22nd Swedish Conference on Macromolecular Structure and Function

Tällberg, 15-18 June 2018

SBNet

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

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Program

Friday, June 15	
16:30-18:00	Conference registration desk open
18:00-20:00	**Dinner**
20:00-21:30	Network Meeting (all PI:s)
20:00-	Poster presenters: put up posters (in room "Rådstugu")
20:00-	Informal networking mixer
Saturday, June 16	
09:00	**Opening of the 22nd SweProt conference** The organizing committee
09.05-09.15	**Hugo Theorell award ceremony** **Mats Hansson**, Chair of SFBBM
09:15-13:00	**Session 1** Chair: **Mats Hansson**, SFBBM, Lund University
09:15-10:00	Hugo Theorell prize awardee **Björn Högberg**, Karolinska Institutet ***3D DNA origami and what it can help us learn about biology***
10:00-10:20	**Seychelle Vos**, Max Planck Institute for Biophysical Chemistry *Structural basis of mammalian RNA polymerase II pausing, pause release, and elongation activation*
10:25-10:45	**Xyeying Zhong**, Karolinska Institutet/KTH *Structural determination of the Bri2 BRICHOS domain: relevance to Alzheimer's disease*
10:50-11:20	**Coffee break** (Conference desk open)
11.20-12:10	Keynote speaker**: Gunnar von Heijne**, Stockholm University ***Cotranslational protein folding***
12:10-12:30	**Annemarie Perez Borema**, SciLife Lab, Stockholm University *Structure of the chloroplast ribosome with chl-RRF and hibernation promoting factor*
12:35-12:45	Platform update: **Marta Carroni**, SciLife Lab, Stockholm *The Swedish National Facility for Cryo-EM*
12:50-13:00	Platform update: **Uwe Müller**, MAX IV Laboratory, Lund *Status of the Macromolecular Crystallography beamlines at MAX IV*
13:00-14:00	**Lunch** (Conference desk open)

14:00-17:45	**Session 2** Chair: **Martin Högbom**, Stockholm University
14:00-14:50	Keynote speaker: **Akif Tezcan**, University of California, San Diego. ***Chemical design of functional and dynamic protein assemblies***
14:50-15:10	**Inna Rozman Grinberg**, Stockholm University *Novel ATP-cone-driven allosteric regulation of ribonucleotide reductase via the radical-generating subunit*
15:15-15:35	**Per Rogne**, Umeå University *Positive and Negative Contributions to Enzymatic Selectivity Supported by Coinciding Amino acid Residues*
15:40-16:10	**Afternoon tea** (Conference desk open)
16:10-17:00	Keynote speaker: **Jan Kern**, Lawrence Berkeley National Laboratory ***Snapshots of the water oxidation reaction in photosystem II using crystallography and spectroscopy at an XFEL***
17.00-17.20	**Cecilia Safari**, Gothenburg University *Time-resolved structural studies of ba3-type Cytochrome c Oxidase*
17:25-17:45	**Livia Meszaros**, Uppsala University *Exploring [FeFe] hydrogenase using synthetic chemistry*
18:00-20:00	**Conference dinner**
20:00-21:00	**Poster session #1** **ODD numbered posters (in room "Rådstugu")**
~21:00-02:00	Informal mixer (bar, disco)
Sunday, June 17	
09:00-12:50	**Session 3** Chair: **Martin Ott**, Stockholm University
09:00-09:50	Keynote speaker**: Cheryl H. Arrowsmith**, University of Toronto ***Mechanisms of methylation-dependent signaling in chromatin regulation***
09:50-10:10	**Geoffrey Masuyer**, Stockholm University *Identification and characterization of a novel botulinum neurotoxin*
10:15-10:35	**Ulrich Eckhard**, University of Salzburg *Bioinformatic discovery and biochemical characterization of proteolytically active bacterial flagella*
10:40-11:10	**Coffee break**
11:10-12:00	Keynote speaker: **Jan Riemer**, Cologne University

