

Publications 2022

- **Adami PE**, Koutlianos N, Baggish A, **Bermon S**, Cavarretta E, Deligiannis A, Furlanello F, Kouidi E, Marques-Vidal P, Niebauer J, Pelliccia A, Sharma S, Solberg EE, Stuart M, Papadakis M. [Cardiovascular effects of doping substances, commonly prescribed medications and ergogenic aids in relation to sports: a position statement of the sport cardiology and exercise nucleus of the European Association of Preventive Cardiology](#). *Eur J Prev Cardiol*. 2022 Jan 27:zwab198.
- Aeles J, Sarcher A, **Hug F**. [Common synaptic input between motor units from the lateral and medial posterior soleus compartments does not differ from that within each compartment](#). *J Appl Physiol*. 2022.
- Andrade RJ, Freitas SR, **Hug F**, Coppieters M, Sierra-Silvestre E, Nordez A. [Spatial variation in mechanical properties along the sciatic and tibial nerves: an ultrasound shear wave elastography study](#). *Journal of Biomechanics*.
- D'Ascenzi F, Castelletti S, **Adami PE**, Cavarretta E, Sanz-de la Garza M, Maestrini V, Biffi A, Kantor P, Pielas G, Verhagen E, Tiberi M. Cardiac screening prior to return to play after SARS-CoV-2 infection: focus on the child and adolescent athlete: A Clinical Consensus Statement of the Task Force for Childhood Health of the European Association of Preventive Cardiology. *European Journal of Preventive Cardiology*. 2022 Sep 5. Doi :[10.1093/eurjpc/zwac180](#)
- **Bontemps B**, Gruet M, Louis J, Owens DJ, Mirić S, Erskine RM & Vercruyssen F. [The time course of different neuromuscular adaptations to short-term downhill running training and their specific relationships with strength gains](#). *European Journal of Applied Physiology* (2022). DOI : 10.1007/s00421-022-04898-3
- **Bougault V**, Turmel J, Boulet LP. [Serum and sputum MMP-9/TIMP-1 in winter sports athletes and swimmers: relationships with airway function](#). *Biomarkers*. 2022;27(2):127-37.
- **Bougault V**, Adami PE, Sewry N, Fitch K, Carlsten C, Villiger B, Schwellnus M, Schobersberger W. [Environmental factors associated with non-infective acute respiratory illness in athletes : A systematic review by a subgroup of the IOC consensus group on « acute respiratory illness in the athlete »](#). *J Sci Med Sport*. 2022;25(6):466-73.
- Boukhris O, Zghal F, Hsouna H, Trabelsi K, Abdessalem R, Ammar A, **Colson SS**, Chtourou H. The etiology of neuromuscular fatigue induced by the 5-m shuttle run test in adult soccer players. *Kinesiology* 54(2022)2:347-356.
- Chalabaev A & **Clément-Guillot C**. (2022). [Stéréotypes sexués et comportements dans les activités physiques et sportives](#). In K. Faniko, D. Bourguignon, O. Sarrasin, & S. Guimond (Eds.), *Psychologie de la discrimination et des préjugés : de la théorie à la pratique*. Louvain-la-Neuve : De Boeck Supérieur.
- **Clément-Guillot C**, Colombel F, Awai Easthope C & Fontayne P. (2022). [Being incidentally exposed to a sport context: same consequences on gender schema activation as being in a sport context?](#) *Movement & Sport Sciences*, 116, 61–72.
- **Corcelle B**, **Morin JB**, **Gerus P**, **Giacomo JP**, **Piponnier E**. (2022) [New field ergometer to reproducibly measure maximum strength and rate of force development of hamstrings](#). *Science & Sports*. 37(8): 802.e1-802.e8.
- Dallas G, **Colson S.S**, Pappas P, Dallas C, Paradisi G. [Whole body vibration and drop jumps induces post-activation performance enhancement](#). *Human Movement*, 24 (1)
- David D, **Hayotte M**, Thérouanne P, **d'Arripe-Longueville F** & Milhabet I. (2022). [Development and validation of the social robot anthropomorphism scale \(SRA\) in a French sample](#). *International Journal of Human-Computer Studies*, 102802
- **Da Silva F**, **Colson SS**, **Zghal F**, **Chorin F**, Guérin O & **Monjo F**. (2022). [Immediate voluntary activation deficits following submaximal eccentric contractions of knee extensors are associated with alterations of the sense of movement](#). *Scientific reports*, 12(1), 2338.
