



Words and Season's Greetings from the Director Trevor Forsyth

As the year draws to a close, it is nice to reflect on all that has happened at LINXS during the year. There has been a huge range of diverse activities, new themes, and the drive and motivation that has developed for the guest lectures, schools and the Young Researchers' Initiatives has been inspiring. However it would of course all be valueless without your participation - and in many ways the strongest sense of motivation for LINXS comes from its growing community and from the growth that is being seeded for the next generation of researchers.



We are delighted to see such strong uptake for the LINXS young researchers' initiatives for all of the life sciences, hard matter and soft matter focus areas. The events organised for each of these areas during the year have been exceptional - all driven and run by up-and-coming researchers from many different academic institutions - in the absence of PIs(!). The development of this community of early career scientists is a key priority for LINXS and of obvious interest for the user communities of the large scale facilities - both those in Sweden and those to which Sweden subscribes.

Our guest researcher programme has been very active throughout the year and numerous collaborative interactions have arisen from these visits.

As noted previously, LINXS management and staff are also delighted to be successful in securing EU-funding for the MCSA COFUND project AMBER (Advanced Multiscale Biological imaging using European Research infrastructures). This five-year postdoctoral programme will address key needs in multiscale advanced biological imaging, and represents a total investment of over €12M. The first call will open on 18th of January, advertising positions for 14 postdoc researchers. Please spread the word to final year PhD students and other interested scientists. It is a wonderful set of project opportunities over a wide range of science and should be of interest to clinicians, life scientists, physicists, chemists.

Finally, we would like to commemorate our former Scientific Advisory Board chair, late Prof. Stefan U. Egelhaaf, who passed away in November 2023. He will be sadly missed.

We are looking forward to 2024 at LINXS – already there are many activities planned, so make sure to check out our events page, and further down in this newsletter. In this newsletter, we also share some interviews and articles from previous theme activities, as well as our LINXS Christmas Calendar – where we highlight material from our Educational Platform.

Have a lovely holiday with family and friends.



Save the date for AMBER's first call

The EU-funded research project AMBER will announce its first round of



In memory of Prof. Stefan U. Egelhaaf

Stefan was an outstanding scientist and wonderful person, who passed away

postdoctoral fellowship positions on 18th of January 2024. AMBER, Advanced Multiscale Biological imaging using European Research infrastructures, will address scientific and sectoral gaps in biological imaging ranging from molecular, through cellular, to tissue, organ and organism levels of organisation, and is coordinated by LINXS.

Around 14 postdocs will be recruited in the first call, with each fellowship lasting 36 months.

[Read more about the AMBER call](#)

much too early. He was a full professor (Soft Condensed Matter Physics) at the Heinrich-Heine University Düsseldorf.

He was a wonderful and warm-hearted person without any trace of professional arrogance, a true friend to many of us, generous to a fault, and brought many laughs and silly jokes along with his serious scientific insight. He took over as Chair of the LINXS SAB in 2021, following Lise Arleth, and gave selflessly of his time and initiative in helping the institute into the strong position it now holds for Sweden and internationally.

LINXS previous and current management will miss him terribly.

[Read an article in memory of Stefan](#)



DON'T MISS LINXS CHRISTMAS CALENDAR WITH DIVERSE EDUCATIONAL VIDEOS FROM OUR EVENTS AND ACTIVITIES - CATCH UP ON GREAT SCIENCE DURING THE HOLIDAYS!



The value of LINXS Guest Researcher

Programme - reflections from five guest researchers

LINXS Guest Researcher programme aims to attract world-leading scientists for short-term focused research visits, and to create international networks that can contribute towards building community and promoting science and education focusing on the use of neutrons and X-rays.

We share some reflections from five guest researchers who visited LINXS during 2023. LINXS is extremely grateful for how they shared their experience, passion, and science with the LINXS community.