	Redox processes in complex I assembly
12:00-12:20	**Erik Hallin**, University of Bergen *Structural characterization of the activity-regulated cytoskeleton-associated protein (ARC) in solution and its binding features*
12:25-12:45	**Annika Söderholm**, Uppsala University *Functional and structural characterization of phage SAM hydrolase enzymes*
12:50-14:00	**Lunch**
14:00-15:10	**Session 4** Chair: **Martin Ott**, Stockholm University
14:00-14:50	Keynote speaker: **Karen M Davies**, Lawrence Berkeley National Laboratory ***Cryo-ET of mitochondria: The role of ATP synthases in shaping cristae***
14:50-15:10	**Raghavendra Nagampalli**, Umeå University *Human mitochondrial pyruvate carrier 2 as an autonomous membrane transporter*
15:10-15:40	**Afternoon tea**
15:40-17:00	Annual football game
18:00-20:00	**Dinner**
20:00-21:00	**Poster session #2** **EVEN numbered posters (in room "Rådstugu")**
~21:00-02:00	Informal mixer (bar, disco)
Monday, June 18	
07:00-11:00	**Hotel check-out** (luggage storage room available) **Take down posters!**
09:00-12:00	**Session 5** Chair: **Pål Stenmark**, Stockholm University
09:00-09:20	**Dan Sjöstrand**, Stockholm University *The structure and function of a membrane superoxide oxidase*
09:25-09:45	**Jesper S. Hansen**, Lund University *Lipid Directed Perilipin-1 Segregation in Human Primary Adipocytes*
09.50-10:10	**Johannes Salomonsson**, Linköping University *Structural basis for selective targeting of proteasome deubiquitinases by enone-containing compounds*
10:15-11:00	**Coffee break, Take down posters!**

11:00-11:50	Keynote speaker: **Vadim Cherezov**, Bridge Institute, University of Southern California ***A decade of GPCR structural biology***
11:50-12:00	Awards and closing remarks
12:00-13:30	**Lunch**
14.00	FIFA world cup game: Sweden-South Korea *Shown in "Storstugan" (where coffee is normally served)*

Posters:

1	Ahlberg Gagnér	Viktor	Short and long-term structural effects of terahertz radiation on cryo-cooled bovine trypsin crystals
2	Aspholm	Emelie	Elucidating the functional details of the human mitochondrial HtrA2 serine protease
3	Aurelius	Oskar	Towards time-resolved structural studies of oxygen activation in μ-oxo-bridged dinuclear metalloproteins
4	Begum	Afshan	Tetrameric Transthyretin co-crystal structures with amyloid probes
5	Båth	Petra	Serial femtosecond crystallography of reaction center from *Blastochloris Viridis*
6	Börjesson	Per	High electric field induced structural changes in protein complexes
7	Castell	Alina	Structural biology as a key tool for fragment-based drug design at Sprint Bioscience
8	Delemotte	Lucie	Free energy of b2-Adrenergic receptor activation using the String of Swarms Method
9	Dunevall	Elin	MraY – an essential membrane-bound enzyme involved in peptidoglycan synthesis
10	Dunge	Andreas	Purification and co-crystallization of Asparaginyl tRNA synthetase from *Brugia malayi*, with inhibitors
11	Ghosh	Swagatha	Structural dynamics of a redox- linked proton pump by advanced X-ray methods
12	Górecki	Kamil	Protein mediated transition metal flux visualized in giant unilamellar vesicles
13	Grave	Kristine	Targeting biosynthesis of the mycobacterial cell wall by structural biochemistry
14	Griese	Julia	Structural and functional characterization of metalloregulators in an actinomycete model organism
15	Gustafsson	Robert	Crystal structure of the emerging cancer target MTHFD2 in complex with a substrate--based inhibitor
16	Hammarin	Greger	Microwaves and Microtubules
17	Harimoorthy	Rajiv	Can microwaves affect the kinetics of microtubule polymerization?
18	Heidler	Thomas	Revealing the spatial arrangement of Type V pili from *P. gingivalis*
19	Howard	Rebecca	Allosteric modulation via an intersubunit transmembrane site in pentameric ligand-gated ion channels
20	Huang	Peng	Complex structure studies of GLUT4 and ASPL
21	Jensen	Rasmus Kjeldsen	A nanobody platform for structural characterizations of complement complexes
22	Jiang	Wangshu	X-ray structures of three *Proteus mirabilis* fimbrial adhesins: UcaD, AtfE and MrpH
23	Johannesen	Hedda	The Norwegian National graduate school in biocatalysis– BioCat
24	Jäger	Franziska	Investigating the organisation and function of the membrane proteins of the Type VII secretion system in *Staphylococcus aureus*
25	Kawale	Ashish	Structural and functional characterization of UvrD mediated transcription coupled repair

