PeerJ, 2017, 5, e2840.	2.0	11
35	Nutrition in Pregnancy: Optimising Maternal Diet and Fetal Adaptations to Altered Nutrient Supply. Nutrients, 2016, 8, 342.	4.1	70
36	Hyperpolarized [1â€‹sup›13‹/sup›C]pyruvate MRI for noninvasive examination of placental metabolism and nutrient transport: A feasibility study in pregnant guinea pigs. Journal of Magnetic Resonance Imaging, 2016, 43, 750-755.	3.4	15

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37	The differential effects of low birth weight and Western diet consumption upon early life hepatic fibrosis development in guinea pig. Journal of Physiology, 2016, 594, 1753-1772.	2.9	26
38	Assessment of in vivo fetal growth and placental vascular function in a novel intrauterine growth restriction model of progressive uterine artery occlusion in guinea pigs. Journal of Physiology, 2016, 594, 1553-1561.	2.9	30
39	Maternal Nutrient Restriction in Guinea Pigs as an Animal Model for Inducing Fetal Growth Restriction. Reproductive Sciences, 2016, 23, 219-227.	2.5	28
40	Placental Adaptations in Growth Restriction. Nutrients, 2015, 7, 360-389.	4.1	171
41	Fishmeal supplementation during ovine pregnancy and lactation protects against maternal stress-induced programming of the offspring immune system. BMC Veterinary Research, 2015, 11, 266.	1.9	7
42	Altered Fetal Skeletal Muscle Nutrient Metabolism Following an Adverse In Utero Environment and the Modulation of Later Life Insulin Sensitivity. Nutrients, 2015, 7, 1202-1216.	4.1	39
43	Adverse In utero and Postnatal Environments Promote Hepatic Microvesicular Steatosis in conjunction with Differential Alterations in Fatty Acid and Amino Acid Metabolism in Early Adulthood. FASEB Journal, 2015, 29, .	0.5	0
44	Low Birth Weight Male Guinea Pig Offspring Display Increased Visceral Adiposity in Early Adulthood. PLoS ONE, 2014, 9, e98433.	2.5	30
45	BMP4 and LGL1 are Down Regulated in an Ovine Model of Congenital Diaphragmatic Hernia. Frontiers in Surgery, 2014, 1, 44.	1.4	7
46	Population-Based Placental Weight Ratio Distributions. International Journal of Pediatrics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.8	26
47	Low birth weight followed by postnatal overâ€nutrition in the guinea pig exposes a predominant player in the development of vascular dysfunction. Journal of Physiology, 2014, 592, 5429-5443.	2.9	21
48	Sex-specific effects of low protein diet on in utero programming of renal G-protein coupled receptors. Journal of Developmental Origins of Health and Disease, 2014, 5, 36-44.	1.4	12
49	Obstetric conditions and the placental weight ratio. Placenta, 2014, 35, 582-586.	1.5	31
50	Fructose, pregnancy and later life impacts. Clinical and Experimental Pharmacology and Physiology, 2013, 40, 824-837.	1.9	50
51	Umbilical uptakes and transplacental concentration ratios of amino acids in severe fetal growth restriction. Pediatric Research, 2013, 73, 602-611.	2.3	46
52	Basic Experimental and Clinical Advances in the Mechanisms Underlying Abnormal Pregnancy Outcomes. Journal of Pregnancy, 2013, 2013, 1-3.	2.4	3
53	Increased collagen deposition in the heart of chronically hypoxic ovine fetuses. Journal of Developmental Origins of Health and Disease, 2013, 4, 470-478.	1.4	8
54	In UteroProgramming of Later Adiposity: The Role of Fetal Growth Restriction. Journal of Pregnancy, 2012, 2012, 1-10.	2.4	91

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55	Male gender promotes an increased inflammatory response to lipopolysaccharide in umbilical vein blood. Journal of Maternal-Fetal and Neonatal Medicine, 2012, 25, 2470-2474.	1.5	41
56	The Long and Short of It: The Role of Telomeres in Fetal Origins of Adult Disease. Journal of Pregnancy, 2012, 2012, 1-8.	2.4	34
57	Central stiffening in adulthood linked to aberrant aortic remodeling under suboptimal intrauterine conditions. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R1731-R1737.	1.8	29