- **Da Silva F**, **Monjo F**, **Gioda J**, **Blain GM**, **Piponnier E**, **Corcelle B**, **Colson SS**. [Knee position sense and knee flexor neuromuscular function are similarly altered after two submaximal eccentric bouts](#). *European Journal of Applied Physiology*.
- **Daumas L**, Corbel C, **Zory R**, Corveleyn X, Fabre R, Robert P, Manera V. [Associations, overlaps and dissociations between apathy and fatigue](#). *Scientific Reports* 2, 7387 (2022).

- **Daumas L, Zory R, Robert P, Manera V.** [Apathetic patients with neurocognitive disorders are more fatigued and fatigable.](#) *Aging Clinical and Experimental Research* (2022).
- **Deshayes M, Clément-Guillotin C, Denis G, Bredin J, Radel R & Zory R.** (in press). [Effect of a sex stereotype on cortical activity during a self-paced exercise: a motor-related cortical potential approach.](#) *Psychology of Sport & Exercise*. Volume 64, January 2023, 102336.
- **Deshayes M, Zory R, Radel R, Clément-Guillotin C.** [Does the Effect of Stereotypes in Older People Depend Upon Task Intensity?](#) *Research on Aging*, 2022, 44 (3-4), pp.254-264.
- **Ducrocq GP, Blain GM.** [Relationship between neuromuscular fatigue, muscle activation and the work done above the critical power during severe intensity exercise.](#) *Exp Physiol* 2022.
- **Filleul V, d'Arripe-Longueville F, Meinadier E, Maillot J, Chan D, Scoffier-Mériaux S, Corrion K.** (2022). [Development of a French paper-and-pencil association test to measure athletes' implicit doping attitudes.](#) *European Journal of Public Health*, 32(2), ckac095.086.
- Gallina A, Disselhorst-Klug C, Farina D, Merletti R, Besomi M, Holobar A, Enoka R, **Hug F**, Falla D, Sogaard K, McGill K, Clancy EA, Carson RG, van Dieën J, Gandevia S, Lowery M, Besier T, Kiernan MC, Rothwell JC, Tucker K, Hodges PW. [Consensus for experimental design in electromyography \(CEDE\) project: High-density surface electromyography matrix.](#) *Journal of Electromyography and Kinesiology*. 2022.
- **Gerus P, Piche E, Guérin O, Chorin F, Zory R.** [How fiber dynamics of plantarflexor and dorsiflexor muscles based on EMG-driven approach can explain the metabolic cost at different gait speeds.](#) *Eur J Appl Physiol*. 2022 Jan 3.
- Goreau V, Pigne R, Bernier N, Nordez A, **Hug F**, Lacourpaille L. [Hamstring muscle activation strategies during eccentric contractions is related to the distribution of muscle damage.](#) *Scandinavian Journal of Medicine and Science in Sports*
- **Gray L, Deshayes M, Colson SS, d'Arripe-Longueville F & Clément-Guillotin C.** (2022). ["Less healthy, unfit, weaker" effects of the emerging nonexerciser stereotype on performance on a fatiguing task.](#) *International Journal of Sport and Exercise Psychology*.
- Hamard R, **Hug F**, Kelp NY, Feigean M, Ales J, Dick T. [Inclusion of image-based in-vivo experimental data into the Hill-type muscle model affects the estimation of individual force-sharing strategies during walking,](#) *Journal of Biomechanics*.
- **Hatamzadeh M, Busé L, Chorin F, Alliez P, Favreau J-D, Zory R.** ["A kinematic-geometric model based on ankles' depth trajectory in frontal plane for gait analysis using a single RGB-D camera"](#). *Journal of Biomechanics*, Volume 145, December 2022, 111358.
- **Hauswirth C, Nesi X, Dubois A, Duforez F, Rougier & Slattery K.** [Four Weeks of a Neuro-Meditation Program Improves Sleep Quality and Reduces Hypertension in Nursing Staff During the COVID-19 Pandemic: A Parallel Randomized Controlled Trial.](#) *Front. Psychol, Vol 13, article 854474* (Mai 2022).
- **Hauswirth C, Nesi X, Gueneron J, Dubois D & Duforez F.** [The impact of chronic exposure to MLX i3Dome on people under stress: effects on body detoxification, immune function, and mood state.](#) *International Journal of Spa and Wellness* (Février 2022).
