Scandinavian Society for Biomaterials

Newsletter
Autumn issue, 2026

Letter from the board

Dear ScSB members,

The wind and the rain rattling my bedroom window at this very moment are trying to tell me rather loudly that the endless days of Scandinavian summer are definitely over, and our little northern corner of the world is now leaning decidedly towards the dark again for the next half a year. Strange thought, especially since it feels like it was just a moment ago we were bathing in the spring sunlight at ScSB 2026 in Fiskebäckskil, where we actively needed to block out the sun so that it did not distract us from the incredible science presented by our members. While we can for sure promise you plenty of daylight, perhaps sunshine is not something we should expect in similar quantities next year when we all get together again to be enthralled by the out-of-this-world strangeness of the Icelandic lava fields at the ScSB 2027 held in Hella at the south coast of Iceland in May.

But that is not all that is going to happen in the coming year! There are more big things coming for us as a society and the entire biomaterials research community in the Nordic region next year: ESB 2027 will be hosted by our former president and ScSB 2025 awardee Cecilia Persson in Uppsala in the beginning of September. It has been a while since a ScSB member country hosted the flagship conference of the European biomaterials community: Finland hosted ESB 2010 in Tampere, at that time still under their own Finnish Society for Biomaterials before merging under the colourful ScSB umbrella. Last time the ESB circus stopped its caravan on Scandinavian soil was back in 1997, when the conference was held in Gothenburg and our ScSB 2026 awardee Peter Thomsen was still a young professor and the secretary of the ESB.

So we at ScSB are very glad that Cecilia and her co-chairs Anders Palmquist and Anna Finne Wistrand have dared to take on the challenge to bring the ESB finally back to Scandinavia after a 30-year hiatus, giving us all an amazing opportunity to showcase the Nordic biomaterials expertise outside of our own cosy little ScSB bubble. Also, please remember that the organising committee for ESB 2027 is still accepting proposals for symposia until 13th November!

As the rainy and muddy season coming up ahead is keeping us cosily wrapped in the warmth of indoors, we have more time to focus on reading up on what is going on at the research forefront in biomaterial science. One good place to start catching up and feeding that scientific curiosity is to dive into our science opinion column on page 8. If that does not satisfy your hunger for locally brewed biomaterials content, we also have a very active Young Scientist Forum that organises monthly webinars on all things related to being a young biomaterials scientist in modern academia, as introduced later in this newsletter. We hope that all will keep you entertained until our next newsletter comes and brightens up the short days of early winter.

