

Swedish National Cryo-EM facility

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Gunnar von Heijne



The Swedish National Cryo-EM facility



Solna node (SciLifeLab, Solna)



Head of Unit: Marta Carroni

Umeå node (UCEM, Umeå University)



Head of Unit: Michael Hall

National screening network (LU, GU, KI/KTH, UU)



Project services



- **Single particle cryo-EM**
- **Cryo-electron tomography**
- **Micro electron diffraction (microED)**



- 3x Titan Krios, with Gatan K3/K2 Bioquantum
- Talos Arctica, with Gatan K2/Falcon III
- Glacios, with Falcon 4 (spring 2022)

- Focused ion beam SEM (FIB-SEM)



- Scios Dual Beam SEM
- In situ structural biology

- Correlative light and electron microscopy (cryo-CLEM)

- Leica DM6 FS cryo CLEM system



Project services



- Sample preparation
- Screening
- Data collection



Full service, full user training and everything in between

Project services



- Sample preparation
 - Screening
 - Data collection
- } Full service, full user training and everything in between
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- Data analysis
- Automated processing (initial quality assessment)
- User drop-in sessions (bi-weekly)

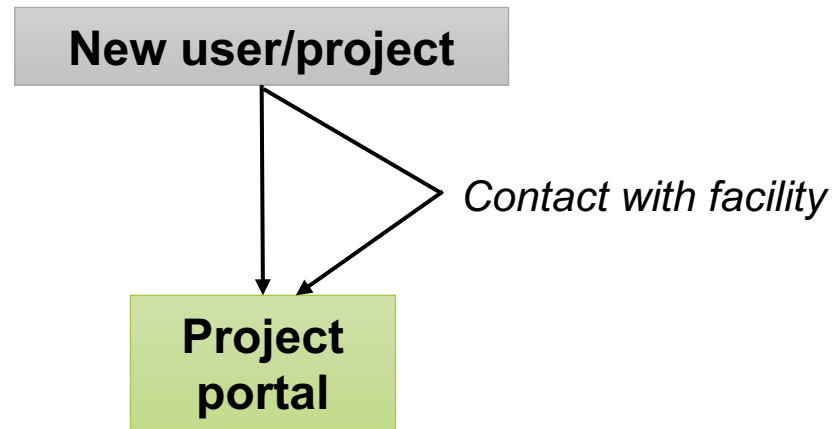
Project services



- Sample preparation
 - Screening
 - Data collection
- } Full service, full user training and everything in between
- Data analysis
 - Automated processing (initial quality assessment)
 - User drop-in sessions (bi-weekly)
 - Bi-weekly seminar/discussion series
 - Courses (4-5/year, basic EM → advanced data analysis)

