Bethan E Phillips

List of Publications by Year in Descending Order

97 papers	1,658 citations	23 h-index	38 g-index
106 ext. papers	2,242 ext. citations	5.3 avg, IF	4.78 L-index

#	Paper	IF	Citations
97	The Combined Oral Stable Isotope Assessment of Muscle (COSIAM) reveals D-3 creatine derived muscle mass as a standout cross-sectional biomarker of muscle physiology vitality in older age.. *GeroScience*, **2022**, 1	8.9	1
96	Pharmacological hypogonadism impairs molecular transducers of exercise-induced muscle growth in humans.. *Journal of Cachexia, Sarcopenia and Muscle*, **2022**,	10.3	1
95	Neuromuscular recruitment strategies of the vastus lateralis according to sex.. *Acta Physiologica*, **2022**, e13803	5.6	1
94	Regenerative Rehabilitation in Sarcopenia, Dynapenia, and Frailty. *Physiology in Health and Disease*, **2022**, 121-176	0.2	
93	The role of resistance exercise training for improving cardiorespiratory fitness in healthy older adults: a systematic review and meta-analysis. *Age and Ageing*, **2022**, 51,	3	1
92	Association between frailty and C-terminal agrin fragment with 3-month mortality following ST-elevation myocardial infarction.. *Experimental Gerontology*, **2021**, 158, 111658	4.5	1
91	Factors associated with electrical stimulation-induced performance fatigability are dependent upon stimulation location. *Experimental Physiology*, **2021**, 106, 828-836	2.4	2
90	Using a quick timed-up-and-go test to predict surgical risk. *JCSM Rapid Communications*, **2021**, 4, 159-165	2.6	
89	Lifelong exercise is associated with more homogeneous motor unit potential features across deep and superficial areas of vastus lateralis. *GeroScience*, **2021**, 43, 1555-1565	8.9	4
88	Combined in vivo muscle mass, muscle protein synthesis and muscle protein breakdown measurement: a RCombined Oral Stable Isotope Assessment of Muscle (COSIAM)Rapproach. *GeroScience*, **2021**, 43, 2653-2665	8.9	2
87	The physiological impact of high-intensity interval training in octogenarians with comorbidities. *Journal of Cachexia, Sarcopenia and Muscle*, **2021**, 12, 866-879	10.3	6
86	Transcriptomic meta-analysis of disuse muscle atrophy vs. resistance exercise-induced hypertrophy in young and older humans. *Journal of Cachexia, Sarcopenia and Muscle*, **2021**, 12, 629-645	10.3	1
85	Atrophy Resistant vs. Atrophy Susceptible Skeletal Muscles: "aRaS" as a Novel Experimental Paradigm to Study the Mechanisms of Human Disuse Atrophy. *Frontiers in Physiology*, **2021**, 12, 653060	4.6	1
84	Contrast-enhanced ultrasound assessed renal microvascular perfusion may predict postoperative renal complications following colorectal surgery. *Clinical and Experimental Pharmacology and Physiology*, **2021**, 48, 971-977	3	
83	Myokine Responses to Exercise in a Rat Model of Low/High Adaptive Potential. *Frontiers in Endocrinology*, **2021**, 12, 645881	5.7	2
82	Age-related alterations in muscle architecture are a signature of sarcopenia: the ultrasound sarcopenia index. *Journal of Cachexia, Sarcopenia and Muscle*, **2021**, 12, 973-982	10.3	8
81	Dietary protein, exercise, ageing and physical inactivity: interactive influences on skeletal muscle proteostasis. *Proceedings of the Nutrition Society*, **2021**, 80, 106-117	2.9	6

