

## Articles scientifiques 2023

---

- Aeles, J., Sarcher, A., & Hug, F. (2023). Common synaptic input between motor units from the lateral and medial posterior soleus compartments does not differ from that within each compartment. *Journal of applied physiology (Bethesda, Md. : 1985)*, 134(1), Article 1. <https://doi.org/10.1152/jappphysiol.00587.2022>
- Arleo, A., Bareš, M., Bernard, J. A., Bogoian, H. R., Bruchhage, M. M. K., Bryant, P., Carlson, E. S., Chan, C. C. H., Chen, L.-K., Chung, C.-P., Dotson, V. M., Filip, P., Guell, X., Habas, C., Jacobs, H. I. L., Kakei, S., Lee, T. M. C., Leggio, M., Misiura, M., ... Manto, M. (2023). Consensus Paper : Cerebellum and Ageing. *The Cerebellum*. <https://doi.org/10.1007/s12311-023-01577-7>
- Aylwin, P., Havenith, G., Cardinale, M., Lloyd, A., Ihsan, M., Taylor, L., Adami, P. E., Alhammoud, M., Alonso, J.-M., Bouscaren, N., Buitrago, S., Esh, C., Gomez-Ezeiza, J., Garrandes, F., Labidi, M., Lange, G., Moussay, S., Mtibaa, K., Townsend, N., ... Racinais, S. (2023). Thermoregulatory responses during road races in hot-humid conditions at the 2019 Athletics World Championships. *Journal of Applied Physiology (Bethesda, Md.: 1985)*. <https://doi.org/10.1152/jappphysiol.00348.2022>
- Baize, D., Meriaux-Scoffier, S., Chrétien, A., Hayotte, M., Piponnier, E., & d'Arripe-Longueville, F. (2023). Sleep Assessment in Competitive Athletes : Development and Validation of French Versions of the Athens Insomnia Scale and the Athlete Sleep Behavior Questionnaire. *Sleep Science*, 16(2), Article 2. <https://doi.org/10.1055/s-0043-1770803>
- Bécu, M., Sheynikhovich, D., Ramanoël, S., Tatur, G., Ozier-Lafontaine, A., Authié, N. C., Sahel, J. A. ; & Arleo, A. (2023). Landmark-based spatial navigation across the human lifespan. *eLife*. <https://doi.org/10.7554/eLife.81318>
- Bougault, V., Schiano-Lomoriello, S., Castanier, C., Buisson, C., Ericsson, M., Teulier, C., & Collomp, K. (2023). Physical activity and combined hormonal contraception : Association with female students' perception of menstrual symptoms. *Frontiers in Physiology*, 14. <https://www.frontiersin.org/articles/10.3389/fphys.2023.1185343>
- Chrétien, A., D'arripe-Longueville, F., Haffner, K., Hayotte, M., Bernier, M., & Vuillemin, A. (2023). Using a socioecological approach to explore healthy lifestyle in elite sport : A qualitative study of French athletes', coaches', and managers' perspectives. *International Journal of Qualitative Studies on Health and Well-being*, 18(1), Article 1. <https://doi.org/10.1080/17482631.2023.2251235>
- Colson, S. S., Gioda, J., & Da Silva, F. (2023). Whole Body Vibration Training Improves Maximal Strength of the Knee Extensors, Time-to-Exhaustion and Attenuates Neuromuscular Fatigue. *Sports*, 11(5), Article 5. <https://doi.org/10.3390/sports11050094>
- Crouzier, M., Hug, F., Sheehan, F. T., Collins, N. J., Crossley, K., & Tucker, K. (2023). Neuromechanical Properties of the Vastus Medialis and Vastus Lateralis in Adolescents With Patellofemoral Pain. *Orthopaedic Journal of Sports Medicine*, 11(6), Article 6. <https://doi.org/10.1177/23259671231155894>
- Da Silva, F., Piponnier, E., Corcelle, B., Blain, G. M., Gioda, J., Colson, S. S., & Monjo, F. (2023). Submaximal fatiguing eccentric contractions of knee flexors alter leg extrapersonal representation. *Heliyon*, 9(8), Article 8. <https://doi.org/10.1016/j.heliyon.2023.e18884>