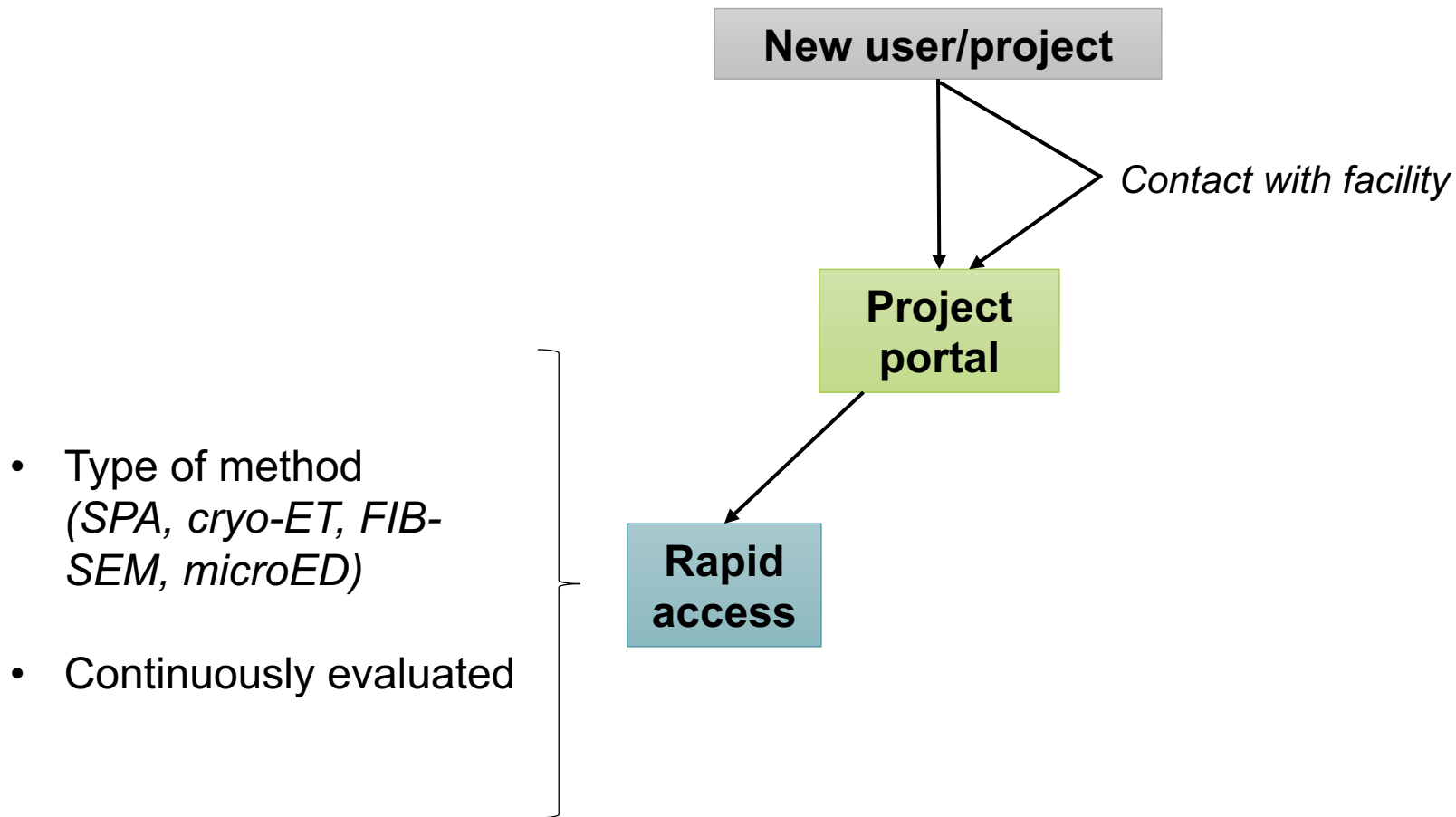


Entry point for project support

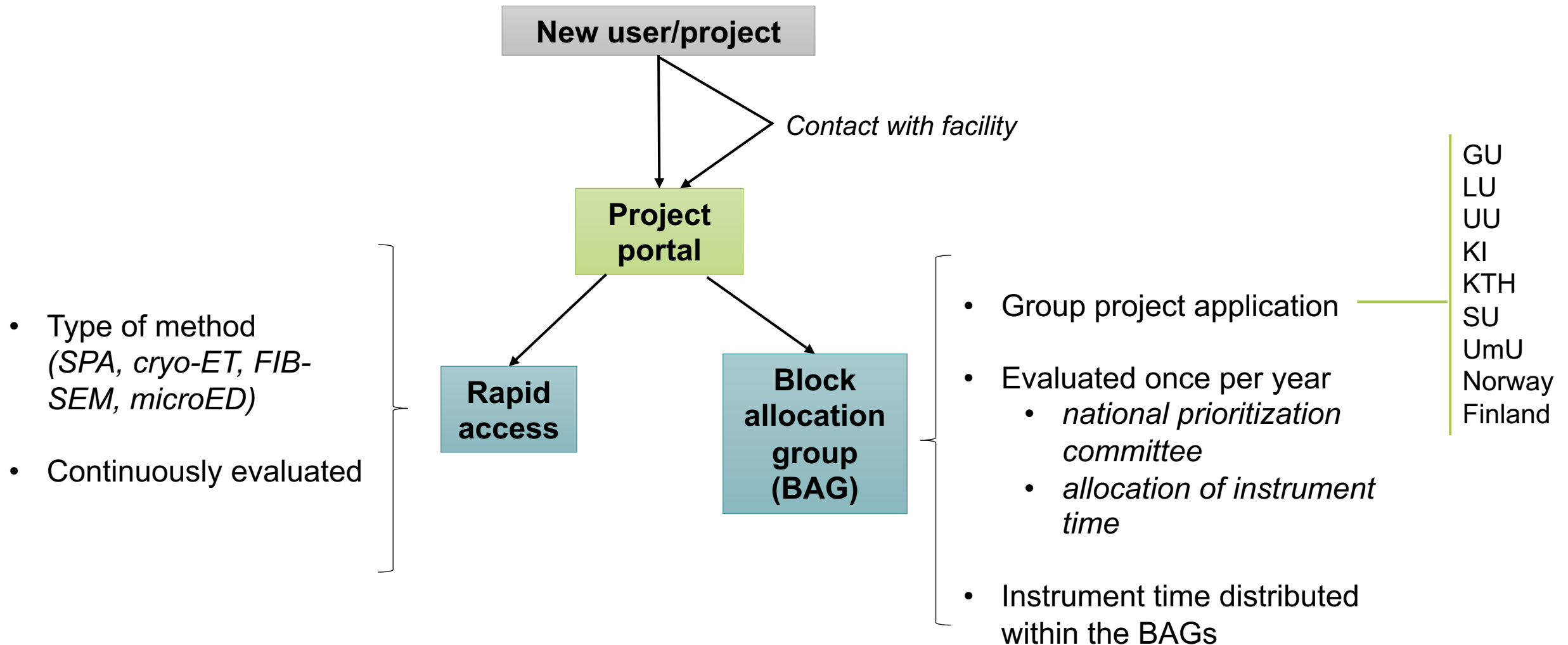


The screenshot shows the Cryo-EM Sweden Information and Application Portal. The page features a header with navigation links: Information, Documents, Contact, and About us. The main content area includes a large image of a cryo-EM micrograph on the left and text on the right. The text describes the facility's access to state-of-the-art equipment and expertise in single particle cryo-EM and cryo-tomography (cryo-ET). It lists three aims: 1. An internationally competitive infrastructure, 2. A training environment, and 3. An educational framework. Below this, it details the facilities in Stockholm and Umeå, and the application process, including Rapid Access (RA) and BAG (Block Allocation Group) applications. At the bottom, there is a login section with fields for Email and Password, and buttons for Login, Register account, Reset password, and Set password. On the right side, there are two application form links: 'Rapid Access application form Single Particle and Tomography' and 'BAG application form - 2020/2021', both with 'Create order' buttons.