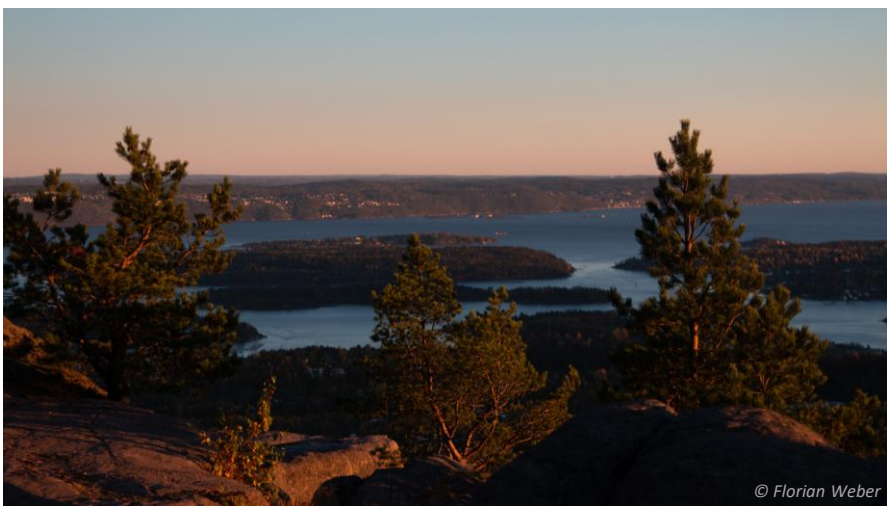
Hanna,

On behalf of the ScSB board

Our president



Hanna Tiainen
Associate Professor
University of Oslo, Norway



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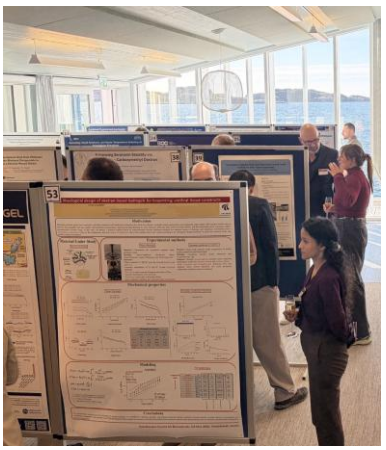
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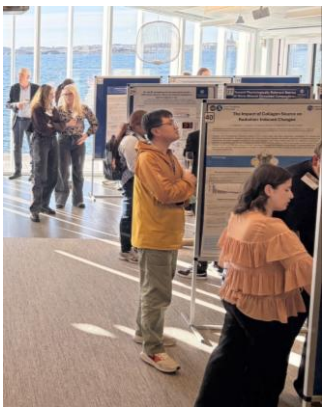
ScSB 2026 meeting highlights



Three days of science, stimulating discussions, and good company in a beautiful setting. The 19th Annual Meeting of the Scandinavian Society for Biomaterials (ScSB 2026) took place on 6–8 May in Fiskebäckskil, Sweden, with excellent spring weather against the backdrop of the Bohuslän archipelago.

With representation from at least 15 countries, the largest numbers of participants came from Sweden (30), Norway (12), Finland (9), and Denmark (5). We also welcomed participants from further afield, including Taiwan and India.

The scientific programme featured eight keynote lectures by Prof. Serena Best, Prof. Hanna Isaksson, Prof. Ralph Müller, Prof. Rickard Brånemark, Prof. Michael Gelinsky, Prof. Maria Asplund, Prof. Már Másson, and Prof. Lars Kölby. The programme also included seven oral presentations and poster presentations.





This year's ScSB Award went to Prof. Peter Thomsen, FBSE (University of Gothenburg), for his contributions to biomaterials research, material–tissue interactions, and osseointegration. His achievements have also been recognised through the George Winter Award (2003) and election as a Fellow of the Royal Swedish Academy of Engineering Sciences (IVA).

Three student travel awards were also presented to support early-career researchers.

There was, of course, more to the meeting than science. A boat tour around the surrounding islands gave participants an opportunity to experience the Bohuslän archipelago, while the sunny weather made it all the more enjoyable. A memorable few days, both inside and outside the lecture hall!

We are grateful to our sponsors for their generous support of ScSB 2026.

Gold Sponsors: Merck, BlueScientific, and Biolin Scientific
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Bronze Sponsor: Lucid Concepts AG

On behalf of the organising team, I would like to thank all speakers, poster presenters, participants, and sponsors for making this meeting possible. It was a pleasure to bring together such an engaged community and see the exchange of ideas across different areas of biomaterials research. We hope the discussions and connections made in Fiskebäckskil will continue beyond the meeting. We look forward to seeing you again at the next ScSB meeting in Hella, Iceland!

Furqan Shah (University of Gothenburg)
on behalf of the ScSB 2026 organising team: Martin Andersson, Mats Hulander, Anders Palmquist, and Alida Ramdén

Welcome to ScSB 2027



About the event

Pushing the boundaries of what nature can teach us about materials and life.
At the edge, we discover resilience, adaptation, and potential – for a more sustainable and innovative future.

Scandinavian Society for Biomaterials

HÁSKÓLINN Í REYKJAVÍK
REYKJAVÍK UNIVERSITY

UNIVERSITY OF ICELAND

For more information, visit scsb.eu/scsb2027

Meet our new board members



Janne Koivisto
Postdoctoral researcher
Tampere University,
Finland

I am a researcher with strong background in materials science, and I'm experienced in growing surprisingly many different human cell types. This is because the focus of my research is in developing new hydrogels to be used in many places, such as 3D cell culture substrates, tissue engineering scaffolds, or bioinks. I have never focused on just a single tissue or disease type but rather aimed to provide hydrogels as tools matching different needs of various collaborators. Currently I'm focusing more and more on physical characterization methods to understand hydrogels better as a material class, to increase the fundamental knowledge of these fascinating materials.

