# Walter L Murfee

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 82 papers | 1,769 citations | 331670 21 h-index | 330143 37 g-index |
| 84 all docs | 84 docs citations | 84 times ranked | 2340 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | An Tissue Culture Method for Discovering Cell Dynamics Involved in Stromal Vascular Fraction Using the Mouse Mesentery. Methods in Molecular Biology, 2022, 2441, 157-170. | 0.9 | 1 |
| 2 | Aging related impairment of brain microvascular bioenergetics involves oxidative phosphorylation and glycolytic pathways. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 1410-1424. | 4.3 | 18 |
| 3 | Glycolytic and Oxidative Phosphorylation Defects Precede the Development of Senescence in Primary Human Brain Microvascular Endothelial Cells. GeroScience, 2022, 44, 1975-1994. | 4.6 | 19 |
| 4 | State of the field: cellular and exosomal therapeutic approaches in vascular regeneration. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H647-H680. | 3.2 | 13 |
| 5 | Estimation of shear stress values along endothelial tip cells past the lumen of capillary sprouts. Microvascular Research, 2022, 142, 104360. | 2.5 | 4 |
| 6 | Linking arterial stiffness to microvascular remodeling. , 2022, , 195-209. | | 0 |
| 7 | Viewing Stromal Vascular Fraction de novo Vessel Formation and Association with Host Microvasculature Using the Rat Mesentery Culture Model. Microcirculation, 2022, , e12758. | 1.8 | 2 |
| 8 | A Novel ex vivo Method for Investigating Vascularization of Transplanted Islets. Journal of Vascular Research, 2022, 59, 229-238. | 1.4 | 0 |
| 9 | Incorporation of Tumor Spheroids into an Exâ€vivo Tissue Culture Model for Investigating Cancer Cellâ€“Microvascular Interactions. FASEB Journal, 2022, 36, . | 0.5 | 0 |
| 10 | Estimation of Shear Stress Heterogeneity along Capillary Segments in Angiogenic Rat Mesenteric Microvascular Networks. FASEB Journal, 2022, 36, . | 0.5 | 0 |
| 11 | Microvascular dysfunction and kidney disease: Challenges and opportunities?. Microcirculation, 2021, 28, e12661. | 1.8 | 20 |
| 12 | A clinical perspective on adiposeâ€derived cell therapy for enhancing microvascular health and function: Implications and applications for reconstructive surgery. Microcirculation, 2021, 28, e12672. | 1.8 | 9 |
| 13 | Biomimetic Models of the Microcirculation for Scientific Discovery and Therapeutic Testing. , 2021, , 1-23. | | 0 |
| 14 | Pericyte migration and proliferation are tightly synchronized to endothelial cell sprouting dynamics. Integrative Biology (United Kingdom), 2021, 13, 31-43. | 1.3 | 19 |
| 15 | Clinical perspectives on the microcirculation. Microcirculation, 2021, 28, e12688. | 1.8 | 0 |
| 16 | Computational Evaluation of Wall Shear Stress Experienced by Endothelial Tip Cells along Capillary Sprouts. FASEB Journal, 2021, 35, . | 0.5 | 0 |
| 17 | Biomimetic Models of the Microcirculation for Scientific Discovery and Therapeutic Testing. Reference Series in Biomedical Engineering, 2021, , 321-342. | 0.1 | 0 |
| 18 | Lymphaticâ€toâ€blood vessel transition in adult microvascular networks: A discovery made possible by a topâ€down approach to biomimetic model development. Microcirculation, 2020, 27, e12595. | 1.8 | 13 |

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| 19 | The maintenance of adult peripheral adult nerve and microvascular networks in the rat mesentery culture model. Journal of Neuroscience Methods, 2020, 346, 108923. | 2.5 | 2 |