26	Kosenina	Sara	Structural characterisation of the catalytic domain of botulinum neurotoxin X–high activity and unique substrate specificity
27	Kumar	Rohit	Galectin-3: Studying role of fluorines in the protein-ligand interaction to achieve high affinity and selectivity
28	Larsson	Daniel	Adhesion-related novel giant proteins of *Lactobacillus kunkeei*
29	Lassinantti	Lena	PrgU represses sex-phermone induced toxicity in *Enterococcus faecalis* pCF10
30	Lebrette	Hugo	Structural study of metalloproteins using a drop-on-demand sample delivery at X-ray free-electron laser sources
31	Lerche	Michael	The low-resolution revolution–SAXS in non-structural biology
32	Lima	Gustavo	Fragment Screening at MAX IV: perspectives for high-throughput data collection and processing at BioMAX beamline
33	Martinez	Markel	Human NUDT22 Is a UDP-Glucose/Galactose Hydrolase Exhibiting a unique structural fold
34	Maurer	Dirk	Crystal structure and regulation of human β-ureidopropionase
35	Missel Winkel	Julie	New structural insights into the regulation of aquaporins
36	Moche	Martin	A pilot macromolecular 3D structure determination project
37	Montserrat Canals	Mateu	Towards the characterization of the ribosomal intersubunit B3 bridge dynamics using NMR spectroscopy
38	Moparthi	Vamsi	Structural and dynamic properties of c-Myc 1-158 as revealed by NMR and small-angle X-ray sattering (SAXS)
39	Mühlig	Kerstin	Ion TOF measurements on aerosolised bioparticles to study hydration levels for experiment with X-ray lasers
40	Nayeri	Niloofar	Structural and functional studies of heavy metal ion transporters
41	Okeke	Damasus	Structural basis and dynamics of the Autoinhibition of NusA
42	Ortolani	Giorgia	A time-resolved study of the light-gated ion pump Channelrhodopsin-2.
43	Pietras	Zuzanna	Allostery in ubiquitination - an integrated structural biology study of UBE2E1
44	Rehling	Daniel	NUDT15 Hydrolyzes Hydrolyzes 6--Thio--DeoxyGTP 6--Thio--DeoxyGTP to mediate the anticancer
45	Rehman	Saima	*Enteroccous faecalis* PcfF: A Ribbon-Helix-Helix protein responsible for recruitment of DNA and Relaxase to initiate conjugation
46	Roos	Annette	The SciLifeLab drug discovery and development platform
47	Rose Scaletti	Emma	The 8-oxo-dGTP hydrolase NUDT1 from *Arabidopsis thaliana* also utilizes non-nucleotide monoterpene substrates
48	Rovšnik	Urška	Towards cryo-electron microscopy of heterogenous states of a model ligand-gated ion channel
49	Rödström	Karin	Structure and function of human K2P ion channels at the SGC
50	Sarabi	Daniel	Computational development and analysis of Time Resolved Protein Dynamics
51	Scacioc	Andreea	Visualizing the inhibitory synapse: Structural studies of the Glycine receptor and gephyrin using electron microscopy

52	Schmitt	Andreas	PrgB promotes aggregation, biofilm formation and conjugation through DNA binding and compaction
53	Schmitz	Florian	Structural characterization of an ancient aquaporin
54	Shilova	Anastasiia	Development of serial millisecond crystallography at BioMAX beamline
55	Sulskis	Darius	Protein dynamics governing the function of the DegP serine protease-chaperone
56	Sweetapple	Lara	microRNA function through structural perturbation
57	Thoma	Johannes	Protein-enriched bacterial outer membrane vesicles - A native scaffold for outer membrane protein studies
58	Troussicot	Laura	A native scaffold for outer membrane protein studies
59	Törmänen	Akke-Pekka	NMR studies of the underlying dynamics of the protein export chaperone SecB in complex with its clients
60	Wiseman	Benjamin	Apolipoprotein N--acyltransferase (Lnt) in a lipoprotein bound state
61	Xu	Hongyi	Electron crystallography for studying protein structures from micron- and nano-sized 3D crystals