Throughout my career, I have been actively participating in the scientific community, both locally and on European level. Between May 2020 and May 2026, I was the ESB Young Scientist Forum (YSF) National Representative for Finland (and few years also for Sweden, when post doc'ing in Stockholm). After the YSF, I wanted to move forward and joined the ScSB board this year. I have been also actively participating in organizing conferences, including the ScSB2025 conference in Hämeenlinna, Finland. Then in 2027, I am part of the organizing committee for the Nordic Rheology Conference in Tampere, Finland, and perhaps I can also already say that in 2028 we will have a summer school in Tampere related to vascularization-on-chip.



Alida Ramdén
PhD Student
Chalmers University of Technology, Sweden

I have just started the second year of my PhD in Martin Andersson's group at Chalmers University of Technology. My research focuses on developing implant coatings that combine photothermal heating from gold nanorods with the local delivery of antimicrobial agents to prevent biomaterial-related infections while reducing the need for antibiotics.

I first encountered the ScSB even before starting my PhD, when Martin got me involved in organizing this year's conference. Being part of the conference organization was a very rewarding experience which made me I realize that I wanted to continue contributing to ScSB beyond the conference. I am excited to do so in my new role as Student Representative.

I believe that regular opportunities to connect with other researchers are essential, not only for sharing results but also for exchanging ideas, discussing challenges, and fostering new collaborations. As Student Representative, I look forward to supporting these interactions and representing the perspectives of PhD students and other early-career researchers within the society.

Current board members and roles

Assoc. Prof. Hanna Tiainen, *University of Oslo, Norway*, President, Website manager
Assoc. Prof. Natalia Ferraz, *Uppsala University, Sweden,* Board Member, Treasurer
Assoc. Prof. Pablo Pennisi, *Aalborg University, Denmark*, Board Member, Website manager
Dr Janne Koivisto, *Tampere University, Finland*, Board Member, Secretary
Prof. Dagnija Loča, *Riga Technical University, Latvia ,* Board Member, Newsletter responsible
Assoc. Prof. Furqan A. Shah, *University of Gothenburg, Sweden*, Board Member, SoMe responsible
Asst. Prof Bergþóra Sigríður Snorradóttir, *University of Iceland*, Board Member
Alida Ramdén, Chalmers *University of Technology, Sweden*, Student representative, YSF liaison

Please find our contact information here

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Stay tuned and follow our LinkedIn, loads of interesting news coming!

Contact

Home BrinterAM

Brinter AM Technologies Oy
Itäinen Pitkäkatu 4 A
20520 Turku, Finland

Scandinavian Society for Biomaterials
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Meet our YSF representatives



Inês Salvador - Sweden
PhD Student
Uppsala University,
Sweden

My name is Inês Salvador, and I am originally from Portugal. I recently moved to Sweden to start my PhD at Uppsala University as part of the Marie Skłodowska-Curie Doctoral Network Print4Life.

My PhD research focuses on developing and optimizing 3D-printed scaffolds for bone tissue engineering, with a particular interest in bone defect reconstruction and antimicrobial strategies to prevent infections.

Moving to a new country and starting a PhD has been an exciting experience, full of new challenges, opportunities, and people to meet. Having studied and worked in different countries, I have realised how much we can learn from sharing experiences and exchanging ideas with people from different backgrounds.

That is also what attracted me to the YSF! I see it as a great opportunity not only to meet researchers from different backgrounds, but also to actively contribute to creating spaces where we can exchange ideas, build connections, and learn from each other.

I am looking forward to getting to know the biomaterials community across the Nordic and Baltic countries, working alongside the other YSF representatives, and hopefully helping to organize some interesting activities along the way!



