LIFS2 Systematic Lipidome Comparisons

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Short description of the project

LIFS2 implements algorithms for systematic lipidome comparison, scoring of lipid identifications and supports the integration of database services for lipidomics.

LUX Score based homology analysis between lung lipidomes of different model organisms and human.

progress report

Shotgun Lipidomics workflow from start to finish of the LIFS consortia. Implementation of mzTab as unified reporting standard is on the way. LIFS2 ( ) contribution.

Performance indicators for LUX score web application

Next Steps:
- Integration of chemical space model and Template-SMILES in LIPIDCOMPASS for generalized lipidome homology
- Integration of automated data validators to improve user interaction
- Publication of in-depth homology analyses for lung lipidomes of mouse, pig, sheep and human with association to physiology
- Implementation of mzTab format as general exchange format of LIFS

de.NBI Training and education

Summier school (LipoSysMed): Integration of Large Scale Lipidomics Data in Systems Medicine Research
22 March 2019, Center of Biotechnology and Biomedicine (BBZ), Leipzig, Germany

Workshop: Bioinformatics for Lipidomics
50th Annual meeting of the German Society for Mass Spectrometry (DGMS)
5. March 2017, Kiel (25 participants)

Workshop: Lipidomics Forum
12 November 2017, Borstel (20 participants)
11 November 2018, Dortmund (19 participants)
10 November 2019, Borstel (18 participants)

Publications


General information on the project

- de.NBI funded postdoctoral researcher (1 FTE)
- Staff paid from additional resources:
- postdoctoral researcher (0.25 FTE)
- PhD student (0.25 FTE)
- Technician (0.25 FTE)