58	Chronic intrauterine hypoxia interferes with aortic development in the late gestation ovine fetus. Journal of Physiology, 2011, 589, 3319-3332.	2.9	43
59	In Utero Origins of Adult Insulin Resistance and Vascular Dysfunction. Seminars in Reproductive Medicine, 2011, 29, 211-224.	1.1	49
60	The Effect of Intermittent Umbilical Cord Occlusion on Elastin Composition in the Ovine Fetus. Reproductive Sciences, 2011, 18, 990-997.	2.5	3
61	The tissue and plasma concentration of polyols and sugars in sheep intrauterine growth retardation. Experimental Biology and Medicine, 2010, 235, 999-1006.	2.4	27
62	Peroxisome Proliferator-Activated Receptor -Î²/Î´, -Î³Agonists and Resveratrol Modulate Hypoxia Induced Changes in Nuclear Receptor Activators of Muscle Oxidative Metabolism. PPAR Research, 2010, 2010, 1-13.	2.4	14
63	Intrauterine Growth Restriction Increases Fetal Hepatic Gluconeogenic Capacity and Reduces Messenger Ribonucleic Acid Translation Initiation and Nutrient Sensing in Fetal Liver and Skeletal Muscle. Endocrinology, 2009, 150, 3021-3030.	2.8	140
64	Effects of early gestation GH administration on placental and fetal development in sheep. Journal of Endocrinology, 2008, 198, 91-99.	2.6	6
65	Chronic late-gestation hypoglycemia upregulates hepatic PEPCK associated with increased PGC1Î± mRNA and phosphorylated CREB in fetal sheep. American Journal of Physiology - Endocrinology and Metabolism, 2008, 294, E365-E370.	3.5	45
66	The expression of ovine placental lactogen, StAR and progesterone-associated steroidogenic enzymes in placentae of overnourished growing adolescent ewes. Reproduction, 2008, 135, 889.	2.6	3
67	The expression of ovine placental lactogen, StAR and progesterone-associated steroidogenic enzymes in placentae of overnourished growing adolescent ewes. Reproduction, 2007, 133, 785-796.	2.6	37
68	Development and Mechanisms of Fetal Hypoxia in Severe Fetal Growth Restriction. Placenta, 2007, 28, 714-723.	1.5	109
69	Ontogeny of endothelial nitric oxide synthase mRNA in an ovine model of fetal and placental growth restriction. American Journal of Obstetrics and Gynecology, 2007, 197, 420.e1-420.e5.	1.3	12
70	In Vivo Techniques for Studying Fetoplacental Nutrient Uptake, Metabolism, and Transport. , 2006, 122, 205-224.		6
71	Developmental Changes in Ovine Myocardial Glucose Transporters and Insulin Signaling Following Hyperthermia-Induced Intrauterine Fetal Growth Restriction. Experimental Biology and Medicine, 2006, 231, 566-575.	2.4	30
72	Mid-gestation transcriptional control of eNOS in the placenta and uterine-umbilical vasculature in an ovine model of fetal growh restriction. American Journal of Obstetrics and Gynecology, 2006, 195, S169.	1.3	0

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73	Placental and vascular transcriptional regulation of eNOS in an ovine model of fetal growth restriction. American Journal of Obstetrics and Gynecology, 2006, 195, S169.	1.3	0
74	Altered Placental and Fetal Expression of IGFs and IGF-Binding Proteins Associated With Intrauterine Growth Restriction in Fetal Sheep During Early and Mid-Pregnancy. Pediatric Research, 2006, 60, 507-512.	2.3	52
75	Fetal hypertension and abnormal Doppler velocimetry in an ovine model of intrauterine growth restriction. American Journal of Obstetrics and Gynecology, 2005, 192, 272-279.	1.3	81
76	Reduction of amniotic and allantoic fluid volume in an ovine model of fetal growth restriction. American Journal of Obstetrics and Gynecology, 2005, 193, S135.	1.3	0
77	Investigating the causes of low birth weight in contrasting ovine paradigms. Journal of Physiology, 2005, 565, 19-26.	2.9	104
78	Fetoplacental transport and utilization of amino acids in IUGR â€" a review. Placenta, 2005, 26, S52-S62.	1.5	122