- Daumas, L., Zory, R., Junquera-Badilla, I., Ferrandez, M., Ettore, E., Robert, P., Sacco, G., Manera, V., & Ramanoël, S. (2023). How does apathy impact exploration-exploitation decision-making in older patients with neurocognitive disorders? *Npj Aging*, 9(1), Article 1. <https://doi.org/10.1038/s41514-023-00121-5>
- Delaire, L., Courtay, A., Humblot, J., Aubertin-Leheudre, M., Mourey, F., Noël Racine, A., Gilbert, T., Niasse-Sy, Z., & Bonnefoy, M. (2023). Implementation and Core Components of a Multimodal Program including Exercise and Nutrition in Prevention and Treatment of Frailty in Community-Dwelling Older Adults : A Narrative Review. *Nutrients*, 15(19), Article 19. <https://doi.org/10.3390/nu15194100>
- Delaire, L., Courtay, A., Pageaux, B., Gautier, C., Rayon, F. J., Mourey, F., Noël Racine, A., Humblot, J., & Bonnefoy, M. (2023). Conducting a multimodal exercise program in primary and secondary prevention of mobility disability in older adults at risk : Guidelines and practical applications. *Geriatric Et Psychologie Neuropsychiatrie Du Vieillessement*, 21(1), Article 1. <https://doi.org/10.1684/pnv.2023.1084>
- Del Vecchio, A., Marconi Germer, C., Kinfe, T.M., Nuccio, S., Hug, F., Eskofier, B., Farina & D., & Enoka, R. M. (2023). The Forces Generated by Agonist Muscles during Isometric Contractions Arise from Motor Unit Synergies. *J Neurosci*. 2023 Apr 19;43(16):2860-2873. <https://doi.org/10.1523/JNEUROSCI.1265-22.2023>.
- Dick, T. J. M., & Hug, F. (2023). Advances in imaging for assessing the design and mechanics of skeletal muscle in vivo. *Journal of Biomechanics*, 111640. <https://doi.org/10.1016/j.jbiomech.2023.111640>
- Doron, J., Hayotte, M., d'Arripe-Longueville, F., & Leprince, C. (2023). *Coping profiles of adolescent football players and association with interpersonal coping: Do emotional competence and psychological need satisfaction matter?* *Scand J Med Sci Sports*. 2023;00:1-11. <https://doi.org/10.1111/sms.14550>
- Durteste, M., Van Poucke, L., Combariza, S., Benziane, B., Sahel, J.-A., Ramanoël, S., & Arleo, A. (2023). The vertical position of visual information conditions spatial memory performance in healthy aging. *Communications Psychology*, 1(1), Article 1. <https://doi.org/10.1038/s44271-023-00002-3>
- Filleul, V., d'Arripe-Longueville, F., Meinadier, E., Maillot, J., Chan, D. K. C., Scoffier-Mériaux, S., & Corrion, K. (2023). Development of a French Paper-and-Pencil Implicit Association Test to Measure Athletes' Implicit Doping Attitude (IAT-Dop). *International Review of Social Psychology*, 36, 1, p.8. <https://doi.org/10.5334/irsp.651>
- Ftaïta, M., Vivion, M., Banks, E., Guida, A., Ramanoël, S., Fartoukh, M., & Mathy, F. (2023). Optimized experimental designs to best detect spatial positional association of response codes in working memory. *Attention, Perception, & Psychophysics*. <https://doi.org/10.3758/s13414-023-02666-9>
- Gambelli, C. N., Bredin, J., Doix, A.-C. M., Garcia, J., Tanant, V., Fournier-Mehouas, M., Desnuelle, C., Sacconi, S., & Colson, S. S. (2023). The effect of tibialis anterior weakness on foot drop and toe clearance in patients with facioscapulohumeral dystrophy. *Clinical Biomechanics*, 102, 105899. <https://doi.org/10.1016/J.CLINBIOMECH.2023.105899>