Jana Vecstaudža – Baltics
Assistant professor
Riga Technical University,
Latvia

I am a biomaterials scientist with a long-standing research interest in calcium phosphate-based biomaterials for bone regeneration and, more recently, organ-on-chip technologies for developing more physiologically relevant *in vitro* models to evaluate biomaterials for bone regeneration. I obtained my PhD in materials science from Riga Technical University, Latvia, in 2021. Currently, I work as a leading researcher and assistant professor at Riga Technical University.

My connection with the ScSB goes back to 2015, when I attended my first ScSB conference in Sigulda, Latvia. Throughout my PhD studies, I continued participating in ScSB conferences together with colleagues from our research group in Riga. I have always appreciated the welcoming atmosphere, scientific exchange, and strong sense of community. I also value having a society that brings together biomaterial researchers from across Northern Europe.

Encouraged by the previous Baltic YSF representative, Arita Dubnika, I decided to become more actively involved in the ScSB community. One YSF initiative I particularly appreciate is its educational webinar series. As a regional representative, I am especially motivated to help continue this initiative by bringing forward interesting and practically useful topics for the ScSB community, particularly early-career researchers.



Marco Santacroce - Norway
PhD student
University of Oslo
Norway

I am an Italian dentist and PhD research fellow at the Department of Biomaterials, University of Oslo. My PhD research focuses on periodontal and peri-implant regeneration, particularly bioactive peptides, implant surfaces, and biomaterial–tissue interactions. Alongside my PhD, I also work clinically, which keeps me interested in how research findings can eventually be applied in practice.

Having studied in different countries, I have enjoyed meeting people with different scientific backgrounds and seeing how they approach similar problems. This is something I particularly appreciate about biomaterials research, where people from clinical, biological, and engineering backgrounds often work together.

Scandinavian researchers have been the pioneers in the development of biomaterials for dentistry, and I feel honoured to be now part of this research community. This is also one of the reasons I decided to join YSF. I see it as an opportunity to meet other PhD students and early-career researchers, learn about their work, and encourage more young researchers in Norway to get involved in the ScSB community.

More information about YSF-ScSB

Scandinavian Society for Biomaterials

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Meet our YSF representatives

Katri Ala-Mononen - Finland
PhD Student
Tampere University,
Finland



I hold an MSc (Tech.) in Biomedical Engineering and am currently doing my PhD at Tampere University, in the Adult Stem Cell Research Group. My research focuses on developing biodegradable materials for the surgical treatment of pelvic organ prolapse, focusing on *in vitro* studies with cells and *in vivo* inflammation research.

During my first year as a PhD researcher, I had the opportunity to attend the ScSB conference, where I was positively surprised by the diversity and breadth of biomaterial research across Scandinavia and associated areas. That inspired me to become more actively involved in the community and encouraged me to take on the role of a regional representative for YSF. In this role, I look forward to continuing the webinar series initiated by the previous representatives, which aims to support young researchers by providing valuable insights and information at the early stages of their research careers. I am also keen to get to know fellow biomaterial researchers from across the Scandinavia and strengthen connections within this community.

What is YSF-ScSB?

The YSF-ScSB represents all early career researchers of the ScSB member countries. YSF-ScSB consists of four national chapter representatives that are affiliated with the YSF-ESB.

The YSF national chapters in Scandinavia, Finland and the Baltics have united their forces to create a webinar series that focuses on topics that are of particular interest to young early career scientists. United North is just what we decided to call ourselves for simplicity. Much snappier than "the region comprising the Nordic countries and the Baltic states". Our online events are all free of charge, and despite the name, also available for everyone outside the Northern corner of Europe.

Are you a young scientist and want to get involved in organising activities for your follow young scientists? Or do you have ideas for new topics we should cover in our webinar series? Please get in touch with one of the national chapter representatives of the United North!

Young Scientist Forum
YSF
European Society for Biomaterials



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Bridging the bone research gap: why *ex vivo* models deserve more attention

Bone regeneration research has never been more exciting. New biomaterials, bioactive molecules, injectable hydrogels, and advanced manufacturing techniques are constantly expanding what is possible in skeletal repair. Yet, despite these advances, a persistent challenge remains: how do we reliably evaluate these innovations before they reach patients?

