



Dear colleagues,
We are pleased to announce the

4th INTERNATIONAL WORKSHOP

SPINE LOADING AND DEFORMATION

July 5 - 7, 2023

Julius Wolff Institute

Berlin Institute of Health, Charité – Universitätsmedizin Berlin

After 3 successful meetings ([July 2015](#), [May 2017](#), and [July 2019](#)), and an imposed pandemic intermission, we are planning the sequel to our **International Workshop on Spine Loading and Deformation** in Berlin on **July 5 - 7, 2023**.

It has become increasingly evident that the key to providing the most effective care for patients suffering from spinal disorders lies in cross communications and collaborations between all those working in imaging, statistics, health care, epidemiology, physiology, ergonomics, biomedical industry, and related experimental and computational environments; in other words, and as elegantly phrased by the late Alf Nachemson, “by interspecialty migrations”.

Our workshop brings together researchers active in different disciplines to share, discuss, and re-examine the potentials of their recent studies on the spine. The research topics cover trunk loads, postures and motions (imaging, sensors, video camera, machine learning), tissue mechanical tolerance, biological responses to mechanical load, failure and pain generation and chronicity, measurements and model studies in sports, occupational and daily living tasks, with focus on the spino-pelvic, lumbar, thoracic and cervical regions of the spine. In addition, a Special Issue in the Journal of Biomechanics has been coordinated similar to previous workshops (see: [J Biomech 49 \(6\) \(2016\)](#), [J Biomech 70 \(2018\)](#) and [J Biomech 102 \(2020\)](#)). The Special Issue (Guest Editors: I. Kingma, H. Schmidt and S. Shirazi-Adl) aims to present up-to-date progresses in spine biomechanics using state-of-the-art, existing and novel measurement and computational techniques.

More details about the meeting program and registration will follow later after abstract evaluation.

Abstract submission:

You are invited to submit a **one-page abstract with up to 300 words** (including introduction, methods, results, and discussion) with an optional additional page containing only up to 2 figures or tables before **January 30, 2023**. The abstract should be submitted in MS WORD format via email to ws2023@spine-biomechanics.com. It should also include all authors (speaker underlined) and affiliations. Using a format similar to the following example would help us prepare the abstract book. Moreover, it should describe in sufficient details the objectives, methodology and results/discussion. Confirmation of abstract acceptance will be made by **February 28, 2023**.

Standing in the Coffee Breaks Increases Low Back Pain Dramatically

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Abstract text ...

With maximum 300 words plus an optional additional page containing up to 2 figures or tables

Manuscript submission:

Following the acceptance of an abstract by the scientific committee, the invited speaker is solicited to prepare an original manuscript of the research work presented in the abstract and submit it as a full-length (or short communication) research paper directly via Editorial Manager to the Journal of Biomechanics as soon as possible but no later than **August 31, 2023**. The accepted manuscripts, after regular stringent journal peer-review process, will be published as soon as accepted and once again in a Special Issue of the Journal of Biomechanics dedicated to this workshop.

Workshop fees:

(Including: Participation in the workshop, coffee breaks, lunches, workshop dinner)

For participants without an oral presentation:

- Members of universities and hospitals: 400 €
- Others: 600 €

For participants with an oral presentation (invited speakers with an accepted abstract):

No workshop fee and free hotel room

- for 2 nights including breakfast for speakers from Europe
- for 3 nights including breakfast for speakers from outside Europe

We hope to see you again in Berlin in July 2023!

Hendrik Schmidt, Saeed Shirazi-Adl, Idsart Kingma

Scientific Committee:

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Join us at

4th International Workshop on Spine Loading and Deformation
Berlin, Germany, July 5 - 7, 2023

Coordinator:

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Charité – Universitätsmedizin Berlin, Germany

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