- Gandrieau, J., Dieu, O., Potdevin, F., Derigny, T., & Schnitzler, C. (2023). Measuring physical literacy for an evidence-based approach : Validation of the French perceived physical literacy instrument for emerging adults. *Journal of Exercise Science & Fitness*. <https://doi.org/10.1016/j.jesf.2023.06.001>
- Hamard, R., Aeles, J., Avrillon, S., Dick, T. J. M., & Hug, F. (2023). A comparison of neural control of the biarticular gastrocnemius muscles between knee flexion and ankle plantar flexion. *Journal of Applied Physiology*. <https://doi.org/10.1152/jappphysiol.00075.2023>
- Hatamzadeh, M., Sharifnezhad, A., Hassannejad, R., & Zory, R. (2023). Discriminative sEMG-based features to assess damping ability and interpret activation patterns in lower-limb muscles of ACLR athletes. *Biomedical Signal Processing and Control* (83). <https://doi.org/10.1016/j.bspc.2023.104665>
- Hauswirth, C., Schmit, C., Rougier, Y., & Coste, A. (2023). Positive Impacts of a Four-Week Neuro-Meditation Program on Cognitive Function in Post-Acute Sequelae of COVID-19 Patients : A Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*, 20(2), Article 2. <https://doi.org/10.3390/ijerph20021361>
- Hayotte, M., & d'Arripe-Longueville, F. (2023). Le recours aux technologies pour promouvoir l'activité physique dans la chirurgie bariatrique : analyse du contenu de deux technologies. *Cahiers de nutrition et de diététique*, 58 : 202-210. <https://doi.org/10.1016/j.cnd.2023.03.004>
- Hellec, J., Hayotte, M., Chorin, F., Colson, S. S., & d'Arripe-Longueville, F. (2023). Applying the UTAUT2 Model to Smart Eyeglasses to Detect and Prevent Falls Among Older Adults and Examination of Associations With Fall-Related Functional Physical Capacities : Survey Study. *Journal of Medical Internet Research*, 25(1), e41220. <https://doi.org/10.2196/41220>
- Hoye, A. V., Mastagli, M., Hayotte, M., & d'Arripe-Longueville, F. (2023). Bouger pour sa santé : Une revue narrative des modèles théoriques de l'engagement dans l'activité physique à partir de l'approche socio-écologique. *Staps, Prépublication*(0), Article 0. <https://doi.org/10.3917/sta.pr1.0043>
- Hug, F., Avrillon, S., Ibáñez, J., & Farina, D. (2023). Common synaptic input, synergies and size principle : Control of spinal motor neurons for movement generation. *Journal of Physiology*, 601(1), Article 1. <https://doi.org/10.1113/JP283698>
- Hung, A., Koch, S., Bougault, V., Gee, C.M., Bertuzzi, R., Elmore, M., McCluskey, P., Hidalgo, L., Garcia-Aymerich, J., & Koehle, M.S. (2023). Personal strategies to mitigate the effects of air pollution exposure during sport and exercise: a narrative review and position statement by the Canadian Academy of Sport and Exercise Medicine and the Canadian Society for Exercise Physiology. *Br J Sports Med*. 2023 Feb;57(4):193-202. <https://doi.org/10.1136/bjsports-2022-106161>
- Hunter, S. K., S Angadi, S., Bhargava, A., Harper, J., Hirschberg, A. L., D Levine, B., L Moreau, K., J Nokoff, N., Stachenfeld, N. S., & Bermon, S. (2023). The Biological Basis of Sex Differences in Athletic Performance : Consensus Statement for the American College of Sports Medicine. *Medicine and Science in Sports and Exercise*. <https://doi.org/10.1249/MSS.0000000000003300>
- Kelp, N. Y., Clemente, C. J., Tucker, K., Hug, F., Pinel, S., & Dick, T. J. M. (2023). Influence of internal muscle properties on muscle shape change and gearing in the human gastrocnemii. *J Appl Physiol* (1985). 2023 Jun 1;134(6):1520-1529. <https://doi.org/10.1152/jappphysiol.00080.2023>.
- Johnson, S., Vuillemin, A., Epstein, J., Geidne, S., Donaldson, A., Tezier, B., Kokko, S., & Van Hoye, A. (2023). French validation of the e-PROSCeSS questionnaire : Stakeholder perceptions of the health

promoting sports club. *Health Promotion International*, 38(3), Article 3. <https://doi.org/10.1093/heapro/daab213>

