

Peter W Nathanielsz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1634070/publications.pdf>

Version: 2024-02-01

112
papers

4,519
citations

81889

39
h-index

114455

63
g-index

114
all docs

114
docs citations

114
times ranked

3972
citing authors

#	ARTICLE	IF	CITATIONS
1	Developmental programming of the metabolic syndrome by maternal nutritional imbalance: how strong is the evidence from experimental models in mammals?. <i>Journal of Physiology</i> , 2004, 561, 355-377.	2.9	474
2	Maternal obesity accelerates fetal pancreatic β -cell but not α -cell development in sheep: prenatal consequences. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2009, 297, R835-R843.	1.8	154
3	Animal Models That Elucidate Basic Principles of the Developmental Origins of Adult Diseases. <i>ILAR Journal</i> , 2006, 47, 73-82.	1.8	152
4	AMP-activated protein kinase signalling pathways are down regulated and skeletal muscle development impaired in fetuses of obese, over-nourished sheep. <i>Journal of Physiology</i> , 2008, 586, 2651-2664.	2.9	137
5	Vulnerability of the fetal primate brain to moderate reduction in maternal global nutrient availability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 3011-3016.	7.1	132
6	Production of premature delivery in pregnant rhesus monkeys by androstenedione infusion. <i>Nature Medicine</i> , 1996, 2, 443-448.	30.7	110
7	Glucocorticoid exposure at the dose used clinically alters cytoskeletal proteins and presynaptic terminals in the fetal baboon brain. <i>Journal of Physiology</i> , 2003, 547, 117-123.	2.9	106
8	Fetal programming of sexual development and reproductive function. <i>Molecular and Cellular Endocrinology</i> , 2014, 382, 538-549.	3.2	105
9	Maternal obesity, lipotoxicity and cardiovascular diseases in offspring. <i>Journal of Molecular and Cellular Cardiology</i> , 2013, 55, 111-116.	1.9	103
10	Resveratrol partially prevents oxidative stress and metabolic dysfunction in pregnant rats fed a low protein diet and their offspring. <i>Journal of Physiology</i> , 2016, 594, 1483-1499.	2.9	97
11	Overnutrition and maternal obesity in sheep pregnancy alter the JNK signaling cascades and cardiac function in the fetal heart. <i>FASEB Journal</i> , 2010, 24, 2066-2076.	0.5	92
12	Mechanisms by which maternal obesity programs offspring for obesity: evidence from animal studies. <i>Nutrition Reviews</i> , 2013, 71, S42-S54.	5.8	91
13	Effects of betamethasone administration to the fetal sheep in late gestation on fetal cerebral blood flow. <i>Journal of Physiology</i> , 2000, 528, 619-632.	2.9	87
14	Delay of Preterm Delivery in Sheep by Omega-3 Long-Chain Polyunsaturates. <i>Biology of Reproduction</i> , 1999, 60, 698-701.	2.7	76
15	Local paracrine effects of estradiol are central to parturition in the rhesus monkey. <i>Nature Medicine</i> , 1998, 4, 456-459.	30.7	74
16	Maternal obesity eliminates the neonatal lamb plasma leptin peak. <i>Journal of Physiology</i> , 2011, 589, 1455-1462.	2.9	74
17	Maternal obesity has sex-dependent effects on insulin, glucose and lipid metabolism and the liver transcriptome in young adult rat offspring. <i>Journal of Physiology</i> , 2018, 596, 4611-4628.	2.9	74
18	Development of a system for individual feeding of baboons maintained in an outdoor group social environment. <i>Journal of Medical Primatology</i> , 2004, 33, 117-126.	0.6	71