- **Hayotte M, Gioda J & d'Arripe-Longueville F.** [Effects and Acceptability of Technology-Based Physical Activity Interventions in Bariatric Surgery: a Scoping Review.](#) *Obesity Surgery* (2022).
- **Hellec J, Chorin F, Castagnetti A, Guérin O, Colson SS.** [Smart Eyeglasses: A Valid and Reliable Device to Assess Spatiotemporal Parameters during Gait.](#) *Sensors* 2022, 22, 1196.
- **Hug F, Avrillon S, Sarcher A, Del Vecchio A, Farina D.** [Correlation networks of spinal motor neurons that innervate lower limb muscles during a multi-joint isometric task.](#) *J Physiol*. 2022.
- **Hug F, Avrillon S, Ibáñez J, Farina D.** [Common synaptic input, synergies, and size principle: Control of spinal motor neurons for movement generation.](#) *J Physiol*. 2022
- **Hug F, Tucker K, Dick T.** ["Moving Is Not as Simple as You May Think."](#) *Frontiers for Young Minds*.
- **Johnson S, Vuillemin A, Epstein J, Geidne S, Donaldson A, Tezier B, Kokko S, Van Hoya A.** [French validation of the e-PROSCeSS questionnaire: stakeholder perceptions of the health promoting sports club,](#) *Health Promotion International*, 2022; daab213.
- **Karamaoun C, Haut B, Blain G, Bernard A, Daussin Fn, Dekerle J, Mauroy B, Bougault V.** [Is airway damage during physical exercise related to airway dehydration ? Inputs from a computational model.](#) *J Appl Physiol*. 2022;132(4):1031-40.

- Kovacs VA, **Vuillemin A**, Murphy MH, Wickramasinghe K, Whiting S. An ecosystems approach for health-enhancing physical activity promotion: introducing the 11th Conference of HEPA Europe. *European Journal of Public Health*, Volume 32, Issue Supplement_1, September 2022, Pages i1–i2 (Editorial).
- Labat G, **Hayotte M**, Bailly L, Fabre R, Brocq O, **Gerus P**, Breuil V, Fournier-Mehouas **M**, **Zory R**, **D'Arripe-Longueville F** & Roux C H. (2022). Impact of a Wearable Activity Tracker on Disease Flares in Spondyloarthritis: A Randomized Controlled Trial. *The Journal of Rheumatology*, 49(10), 1109–1116.
- Lion A, Vuillemin A, Léon F, Delagardelle C, Van Hoye A. Effect of elite sport on physical activity practice in the general population: a systematic review. *Journal of Physical Activity and Health*. 2022 Dec 13;20(1):77-93.
- Maillet J, Rossi J, **Hug F**, Proquez JJ, Nordez A. Influence of experience on kinematics of upper limbs during sewing gesture. *Appl Ergon*. 2022. DOI : 10.1016/j.apergo.2022.103737
- Maillet J, Avrillon S, Nordez A, Rossi J, **Hug F**. Handedness is associated with less common input to spinal motor neurons innervating different hand muscles. *J Neurophysiol*. 2022 Aug 24.
- Martinez-Valdes E, Enoka RM, Holobar A, McGill K, Farina F, Besomi M, **Hug F**, Falla D, Carson RG, Clancy EA, Disselhorst-Klug C, van Dieën JH, Tucker T, Gandevia S, Lowery M, Sjøgaard K, Besier T, Merletti R, Kiernan MC, Rothwell JC, Perreault E, Hodges PW. Consensus for experimental design in electromyography (CEDE) project: Single motor unit matrix, *Journal of Electromyography and Kinesiology*.
- **Meriaux-Scoffier S**, Chaba L, Lentillon-Kaestner V & **d'Arripe-Longueville F**. (2022). Drive for Muscularity Behaviors in Male Bodybuilders: A Trans-Contextual Model of Motivation, *European Journal of Public Health*, Volume 32, Issue Supplement_2, September 2022, ckac094.040.
- **Noël Racine A**, **Garbarino JM**, **Massiera B**, **Vuillemin A**. Modeling the development of local Health-Enhancing Physical Activity policies from empirical data and policy science theories. *International Journal of Environmental Research and Public Health*. 2022, 19, 1213.