- Levine, J., Avrillon, S., Farina, D., Hug, F., & Pons, J. L. (2023). Two motor neuron synergies, invariant across ankle joint angles, activate the triceps surae during plantarflexion. *J Physiol*. 2023 Oct;601(19):4337-4354. <https://physoc.onlinelibrary.wiley.com/doi/10.1113/JP284503>.
- Lion, A., Vuillemin, A., Léon, F., Delagardelle, C., & Hoyer, A. van. (2023). Effect of Elite Sport on Physical Activity Practice in the General Population : A Systematic Review. *Journal of Physical Activity and Health*, 20(1), Article 1. <https://doi.org/10.1123/jpah.2022-0123>
- Manera, V., Fabre, R., Daumas, L., Zeghari, R., Derreumaux, A., Payne, M., Lemaire, J., Sacco, G., Gros, A., & Robert, P. (2023). Cutoff scores for the « Interest game », an application for the assessment of diminished interest in neurocognitive disorders. *Frontiers in Psychiatry*, 14, 1126479. <https://doi.org/10.3389/fpsyt.2023.1126479>
- Martinez-Valdes, E., Enoka, R. M., Holobar, A., McGill, K., Farina, D., Besomi, M., Hug, F., Falla, D., Carson, R. G., Clancy, E. A., Disselhorst-Klug, C., Van Dieën, J. H., Tucker, K., Gandevia, S., Lowery, M., Sogaard, K., Besier, T., Merletti, R., Kiernan, M. C., Rothwell, J. C., Perreault, E., & Hodges, P. W. Consensus for experimental design in electromyography (CEDE) project: Single motor unit matrix. *J Electromyogr Kinesiol*. 2023 Feb;68:102726. <https://doi.org/10.1016/j.jelekin.2022.102726>
- Masson, E. (2023, septembre 7). *Utilisation de l'électromyographie dans l'évaluation de la fonction musculaire et intérêt en pratique clinique*. EM-Consulte. <https://www.em-consulte.com/article/1601240>
- Nezondet, C., Gandrieau, J., Bourrelier, J., Nguyen, P., & Zunquin, G. (2023). The Effectiveness of a Physical Literacy-Based Intervention for Increasing Physical Activity Levels and Improving Health Indicators in Overweight and Obese Adolescents (CAPACITES 64). *Children*, 10(6), Article 6. <https://doi.org/10.3390/children10060956>
- Piche, E., Chorin, F., Gerus, P., Jaafar, A., Guerin, O., & Zory, R. (2023). Effects of age, sex, frailty and falls on cognitive and motor performance during dual-task walking in older adults. *Experimental Gerontology*, 171. <https://doi.org/10.1016/j.exger.2022.112022>
- Piponnier, E., Ishikawa, M., Kunimasa, Y., Sano, K., Jagot, K., Boisseau, N., Kurihara, T., & Martin, V. (2023). Quantification of Extramyocellular Lipids and Intramuscular Fat from Muscle Echo Intensity in Lower Limb Muscles : A Comparison of Four Ultrasound Devices against Magnetic Resonance Spectroscopy. *Sensors*, 23(11), Article 11. <https://doi.org/10.3390/s23115282>
- Pitsiladis, Y., Hamilton, B., Geistlinger, M., Bermon, S., Bigard, X., Migliorini, S., Wolfarth, B., Di Luigi, L., Ionescu, A., Schneider, C., Bachl, N., Miller, M., Shroff, M., Singleton, P., Constantinou, D., Swart, J., Beltrami, G., Arroyo, F., Badtieva, V., ... Pigozzi, F. (2023). Letter to the editor entitled “fairness and scientific correctness is needed in the debate on transgender athletes”. *Deutsche Zeitschrift für Sportmedizin/German Journal of Sports Medicine*, 74(6), Article 6. <https://doi.org/10.5960/dzsm.2023.573>
- Reneaud, N., Zory, R., Guérin, O., Thomas, L., Colson, S. S., Gerus, P., & Chorin, F. (2023). Validation of 3D Knee Kinematics during Gait on Treadmill with an Instrumented Knee Brace. *Sensors (Basel, Switzerland)*, 23(4), Article 4. <https://doi.org/10.3390/s23041812>

