





Hanseatic League of Science Interconnecting infrastructures for life science research and innovation



medicon valley **alliance**

Creating Opportunities

Welcome to HALOS symposium



Anette Steenberg, CEO, Medicon Valley Alliance



Kajsa M Paulsson, HALOS Project Manager

MEDICON VALLEY ALLIANCE'S VISION

Medicon Valley Alliance's vision is to strengthen and position Medicon Valley as Northern Europe's most competitive and vital life science cluster.

We do that through knowledge-sharing, networking events, partnerships and innovative new R&D projects, stakeholder management across the Danish and Swedish cluster. cluster 🔹

countries

regions

million inhabitants

MEDICON VALLEY

Strengthening the most competitive and vital Life Science Region in Northern Europe

medicon valley alliance

Creating Opportunities

- Non-profit membership organisation
- 300+ members representing the region's triple helix
- Includes universities, hospitals, life science industry, regional governments and service providers

9 universities

and learning institutions perform life science research in Medicon Valley



5 science parks

in Medicon Valley completely or significantly focus on the life sciences



45 000 Employees in the private life science sector in Medicon Valley

km²

28



Source: Copenhagen Capacity and Invest in Skåne



WORKING TOGETHER – TRIPLE HELIX

Medicon Valley Alliance works as a platform for strategic partnerships between universities, science parks, incubators, investors, hospitals and the life science industry in Greater Copenhagen



Cluster advantages:

Dynamic environment with many startups Good recruitment opportunities Specialized funding opportunities Specialized partners and suppliers Access to unique knowledge High level of innovation High productivity and growth



CROSS-BORDER PROJECTS

MVA has fundraised more than **EUR 34 mil** for private-public partnerships the past 7 years Presently we are project managing projects of app. EUR 18 mil (20219-2022)

- ReproUnion: An Interreg project with a budget of EUR 8,5 focusing on 5 major future challenges within reproductive medicine. The project is co-financed by Region Skåne, Region H, Ferring Pharmaceuticals and Interreg V
- ✓ HALOS: A continuation of the ESS/MAX IV: Cross border science and society project. MVA will assist with getting the industry involved through networking events
- ✓ Greater Copenhagen Microbiome Signature Project: The project aims to strengthen entry into the region's research environment within microbiome research
- DiaUnion: Medicon Valley Center for Diabetes, Autoimmunity and Prevention. The project is co-financed by Region Skåne, Region H, The Novo Nordisk Foundation and Interreg V



EUROPEAN UNION European Regional Development Fund

Hanseatic League of Science (HALOS)

Kajsa M. Paulsson

Experimental Medical Science, Faculty of Medicine, Lund University















Hanseatic League of Science (HALOS) interconnecting infrastructures for Life Science and Innovation

WP Cross Border Research

Seminars, webinars, workshops, summer/winter schools, match-making, funding of 6 month projects

> Increased awareness, competence development and increased use of large scale facilities in Life Science research and innovation

WP Regional Development

Mobility, remote access, innovation and tech-transfer, science cities

Joint key messages and strategies, bi- and multi-lateral agreements.



Lund university Universität Hamburg University of Copenhagen MAX IV ESS Malmö university Region Skåne DESY European XFEL City of Hamburg Technical university of Denmark Aarhus university Capital Region of Denmark Medicon Valley Alliance EMBL

Oslo University

Interreg funding: 2019-2022 Total budget 3,6 M€





MAX4ESSFUN - 194 cross-border research projects in the Öresund Kattegat Skagerack (ÖKS) region





194 projects with 181 of the projects using synchrotron experiments and 87 neutrons. The projects created a viable cross-border **network** for using synchrotron light and neutrons in the Öresund-Kattegat-Skagerack (ÖKS).

~ 50% of the MAX4ESSFUN projects were within Life Science!





Within only a few hours distance – four unique and complementary large-scale infrastructures





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On 18 June 2021, the Baltic Science Network (BSN) and CB55 Baltic Sea Science Day will heat the international online contenence:

Towards a new ERA for Research and Innovation in the Baltic Sea Region

10:30

ion: A new ERA for Research and Innovation in the Baltic Sea **Punel Disc** Region?

How can various cross-border research support initiatives and funding programs be better aligned in order to fully exploiting the potential of the Baltic Sea science region?

Signe Ratso, Deputy Director-General, DG Research and Innovation, European

Peter Berkowitz, Head of the Unit for Smart and Sustainable Growth, DG Regional and Urban Policy, European Commission

Andris Andrusaitis, Acting Executive Director, Baltic and North Sea Coordination and Support Action (BANOS)

Kaisa Paulason, Programme Manager, Hanseatic League of Science (HALOS), Lund University Sweden

Viktor M. Smirney, Deputy Director of International Department, Ministry of Science and Higher Education of the Russian Federation

Mederator: Marcus Flatten, Managing director of the Hamburg communications agency "Mann beißt Hund", Germany

12:00

Presentation: The Baltic Science Network - Key Besuits and new Vision

Klaus von Lepel. BSN Project Director. Hamburg Ministry of Science. Research. Equalities and Districts, Germany



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8 m i n	Welcome and introduction	Erik Renström/Kajsa M. Paulsson (LU)	
7 m i n	SVS plans and opportunities	Fredrik Melander (SVS)	
1 2 m	How can industry get access to large	Selma Maric (MAX IV) and Uwe Sassenberg	

What's in it for Tomas Lundqvist (RISE) industry?

