Jeffrey L Segar

List of Publications by Year
in descending order

110 papers	1,983 citations	201385 27 h-index	329751 37 g-index
118 all docs	118 docs citations	118 times ranked	1782 citing authors

#	Article	IF	Citations
1	William E. Segar (1923â€“2021): pioneer and educator. Pediatric Research, 2022, 91, 262-263.	1.1	0
2	Cardiorespiratory management of infants born at 22 weeksâ€™ gestation: The Iowa approach. Seminars in Perinatology, 2022, 46, 151545.	1.1	9
3	Fluid management considerations in extremely preterm infants born at 22-24 weeks of gestation. Seminars in Perinatology, 2022, 46, 151541.	1.1	12
4	Methods for the Comprehensive in vivo Analysis of Energy Flux, Fluid Homeostasis, Blood Pressure, and Ventilatory Function in Rodents. Frontiers in Physiology, 2022, 13, 855054.	1.3	15
5	Cardiometabolic effects of DOCA-salt in male C57BL/6J mice are variably dependent on sodium and nonsodium components of diet. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2022, 322, R467-R485.	0.9	7
6	Deletion of Prorenin Receptor in the Rostral Ventrolateral Medulla Results in Biphasic and Sexâ€Dependent Pressor Responses in Deoxycorticosterone Acetateâ€salt Hypertension. FASEB Journal, 2022, 36, .	0.2	0
7	Low Sodium Supply in Early Life Causes Growth Restriction and Programs Longâ€Term Changes in Energy Homeostasis. FASEB Journal, 2022, 36, .	0.2	1
8	Chronic intracerebroventricular infusion of angiotensin II causes dose- and sex-dependent effects on intake behaviors and energy homeostasis in C57BL/6J mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2022, 323, R410-R421.	0.9	4
9	Quantification of body fluid compartmentalization by combined time-domain nuclear magnetic resonance and bioimpedance spectroscopy. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R44-R54.	0.9	15
10	Dissociable effects of dietary sodium in early life upon somatic growth, fluid homeostasis, and spatial memory in mice of both sexes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R438-R451.	0.9	6
11	Maturational changes in sodium metabolism in periviable infants. Pediatric Nephrology, 2021, 36, 3693-3698.	0.9	8
12	Fluid management, electrolytes imbalance and renal management in neonates with neonatal encephalopathy treated with hypothermia. Seminars in Fetal and Neonatal Medicine, 2021, 26, 101261.	1.1	8
13	Diuretic use, acute kidney injury, and premature infants: the call for evidence-based guidelines. Pediatric Nephrology, 2021, 36, 3807-3811.	0.9	1
14	Role of dopamine and selective dopamine receptor agonists on mouse ductus arteriosus tone and responsiveness. Pediatric Research, 2020, 87, 991-997.	1.1	3
15	Increased aortic stiffness and elevated blood pressure in response to exercise in adult survivors of prematurity. Physiological Reports, 2020, 8, e14462.	0.7	11
16	Rethinking furosemide use for infants with bronchopulmonary dysplasia. Pediatric Pulmonology, 2020, 55, 1100-1103.	1.0	10
17	Fetal storage of osmotically inactive sodium. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2020, 318, R512-R514.	0.9	6
18	Feeding Formula Eliminates the Necessity of Bacterial Dysbiosis and Induces Inflammation and Injury in the Paneth Cell Disruption Murine NEC Model in an Osmolality-Dependent Manner. Nutrients, 2020, 12, 900.	1.7	10

