

Swiss University Centre for Music Physiology

Contact: www.shzm.ch

Annual Report 2022 / 2023 and Newsletter August 2023

The SHZM was cooperation partner of the international online symposium "Art in Motion - **Motivation**" on June 2nd and 3rd, 2023 in Munich. In addition to presentations and workshops, the focus was on various research results from music, dance and sports in the contexts of practicing, learning, training, movement, coordination, and precision. The flyer can be found on our homepage under the [Current Activities/Events](#).

The continuing education study program in Music Physiology, supported by the SHZM and structured by lecturers of several Swiss music universities has accepted a new group of ten students for the syllabus. More information on the syllabus aiming for the degrees CAS, DAS and MAS (Master of Advanced Studies) can be found on the website of the SHZM under [Links](#).

Last academic year, Christina Theis (clarinet, Saarbrücken) completed her Master of Advanced Studies (MAS) in Music Physiology. The project, as well as its documentation, were dedicated to the successful implementation of musicophysiological teaching and counselling offers in a music school. The project and final documentation of the degree carry the title:

Musikschule der Landeshauptstadt Saarbrücken wird "gesunde musikschule®"

Erstellung eines musikphysiologischen Angebots an der Musikschule der Landeshauptstadt Saarbrücken mit eingehender Bedarfsanalyse der multiplen Bedürfnisse innerhalb des Institutes und an den Schnittstellen zu Vereinen und Verbänden im Saarland

Following the introduction of workshops dedicated to constructively deal with Music Performance Anxiety for teachers and students, body-oriented offers for individual counselling and group settings will follow.

The SNF research project "Music performance anxiety from the challenge and threat perspective: psychophysiological and performance outcomes", conceived in cooperation with the University of Lausanne and started in autumn 2019, has further advanced. The focus of this study is the examination of changes in stress, cognition, emotion, and physiological parameters attributable to stage fright (stress hormone levels, cardio-vascular functions, and respiration) in 121 music students. The objective parameters are analysed with regards to how they relate to qualitative parameters relevant for solo performance quality. First publications have become available during the last academic year (see below).

The SNF research project "The Influence of an Instrument's Dimensions, String Length-dependent Finger Spacing and Position on Muscle Activity and Perceived Effort in Viola Playing", which began in 2021, is currently in its main study phase since the autumn term of 2022. The aim of the study is the development of ergonomic solutions for playing the viola and its construction, based on objective data. Results are expected to yield information on the influence of the string's length and its influence on the hand, the size and position of the instrument as well as objective muscle activation and subjectively perceived effort. For this, the project will gather data on objective, physiological parameters such as biomechanics, span-widths and reach of fingers and the arm, as well as muscle activity as criteria, paving the way towards an individually suitable viola's position and dimensions. In addition, data regarding muscle strength and endurance in different viola positions and with different instrument dimensions is collected.

The further education offers in music physiology, now available for over 17 years, continue to be offered for music universities wishing to host such events in collaboration with the SHZM. In addition to their own musicophysiological courses on offer, the respective music universities also have the option of booking one of 15 events, held in multiple languages. Information can be found on the SHZM website under [Current Activities/Events](#).

The SHZM's flyer can be downloaded and printed out in German, French and English from the homepage under the link "Downloads".

Important projects involving the SHZM were presented during the last season at continuing education courses and conventions in Aschaffenburg, Basel, Bern (Jugend und Musik; SMM), Burgdorf, Lucerne, Munich, and Therwil.

Written publications in the journal *Frontiers in Psychology* have appeared under the following links:

<https://doi.org/10.3389/fpsyg.2023.1146405>

<https://doi.org/10.3389/fpsyg.2022.1017039>

<https://doi.org/10.3389/fpsyg.2022.959190>

as well as in the documentation of the symposium *Art in Motion – Motivation* (2023) under the following links:

<https://www.artinmotion2023.com/abstracts/f3995ac329513a9c1251557a4346bff1>

<https://www.artinmotion2023.com/abstracts/c4153100b393f0c88aba5bbc1567c86a>

Horst Hildebrandt, Irene Spirgi and Oliver Margulies for the SHZM coordination team, August 2023.