80	Influence of sex on the age-related adaptations of neuromuscular function and motor unit properties in elite masters athletes. *Journal of Physiology*, **2021**, 599, 193-205	3.9	13
79	The mechanisms of skeletal muscle atrophy in response to transient knockdown of the vitamin D receptor in vivo. *Journal of Physiology*, **2021**, 599, 963-979	3.9	10
78	The Effects of Very Low Energy Diets and Low Energy Diets with Exercise Training on Skeletal Muscle Mass: A Narrative Review. *Advances in Therapy*, **2021**, 38, 149-163	4.1	2
77	Molecular and neural adaptations to neuromuscular electrical stimulation; Implications for ageing muscle. *Mechanisms of Ageing and Development*, **2021**, 193, 111402	5.6	5
76	Application of dynamic contrast enhanced ultrasound in the assessment of kidney diseases. *Current Opinion in Nephrology and Hypertension*, **2021**, 30, 138-143	3.5	3
75	Time-efficient physical activity interventions to reduce blood pressure in older adults: a randomised controlled trial. *Age and Ageing*, **2021**, 50, 980-984	3	6
74	Phenylbutyrate, a branched-chain amino acid keto dehydrogenase activator, promotes branched-chain amino acid metabolism and induces muscle catabolism in C2C12 cells. *Experimental Physiology*, **2021**, 106, 585-592	2.4	1
73	Short-Term, Equipment-Free High Intensity Interval Training Elicits Significant Improvements in Cardiorespiratory Fitness Irrespective of Supervision in Early Adulthood. *Frontiers in Sports and Active Living*, **2021**, 3, 697518	2.3	0
72	Indicators of response to exercise training: a systematic review and meta-analysis. *BMJ Open*, **2021**, 11, e044676	3	1
71	Transcriptomic links to muscle mass loss and declines in cumulative muscle protein synthesis during short-term disuse in healthy younger humans. *FASEB Journal*, **2021**, 35, e21830	0.9	0
70	Six weeks of high-intensity interval training enhances contractile activity induced vascular reactivity and skeletal muscle perfusion in older adults. *GeroScience*, **2021**, 43, 2667-2678	8.9	0
69	Overcoming protein-energy malnutrition in older adults in the residential care setting: A narrative review of causes and interventions. *Ageing Research Reviews*, **2021**, 70, 101401	12	2
68	Exploring the impact of COVID-19 on the willingness of older adults to participate in physiology research: views from past and potential volunteers. *Applied Physiology, Nutrition and Metabolism*, **2021**, 46, 1147-1151	3	
67	Transcriptomic adaptation during skeletal muscle habituation to eccentric or concentric exercise training.. *Scientific Reports*, **2021**, 11, 23930	4.9	0
66	Circulating testosterone and dehydroepiandrosterone are associated with individual motor unit features in untrained and highly active older men. *GeroScience*, **2021**, 1	8.9	0
65	The time course of physiological adaptations to high-intensity interval training in older adults. *Aging Medicine (Milton (N S W))*, **2020**, 3, 245-251	3.5	4
64	Challenges and practical recommendations for successfully recruiting inactive, statin-free older adults to clinical trials. *BMC Research Notes*, **2020**, 13, 174	2.3	1
63	Exploring the Association between Vascular Dysfunction and Skeletal Muscle Mass, Strength and Function in Healthy Adults: A Systematic Review. *Nutrients*, **2020**, 12,	6.7	14

62	Targeted genotype analyses of GWAS-derived lean body mass and handgrip strength-associated single-nucleotide polymorphisms in elite master athletes. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2020**, 319, R184-R194	3.2	1
61	High Levels of Physical Activity in Later Life Are Associated With Enhanced Markers of Mitochondrial Metabolism. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2020**, 75, 1481-1487	6.4	8
60	Network analysis of human muscle adaptation to aging and contraction. *Aging*, **2020**, 12, 740-755	5.6	9
59	Untargeted metabolomics for uncovering biological markers of human skeletal muscle ageing. *Aging*, **2020**, 12, 12517-12533	5.6	5
58	A double-blind randomized controlled trial of the effects of eicosapentaenoic acid supplementation on muscle inflammation and physical function in patients undergoing colorectal cancer resection. *Clinical Nutrition*, **2020**, 39, 2055-2061	5.9	2
57	Exploring mechanistic links between extracellular branched-chain amino acids and muscle insulin resistance: an in vitro approach. *American Journal of Physiology - Cell Physiology*, **2020**, 319, C1151-C1157	5.4	7
56	Associations between Plasma Branched Chain Amino Acids and Health Biomarkers in Response to Resistance Exercise Training Across Age. *Nutrients*, **2020**, 12,	6.7	1
55	Overexpression of the vitamin D receptor (VDR) induces skeletal muscle hypertrophy. *Molecular Metabolism*, **2020**, 42, 101059	8.8	19
54	Glucagon-like peptide 1 infusions overcome anabolic resistance to feeding in older human muscle. *Aging Cell*, **2020**, 19, e13202	9.9	4
53	Molecular Transducers of Human Skeletal Muscle Remodeling under Different Loading States. *Cell Reports*, **2020**, 32, 107980	10.6	13
52	The impact of acute beta-hydroxy-beta-methylbutyrate (HMB) ingestion on glucose and insulin kinetics in young and older men. *Journal of Functional Foods*, **2020**, 73, 104163	5.1	0
51	Animal, Plant, Collagen and Blended Dietary Proteins: Effects on Musculoskeletal Outcomes. *Nutrients*, **2020**, 12,	6.7	9
50	Links Between Testosterone, Oestrogen, and the Growth Hormone/Insulin-Like Growth Factor Axis and Resistance Exercise Muscle Adaptations. *Frontiers in Physiology*, **2020**, 11, 621226	4.6	16
49	Longevity-related molecular pathways are subject to midlife "switch" in humans. *Aging Cell*, **2019**, 18, e12970	9.9	11
48	Short-term pre-operative high-intensity interval training does not improve fitness of colorectal cancer patients. *Scandinavian Journal of Medicine and Science in Sports*, **2019**, 29, 1383-1391	4.6	12
47	Gene-based analysis of angiogenesis, mitochondrial and insulin-related pathways in skeletal muscle of older individuals following nutraceutical supplementation. *Journal of Functional Foods*, **2019**, 56, 216-223	5.1	1
46	A statistical and biological response to an informatics appraisal of healthy aging gene signatures. *Genome Biology*, **2019**, 20, 152	18.3	1
45	The effect of oral essential amino acids on incretin hormone production in youth and ageing. *Endocrinology, Diabetes and Metabolism*, **2019**, 2, e00085	2.7	2