| 20 | Pericyte Bridges in Homeostasis and Hyperglycemia. Diabetes, 2020, 69, 1503-1517. | 0.6 | 25 |
| 21 | A novel tissue culture model for evaluating the effect of aging on stem cell fate in adult microvascular networks. GeroScience, 2020, 42, 515-526. | 4.6 | 8 |
| 22 | Linking lymphatic function to disease. Journal of Physiology, 2020, 598, 3065-3066. | 2.9 | 3 |
| 23 | Bioreactor System to Perfuse Mesentery Microvascular Networks and Study Flow Effects During Angiogenesis. Tissue Engineering - Part C: Methods, 2019, 25, 447-458. | 2.1 | 11 |
| 24 | Emerging topics in microvascular research: Advancing our understanding by interdisciplinary exploration. Microcirculation, 2019, 26, e12558. | 1.8 | 2 |
| 25 | Stromal Vascular Fraction Vasculogenesis, Vessel Incorporation, and Integration with Intact Angiogenic Microvascular Networks in an Ex Vivo Cultured Tissue Model. FASEB Journal, 2019, 33, 517.5. | 0.5 | 0 |
| 26 | An Ex Vivo Model for Investigating Transplanted Pancreatic Islet Vascular Integration. FASEB Journal, 2019, 33, 685.10. | 0.5 | 0 |
| 27 | Endothelial Cell Phenotypes are Maintained During Angiogenesis in Cultured Microvascular Networks. Scientific Reports, 2018, 8, 5887. | 3.3 | 20 |
| 28 | A Microcontroller Operated Device for the Generation of Liquid Extracts from Conventional Cigarette Smoke and Electronic Cigarette Aerosol. Journal of Visualized Experiments, 2018, , . | 0.3 | 0 |
| 29 | Lymphatic Vessel Network Structure and Physiology. , 2018, 9, 207-299. | | 214 |
| 30 | Induction of microvascular network growth in the mouse mesentery. Microcirculation, 2018, 25, e12502. | 1.8 | 7 |
| 31 | A Novel ex vivo Mouse Mesometrium Culture Model for Investigating Angiogenesis in Microvascular Networks. Journal of Vascular Research, 2018, 55, 125-135. | 1.4 | 8 |
| 32 | A novel high-throughput assay for respiration in isolated brain microvessels reveals impaired mitochondrial function in the aged mice. GeroScience, 2018, 40, 365-375. | 4.6 | 54 |
| 33 | Understanding angiogenesis during aging: opportunities for discoveries and new models. Journal of Applied Physiology, 2018, 125, 1843-1850. | 2.5 | 29 |
| 34 | Modelling microvascular pathology. Nature Biomedical Engineering, 2018, 2, 349-350. | 22.5 | 4 |
| 35 | An Ex Vivo Platform for Studying Angiogenesis in Perfused Microvascular Networks. FASEB Journal, 2018, 32, 577.1. | 0.5 | 0 |
| 36 | Angiogenesis is Not Impaired in Cultured Rat Mesenteric Microvascular Networks. FASEB Journal, 2018, 32, 578.8. | 0.5 | 0 |

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| 37 | When angiogenesis is not good enough. Journal of Physiology, 2017, 595, 1439-1439. | 2.9 | 1 |
| 38 | Evaluation of Arteriolar Smooth Muscle Cell Function in an Ex Vivo Microvascular Network Model. Scientific Reports, 2017, 7, 2195. | 3.3 | 14 |
| 39 | Microfluidics Technologies and Approaches for Studying the Microcirculation. Microcirculation, 2017, 24, e12377. | 1.8 | 3 |
| 40 | Aging is associated with impaired angiogenesis, but normal microvascular network structure, in the rat mesentery. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H275-H284. | 3.2 | 13 |
| 41 | An <em>Ex Vivo</em> Method for Time-Lapse Imaging of Cultured Rat Mesenteric Microvascular Networks. Journal of Visualized Experiments, 2017, , . | 0.3 | 15 |