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19	Human Fetuses Accrue Osmotically Inactive Sodium Stores in Anticipation of Birth. FASEB Journal, 2020, 34, 1-1.	0.2	0
20	Maintenance Intravenous Fluids. Pediatrics, 2019, 143, .	1.0	3
21	Fluid and Electrolyte Management of High-Risk Infants. , 2019, , 151-164.		1
22	Fetal hyperglycemia acutely induces persistent insulin resistance in skeletal muscle. Journal of Endocrinology, 2019, 242, M1-M15.	1.2	12
23	Physiological Approach to Sodium Supplementation in Preterm Infants. American Journal of Perinatology, 2018, 35, 994-1000.	0.6	21
24	Causes and circumstances of death in a neonatal unit over 20 years. Pediatric Research, 2018, 83, 829-833.	1.1	21
25	Impact of the ovarian cycle and pregnancy on plasma chemistry values in ewes. Journal of Veterinary Diagnostic Investigation, 2018, 30, 238-244.	0.5	2
26	Chronic Kidney Disease: A Life Course Health Development Perspective. , 2018, , 375-401.		6
27	Neurohumoral and Autonomic Regulation of Blood Pressure. , 2018, , 3-26.		0
28	Renal adaptive changes and sodium handling in the fetal-to-newborn transition. Seminars in Fetal and Neonatal Medicine, 2017, 22, 76-82.	1.1	17
29	Neural Regulation of Blood Pressure During Fetal and Newborn Life. , 2017, , 573-584.e4.		0
30	Neurohumoral and Autonomic Regulation of Blood Pressure. , 2017, , 1-25.		0
31	Increasing fetal ovine number per gestation alters fetal plasma clinical chemistry values. Physiological Reports, 2016, 4, e12905.	0.7	7
32	Neonatal growth restriction-related leptin deficiency enhances leptin-triggered sympathetic activation and central angiotensin II receptor-dependent stress-evoked hypertension. Pediatric Research, 2016, 80, 244-251.	1.1	5
33	Ovine uterine space restriction causes dysregulation of the reninâ€“angiotensin system in fetal kidneys^{<xref ref-type="fn" rid="afn1">â€</xref>}. Biology of Reproduction, 2016, 96, 211-220.	1.2	1
34	Maternal Hyperglycemia Directly and Rapidly Induces Cardiac Septal Overgrowth in Fetal Rats. Journal of Diabetes Research, 2015, 2015, 1-11.	1.0	29
35	ANG II modulation of cardiac growth and remodeling in immature fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 308, R965-R972.	0.9	9
36	Early-Life Course Socioeconomic Factors and Chronic Kidney Disease. Advances in Chronic Kidney Disease, 2015, 22, 16-23.	0.6	31

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37	Angiotensin IIâ€“induced cardiovascular load regulates cardiac remodeling and related gene expression in late-gestation fetal sheep. Pediatric Research, 2014, 75, 689-696.	1.1	8
38	Genotype-specific alterations in vascular smooth muscle cell function in cystic fibrosis piglets. Journal of Cystic Fibrosis, 2014, 13, 251-259.	0.3	20
39	Hyperglycemia induces embryopathy, even in the absence of systemic maternal diabetes: An in vivo test of the fuel mediated teratogenesis hypothesis. Reproductive Toxicology, 2014, 46, 129-136.	1.3	32
40	Neurohumoral and Autonomic Regulation of Blood Pressure. , 2013, , 3-23.		0
41	Urinary metabolomic markers of aminoglycoside nephrotoxicity in newborn rats. Pediatric Research, 2013, 73, 585-591.	1.1	38
42	Thyroid hormone is required for growth adaptation to pressure load in the ovine fetal heart. Experimental Physiology, 2013, 98, 722-733.	0.9	28
43	Impact of maternal dexamethasone on coronary PGE2 production and prostaglandin-dependent coronary reactivity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R513-R519.	0.9	4
44	Sex-specific programming of hypertension in offspring of late-gestation diabetic rats. Pediatric Research, 2012, 72, 352-361.	1.1	39
45	Maternal Hyperglycemia Disrupts Histone 3 Lysine 36 Trimethylation of the IGF-1 Gene. Journal of Nutrition and Metabolism, 2012, 2012, 1-7.	0.7	29
46	Neonatal Diuretic Therapy: Furosemide, Thiazides, and Spironolactone. Clinics in Perinatology, 2012, 39, 209-220.	0.8	52
47	The effect of adrenalectomy on the cardiac response to subacute fetal anemia. Canadian Journal of Physiology and Pharmacology, 2011, 89, 79-88.	0.7	8
48	Transfusion Effects on Cardiomyocyte Growth and Proliferation in Fetal Sheep After Chronic Anemia. Pediatric Research, 2011, 69, 485-490.	1.1	15
49	Effect of Insulin and Dexamethasone on Fetal Assimilation of Maternal Glucose. Endocrinology, 2011, 152, 255-262.	1.4	14
50	Programming of Adult Cardiovascular Disease following Exposure to Late-Gestation Hyperglycemia. Neonatology, 2011, 100, 198-205.	0.9	20
51	Maternal antioxidant blocks programmed cardiovascular and behavioural stress responses in adult mice. Clinical Science, 2011, 121, 427-436.	1.8	26
52	Neurohumoral Regulation of Blood Pressure in Early Development. , 2011, , 3-22.		0
53	Neural Regulation of Blood Pressure During Fetal and Newborn Life. , 2011, , 789-798.		1
54	Localized Fetomaternal Hyperglycemia: Spatial and Kinetic Definition by Positron Emission Tomography. PLoS ONE, 2010, 5, e12027.	1.1	9

