29th Swedish Conference on Macromolecular

Structure & Function

Program

Sweprot 2026

Sweprot is the Annual Symposium of SFBBM (Swedish Society for Biochemistry, Biophysics and Molecular Biology) in collaboration with SBNet (Swedish Structural Biology Network), in 2026 arranged by Umeå University

SFBBM
Svenska föreningen för biokemi, biofysik och molekylärbiologi
Swedish society for biochemistry, biophysics and molecular biology

UMEÅ UNIVERSITET

SVENSKA KEMISAMFUNDET
The Swedish Chemical Society

Friday June 12th

16:30 – 18:00 Conference desk open

18:00 – 19:30 Dinner

19:45 – 20:45 Session I: Opening and Award

Chair: Profs. Anders Liljas, Elisabeth Sauer-Eriksson, Ronnie Berntsson

19:45 – 20:00 Welcome, presentation of the Svedberg award

20:00 – 20:45 ***The 2026 Svedberg Award Lecture*** by Dr. Nils Landegren, Uppsala University.

Autoimmunity - when your immune system turns against you

20:45 – 21:15 PI meeting

Saturday June 13th

07:00 – 08:45 Breakfast

09:00 – 11:50 Session II: Multiscale biology

Chair: Prof. Elisabeth Sauer-Eriksson

09:00 – 09:45 **Keynote 1**: Prof. Mathias Uhlén, KTH Royal Institute of Technology, Sweden

The Human Protein Atlas journey - towards AI-based precision and translational medicine

09:50 – 10:10 Nicholas Valerie, Karolinska Institute

Targeted protein degradation reveals a cryptic NUDT5–PPAT axis governing nucleoside analog drug efficacy

10:15 – 10:35 Simin Zhang, Karolinska Institute

Novel roles of NUDT15 in antileukemic therapies

10:35 – 11:05 Coffee

11:05 – 11:25 Candice Gautier, Uppsala University

Divide to conquer: Deciphering the interaction landscape of whirlin, an Usher syndrome protein.

11:30 – 11:50 Abi Ghifari, University of Gothenburg

Structural and molecular basis of protein quality control in the inner mitochondrial membrane by the prohibitin-mAAA complex

12:00 – 13:30 Lunch

13:30 – 17:20 Session III: Structural enzymology

Chair: Prof. Uwe Sauer

13:30 – 14:15 **Keynote 2**: Prof. **Anne Bertolotti,** MRC Laboratory of Molecular Biology, UK

The integrated stress response: From the bench to the clinic and back.

14:20 – 14:40 Lukas Grunewald, Uppsala University

Shining Light on Phytochromes: Ultrafast Photosignalling Captured by Time-Resolved Serial Crystallography

14:45 – 15:05 Shirin Akbat, Uppsala University

Cryo-EM reconstruction of the 23S rRNA 2'-O-methyltransferase RlmE in complex with its ribosomal substrate reveals structural basis of late 50S maturation

15:10 – 15:30 Gabrielle Wehlander, Gothenburg University

Structural investigation of the reaction mechanism of a glucuronyl esterase using time-resolved serial crystallography

15:30 – 16:10 Coffee

16:10 – 16:40 Johannes Messinger, Umeå University

Atomic resolution structure of spinach rubisco reveals protons and dynamics

16:45 – 17:05 Johan Glerup, Gothenburg University

Time-resolved studies of nitric oxide turnover in cytochrome c oxidase

18:00 – 19:30 Dinner

20:00 – 21:30 Poster Session I (Odd numbers)

Sunday June 14th

07:00 – 08:45 Breakfast

09:00 – 11:00 Session IV: Host-pathogen interactions

Chair: Prof. Erik Johansson

09:00 – 09:45 **Keynote 3**: Prof. **Lars-Anders Carlson**, Umeå University, Sweden

Replication of arthropod-borne viruses through the lens of a cryo-electron microscope

09:50 – 10:10 Rupesh Balaji Jayachandran, Umeå University

Open and closed forms of assembled henipavirus nucleoprotein suggest structural basis of genome access

10:10 – 10:30 Josy ter Beek, Umeå University

Pili are essential for conjugation also in many Gram-positive bacteria

10:30 – 11:00 Coffee

11.00 – 14.05 Session V: Integrated structural biology

Chair: Prof. Lars-Anders Carlsson

11:00 – 11:45 **Keynote 4**: Prof. **Martin Beck,** Max Planck Institute of Biophysics, Frankfurt, Germany

From interactomes to in situ structures: what proteomics adds to structural biology

11:50 – 12:10 Yat Kei Lo, Uppsala University

Structural basis of a novel PMF-coupled carbon-concentrating mechanism

12:10 – 13:20 Lunch

13:20 – 13:40 Agnes Moe, University of Bern, Switzerland

Molecular architecture of lipid transfer between the two mitochondrial membranes

13:45 – 14:05 Justin Westerfield, Stockholm University,

Cotranslational Folding and "Constrained Monomers" in the Maturation of HIV-1 Protease

14:10 – 16:00 Session VI: Folding and misfolding

Chair: Prof. Ronnie Berntsson

14:10 – 14:55 **Keynote 5**: Prof. **Patrick van der Wel,** University of Groningen, Netherlands

Dissecting and modulating pathogenic aggregation pathways of the atypical amyloidogenic protein mutated in Huntington's disease

15:00 – 15:20 Caroline Körösy, Utrecht University, the Netherlands

Accessing the Low-Force Regime: Magnetic Tweezers Reveal Early Activation Steps in von Willebrand Factor

15:25 – 15:45 Morgana Kellog, Stockholm University

CryoEM of a Variant of the SDD1 Arrest Peptide Reveals the Mechanism of Enhanced Arrest

15:50 – 16:20 Coffee

16.20 – 18:00 Networking / games

18:00 – 19:30 Dinner

20:00 – 21:30 Poster Session II (Even numbers)

Monday June 15th

07:00 – 08:45 Breakfast

09:00 – 11:50 Session VII: Hot topics

Chair: Prof. Linda Sandblad

09:00 – 09:45 **Keynote 6**. Dr. **Tzviya Zeev Ben Mordehai,** Utrecht University**,** Netherlands

Cryo-EM single particle analysis meets cryo-ET at the sperm tail

09:50 – 10:10 Samuel Hjorth-Jensen, Lund University

Structural insights into the Danio rerio aquaglyceroporin 3b

10:15 – 10:35 Jakob Merlin Silberberg, Stockholm University

Redox-sensitive Regulation of the K+ efflux system KefC by Glutathione and NADH

10:35 – 10:55 Coffee

10:55 – 11:15 Sergio Trillo-Muyo, Gothenburg University

Cryo-EM structure of CLCA1 identifies CLCA1 as a founding member of a novel metzincin family

11:20 – 11:50 Closing of meeting and award of prizes for best presentation and poster

12:00 – 13:00 Lunch + Departure

COMPETITION:

What's your favorite molecule?

What's your favorite molecule, and why? Send in your answer to the Swedish Chemical Society for a chance to win a nice prize.

Mark your email "Sweprot 2026 Molecule" and send it to info@kemisamfundet.se by the end of Tuesday, June 16. The winning answer will be published on the kemisamfundet.se website along with the winner's name. Other submissions may also be published.

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