- Reier-Nilsen, T., Sewry, N., Chenuel, B., Backer, V., Larsson, K., Price, O.J., Pedersen, L., Bougault, V., Schwellnus, M., & Hull, JH. (2023). Diagnostic approach to lower airway dysfunction in athletes: a systematic review and meta-analysis by a subgroup of the IOC consensus on 'acute respiratory illness in the athlete'. *Br J Sports Med.* 2023 Apr;57(8):481-489. <https://doi.org/10.1136/bjsports-2022-106059>
- Riquier, O., Van Hoye, A., & Vuillemin, A. (2023). Capitalization of experience of physical activity resumption programs : Lessons learned for adherence and post-program referral. *Evaluation and Program Planning*, 100, 102349. <https://doi.org/10.1016/j.evalprogplan.2023.102349>
- Robert, F., Wu, H.-Y., Sassatelli, L., Ramanoël, S., Gros, A., & Winckler, M. (2023). An Integrated Framework for Understanding Multimodal Embodied Experiences in Interactive Virtual Reality. *Proceedings of the 2023 ACM International Conference on Interactive Media Experiences*, 14-26. <https://doi.org/10.1145/3573381.3596150>
- Rossoni, A., Vecchiato, M., Brugin, E., Tranchita, E., Adami, P. E., Bartesaghi, M., Cavarretta, E., & Palmeri, S. (2023). The eSports Medicine : Pre-Participation Screening and Injuries Management-An Update. *Sports (Basel, Switzerland)*, 11(2), Article 2. <https://doi.org/10.3390/sports11020034>
- Sarcher, A., Carcreff, L., Moissenet, F., Hug, F., & Deschamps, T. (2023). CONSISTENCY OF MUSCLE ACTIVATION SIGNATURES ACROSS DIFFERENT WALKING SPEEDS. *Gait & Posture.* <https://doi.org/10.1016/j.gaitpost.2023.09.001>
- Tézier, B., Lucas, Q., Johnson, S., Vuillemin, A., Lemonnier, F., Rostan, F., Guillemin, F., & Van Hoye, A. (2023). A RE-AIM framework analysis of a sports club health promotion MOOC : The PROSCeSS MOOC. *Health Promotion International*, 38(4), daad069. <https://doi.org/10.1093/heapro/daad069>
- Thérouanne, P., Hayotte, M., Halgand, F., & d'Arripe-Longueville, F. (2023). The Acceptability of Technology-Based Physical Activity Interventions in Postbariatric Surgery Women : Insights From Qualitative Analysis Using the Unified Theory of Acceptance and Use of Technology 2 Model. *JMIR human factors*, 10, e42178. <https://doi.org/10.2196/42178>
- Tier, L., Salomoni, S. E., Hug, F., Besomi, M., & Hodges, P. W. (2023). Adaptability of the load sharing between the longissimus and components of the multifidus muscle during isometric trunk extension in healthy individuals. *European Journal of Applied Physiology.* <https://doi.org/10.1007/s00421-023-05193-5>
- Timpka, T., Fagher, K., Bargoria, V., Andersson, C., Jacobsson, J., Gauffin, H., Hansson, P.-O., Adami, P. E., Bermon, S., & Dahlström, Ö. (2023). Injury acknowledgement by reduction of sports load in world-leading athletics (track and field) athletes varies with their musculoskeletal health literacy and the socioeconomic environment. *British Journal of Sports Medicine*, bjsports-2022-106007. <https://doi.org/10.1136/bjsports-2022-106007>
- *Two motor neuron synergies, invariant across ankle joint angles, activate the triceps surae during plantarflexion—Levine—The Journal of Physiology—Wiley Online Library.* (2023, septembre 7). <https://physoc.onlinelibrary.wiley.com/doi/10.1113/JP284503>
- Van Hoye, A., Geidne, S., Vuillemin, A., Dowd, K., Glibo, I., Heck, S., Ibsen, B., Johnson, S., Kingsland, M., Kokko, S., Lane, A., Ooms, L., Overbye, M., Woods, C., Zeimers, G., Whiting, S., & Winand, M. (2023).

Health promoting sports federations : Theoretical foundations and guidelines. *Frontiers in Public Health*, 11. <https://www.frontiersin.org/articles/10.3389/fpubh.2023.1147899>

- Vieux, M., Johnson, S., Roquelaure, Y., & Bourdon, M. (2023). Breast Cancer Survivors' Experiences of Managers' Actions During the Return to Work Process : A Scoping Review of Qualitative Studies. *Journal of Occupational Rehabilitation*. <https://doi.org/10.1007/s10926-023-10101-x>
- Vuillemin, A. (2023). Agir en faveur de la santé des populations, c'est l'affaire de tous ! *Santé Publique*, 35(3), 233-234. <https://doi.org/10.3917/spub.233.0233>
- Van Hove, A., Lane, A., Vuillemin, A., Woods, C. (2023) An exploration of national and local policies supporting health promoting sports clubs in the Republic of Ireland. *International Journal of Sport Policy and Politics* <https://doi.org/10.1080/19406940.2023.2290123>
- Wen, Y., Kim, S. J., Avrillon, S., Levine, J. T., Hug, F., & Pons, J. L. (2023). Toward a generalizable deep CNN for neural drive estimation across muscles and participants. *Journal of Neural Engineering*, 20(1), Article 1. <https://doi.org/10.1088/1741-2552/acae0b>