#	ARTICLE	IF	CITATIONS
19	Maternal obesity induces fibrosis in fetal myocardium of sheep. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2010, 299, E968-E975.	3.5	71
20	Identification and comparative analyses of myocardial miRNAs involved in the fetal response to maternal obesity. <i>Physiological Genomics</i> , 2013, 45, 889-900.	2.3	67
21	In Utero Exposure to Maternal Obesity and Diabetes: Animal Models That Identify and Characterize Implications for Future Health. <i>Clinics in Perinatology</i> , 2007, 34, 515-526.	2.1	65
22	Emergence of insulin resistance in juvenile baboon offspring of mothers exposed to moderate maternal nutrient reduction. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2011, 301, R757-R762.	1.8	65
23	Effect of Bilateral Splanchnic Nerve Section on Adrenal Function in the Ovine Fetus*. <i>Endocrinology</i> , 1990, 127, 2328-2335.	2.8	62
24	Interventions to prevent adverse fetal programming due to maternal obesity during pregnancy. <i>Nutrition Reviews</i> , 2013, 71, S78-S87.	5.8	61
25	Different levels of overnutrition and weight gain during pregnancy have differential effects on fetal growth and organ development. <i>Reproductive Biology and Endocrinology</i> , 2010, 8, 75.	3.3	60
26	Cardiac remodelling in a baboon model of intrauterine growth restriction mimics accelerated ageing. <i>Journal of Physiology</i> , 2017, 595, 1093-1110.	2.9	59
27	Intrauterine growth restriction alters term fetal baboon hypothalamic appetitive peptide balance. <i>Journal of Endocrinology</i> , 2013, 217, 275-282.	2.6	56
28	Maternal nutrient restriction during early to mid gestation up-regulates cardiac insulin-like growth factor (IGF) receptors associated with enlarged ventricular size in fetal sheep. <i>Growth Hormone and IGF Research</i> , 2005, 15, 291-299.	1.1	51
29	Sexually Dimorphic Effects of Maternal Nutrient Reduction on Expression of Genes Regulating Cortisol Metabolism in Fetal Baboon Adipose and Liver Tissues. <i>Diabetes</i> , 2013, 62, 1175-1185.	0.6	50
30	Temporal Structuring of Delivery in the Absence of a Photoperiod: Preparturient Myometrial Activity of the Rhesus Monkey is Related to Maternal Body Temperature and Depends on the Maternal Circadian System1. <i>Biology of Reproduction</i> , 1991, 45, 617-625.	2.7	49
31	Up-Regulation of the Fetal Baboon Hypothalamo-Pituitary-Adrenal Axis in Intrauterine Growth Restriction: Coincidence with Hypothalamic Glucocorticoid Receptor Insensitivity and Leptin Receptor Down-Regulation. <i>Endocrinology</i> , 2013, 154, 2365-2373.	2.8	46
32	Effect of antenatal betamethasone treatment on microtubule-associated proteins MAP1B and MAP2 in fetal sheep. <i>Journal of Physiology</i> , 2001, 530, 497-506.	2.9	45
33	Blood pressure and heart rate in the ovine fetus: ontogenic changes and effects of fetal adrenalectomy. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1999, 276, H248-H256.	3.2	44
34	Influence of maternal undernutrition and overfeeding on cardiac ciliary neurotrophic factor receptor and ventricular size in fetal sheep. <i>Journal of Nutritional Biochemistry</i> , 2008, 19, 409-414.	4.2	43
35	Poor nutrition during pregnancy and lactation negatively affects neurodevelopment of the offspring: evidence from a translational primate model. <i>American Journal of Clinical Nutrition</i> , 2013, 98, 396-402.	4.7	43
36	Adult exercise effects on oxidative stress and reproductive programming in male offspring of obese rats. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 308, R219-R225.	1.8	43