Participants:

Ahlberg Gagnér Viktor
viktor.ahlberg.gagner@gu.se

Allgardsson Anders
anders.allgardsson@foi.se

Andrell Juni
juni.andrell@scilifelab.se

Arrowsmith Cheryl
carrow@uhnresearch.ca

Aspholm Emelie
emelie.aspholm@gu.se

Aurelius Oskar
oskar.aurelius@dbb.su.se

Begum Afshan
afshan.begum@liu.se

Berggren Gustav
gustav.berggren@kemi.uu.se

Berglund Helena
helena.berglund@ki.se

Berntsson Ronnie
ronnie.berntsson@umu.se

Biverstål Henrik
henrik.biverstal@ki.se

Brändén Gisela
gisela.branden@gu.se

Burmann Björn
bjorn.marcus.burmann@gu.se

Båth Petra
petra.bath@gu.se

Börjesson Per
borjesson.per@gu.se

Böwer Nathalie
hanna_nyblom@bio-rad.com

Caporaletti Francesca
francesca.caporaletti@liu.se

Carlström Andreas
andreascarlstroem@gmail.com

Carroni Marta
marta.carroni@scilifelab.se

Castell Alina
alina.castell@sprintbioscience.com

Cherezov Vadim
cherezov@usc.edu

Davies Karen
KMDavies@lbl.gov

Delemotte Lucie
lucied@kth.se

Diamanti Riccardo
riccardo.diamanti@dbb.su.se

Dobritzsch Doreen
Doreen.Dobritzsch@kemi.uu.se

Drew David
ddrew@dbb.su.se

Dunevall Elin
elin.dunevall@cmb.gu.se

Dunge Andreas
dunge.andreas@gmail.com

Eckhard Ulrich
ulrich.eckhard@sbg.ac.at

Englund Tomas
tomas@labvision.se

Ghosh Swagatha
swagatha.ghosh@gu.se

Gordon James
james@moleculardimensions.com

Górecki Kamil
kamil.gorecki@med.lu.se

Grave Kristine
kristine.grave@dbb.su.se

Griese Julia
julia.griese@icm.uu.se

Gustafsson Robert
robert.gustafsson@dbb.su.se

Hallin Erik
erik-hallin@uib.no

Hammarin Greger
greger.hammarin@gu.se

Hansen Jesper S.
jesper.sondergaard_hansen@med.lu.se

Hansson Mats
mats.hansson@biol.lu.se

Hansson Henrik
Henrik.Hansson@slu.se

Harimoorthy Rajiv
rajiv.harimoorthy@chem.gu.se

Hebert Louise
louise.hebert@nanotempertech.com

Heidler Thomas
Thomas.Heidler@umu.se

Howard Rebecca
rebecca.howard@scilifelab.se

Huang Peng
peng.huang@med.lu.se

Högberg Björn
bjorn.hogberg@ki.se

Högbom Martin
hogbom@dbb.su.se

Jensen Rasmus Kjeldsen
rasmuskj@mbg.au.dk

Jiang Wangshu
wangshu.jiang@icm.uu.se

Johannesen Hedda
hedda.johannesen@ibv.uio.no

Jäger Franziska
franziska-jaeger@gmx.net

Karlsson Göran
goran.karlsson@nmr.gu.se

Kawale Ashish
ashish.kawale@tum.de

Kern Jan
jfkern@lbl.gov

Knight Stefan
stefan.knight@icm.uu.se

Kosenina Sara
sara.kosenina@gmail.com

Kumar Rohit
rohit.kumar@biochemistry.lu.se

Larsson Daniel
daniel.larsson@icm.uu.se

Lassinantti Lena
lena.lassinantti@umu.se

Lauritzen Susanne
susanne.lauritzen@ge.com

Lebrette Hugo
hugo.lebrette@dbb.su.se

Lerche Michael
michael.lerche@dbb.su.se

Liljas Anders

Lima Gustavo
gustavo.lima@maxiv.lu.se

Lohkamp Bernhard
Bernhard.Lohkamp@ki.se

Lundqvist Tomas
tomas.lundqvist@maxiv.lu.se

Martinez Markel
markel.martinez@dbb.su.se

Masuyer Geoffrey