Entry point for project support



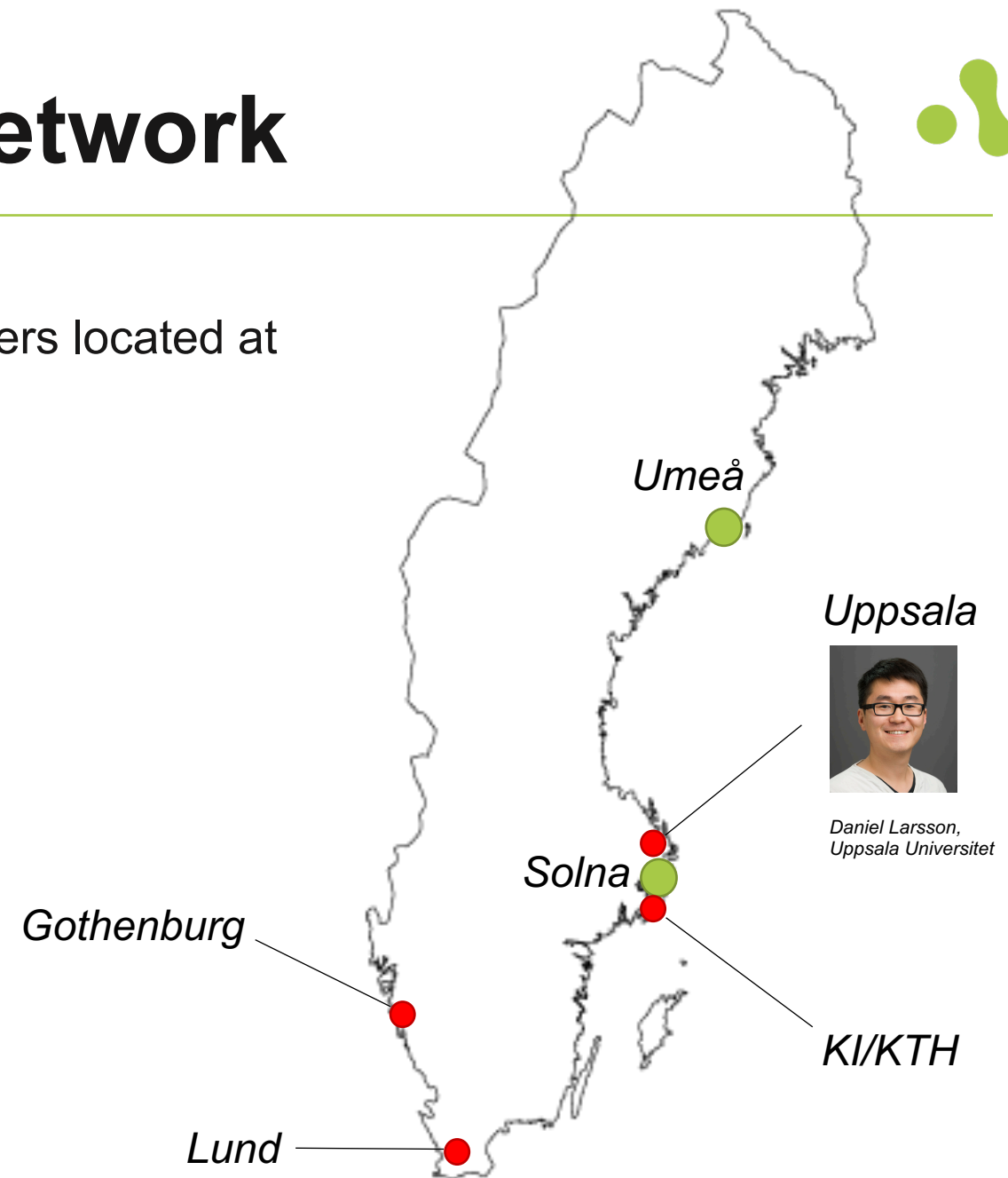
Entry point for project support



National screening network



- New part-time Cryo-EM facility staff members located at LU, GU, KI/KTH, UU
- Local on-site project support
 - Planning
 - Sample preparation
 - User training
 - Screening / data collection
 - Data analysis support
- Utilization of existing core facilities
- Fully established by end of 2021



Upcoming



- *Annual Users Meeting 2021, December 13, SciLifeLab Stockholm*
- *1-2 image processing experts will be recruited to DDLS-WABI (2022)*