# **LINXS** Imaging

# The QUANTIM Hackathon

November 26-27

(organized by LINXS and QIM, contact: rajmund.mokso@maxiv.lu.se)

#### **Special focus:**

Cellular materials in biomedicine and materials science

#### **Invited experts:**

E. Gouillart (remote), E. Ando, G. Lovric, Vedrana Dahl, Anders Dahl

#### Format:

- 1.5 days challenge solving with experts in image analysis, biomedicine and materials
- local and external experts help user groups to find the right approach to quantify their tomographic images

- create environment for cross-fertilization between diverse groups but in need of similar image quantification tools.

- Initiation into the principles of image quantification, introducing tools and terminology.

#### Schedule:

Day 1: (12:00 - 18:00)

- 5 min intro into to the challenges by each participant
- 3x45 min tutorials by invited speakers
- setting up data / software and defining strategies
- start coding
- summary of the day and how to continue
- 19:00- 21:00 DINNER: establishing networks for collaboration
- Day 2: (8:30-14:00)
  - coding / consulting experts
  - interpretation of results and identifying what did not work out
  - next steps

parallel program for invited experts:

- invited + local organizers discuss concepts of common platforms / frameworks for collaboration on image quantification
- prepare document with recommendations on how to facilitate image quantification collaborations (common frameworks / sharing scripts / short term visits)

## **Challenges to work on / participants:**

- Lung hypertension: Christian Norvik, Niccolo Peruzzi, (Karin Tran Lundmark)
- barley/wheat grain mutation: Nick Sirijovski nick.sirijovski@biol.lu.se, Mats Hansson mats.hansson@biol.lu.se
- skin hydration and formulations, Enamul Mojundar Malmo
- liver fibrosis, Anja Schmidt Christensen, LU and Malmo

## Next hackathons:

Porous media – fibers – unique samples