- **Piche E**, **Gerus P**, **Chorin F**, Jaafar A, Guerin O, **Zory R**. The effect of different dual-tasks conditions on gait kinematics and spatio-temporal walking parameters in older adults. *Gait and Posture* (p63-69) (2022)
- **Piche E**, Guilbot M, **Chorin F**, Guerin O, **Zory R**, **Gerus P**. Validity and repeatability of a new inertial measurement unit system for gait analysis on kinematic parameters: Comparison with an optoelectronic system. *Measurement* 198 (2022), 111442.
- **Piche E**, **Chorin F**, **Gerus P**, Jaafar A, Guerin O, **Zory R**. Effects of age, sex, frailty and falls on cognitive and motor performance during dual-task walking in older adults, *Experimental Gerontology*, Volume 171, January 2023, 112022.
- Pigozzi F, Bigard X, Steinacker J et al. Joint position statement of the International Federation of Sports Medicine (FIMS) and European Federation of Sports Medicine Associations (EFSMA) on the IOC framework on fairness, inclusion and non-discrimination based on gender identity and sex variations. *BMJ Open Sport & Exercise Medicine* 2022;0:e001273.
- Price OJ, Walsted ES, Bonini M, Brannan JD, **Bougault V**, Carlsen KH, Couto M, Kippelen P, Moreira A, Pite H, Rukhadze M, Hull JH. Diagnosis and management of allergy and respiratory disorders in sport: An EAACI task force position paper. *Allergy*. 2022.56(4):213-22.
- Ramirez Varela et al. Status and Trends of Physical Activity Surveillance, Policy, and Research in 164 Countries: Findings From the Global Observatory for Physical Activity—GoPA! 2015 and 2020 Surveys. *Journal of Physical Activity and Health*. 2022 Dec 19:1-17. Online ahead of print.
- Racinais S, Havenith G, Aylwin P, Ihsan M, Taylor L, **Adami PE**, Adamuz MC, Alhammoud M, Alonso JM, Bouscaren N, Buitrago S, Cardinale M, van Dyk N, Esh CJ, Gomez-Ezeiza J, **Garrandes F**, Holtzhausen L, Labidi M, Lange G, Lloyd A, Moussay S, Mtibaa K, Townsend N, Wilson MG, **Bermon S**. Association between thermal responses, medical events, performance, heat acclimation and health status in male and female elite athletes during the 2019 Doha World Athletics Championships. *Br J Sports Med*. 2022 Feb 14;bjsports-2021-104569.
- Racinais S, Hosokawa Y, Akama T, **Bermon S**, Bigard X, Casa DJ, Grundstein A, Jay O, Massey A, Migliorini S, Mountjoy M, Nikolic N, Pitsiladis YP, Schobersberger W, Steinacker JM, Yamasawa F, Zideman DA, Engebretsen L, Budgett R. IOC consensus statement on recommendations and regulations for sport events in the heat. *Br J Sports Med*. 2022 Sep 23;bjsports-2022-105942.
- **Ramanoël S**, Durtteste M, Perot V, Habas C, Arleo A. (2022). An Appraisal of the Role of the Neocerebellum for Spatial Navigation in Healthy Aging. *Cerebellum*.

- **Ramanoël S**, Durteste M, Delaux A, de Saint Aubert JB, Arleo A. (2022). Future trends in brain aging research: Visuo-cognitive functions at stake during mobility and spatial navigation. *Aging Brain*, Vol 2, 100034, ISSN 2589-9589,
- **Ramanoël S**†, Durteste M†*, Bizeul A*, Ozier-Lafontaine A*, Bécu M, Sahel AJ, Habas C, Arleo A. (accepted). Selective neural coding of object, feature, and geometry spatial cues in humans. *Human Brain Mapping*. † = co-first authors.
- Ripoll T, Solla F, Oborocianu I, Bertonecelli C, **Rampal V**. Congenital hypoplasia and aplasia of the quadriceps: Diagnosis and treatment. *Orthop Traumatol Surg Res*. 2022 May 13:103316.
- Riquier O, **Vuillemin A**, Van Hoyer A. PERSISTE: a mixed methods protocol to identify barriers and levers to a sustainable physical activity practice among patients with chronic disease after physical activity resumption programs. *BMJ Open Sport & Exercise Medicine*. 2022;8:e001261.
- Rossato J, Tucker K, Avrillon S, Lacourpaille L, Holobar A & **Hug F**. (in press). Less common synaptic input between muscles from the same group allows for more flexible coordination strategies during a fatiguing task. *Journal of Neurophysiology*.