79	Placental Expression of Angiopoietin-1, Angiopoietin-2 and Tie-2 during Placental Development in an Ovine Model of Placental Insufficiency-Fetal Growth Restriction. Pediatric Research, 2005, 58, 1228-1232.	2.3	32
80	Placental uptake and transport of ACP, a neutral nonmetabolizable amino acid, in an ovine model of fetal growth restriction. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E1114-E1124.	3.5	64
81	Characterization of Glucose Transporter 8 (GLUT8) in the Ovine Placenta of Normal and Growth Restricted Fetuses. Placenta, 2004, 25, 70-77.	1.5	68
82	Glucose-stimulated insulin response in pregnant sheep following acute suppression of plasma non-esterified fatty acid concentrations. Reproductive Biology and Endocrinology, 2004, 2, 64.	3.3	33
83	Fetal Requirements and Placental Transfer of Nitrogenous Compounds. , 2004, , 509-527.		1
84	Endothelial nitric oxide synthase in uteroplacental vasculature in an ovine model of IUGR. American Journal of Obstetrics and Gynecology, 2003, 189, S193.	1.3	3
85	Progressive hemodynamic and acid-base alterations in an ovine model of IUGR of different severity. American Journal of Obstetrics and Gynecology, 2003, 189, S221.	1.3	0
86	The relationship between transplacental O 2 diffusion and placental expression of PlGF, VEGF and their receptors in a placental insufficiency model of fetal growth restriction. Journal of Physiology, 2003, 550, 641-656.	2.9	123
87	Understanding Fetoplacental Growth Through Transgenic IGF Models. Pediatric Research, 2003, 53, 537-537.	2.3	7
88	Induction of Glutamate Dehydrogenase in the Ovine Fetal Liver by Dexamethasone Infusion during Late Gestation¹. Experimental Biology and Medicine, 2003, 228, 100-105.	2.4	5
89	The IGF-II-deficient placenta: aspects of its function. Trends in Endocrinology and Metabolism, 2002, 13, 410-412.	7.1	4
90	Placental Expression of VEGF, PlGF and their Receptors in a Model of Placental Insufficiencyâ€"Intrauterine Growth Restriction (PI-IUGR). Placenta, 2002, 23, 132-144.	1.5	101

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91	Placental Development in Normal and Compromised Pregnanciesâ€" A Review. Placenta, 2002, 23, S119-S129.	1.5	222
92	Inefficient transduction of sheep in utero after intra-amniotic injection of retroviral producer cells. American Journal of Obstetrics and Gynecology, 2002, 187, 469-474.	1.3	3
93	Transport and Metabolism of Amino Acids in Placenta. Endocrine, 2002, 19, 23-42.	2.2	112
94	Cotyledon and binucleate cell nitric oxide synthase expression in an ovine model of fetal growth restriction. Journal of Applied Physiology, 2001, 90, 2420-2426.	2.5	28
95	639 Ultrasound detection of reduced placentome size in an ovine model of intrauterine growth restriction. American Journal of Obstetrics and Gynecology, 2001, 185, S253.	1.3	0
96	Placental Transport and Metabolism of Amino Acids. Placenta, 2001, 22, 145-161.	1.5	145
97	Altered arterial concentrations of placental hormones during maximal placental growth in a model of placental insufficiency. Journal of Endocrinology, 1999, 162, 433-442.	2.6	49
98	Umbilical vein blood flow determination in the ovine fetus: Comparison of Doppler ultrasonographic and steady-state diffusion techniques. American Journal of Obstetrics and Gynecology, 1999, 181, 1149-1153.	1.3	57
99	Endothelial Nitric Oxide Synthase Protein Content in Uterine and Umbilical Vessels in the Early Gestation, Heat-Stress, Ovine Model of Intrauterine Growth Restriction. Pediatric Research, 1999, 45, 51A-51A.	2.3	0
100	Secondary photosensitisation of sheep grazing bambatsi grass (Panicum coloratum var) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (m	1.1	5
101	Aspects of fetoplacental nutrition in intrauterine growth restriction and macrosomia. , 0, , 32-46.		2
102	Ruminant models of prenatal growth restriction. Bioscientifica Proceedings, 0, , .	1.0	5