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55	Coronary endothelial function and vascular smooth muscle proliferation are programmed by early-gestation dexamethasone exposure in sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R1607-R1614.	0.9	6
56	Vascular nitric oxide and superoxide anion contribute to sex-specific programmed cardiovascular physiology in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R651-R662.	0.9	47
57	Cardiomyopathy in offspring of diabetic rats is associated with activation of the MAPK and apoptotic pathways. Cardiovascular Diabetology, 2009, 8, 43.	2.7	31
58	Fetal programming alters reactive oxygen species production in sheep cardiac mitochondria. Clinical Science, 2009, 116, 659-668.	1.8	16
59	Programming of growth, insulin resistance and vascular dysfunction in offspring of late gestation diabetic rats. Clinical Science, 2009, 117, 129-138.	1.8	39
60	Coronary Constriction to Angiotensin II Is Enhanced by Endothelial Superoxide Production in Sheep Programmed by Dexamethasone. Pediatric Research, 2008, 63, 370-374.	1.1	10
61	Endothelial Superoxide Production Is Altered in Sheep Programmed by Early Gestation Dexamethasone Exposure. Neonatology, 2008, 93, 19-27.	0.9	22
62	Activation of the Mitogen-Activated Protein Kinases and Akt in Response to Pulmonary Artery Banding in the Fetal Sheep Heart Is Developmentally Regulated. Neonatology, 2008, 93, 145-152.	0.9	5
63	Maternal Low Protein Diet and Fetal Glucocorticoid Exposure Program Adult Murine Cardiovascular and Endocrine Status. FASEB Journal, 2008, 22, 947.10.	0.2	0
64	Murine aortic reactivity is programmed equally by maternal low protein diet or late gestation dexamethasone. Journal of Maternal-Fetal and Neonatal Medicine, 2007, 20, 833-841.	0.7	18
65	Increased Erythropoietin Elimination in Fetal Sheep Following Chronic Phlebotomy. Pharmaceutical Research, 2007, 24, 1653-1659.	1.7	6
66	Expression of 11â€beta hydroxysteroid dehydrogenase type 2 in the murine placenta and its regulation in cultured placental trophoblasts. FASEB Journal, 2007, 21, A1420.	0.2	0
67	Mitogen-activated protein kinase activation and regulation in the pressure-loaded fetal ovine heart. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H1587-H1595.	1.5	13
68	Early gestation dexamethasone alters baroreflex and vascular responses in newborn lambs before hypertension. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 291, R481-R488.	0.9	38
69	The Mitogen-Activated Protein Kinases and Akt Are Developmentally Regulated in the Chronically Anemic Fetal Sheep Heart. Journal of the Society for Gynecologic Investigation, 2006, 13, 157-165.	1.9	11
70	Newborn lamb coronary artery reactivity is programmed by early gestation dexamethasone before the onset of systemic hypertension. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R1169-R1176.	0.9	38
71	Correlation between myocardial malate/aspartate shuttle activity and EAAT1 protein expression in hyper- and hypothyroidism. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H2521-H2526.	1.5	26
72	Early gestation dexamethasone programs enhanced postnatal ovine coronary artery vascular reactivity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 288, R46-R53.	0.9	36

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73	Myocardial vascular and metabolic adaptations in chronically anemic fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 289, R1736-R1745.	0.9	26
74	Regulation of Myocardial Glucose Transporters GLUT1 and GLUT4 in Chronically Anemic Fetal Lambs. Pediatric Research, 2005, 58, 713-718.	1.1	10
75	Late-gestation betamethasone enhances coronary artery responsiveness to angiotensin II in fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2004, 286, R80-R88.	0.9	20
76	Ontogeny of Vascular Growth Factors in Perinatal Sheep Myocardium. Journal of the Society for Gynecologic Investigation, 2004, 11, 503-510.	1.9	3
77	Neonatal vulnerability to ischemia and reperfusion: cardioplegic arrest causes greater myocardial apoptosis in neonatal lambs than in mature lambs. Journal of Thoracic and Cardiovascular Surgery, 2004, 127, 490-497.	0.4	41
78	Localization and function of the brain excitatory amino acid transporter type 1Bin cardiac mitochondria. Journal of Molecular and Cellular Cardiology, 2004, 37, 33-41.	0.9	45
79	Apoptosis-related mitochondrial dysfunction in the early postoperative neonatal lamb heart. Annals of Thoracic Surgery, 2004, 78, 948-955.	0.7	24
80	Neurohumoral Regulation of Blood Pressure in Early Development. , 2004, , 3-21.		1
81	Neural Regulation of Blood Pressure During Fetal and Newborn Life. , 2004, , 717-726.		2
82	Myocardial apoptosis after cardioplegic arrest in the neonatal lamb. Journal of Thoracic and Cardiovascular Surgery, 2003, 125, 1268-1273.	0.4	14
83	Metabolic Adaptation of the Fetal and Postnatal Ovine Heart: Regulatory Role of Hypoxia-Inducible Factors and Nuclear Respiratory Factor-1. Pediatric Research, 2002, 52, 269-278.	1.1	46
84	Optimization of high-frequency oscillatory ventilation for the treatment of experimental pneumothorax. Critical Care Medicine, 2002, 30, 1131-1135.	0.4	28
85	Effects of gestational age on myocardial blood flow and coronary flow reserve in pressure-loaded ovine fetal hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H1359-H1369.	1.5	17
86	Inhibition of sympathetic responses at birth in sheep by lesion of the paraventricular nucleus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 283, R1395-R1403.	0.9	10
87	Effects of fetal ovine adrenalectomy on sympathetic and baroreflex responses at birth. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2002, 283, R460-R467.	0.9	16
88	Angiotensin II in cardiac pressure-overload hypertrophy in fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 281, R2037-R2047.	0.9	30
89	Glucocorticoid modulation of cardiovascular and autonomic function in preterm lambs: role of ANG II. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R646-R654.	0.9	30
90	Autonomic Adjustments to Severe Hypotension in Fetal and Neonatal Sheep. Pediatric Research, 2001, 49, 56-62.	1.1	15