| 42 | Lysophosphatidic acid does not cause blood/lymphatic vessel plasticity in the rat mesentery culture model. Physiological Reports, 2016, 4, e12857. | 1.7 | 2 |
| 43 | Laser Directâ€Write Onto Live Tissues: A Novel Model for Studying Cancer Cell Migration. Journal of Cellular Physiology, 2016, 231, 2333-2338. | 4.1 | 34 |
| 44 | Macrophages: An Inflammatory Link Between Angiogenesis and Lymphangiogenesis. Microcirculation, 2016, 23, 95-121. | 1.8 | 240 |
| 45 | Estimation of the Pressure Drop Required for Lymph Flow through Initial Lymphatic Networks. Lymphatic Research and Biology, 2016, 14, 62-69. | 1.1 | 16 |
| 46 | An Ex Vivo Tissue Culture Model for Anti-angiogenic Drug Testing. Methods in Molecular Biology, 2016, 1464, 85-95. | 0.9 | 8 |
| 47 | An Ex Vivo Model for Anti-Angiogenic Drug Testing on Intact Microvascular Networks. PLoS ONE, 2015, 10, e0119227. | 2.5 | 23 |
| 48 | Printing cancer cells into intact microvascular networks: a model for investigating cancer cell dynamics during angiogenesis. Integrative Biology (United Kingdom), 2015, 7, 1068-1078. | 1.3 | 58 |
| 49 | Applications of computational models to better understand microvascular remodelling: a focus on biomechanical integration across scales. Interface Focus, 2015, 5, 20140077. | 3.0 | 12 |
| 50 | Estimation of Pressure Drop Required for Lymph Flow through Initial Collecting Lymphatics. FASEB Journal, 2015, 29, 633.2. | 0.5 | 0 |
| 51 | Comparison of Network Resistances in Aged Versus Adult Microvascular Networks. FASEB Journal, 2015, 29, 786.7. | 0.5 | 0 |
| 52 | Lysophosphatidic Acid Stimulation Does Not Induce a Lymphatic Identity along Blood Vessels in Intact Microvascular Networks Ex Vivo. FASEB Journal, 2015, 29, 630.9. | 0.5 | 0 |
| 53 | Tracking Human Adiposeâ€Derived Stem Cells (hASCs) in an Ex Vivo Microvascular Network Model. FASEB Journal, 2015, 29, 790.2. | 0.5 | 1 |
| 54 | Targeting Pericytes for Angiogenic Therapies. Microcirculation, 2014, 21, 345-357. | 1.8 | 81 |

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|---|---|---|---|
| 55 | <scp>VEGF</scp>â€€ Induces Lymphangiogenesis and Angiogenesis in the Rat Mesentery Culture Model. Microcirculation, 2014, 21, 532-540. | 1.8 | 48 |
| 56 | Vascular islands during microvascular regression and regrowth in adult networks. Frontiers in Physiology, 2013, 4, 108. | 2.8 | 15 |
| 57 | An angiogenesis model for investigating multicellular interactions across intact microvascular networks. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H235-H245. | 3.2 | 53 |
| 58 | Relationships Between Lymphangiogenesis and Angiogenesis During Inflammation in Rat Mesentery Microvascular Networks. Lymphatic Research and Biology, 2012, 10, 198-207. | 1.1 | 45 |
| 59 | Spatiotemporal Distribution of Neurovascular Alignment in Remodeling Adult Rat Mesentery Microvascular Networks. Journal of Vascular Research, 2012, 49, 299-308. | 1.4 | 10 |
| 60 | Rat Mesentery Exteriorization: A Model for Investigating the Cellular Dynamics Involved in Angiogenesis. Journal of Visualized Experiments, 2012, , e3954. | 0.3 | 11 |
| 61 | Identification of class III Î²-tubulin as a marker of angiogenic perivascular cells. Microvascular Research, 2012, 83, 257-262. | 2.5 | 38 |
| 62 | Cell proliferation along vascular islands during microvascular network growth. BMC Physiology, 2012, 12, 7. | 3.6 | 14 |