(DESY)

scale facilities?

Why a Life Science company benefit from large scale infrastructures	Anna Sandström (Astra Zeneca)
NNF's perspectives on MAX IV and visions for the future	Lene Oddershede (Novo Nordisk foundation)
Live discussion	Moderator: Anna Stenstam (CR)

Concluding	Kajsa M. Paulsson
remarks	(LU)



13.25 Leveraging investments in regional programmes/ research infrastructure for growth

> Research platform resources in the region: Kajsa Paulsson, Project Manager, HALOS

Panelists: Unik Lytt Rahbek, Vice President, Novo Nordisk A/S, Hans T Schambye, CEO, Dansk Biotek, Kajsa Paulsson, Project Manager, HALOS, Justin Pierce, CEO, Magle Chemoswed and Asa Wallin, Portfolio Manager, Swelfe



MEDICON VALLEY ALLIANCE R&D NETWORK MEETING - FOCUS ON RESEARCH INFRASTRUCTURE

A web-functioning respects infrastructure is a key fundamental to suggoid science and to accelerate resolution within adaptions and industry. Researchers and individual companies requires access to complex technologies and often lack some of the expertise required in Acuse to address all aspects of complex research questions. Many national, regional and proble initiatives have invested in significant resonation in evolute resonant/serv access to highly advertised equipment, resonance collection as well as bedvices expertise to copport individual essenth and suffing edge coarses

This Medican Valuey RMO Network meeting will provide severates from reduced, regional and private recourses wailable for the science compenses in the Medical Vallay wport State of the art large European inflatioustures such as Max V and EES and here specialized oper resolution resources here Lass Pharma Open intercedues will be highlighted Besseries considering DNE Bioman Taxla contex and Open Lab Bidne will be presented as and as how researchers and instanty can benefit horn cataborating with them

Balai Thursday 20th of May 2013 Time 10.00 - Milde Weiner Dribw

EVENT RATE:

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Big Science Facilities Summit

TCE is proud to announce this inaugural summit on Tuesday November 16th with a symposium on Leveraging Europe's Big Science infrastructure. Preliminary Program:





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Simpler 2027 - Dualing Current Scheme and Personal Investmentions for industry and



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http://www.co

Synchrotron light and epigenomics

March 16 | 12 PM | webinar Unlocking the secrets of bone by multinodal and multi-length-scale X-rav



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May 25 | 12 PM | webinar Combined spectroscopy and scattering







NOVEMBER 29 | 12:00 - 13:00 | 200M

WEBDAR with Ditley Epeakov Bradersen, professor of Structural Microbiology, Department of Molecular Biology and Genetics,

10.00 -05.00 Deltes CONTACT PERSON

Personal Manhains

EVENT INFO

10.64

THE R. LEWIS CO., LANSING MICH.

+ Imaging & Image analysis of data from targe scale facilities - complementary to data acquisition at snyeEH centres and synchrotrons. · Multimodal imaging · Correlative sight and electron microscopy and correlative x-ray microscopy · Resources in the HALOS macro-region

Workshop - Image analysis beyond borders

· Imaging and analysis of tissues and calls

IMAGE ANALYSIS BEYOND BORDERS - WORKSHOP BY HALOS-OIM-

Welcome to a full-day workshop organized by HALDS-OIM-CRN-CSSB covering the following topics:

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Date: Mith of June 2025 Time: 15.30-15.00 Versat: Online:

CIPA-CSSB

HALOS workshop on image analysis (co-organised by PDB-EBI)

When: 20-22nd of October 2020 · HOW: By your computer in ZOOM · SCOPE: image analysis, bring your own material to the computer!

Register here: https://www.conterences.uni-hamburg.de/event/124/registrations/123/

This virtual workshop aims to provide an introduction to the Protein Data Bank and associated databases. It will take the form of three afternoon online workshop sessions, combined with webinars that should be watched before the online sessions.

Details of pre-recorded webinars and software you will need to download for session 3. This Document will be updated as the final links become available.

Day 1: 14-17h CET 20th October 2020 - Finding and visualising macromolecular structures at

To prepare for this session you should watch the pre-recorded webmans - these take a total of 2.5-bours

- Introduction to the POB archeve (30 minutes)
- Validation of PDB data (40 minutes)
- Searching for structures at PODe (20 minutes)
- Vacatization of structures with Mull (30 mmulles)
- Getting an overview of available structural data with POGe-KS. POSe KB (30 minutes)
 - new teatures in PDDe X0 (10 minutes)

Day 2: 14-17h CET 21st October 2020 - PDB deposition and advanced structure analysis

To prepare for this session you should watch the pre-recorded webinars - these fake a total of 1.5 hours.