- Sachet I, Brochner Nygaard NP, Guilhem G, **Hug F**, Dorel S. (in press) Strength capacity of lower-limb muscles in world-class cyclists: new insights into the limits of sprint cycling performance. *Sports Biomech*.
- **Scoffier-Meriaux S** & Paquet Y. The self-regulation of eating attitudes in sport scale: defining an optimal regulation zone. *Frontiers in Psychology*, 3909.
- Schwellnus M, **Adami PE**, **Bougault V**, Budgett R, Clemm HH, Derman W, Erdener U, Fitch K, Hull JH, McIntosh C, Meyer T, Pedersen L, Pyne DB, Reier-Nilsen T, Schobersberger W, Schumacher YO, Sewry N, Soligard T, Valtonen M, Webborn N, Engebretsen L. International Olympic Committee (IOC) consensus statement on acute respiratory illness in athletes part 1: acute respiratory infections. *Br J Sports Med*. 2022. Jul 21:bjssports-2022-105759
- Schwellnus M, **Adami PE**, **Bougault V**, Budgett R, Clemm HH, Derman W, Erdener U, Fitch K, Hull JH, McIntosh C, Meyer T, Pedersen L, Pyne DB, Reier-Nilsen T, Schobersberger W, Schumacher YO, Sewry N, Soligard T, Valtonen M, Webborn N, Engebretsen L. International Olympic Committee (IOC) consensus statement on acute respiratory illness in athletes part 2: non-infective acute respiratory illness. *Br J Sports Med*. 2022. May 27:bjssports-2022-105567
- Souron R., Carayol M., Martin V., Piponnier E., Duché P., Gruet M. (2022) Difference in time to task failure and fatigability between children and young adults: A systematic review and meta-analysis. *Front Physiol*. 31; 13: 1026012.
- Tezier B, Guillemain F, **Vuillemin A**, **Johnson S**, Lemonnier F, Rostan F, Van Hoyer A. Evaluation of implementation and effects of a health promoting sports club intervention using a mixed-method design: PROSCeSS protocol. *BMJ Open Sport & Exercise Medicine* 2022;**8**:e001444.
- Tezier B, Guillemain F, Vuillemin A, Johnson S, Lemonnier F, Rostan F, Van Hoyer A. Development of a health-promoting sports club's intervention in France applying participatory action research. *Health Promot Int*. 2022 Dec 1;37(6):daac145.
- Timpka T, Dahlström Ö, Fagher K, **Adami P E**, Andersson C, Jacobsson J, Göran Svedin C & **Bermon S**. Vulnerability and stressors on the pathway to depression in a global cohort of young athletics (track and field) athletes. *Scientific reports*, 12, 7901 (2022)
- Torregrosa C, **Chorin F**, Beltran E, Neuzillet C, Cardot-Ruffino V. (2022). Physical Activity as the Best Supportive Care in Cancer: The Clinician's and the Researcher's Perspectives. *Cancers*. 14. 5402.
- Turmel J, **Bougault V**, Couture J, Boulet LP. A preliminary study on assessment of lead exposure in competitive biathletes and its effects on respiratory health. *Sci Mot*. 2022;116:39-47
- **Van Hoyer A**, **Johnson S**, Lemonnier F, Crochet L, Maso F, Lecoarer T, Rostan F, Tezier B, **Vuillemin A**. Manager, coach and sport club participant perceptions of health promotion. *Health Education Journal*. 2022.
- Viana M, Karatzas K, Arvanitis A, Reche C, Escibano M, Ibarrola-Ulzurrun E, **Adami PE**, **Garrandes F**, **Bermon S**. Air Quality Sensors Systems as Tools to Support Guidance in Athletics Stadia for Elite and Recreational Athletes. *Int. J. Environ. Res. Public Health* **2022**, 19(6), 3561.
- **Vuillemin A**, **d'Arripe-Longueville**, Wickramasinghe K. 2022 HEPA Europe Conference: An Ecosystem Approach to Health-Enhancing Physical Activity Promotion. *European Journal of Public Health*, Volume 32, Issue Supplement_2, September 2022, ckac091 (Editorial).
- Wen Y, Kim SJ, Avrillon S, Levine JT, **Hug F**, Pons JL. A deep CNN framework for neural drive estimation from HD-EMG across contraction intensities and joint angles. *IEEE Trans Neural Syst Rehabil Eng*. 2022.