[Read an article with their reflections](#)



Symposium on Hard Matter builds community, networks and new ideas

The Young Researchers' Symposium on X-ray and Neutron Science in Hard Matter, organised in early November, aimed to provide an inclusive and diverse environment to enable networking, discussions and new collaborations among PhDs and postdoctoral researchers.

The LINXS organisers, Sandra Benter, PhD Student at Synchrotron Radiation Research, Lund University, Konstantin Victor Werner, postdoc, Materials and Surface Engineering, DTU, and Annika Stellhorn, scientist at the ESS, are very happy with the outcome. They all agree that events that encourage networking are key to support the next generation of researchers.

[Read an article about the symposium](#)



Building community on food science and X-ray tomography

During autumn, the Northern Lights on Food theme has organised many activities with the aim to bring communities of food researchers together in different parts of Sweden and to increase knowledge of existing and new infrastructures and techniques. The ambition is to advance food science, support the use of X-rays and neutrons, and build networks.

[Read an article about the outcome of the events](#)



The ECL theme is set up for a good start!

To set up the theme for the best possible start, the Environment and Climate theme chose to highlight input from previous and current themes at LINXS at their kickoff in October. The aim was to take inspiration from what works, and to integrate lessons learned as the theme starts to plan its activities in detail.

– I am excited to see what the next few months will bring. It will be interesting to see our progression in a year's time, says theme leader Dimitrios Floudas.

[Read an interview about the kickoff](#)



LINXS cross-theme workshop identified X-ray communities' needs in chemical imaging

The aim of the workshop, Future of Chemical Imaging at Next Generation Synchrotrons, organised at LINXS in October, was to highlight and discuss scientific needs in chemical microscopy. It was organised by members from LINXS themes: Chemistry of Life, Heritage Science, Northern Lights on Food, Environment and Climate, and New Materials, in collaboration with MAX IV.

– The long-term goal is to develop a chemical microscopy beamline (CheMic) at the tender to hard X-ray microprobe level at MAX IV. To do this right, we need to involve the user communities at every stage, to find out what they need, says Susan Nehzati, researcher at MAX IV, and one of the main organisers of the event.

[Read an article about the cross-theme event](#)

Thanks to all that came to LINXS Christmas open house!



Happening at LINXS!

See all our thematic events and activities.

9-10

Jan

LINXS Outreach

– 20th Nordic Workshop on Scattering from Soft Matter

[Register](#)

18

Jan

LINXS Guest Seminar

- The importance of water in membrane receptor function – Implications for optogenetics with Anthony Watts

[Register](#)

23

Jan

LINXS partner webinar

- ECIS: Fundamental aspects of wetting – drop

friction

[Register](#)

25

Jan

LINXS related

- Webinar: Explore ESRF beamlines – ID11 Material Science Beamline (Diffraction and Imaging) with Jonathan Wright

[Register](#)

27-

29

Feb

LINXS related

- Workshop on Advanced X-ray characterization technologies in Earth Sciences

[Register](#)

29

Feb

LINXS Guest Seminar

- Data-driven modeling of the intrinsically disordered proteome with Giulio Tesei

[Register](#)

11-

15

March

LINXS partner event

- French-Swedish Academy for Scattering Experiments and Modeling (FASEM) for Life science: from experiments to data analysis

[Register](#)

14-

19

LINXS Outreach

- 19th Food Colloids Conference: Using colloids science to find new sustainable solutions in food

April

[Register](#)**22**

April

LINXS Science Day and New Materials
- New Materials Theme Closing Conference

[More information](#)**27-****29**

May

Northern Lights on Food
- Northern Lights on Food Conference V -
Boosting structural food science

[More information](#)**30-****31**

May

Chemistry of Life and LINXS event
- Chemistry of Life: Young Researchers'
Symposium

[More information](#)**10-****14**

June

LINXS related
- Neutrons & Food 7 Conference

[More information](#)**16-****20**

June

LINXS partner event
- Coherence 2024: 11th International Conference
on Phase Retrieval and Coherent Scattering

[Register](#)**MORE EVENTS**