- · PDB deposition in OneDep tips and links (20 minutes)
- · PDBe tools : interactions and macromolecules pages (10 minutes)
- Using PDBe KB to support your research (20 minutes)
- Introduction to PDBe programmatic access services (25 merulies)
- PDBeFold and PDBePtSA (10 manufes)

Day 3 14-17h CET 22nd October - Access and submission of EMPIAR data. For this session you will also need to download some software onto your local computer. All the software is open source. Please do this well in advance of the workshop as we will not have time during the workshop to trouble-shoot software installation.

1. Chimera 2. Chimetal

3.110 4. Aspera Connect (this is a browser plugin you will need for downloading some test data) Webinars for Day 3 to come asap

ife Sciences using Advanced hoton and Electron Sources MALOS VIRTUAL HALOS AUTUMN SCHOOL 20 - 28 SEPTEMBER / ONLINE

October 6 | 12 PM | webinar Microscopy at MAX IV

interreg |

iniarreg and insertions ()

There is still time to register for the virtual HALOS statement tohold that will not next week (20-24th September 2021), Attendance is FREE!

The school will combine lectures thorning) and practical demonstrations (afternoon) illustrating the types of operiments and science questions that can be addressed cing state of the art photon and electron sources.

Information & registration: halos.lu.se/



Lectures and exercises cover the full pipeline from data acquisition ti reconstruction and segmentation to modelling based on real 3D data. The online Coursera course must be completed before arrival: of natural and synthetic materials



(limited number of participants, first come - first served)





nmark and University of Cor

The 6th International Summer School

CINEMAX

August 23 - 27 2021

For PhD students, Post Docs and industrial researchers

3D imaging and modelling







X-ray imaging on site





Interreg



Workshops

- common challenges and potentials, future cooperation...

Copenhagen Science City

medicine, health and natural science





Science City Hamburg Bahrenfeld

in development, around DESY & European XFEL & university and non-university research institutions

Science Village Scandinavia, Lund in development, around ESS & MAX IV







Impact chain of HALOS





Contact information

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www.halos.lu.se



Hanseatic League of Science Interconnecting infrastructures for life science research and innovation





- 13.00 Welcome to the LifeScience and Innovation ecosystem in the Hamburg Öresund – Kattegatt – Skagerack region
- **13.20** Presentation from HALOS researchers
- 14.30 Short break
- 14.45 Workflows and resources around the large-scale Research Infrastructures in the Hamburg-Öresund-Kattegatt-Skagerack region
- 15.15 Panel discussion
- 15.55 Concluding remarks

House-keeping rules

- You are automatically muted
- Use the chat function for technical questions
- Use the Q&A for questions to the speakers
- We will post polls throughout the meeting

Please note that this event will be recorded. You will receive a link to the recording after the event.

Presentation from HALOS researchers



Clement Blanchet EMBL



Thomas Boesen Aarhus University



Kajsa Sigfridsson Clauss MAX IV



Azadeh Shahsavar Aarhus University



Leila Lo Leggio University of Copenhagen



Felix Roosen Runge Malmö University



Anders B. Dahl DTU



Anja Schmidt-Christensen Lund University

Welcome back!

14.45 Workflows and resources around the large scale Research Infrastructures in the Hamburg-Öresund-Kattegatt-Skagerack region Magnus Larsson, Head of Industrial Relations, MAX IV Laboratory in Lund

15.15 Panel discussion

Moderated by: Fredrik Melander, Head of R&D Relations, Science Village Scandinavia AB Carina Lobley, Senior Officer in Scientific Coordination and User Office, ESS Marjolein Thunnissen, Life Science Director, MAX IV Laboratory Arwen Pearson, Hamburg Center for Ultrafast Imaging, Hamburg University David Brown, Servier & University of Kent

15.55 Concluding remarks

Workflows and resources around the large-scale Research Infrastructures in the Hamburg-Öresund-Kattegatt-Skagerack region



Magnus Larsson, Head of Industrial Relations, MAX IV Laboratory in Lund

Panel discussion



Moderator: Fredrik Melander, Head of R&D Relations, Science Village Scandinavia AB



Carina Lobley Senior Officer in Scientific Coordination and User Office, ESS



David Brown Head of Structural biology, Servier and University of Kent



Arwen Pearson Hamburg Center for Ultrafast Imaging, Hamburg University



Marjolein Thunnissen Life Science Director, MAX IV Laboratory

Concluding remarks



Kajsa M Paulsson, HALOS Project Manager

Thank you!

- You will receive a link to the recording and to the presentations by email
- We would like your feedback please answer the survey you will receive by email
- If you have any questions please contact;
 - Kajsa M Paulson, HALOS Project Manager kajsa m.paulsson@med.lu.se or,
 - Sofia Norås, Project Manager, Medicon Valley Alliance, sn@mva.org
- For more information please visit www.mva.org





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