44	Testosterone therapy induces molecular programming augmenting physiological adaptations to resistance exercise in older men. *Journal of Cachexia, Sarcopenia and Muscle*, **2019**, 10, 1276-1294	10.3	34
43	The acute transcriptional response to resistance exercise: impact of age and contraction mode. *Aging*, **2019**, 11, 2111-2126	5.6	8
42	Short-Term (. *Medicine and Science in Sports and Exercise*, **2018**, 50, 1740-1749	1.2	14
41	Exercise and other nonpharmacological strategies to reduce blood pressure in older adults: a systematic review and meta-analysis. *Journal of the American Society of Hypertension*, **2018**, 12, 248-267		45
40	Oesophageal Doppler guided optimization of cardiac output does not increase visceral microvascular blood flow in healthy volunteers. *Clinical Physiology and Functional Imaging*, **2018**, 38, 213-219	2.4	2
39	Effects of leucine-enriched essential amino acid and whey protein bolus dosing upon skeletal muscle protein synthesis at rest and after exercise in older women. *Clinical Nutrition*, **2018**, 37, 2011-2021	5.9	54
38	A coding and non-coding transcriptomic perspective on the genomics of human metabolic disease. *Nucleic Acids Research*, **2018**, 46, 7772-7792	20.1	22
37	Muscle and Tendon Contributions to Reduced Rate of Torque Development in Healthy Older Males. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 539-545	6.4	27
36	Contact tracing for chronic hepatitis B in primary care? A Snapshot Audit in Grampian, Northeast Scotland. *Scottish Medical Journal*, **2018**, 63, 75-79	1.8	1
35	Enriching a protein drink with leucine augments muscle protein synthesis after resistance exercise in young and older men. *Clinical Nutrition*, **2017**, 36, 888-895	5.9	34
34	"Nutraceuticals" in relation to human skeletal muscle and exercise. *American Journal of Physiology - Endocrinology and Metabolism*, **2017**, 312, E282-E299	6	39
33	Human skeletal muscle is refractory to the anabolic effects of leucine during the postprandial muscle-full period in older men. *Clinical Science*, **2017**, 131, 2643-2653	6.5	22
32	Physiological adaptations to resistance exercise as a function of age. *JCI Insight*, **2017**, 2,	9.9	35
31	A 4-week, lifestyle-integrated, home-based exercise training programme elicits improvements in physical function and lean mass in older men and women: a pilot study. *F1000Research*, **2017**, 6, 1235	3.6	5
30	The efficacy of unsupervised home-based exercise regimens in comparison to supervised laboratory-based exercise training upon cardio-respiratory health facets. *Physiological Reports*, **2017**, 5, e13390	2.6	17
29	Supplementing essential amino acids with the nitric oxide precursor, l-arginine, enhances skeletal muscle perfusion without impacting anabolism in older men. *Clinical Nutrition*, **2017**, 36, 1573-1579	5.9	16
28	A Practical and Time-Efficient High-Intensity Interval Training Program Modifies Cardio-Metabolic Risk Factors in Adults with Risk Factors for Type II Diabetes. *Frontiers in Endocrinology*, **2017**, 8, 229	5.7	49
27	A 4-week, lifestyle-integrated, home-based exercise training programme elicits improvements in physical function and lean mass in older men and women: a pilot study. *F1000Research*, **2017**, 6, 1235	3.6	4