| 63 | The effect of microvascular pattern alterations on network resistance in spontaneously hypertensive rats. Medical and Biological Engineering and Computing, 2012, 50, 585-593. | 2.8 | 11 |
| 64 | Passive recruitment of circulating leukocytes into capillary sprouts from existing capillaries in a microfluidic system. Lab on A Chip, 2011, 11, 1924. | 6.0 | 21 |
| 65 | Matrix Metalloproteinase Activity Causes VEGFRâ€2 Cleavage and Microvascular Rarefaction in Rat Mesentery. Microcirculation, 2011, 18, 228-237. | 1.8 | 20 |
| 66 | Angiogenesis in Mesenteric Microvascular Networks from Spontaneously Hypertensive Versus Normotensive Rats. Microcirculation, 2011, 18, 574-582. | 1.8 | 15 |
| 67 | The Distribution of Fluid Shear Stresses in Capillary Sprouts. Cardiovascular Engineering and Technology, 2011, 2, 124-136. | 1.6 | 26 |
| 68 | Lymphatic/Blood Endothelial Cell Connections at the Capillary Level in Adult Rat Mesentery. Anatomical Record, 2010, 293, spc1-spc1. | 1.4 | 0 |
| 69 | Lymphatic/Blood Endothelial Cell Connections at the Capillary Level in Adult Rat Mesentery. Anatomical Record, 2010, 293, 1629-1638. | 1.4 | 25 |
| 70 | Microvascular NG2 expression patterns in response to aging, ischemic injury, and disease in mouse spinotrapezius muscle. FASEB Journal, 2009, 23, 592.20. | 0.5 | 0 |
| 71 | Chapter 12 Structure of Microvascular Networks in Genetic Hypertension. Methods in Enzymology, 2008, 444, 271-284. | 1.0 | 25 |
| 72 | Microvascular Network Restructuring Associated with MMP Inhibition in Spontaneously Hypertensive Rats. FASEB Journal, 2008, 22, 732.8. | 0.5 | 1 |

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| 73 | Discontinuous Expression of Endothelial Cell Adhesion Molecules along Initial Lymphatic Vessels in Mesentery: The Primary Valve Structure. Lymphatic Research and Biology, 2007, 5, 81-90. | 1.1 | 48 |
| 74 | Computational Network Model Prediction of Hemodynamic Alterations Due to Arteriolar Remodeling in Interval Sprint Trained Skeletal Muscle. Microcirculation, 2007, 14, 181-192. | 1.8 | 24 |
| 75 | EphB4 Expression Along Adult Rat Microvascular Networks: EphB4 Is More Than a Venous Specific Marker. Microcirculation, 2007, 14, 253-267. | 1.8 | 28 |
| 76 | Analysis of primary valve structure along initial lymphatic networks in adult rat mesentery. FASEB Journal, 2007, 21, A490. | 0.5 | 0 |
| 77 | Perivascular Cells Along Venules Upregulate NG2 Expression During Microvascular Remodeling. Microcirculation, 2006, 13, 261-273. | 1.8 | 70 |
| 78 | NG2 proteoglycan expression is functionally involved in microvascular remodeling. FASEB Journal, 2006, 20, A712. | 0.5 | 0 |
| 79 | Differential Arterial/Venous Expression of NG2 Proteoglycan in Perivascular Cells Along Microvessels: Identifying a Venuleâ€Specific Phenotype. Microcirculation, 2005, 12, 151-160. | 1.8 | 119 |
| 80 | Cell Proliferation in Mesenteric Microvascular Network Remodeling in Response to Elevated Hemodynamic Stress. Annals of Biomedical Engineering, 2004, 32, 1662-1666. | 2.5 | 6 |
| 81 | Enhanced Smooth Muscle Cell Coverage of Microvessels Exposed to Increased Hemodynamic Stresses In Vivo. Circulation Research, 2003, 92, 929-936. | 4.5 | 66 |
| 82 | A Challenge for Engineering Biomimetic Microvascular Models: How do we Incorporate the Physiology?. Frontiers in Bioengineering and Biotechnology, 0, 10, . | 4.1 | 3 |