geoffrey.masuyer@dbb.su.se

Maurer Dirk
Dirk.maurer@kemi.uu.se

Meszaros Livia
livia.meszaros@kemi.uu.se

Metzger Lisa
lisa.metzger@epfl.ch

Missel Julie Winkel
juliem@sund.ku.dk

Moche Martin
martin.moche@ki.se

Montserrat Canals Mateu
mateu.montserrat@outlook.com

Moparthi Vamsi
moparthi.vk@gmail.com

Morad Vivian
vivian.morad@liu.se

Mueller Uwe
uwe.muller@maxiv.lu.se

Mühlig Kerstin
kerstin.muehlig@icm.uu.se

Müller Bettina
Bettina.Muller@slu.se

Nagampalli Raghavendra
raghavendra.nagampalli@umu.se

Nayeri Niloofar
niloofar.nayeri@med.lu.se

Nelson David
david.blahanelson@icm.uu.se

Nilsson Harriet
harriet.nilsson@sth.kth.se

Nyblom Hanna
hanna_nyblom@bio-rad.com

Okeke Damasus
damasus.okeke@gu.se

Ortolani Giorgia
giorgia.ortolani@gu.se

Ott Martin
martin.ott@dbb.su.se

Payne Christina

Perez Boerema Annemarie
a.perezboerema@scilifelab.se

Persson Cecilia
cecilia.persson@nmr.gu.se

Persson Karina
karina.persson@umu.se

Pietras Zuzanna
zuzanna.pietras@liu.se

Ramsey Lance
lance.ramsey@formulatrix.com

Rehling Daniel
daniel.rehling@dbb.su.se

Rehman Saima
saima.rehman@umu.se

Riemer Jan
jan.riemer@uni-koeln.de

Rogne Per
per.rogne@umu.se

Roos Annette
annette.roos@icm.uu.se

Rose Scaletti Emma
emma.scaletti@dbb.su.se

Rovšnik Urška
urskaxrovsnik@gmail.com

Rozman Grinberg Inna
innarogr@gmail.com

Rödström Karin
karin.rodstrom@sgc.ox.ac.uk

Safari Cecilia
cecilia.safari@gu.se

Sahlin Margareta
margareta.sahlin@dbb.su.se

Salomonsson Johannes
johsa899@student.liu.se

Sandberg Lena
lena.c.sandberg@ge.com

Sandgren Mats
mats.sandgren@slu.se

Sandmark Jenny
jenny.sandmark@astrazeneca.com

Sarabi Daniel
danielsarabi@gmail.com

Sauer-Eriksson Elisabeth
elisabeth.sauer-eriksson@umu.se

Scacioc Andreea
andreea.scacioc@ki.se

Schmitt Andreas
andreas.schmitt@umu.se

Schmitz Florian
florian.schmitz@gu.se

Seibert Marvin
marvin.seibert@icm.uu.se

Selmer Maria
maria.selmer@icm.uu.se

Shilova Anastasiia
anastasiia.shilova@maxiv.lu.se

Sjöstrand Dan
dan.sjostrand@dbb.su.se

Stenmark Pål
stenmark@dbb.su.se

Sulskis Darius
darius.sulskis@gu.se

Sunnerhagen Maria
maria.sunnerhagen@liu.se

Sweetapple Lara
lara.sweetapple@ki.se

Söderholm Annika
annika.soderholm@icm.uu.se

Tezcan F. Akif
tezcan@ucsd.edu

Thoma Johannes
johannes.thoma@bsse.ethz.ch

Trésaugues Lionel
lionel.tresaugues@sprintbioscience.com

Troussicot Laura
laura.troussicot@gu.se

Törmänen Akke-Pekka
akke-pekka.tormanen@student.oulu.fi

Walldén Karin
karin.wallden@scilifelab.se

Wink Rene
rene.wink@nanotempertech.com

Wiseman Benjamin
bwise@dbb.su.se

Von Castelmur Eleonore
eleonore.von.castelmur@liu.se

Von Heijne Gunnar
gunnar@dbb.su.se

Vos Seychelle
seychelle.vos@mpibpc.mpg.de

Xu Hongyi
hongyi.xu@mmk.su.se

Zhong Xueying
xueying.zhong@ki.se

Zou Xiaodong
xzou@mmk.su.se