Most preclinical bone research still relies on two ends of an experimental spectrum. On one side are conventional cell culture models, which offer simplicity, affordability, and experimental control. On the other hand, animal studies provide biological complexity and physiological relevance. Both are indispensable, but neither fully addresses the growing need for models that accurately represent the bone microenvironment while remaining practical and ethically responsible. This leaves a translational gap that many researchers encounter sooner or later.

Traditional cell cultures have taught us a great deal about cell-material interactions, but bone is far more complex than a layer of cells growing on plastic. Native bone contains a highly organized extracellular matrix, multiple interacting cell types, and a dynamic biomechanical environment. Cells behave differently when removed from these surroundings, which can make it difficult to predict how promising laboratory findings will translate into living tissues. At the same time, animal studies remain expensive, time-consuming, and subject to ethical considerations, while physiological differences between species can complicate clinical translation. This is where *ex vivo* bone models offer a compelling alternative.

Why *ex vivo* models matter

Ex vivo models utilize living bone tissue maintained outside the body under carefully controlled conditions. Unlike conventional cell culture systems, they preserve much of the native architecture of bone, including the extracellular matrix, resident cell populations, and many of the tissue-level interactions that influence regeneration and remodeling. As a result, they occupy a valuable middle ground between *in vitro* studies and complex *in vivo* experiments.

One of the most attractive features of *ex vivo* models is the ability to study tissue responses in a controlled setting. Researchers can isolate variables that are often difficult to separate in animal studies and directly examine how biomaterials, biological factors, or mechanical stimulation influence bone behavior. This level of control allows a clearer understanding of cause-and-effect relationships while retaining much of the biological relevance that is lost in conventional cell culture.

The growing interest in *ex vivo* systems also aligns closely with the principles of the 3Rs: Replacement, Reduction, and Refinement of animal use in research. By using bone tissues maintained outside the body, or tissues obtained from animals already used in other approved studies, researchers can reduce the number of animals required for biomaterials testing while extracting greater scientific value from each sample. Rather than viewing *ex vivo* approaches as replacements for animal models, they can be seen as tools that improve experimental efficiency and help researchers make better-informed decisions before progressing to *in vivo* studies.

The challenge of preserving living bone

Of course, maintaining living bone outside the body is not a trivial task. Bone is a highly active tissue that depends on a continuous supply of nutrients, oxygen transport, cellular communication, and mechanical stimulation. Replicating these conditions requires sophisticated culture platforms and bioreactor technologies. s have significantly improved the viability of cultured bone tissues, allowing experiments to extend from days to several weeks and enabling researchers to investigate longer-term biological responses. As these technologies continue to evolve, *ex vivo* models are becoming increasingly attractive tools for studying biomaterials intended for bone regeneration.

Would you like to submit a column contribution?

We would like to invite anyone among our members to propose their contribution to this new column for the ScSB newsletter. Our goal is to enrich our community with expert opinions and angles from our diverse members. So, if you are brimming with exciting research, interesting viewpoints, or cool commentaries, we will be happy to take a look at it!

Feel free to email your piece for our review.

Bridging the bone research gap: why *ex vivo* models deserve more attention

These advances are particularly relevant for bone biomaterials research. The materials we develop are becoming increasingly sophisticated, often incorporating bioactive components, responsive properties, or regenerative functions. Evaluating such materials in overly simplified test systems risks overlooking important biological interactions, while immediate progression to animal studies may not always be the most efficient approach. *Ex vivo* models offer an opportunity to study biomaterial integration, cellular responses, and tissue adaptation in a setting that more closely resembles the environment these materials will ultimately encounter.

