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Dear Editor,

We are submitting the manuscript 'Biotechnology data analysis training with Jupyter Notebooks' for consideration of publication in JMBE. Computational data analysis and associated digital skills are increasingly important for successful life science careers. However, the bachelor and master curricula are adapting too slowly and leave students ill prepared. In this article we present the software, the educational workflow, the course implementation, and the evaluation of a computational and data analysis training course of three hours for biologists, microbiologists and biotechnologists.

We believe our material is of interest to the community because:

1. the content is general enough to be implemented in various lecture topics.
2. the setup is optimized for distance learning with no software requirements.
3. the generated data emulates complexity and formatting of real experimental instruments.
4. students are motivated by an engaging narrative, processing tips and gamification elements.

The manuscript introduces the simulation engine for virtual micro-organisms, *silvio*, which consists of connected physiological models. *silvio* allows to generate synchronized data from different experiments to prepare students for the integrative data analysis. The students work on a cloud server in a Jupyter Notebook HTML-file that allows *silvio* and Python code running together with explanatory text and visualizations. We tested our course in three guided zoom seminars and a detailed evaluation of expectations, knowledge, performance and skill gains of the students was conducted. Our Jupyter Notebook session is freely available and adaptable and can be effectively used to raise the computational and data analysis skills of life science students.

Yours sincerely,

Ulf Liebal
On behalf of all authors