#	ARTICLE	IF	CITATIONS
37	Sexual dimorphism in the fetal cardiac response to maternal nutrient restriction. <i>Journal of Molecular and Cellular Cardiology</i> , 2017, 108, 181-193.	1.9	41
38	Effects of Gestational Age and Labor on Expression of Prostanoid Receptor Genes in Baboon Uterus ¹ . <i>Biology of Reproduction</i> , 2001, 64, 1131-1137.	2.7	40
39	In Utero Exposure to Maternal Obesity and Diabetes: Animal Models That Identify and Characterize Implications for Future Health. <i>Obstetrics and Gynecology Clinics of North America</i> , 2007, 34, 201-212.	1.9	40
40	Prenatal betamethasone exposure has sex specific effects in reversal learning and attention in juvenile baboons. <i>American Journal of Obstetrics and Gynecology</i> , 2011, 204, 545.e1-545.e10.	1.3	40
41	Maternal obesity accelerates rat offspring metabolic ageing in a sex-dependent manner. <i>Journal of Physiology</i> , 2019, 597, 5549-5563.	2.9	40
42	Premature Brain Aging in Baboons Resulting from Moderate Fetal Undernutrition. <i>Frontiers in Aging Neuroscience</i> , 2017, 9, 92.	3.4	39
43	Maternal Obesity in Sheep Increases Fatty Acid Synthesis, Upregulates Nutrient Transporters, and Increases Adiposity in Adult Male Offspring after a Feeding Challenge. <i>PLoS ONE</i> , 2015, 10, e0122152.	2.5	39
44	Accelerated aging of reproductive capacity in male rat offspring of protein-restricted mothers is associated with increased testicular and sperm oxidative stress. <i>Age</i> , 2014, 36, 9721.	3.0	36
45	Maternal obesity impairs fetal cardiomyocyte contractile function in sheep. <i>FASEB Journal</i> , 2019, 33, 2587-2598.	0.5	35
46	Influence of gestational overfeeding on cardiac morphometry and hypertrophic protein markers in fetal sheep. <i>Journal of Nutritional Biochemistry</i> , 2011, 22, 30-37.	4.2	34
47	Maternal nutrient restriction during pregnancy and lactation leads to impaired right ventricular function in young adult baboons. <i>Journal of Physiology</i> , 2017, 595, 4245-4260.	2.9	34
48	Growth and insulin dynamics in two generations of female offspring of mothers receiving a single course of synthetic glucocorticoids. <i>American Journal of Obstetrics and Gynecology</i> , 2012, 207, 203.e1-203.e8.	1.3	33
49	Sex-Dependent Cognitive Performance in Baboon Offspring Following Maternal Caloric Restriction in Pregnancy and Lactation. <i>Reproductive Sciences</i> , 2012, 19, 493-504.	2.5	31
50	Role of catecholamines in maternal-fetal stress transfer in sheep. <i>American Journal of Obstetrics and Gynecology</i> , 2015, 213, 684.e1-684.e9.	1.3	30
51	Reduced placental amino acid transport in response to maternal nutrient restriction in the baboon. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2015, 309, R740-R746.	1.8	29
52	Effect of the Oxytocin Antagonist Atosiban (1-Deamino-2-D-Tyr(OET)-4-Thr-8-Orn- Vasotocin/Oxytocin) on Nocturnal Myometrial Contractions, Maternal Cardiovascular Function, Transplacental Passage, and Fetal Oxygenation in the Pregnant Baboon during the Last Third of Gestation ¹ . <i>Biology of Reproduction</i> , 1997, 57, 320-324.	2.7	28
53	Effects of moderate global maternal nutrient reduction on fetal baboon renal mitochondrial gene expression at 0.9 gestation. <i>American Journal of Physiology - Renal Physiology</i> , 2015, 308, F1217-F1228.	2.7	28
54	Intrauterine growth restriction results in persistent vascular mismatch in adulthood. <i>Journal of Physiology</i> , 2018, 596, 5777-5790.	2.9	28