The BONEGEL project

This vision is reflected in one of the core objectives of my MSCA-funded BONEGEL project: the development of an *ex vivo* bone culture platforms that enable more physiologically relevant evaluation of next-generation supramolecular hydrogels for bone regeneration. While the primary focus of BONEGEL is the design of innovative biomaterials, an equally important goal is to establish physiologically relevant testing platforms that better replicate the complexity of living bone. By preserving native tissue architecture, cellular interactions, and aspects of the bone microenvironment, these models have the potential to improve the predictive value of preclinical studies while maintaining the experimental flexibility required for mechanistic investigations.

As biomaterials researchers, we often focus on designing smarter materials. Equally important, however, is the development of smarter models for evaluating them. The future of bone regeneration will depend not only on the innovations we create but also on the systems we use to understand their biological performance.

Ex vivo bone models may not replace animal studies or traditional cell culture, but they have the potential to strengthen the bridge between them. In doing so, they could help accelerate the translation of promising biomaterials from the laboratory to the clinic while promoting more efficient and responsible research practices.

Further reading

Sharun K, Banu SA, El Khassawna T, Pennisi CP. Ex Vivo Models: Transforming Standards in Preclinical Bone Regeneration Research. *Discovery Medicine*. 2026; 38(204):305-309. https://doi.org/10.24976/Discov.Med.202638204.24

> *"The future of bone regeneration may depend not only on designing better biomaterials but also on creating better ways to test them."*



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Upcoming events in Scandinavia

SAVE THE DATE!

6–10 September 2027
Uppsala, Sweden

36th Annual Conference of the European Society for Biomaterials

ESB 2027 is organized by an international scientific community with strong representation from Uppsala University and other Swedish research institutions.



Prof. Cecilia Persson
— Uppsala University



Prof. Anders Palmquist
— Gothenburg University



Prof. Anna Finne Wistrand
— KTH Royal Institute of Technology

Welcome to the 36th Annual Conference of the European Society for Biomaterials, taking place 6–10 September 2027 in Uppsala, Sweden. ESB 2027 brings together an international community working across biomaterials, biofabrication, tissue engineering, regenerative medicine and related fields.

The scientific programme will place particular emphasis on three themes shaping the future of biomaterials: additive manufacturing, artificial intelligence and sustainability. From next-generation biofabrication and patient-specific implants to data-driven materials discovery and environmentally responsible materials design, the meeting will explore how these areas are redefining what biomaterials can achieve.

ESB 2027

www.esb2027.org

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Career

Here we list upcoming PhD defences, open positions as well as other career opportunities. Please feel free to send us relevant information to include in this column!

Open positions

Reykjavík University has announced a faculty position in Biomedical Engineering, while Karolinska Institutet is on a look out for a talented Postdoc in DNA nanostructures for cell targeting.

Reykjavík University

Karolinska Institutet

Young Scientist Forum



A series of webinars specifically aimed to the young biomaterials scientists – A platform where you can hear experts talk about science, useful career tips, and scientific debates.

Next webinar: check out our website for detailed info!

Do you have a suggestion for webinar topics? Contact one of our YSF representatives or fill in our feedback form!

Information for advertisers

The newsletter of the ScSB is published 2-4 times per year. It is distributed by e-mail to a highly focussed Scandinavian and international readership, bringing news and reports of interest to our subscribers. Accounts of activities in the participating countries, such as new research projects and new facilities are published, and open positions and PhD defences are announced. There are currently approximately 500 subscribers to the newsletter.

Current advertisement and promotion article prices (€):

One page:	100
Half page:	70
Quarter page:	50

About ScSB

The Scandinavian Society for Biomaterials (ScSB) was founded in May 2008. The focus of our activities is centred on organizing an annual Biomaterials meeting and thereby promote cross-fertilization of Biomaterials research in the Nordic countries and the Baltic states. In addition to academic researchers, the society welcomes students and industry to participate in the yearly meetings. ScSB is an affiliated society to the European Society for Biomaterials (ESB) and its President takes part in the ESB National Societies Meetings.

Where to find us

You can reach us and follow ScSB's updates on different communication channels and network.

- Website: Scandinavian Society for Biomaterials
- Social media:

- e-mail list: Sign up here to our e-mail list and don't miss our latest news
- Newsletter : e-mail distribution.