

## Taxila global scientific literature text-mining intelligence for oncology research

**The Interdisciplinary Centre for Mathematical and Computational Modelling  
at the University of Warsaw (ICM UW)  
jointly with  
The Systems Biology Institute (SBI) in Tokyo**

**Overview:** The purpose of this workshop is to acquaint attendees with the toolset of Taxila – text-mining intelligence deployed on ICM system in collaboration with The Systems Biology Institute (SBI) in Tokyo. Particular focus of this workshop will be text-mining and potential hypothesis generation for oncology research, based on the possibly entire global corpus of scientific literature in this domain.

Taxila is an AI-driven framework enabling advanced big-scaled text analysis and its conversion into useful scientific insight. In particular, given an access to a huge database of scientific publications, Taxila allows to develop an understanding between various concepts presented in the papers via several tools as tag analysis, concept correlation or graph visualisation [1].

This is the first workshop organised jointly by ICM and SBI, a new collaborative initiative where SBI brings Taxila and ICM contributes, among other things, with the corpus of scientific literature forming ICM Virtual Library of Science -a full-text collection of over 160 thousand of scientific books and over 26,000 scientific journals.

The workshop will be led by SBI team with its thematic focus on oncological diseases.

**Planned outcome:** After the workshop the participants should be able to search in the scientific database for their points of interest via Taxila.

**Date: 3rd December 2021** - Taxila methodology and tools [2]

**Time:** 4:00 PM (GMT+1)

**Duration:** 3 hours

**Instructors:** Samik Ghosh, Ayako Yachie (tentative), Suchee Kumar Palaniappan

**Participants:**

- Scientists, researchers and doctors in the field of oncology;
- Max number of participants: 20

**Registration [until Nov 30] :** <https://akademia.icm.edu.pl/szkolenia/taxila-global-scientific-literature-text-mining-intelligence-for-oncology-research/>

### References and notes:

[1] Akujuobi U., Spranger M., Palaniappan S.K., Zhang X. 2020 T-PAIR: Temporal Node-pair Embedding for Automatic Biomedical Hypothesis Generation *IEEE Transactions on Knowledge and Data Engineering*

[2] Second, follow-up session with much richer corpus of scientific texts will be run in January 2022