#	ARTICLE	IF	CITATIONS
55	Elevated glucocorticoids during ovine pregnancy increase appetite and produce glucose dysregulation and adiposity in their granddaughters in response to ad libitum feeding at 1 year of age. <i>American Journal of Obstetrics and Gynecology</i> , 2013, 209, 353.e1-353.e9.	1.3	27
56	Maternal obesity disrupts the methionine cycle in baboon pregnancy. <i>Physiological Reports</i> , 2015, 3, e12564.	1.7	26
57	Opposing Effects of Androgen and Estrogen on Pituitary-Adrenal Function in Nonpregnant Primates1. <i>Biology of Reproduction</i> , 2000, 62, 1445-1451.	2.7	25
58	The insulin-like growth factor system and the fetal brain: Effects of poor maternal nutrition. <i>Reviews in Endocrine and Metabolic Disorders</i> , 2007, 8, 71-84.	5.7	24
59	Different Statistical Approaches to Characterization of Adipocyte Size in Offspring of Obese Rats: Effects of Maternal or Offspring Exercise Intervention. <i>Frontiers in Physiology</i> , 2018, 9, 1571.	2.8	23
60	Behavioral responses of the chronically instrumented sheep fetus to chemosensory stimuli presented in utero.. <i>Behavioral Neuroscience</i> , 1995, 109, 551-562.	1.2	22
61	Timing of the Switch from Myometrial Contractures to Contractions in Late-Gestation Pregnant Rhesus Monkeys as Recorded by Myometrial Electromyogram during Spontaneous Term and Androstenedione-Induced Labor1. <i>Biology of Reproduction</i> , 1997, 56, 557-562.	2.7	22
62	Effects of maternal stress and nutrient restriction during gestation on offspring neuroanatomy in humans. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 117, 5-25.	6.1	22
63	Diet reduction to requirements in obese/overfed ewes from early gestation prevents glucose/insulin dysregulation and returns fetal adiposity and organ development to control levels. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2013, 305, E868-E878.	3.5	21
64	Effect of moderate, 30 percent global maternal nutrient reduction on fetal and postnatal baboon phenotype. <i>Journal of Medical Primatology</i> , 2017, 46, 293-303.	0.6	21
65	Maternal obesity in the ewe increases cardiac ventricular expression of glucocorticoid receptors, proinflammatory cytokines and fibrosis in adult male offspring. <i>PLoS ONE</i> , 2017, 12, e0189977.	2.5	21
66	Prostaglandin Regulation of Fetal Plasma Adrenocorticotropin and Cortisol Concentrations in Late-Gestation Sheep1. <i>Biology of Reproduction</i> , 1998, 58, 514-519.	2.7	19
67	Characterization of decorin mRNA in pregnant intrauterine tissues of the ewe and regulation by steroids. <i>American Journal of Physiology - Cell Physiology</i> , 2000, 278, C199-C206.	4.6	19
68	The Prolonged Effect of Repeated Maternal Glucocorticoid Exposure on the Maternal and Fetal Leptin/Insulin-like Growth Factor Axis in Papio species. <i>Reproductive Sciences</i> , 2009, 16, 308-319.	2.5	18
69	Ageing changes in biventricular cardiac function in male and female baboons (<i>Papio</i> spp.). <i>Journal of Physiology</i> , 2018, 596, 5083-5098.	2.9	16
70	Strength of nonhuman primate studies of developmental programming: review of sample sizes, challenges, and steps for future work. <i>Journal of Developmental Origins of Health and Disease</i> , 2020, 11, 297-306.	1.4	16
71	Increased aggressive and affiliative display behavior in intrauterine growth restricted baboons. <i>Journal of Medical Primatology</i> , 2015, 44, 143-157.	0.6	15
72	Development of a 96-well based assay for kinetic determination of catalase enzymatic-activity in biological samples. <i>Toxicology in Vitro</i> , 2020, 69, 104996.	2.4	15