26	Human Skeletal Muscle Protein Metabolism Responses to Amino Acid Nutrition. *Advances in Nutrition*, **2016**, 7, 828S-38S	10	44
25	Acute cocoa flavanol supplementation improves muscle macro- and microvascular but not anabolic responses to amino acids in older men. *Applied Physiology, Nutrition and Metabolism*, **2016**, 41, 548-56	3	14
24	Synchronous deficits in cumulative muscle protein synthesis and ribosomal biogenesis underlie age-related anabolic resistance to exercise in humans. *Journal of Physiology*, **2016**, 594, 7399-7417	3.9	102
23	Exercise and Regulation of Protein Metabolism. *Progress in Molecular Biology and Translational Science*, **2015**, 135, 75-98	4	16
22	Application of deuterium oxide (D2O) to metabolic research: just D2O it? Depends just how you D2O it!. *American Journal of Physiology - Endocrinology and Metabolism*, **2015**, 308, E847	6	6
21	The effects of resistance exercise training on macro- and micro-circulatory responses to feeding and skeletal muscle protein anabolism in older men. *Journal of Physiology*, **2015**, 593, 2721-34	3.9	29
20	Intake of low-dose leucine-rich essential amino acids stimulates muscle anabolism equivalently to bolus whey protein in older women at rest and after exercise. *American Journal of Physiology - Endocrinology and Metabolism*, **2015**, 308, E1056-65	6	88
19	Creatinine and myoglobin are poor predictors of anaerobic threshold in colorectal cancer and health. *Journal of Cachexia, Sarcopenia and Muscle*, **2015**, 6, 125-31	10.3	13
18	A novel multi-tissue RNA diagnostic of healthy ageing relates to cognitive health status. *Genome Biology*, **2015**, 16, 185	18.3	112
17	The impact of delivery profile of essential amino acids upon skeletal muscle protein synthesis in older men: clinical efficacy of pulse vs. bolus supply. *American Journal of Physiology - Endocrinology and Metabolism*, **2015**, 309, E450-7	6	37
16	A dose- rather than delivery profile-dependent mechanism regulates the "muscle-full" effect in response to oral essential amino acid intake in young men. *Journal of Nutrition*, **2015**, 145, 207-14	4.1	43
15	Protein carbonylation and heat shock proteins in human skeletal muscle: relationships to age and sarcopenia. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2015**, 70, 174-81	6.4	44
14	Internal comparison between deuterium oxide (D2O) and L-[ring-13C6] phenylalanine for acute measurement of muscle protein synthesis in humans. *Physiological Reports*, **2015**, 3, e12433	2.6	34
13	Pharmacological enhancement of leg and muscle microvascular blood flow does not augment anabolic responses in skeletal muscle of young men under fed conditions. *American Journal of Physiology - Endocrinology and Metabolism*, **2014**, 306, E168-76	6	21
12	Physiological mechanisms of action of incretin and insulin in regulating skeletal muscle metabolism. *Current Diabetes Reviews*, **2014**, 10, 327-35	2.7	22
11	Effect of colon cancer and surgical resection on skeletal muscle mitochondrial enzyme activity in colon cancer patients: a pilot study. *Journal of Cachexia, Sarcopenia and Muscle*, **2013**, 4, 71-7	10.3	24
10	Molecular networks of human muscle adaptation to exercise and age. *PLoS Genetics*, **2013**, 9, e1003389	6	123
9	Development of a new Sonovue® contrast-enhanced ultrasound approach reveals temporal and age-related features of muscle microvascular responses to feeding. *Physiological Reports*, **2013**, 1, e00119	2.6	50

8	Adding arginine to an essential amino acid (EAA) feed reverses age-related impairments in vascular responsiveness. *FASEB Journal*, **2013**, 27, 679.5	0.9	
7	The effects of bolus versus pulse feeding strategies on muscle anabolism in older men. *FASEB Journal*, **2013**, 27, 1208.3	0.9	
6	Resistance exercise training reverses age-related impairments in macro and microvascular blood flow and the associated blunted muscle protein synthesis response to nutrition. *FASEB Journal*, **2013**, 27, 1132.9	0.9	
5	Regulation of muscle protein synthesis in humans. *Current Opinion in Clinical Nutrition and Metabolic Care*, **2012**, 15, 58-63	3.8	58
4	Effect of tumor burden and subsequent surgical resection on skeletal muscle mass and protein turnover in colorectal cancer patients. *American Journal of Clinical Nutrition*, **2012**, 96, 1064-70	7	87
3	Resistance exercise training improves age-related declines in leg vascular conductance and rejuvenates acute leg blood flow responses to feeding and exercise. *Journal of Applied Physiology*, **2012**, 112, 347-53	3.7	41
2	Human skeletal muscle microvascular blood volume: effects of ageing, feeding and exercise training. *FASEB Journal*, **2012**, 26, 1142.2	0.9	
1	20 wk resistance training (RT) in 70 y olds improves glucose handling and leg blood flow (LBF) responsiveness to feeding and exercise-plus-feeding without reversing age-related declines in protein kinase B (PKB) responses or increasing endothelial markers. *FASEB Journal*, **2010**, 24, 618.11	0.9	