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91	Responses of Fetal Ovine Systemic and Umbilical Arteries to Angiotensin II. Pediatric Research, 2001, 49, 826-833.	1.1	18
92	Metabolic Adaptation of the Hypertrophied Heart: Role of the Malate/Aspartate and Î± -Glycerophosphate Shuttles. Journal of Molecular and Cellular Cardiology, 2000, 32, 2287-2297.	0.9	37
93	Mechano- and chemoreceptor modulation of renal sympathetic nerve activity at birth in fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1999, 276, R1295-R1301.	0.9	3
94	Reply. Journal of Pediatrics, 1999, 134, 383-384.	0.9	2
95	Development of baroreflex influences on heart rate variability in preterm infants. Early Human Development, 1998, 53, 37-52.	0.8	52
96	The effect of inhaled nitric oxide therapy on bleeding time and platelet aggregation in neonates. Journal of Pediatrics, 1998, 132, 731-734.	0.9	84
97	Ontogeny and Regulation of Cardiac Angiotensin Types 1 and 2 Receptors during Fetal Life in Sheep. Pediatric Research, 1998, 44, 323-329.	1.1	24
98	Angiotensin AT1receptor blockade fails to attenuate pressure-overload cardiac hypertrophy in fetal sheep. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1997, 273, R1501-R1508.	0.9	26
99	Changes in body water compartments with diuretic therapy in infants with chronic lung disease. Early Human Development, 1997, 48, 99-107.	0.8	21
100	Effect of Cortisol on Gene Expression of the Renin-Angiotensin System in Fetal Sheep. Pediatric Research, 1995, 37, 741-746.	1.1	67
101	Differential Gene Expression and Regulation of Renal Angiotensin II Receptor Subtypes (AT1 and AT2) during Fetal Life in Sheep. Pediatric Research, 1995, 38, 896-904.	1.1	52
102	Role of Sympathetic Activity in the Generation of Heart Rate and Arterial Pressure Variability in Fetal Sheep. Pediatric Research, 1994, 35, 250-254.	1.1	29
103	Ontogenic Changes and Regulation of Renal Angiotensin II Type 1 Receptor Gene Expression during Fetal and Newborn Life. Pediatric Research, 1994, 36, 755-762.	1.1	47
104	Influence of renal nerves on renal function during development. Pediatric Nephrology, 1993, 7, 667-671.	0.9	16
105	Hemodynamic Changes during Endotracheal Suctioning Are Mediated by Increased Autonomic Activity. Pediatric Research, 1993, 33, 649-652.	1.1	21
106	Addition of metolazone to overcome tolerance to furosemide in infants with bronchopulmonary dysplasia. Journal of Pediatrics, 1992, 120, 966-973.	0.9	36
107	Mechanisms regulating renal sodium excretion during development. Pediatric Nephrology, 1992, 6, 205-213.	0.9	51
108	Neural control of renal hemodynamics and function during development. Pediatric Nephrology, 1990, 4, 436-441.	0.9	9

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109	Metabolic Adaptation of the Fetal and Postnatal Ovine Heart: Regulatory Role of Hypoxia-Inducible Factors and Nuclear Respiratory Factor-1. , 0, .		3
110	Postnatal fluid balance â€“ itâ€™s time to pay attention. Journal of Perinatology, 0, , .	0.9	1