#	ARTICLE	IF	CITATIONS
73	Importance of the lactation period in developmental programming in rodents. <i>Nutrition Reviews</i> , 2020, 78, 32-47.	5.8	15
74	Sex-dependent vulnerability of fetal nonhuman primate cardiac mitochondria to moderate maternal nutrient reduction. <i>Clinical Science</i> , 2021, 135, 1103-1126.	4.3	15
75	Electrocortical activity in fetal sheep in the last seven days of gestation. <i>Journal of Physiology</i> , 1998, 513, 273-281.	2.9	14
76	A decline in female baboon hypothalamo-pituitary-adrenal axis activity anticipates aging. <i>Aging</i> , 2017, 9, 1375-1385.	3.1	14
77	Fetal sheep adrenal blood flow responses to hypoxemia after splanchnicotomy using fluorescent microspheres. <i>Journal of Applied Physiology</i> , 1998, 84, 82-89.	2.5	13
78	Alteration of fetal oxygenation and responses to acute hypoxemia by increased myometrial contracture frequency produced by pulse administration of oxytocin to the pregnant ewe from 96 to 131 daysâ€™ gestation. <i>American Journal of Obstetrics and Gynecology</i> , 1999, 180, 1202-1208.	1.3	13
79	Increased myometrial contracture frequency at 96â€“140 days accelerates fetal cardiovascular maturation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000, 278, H41-H49.	3.2	13
80	Differences in the In Vitro Sensitivity of Ovine Myometrium and Mesometrium to Oxytocin and Prostaglandins E2 and F2Î± 1. <i>Biology of Reproduction</i> , 1998, 58, 73-78.	2.7	12
81	Contractile activity of the uterus prior to labor alters the temporal organization of spontaneous motor activity in the fetal sheep. , 1996, 29, 667-683.		11
82	Nonhuman primate breath volatile organic compounds associate with developmental programming and cardio-metabolic status. <i>Journal of Breath Research</i> , 2018, 12, 036016.	3.0	11
83	The nonhuman primate hypothalamo-pituitary-adrenal axis is an orchestrator of programming-aging interactions: role of nutrition. <i>Nutrition Reviews</i> , 2020, 78, 48-61.	5.8	11
84	Developmental programming and ageing of male reproductive function. <i>European Journal of Clinical Investigation</i> , 2021, 51, e13637.	3.4	11
85	Cell Type-Specific Regulation of Fetal Fibronectin Expression in Amnion: Conservation of Glucocorticoid Responsiveness in Human and Nonhuman Primates1. <i>Biology of Reproduction</i> , 2000, 62, 1812-1817.	2.7	10
86	Maternal nutrient restriction in baboon programs later-life cellular growth and respiration of cultured skin fibroblasts: a potential model for the study of aging-programming interactions. <i>GeroScience</i> , 2018, 40, 269-278.	4.6	10
87	Role of pregnancy and obesity on vitamin D status, transport, and metabolism in baboons. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2019, 316, E63-E72.	3.5	9
88	Antenatal Synthetic Glucocorticoid Exposure at Human Therapeutic Equivalent Doses Predisposes Middle-Age Male Offspring Baboons to an Obese Phenotype That Emerges With Aging. <i>Reproductive Sciences</i> , 2019, 26, 591-599.	2.5	8
89	Rodent studies of developmental programming and ageing mechanisms. <i>European Journal of Clinical Investigation</i> , 2021, 51, e13631.	3.4	8
90	Changes in Adrenocorticotropin and Cortisol Responsiveness after Repeated Partial Umbilical Cord Occlusions in the Late Gestation Ovine Fetus. <i>Endocrinology</i> , 1997, 138, 259-263.	2.8	8

#	ARTICLE	IF	CITATIONS
91	DHA Supplementation of Obese Rats throughout Pregnancy and Lactation Modifies Milk Composition and Anxiety Behavior of Offspring. <i>Nutrients</i> , 2021, 13, 4243.	4.1	8
92	Comparison of the Myometrial Response to Oxytocin during Daylight with the Response Obtained during the Early Hours of Darkness in the Fetectomized Rhesus Monkey at 160–172 Days Gestational Age. <i>Biology of Reproduction</i> , 1993, 48, 779-785.	2.7	7
93	Aging Endocrine and Metabolic Phenotypes Are Programmed by Mother's Age at Conception in a Sex-Dependent Fashion in the Rat. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2020, 75, 2304-2307.	3.6	7
94	Maternal obesity (MO) programs morphological changes in aged rat offspring small intestine in a sex dependent manner: Effects of maternal resveratrol supplementation. <i>Experimental Gerontology</i> , 2021, 154, 111511.	2.8	7
95	Anesthetic management for instrumentation of the pregnant rhesus monkey. <i>Journal of Medical Primatology</i> , 1991, 20, 223-228.	0.6	7
96	Dipeptidyl peptidase IV inhibition delays developmental programming of obesity and metabolic disease in male offspring of obese mothers. <i>Journal of Developmental Origins of Health and Disease</i> , 2022, 13, 727-740.	1.4	7
97	Effect of maternal obesity on fetal and postnatal baboon (<i>Papio</i> species) early life phenotype. <i>Journal of Medical Primatology</i> , 2019, 48, 90-98.	0.6	6
98	A heretical view: rather than a solely placental protective function, placental 11 β hydroxysteroid dehydrogenase 2 also provides substrate for fetal peripheral cortisol synthesis in obese pregnant ewes. <i>Journal of Developmental Origins of Health and Disease</i> , 2021, 12, 94-100.	1.4	6
99	Prostaglandin Synthase Activity of Fetal Sheep Cotyledons at 122 Days of Gestation and Term: Expression of Prostaglandin Synthetic Capacity in Fetal Cotyledonary Tissue near Labor is Location-Dependent. <i>Biology of Reproduction</i> , 1995, 52, 737-744.	2.7	5
100	Maternal obesity in sheep impairs foetal hepatic mitochondrial respiratory chain capacity. <i>European Journal of Clinical Investigation</i> , 2021, 51, e13375.	3.4	5
101	Age and sex modify cellular proliferation responses to oxidative stress and glucocorticoid challenges in baboon cells. <i>GeroScience</i> , 2021, 43, 2067-2085.	4.6	5
102	Sexual dimorphism in liver cell cycle and senescence signalling pathways in young and old rats. <i>Journal of Physiology</i> , 2021, 599, 4309-4320.	2.9	3
103	Strengths and validity of three methods for assessing rat body fat across the life course. <i>International Journal of Obesity</i> , 2020, 44, 2430-2435.	3.4	2
104	Prenatal stress: Biomarkers of brain development. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 117, 140-141.	6.1	1
105	“Stiffening the sinews of the heart”. <i>Journal of Physiology</i> , 2018, 596, 2279-2280.	2.9	0
106	Maternal programming by hypoxia alters the molecular composition of the oviduct of her offspring, the first pathway her grandchildren will transit: a potential novel pathway for intergenerational programming?. <i>Journal of Physiology</i> , 2019, 597, 2325-2326.	2.9	0
107	Cortical responsive neurostimulation in a baboon with genetic generalized epilepsy. <i>Epilepsy and Behavior</i> , 2021, 120, 107973.	1.7	0
108	General review of contents by Peter Nathanielsz. <i>European Journal of Clinical Investigation</i> , 2021, 51, e13647.	3.4	0

#	ARTICLE	IF	CITATIONS
109	Hematological and blood chemistry responses to docosahexaenoic acid (DHA) and arachidonic acid (ARA) supplementation in baboon neonates. FASEB Journal, 2006, 20, A136.	0.5	0
110	The influence of moderate and high levels of long chain polyunsaturated fatty acid (LCPUFA) supplementation on 12 week old baboon neonate tissue fatty acids. FASEB Journal, 2006, 20, A137.	0.5	0
111	Effects of Maternal Nutrition Excess (MNE) on Fetal Cardiac Mitochondrial Transcripts and Protein at 0.9 G in Non-Human Primates (NHP). FASEB Journal, 2012, 26, 137.4.	0.5	0
112	Cellular resilience and baboon aging. Aging, 2021, 13, 24482-24484.	3.1	0