

Reflecting on 2025: a year of science and collaboration

Nanion Technologies GmbH, Munich.



Dr. Niels Fertig,
CEO of Nanion Technologies

Dear Colleagues, Partners and Friends,

As we start 2026 and celebrate Nanion's 24th anniversary, we would like to take a moment to look back on the past year.

2025 was an exciting year for ion channel and membrane protein research. Together with you, our customers, partners, and collaborators, we continued to develop assays, tools, and workflows that help turn new ideas into reliable data. Many of our advances this year, from organellar electrophysiology to optical and high-throughput approaches, grew out of discussions and feedback from you.

In particular, 2025 was a breakout year for ion channels - one of the strongest we've seen in decades with multiple new ion channel drugs being released and approved. Kicking off with Journavx (suzetrigine), the first $\text{Na}_v1.8$ inhibitor and first truly novel non-opioid analgesic in 20+ years. Then came VYKAT XR (K_{ATP} opener for Prader-Willi hyperphagia), Tryptyr (TRPM8 agonist for dry eye), KETARx (NMDA blocker for surgical pain), Cardamyst (etripamil nasal spray, the first self-administered L-type Ca_v blocker for PSVT), and a handful of other approvals of label expansions and generic ion channel drugs around the world.

Beyond industry, we also saw remarkable discoveries from academia with the 50+ year-old ball-and-chain mechanism finally resolved at atomic resolution, a lot of new cryo-EM structures ($\text{K}_{\text{Co}2.2}$, $\text{K}_v1.2$, TRPC1/TRPC4, ELIC, THIK-1...) and huge progress in *de novo* ion channel design, including dVGAC (*de novo* voltage-gated anion channel) and *de novo* calcium channels with defined selectivity filter geometry. Absolutely fantastic.

Yes, ion channels clearly had a moment in 2025, and it feels like just the beginning. But what stood out most for us at Nanion was the strong sense of connection. Through

conferences, workshops, user meetings, and collaborations, 2025 once again showed us how important open exchange, curiosity, and long-term partnerships are for scientific progress. We are very grateful for your trust.

From our side at Nanion Technologies, we'll keep building tools, assays, and collaborations to support your projects in 2026. Lots in the works. Stay tuned.

Thank you for being part of this journey. We look forward to continuing our work together in 2026.

Warm regards,

Dr. Niels Fertig



Guided by the light: Scientific advances

In 2025, much of our development work focused on making challenging targets easier to study in a reliable and scalable way.

One important area was organellar electrophysiology. We continued to expand lyso-patch assays on the SyncroPatch 384 and SURFE²R platforms. These approaches allow functional measurements of lysosomal ion channels and transporters that were previously difficult to access and are relevant in neurodegenerative and metabolic disease research.

We also introduced the optical stimulation lid (SOL) for the SyncroPatch 384, enabling light-controlled stimulation to be combined with high-throughput, high-quality electrophysiology, opening new experimental possibilities while keeping workflows simple and robust.

A global community of science

Collaboration remains at the heart of Nanion's approach. In 2025, we co-authored 13 peer-reviewed publications with partners worldwide, while more than 150 scientific papers published during the year were supported by Nanion instruments. These studies spanned ion channels, transporters,

cardiac safety, neuroscience, and related fields.

Throughout the year, Nanion participated in more than 50 conferences, workshops, and scientific meetings, allowing us to exchange directly with researchers across academia, CROs, and pharma.

The conference year once again started with the Annual Biophysical Society Meeting, this time held in Los Angeles in February. As always, Nanion was represented by a large team of colleagues and collaborators, and our booth quickly became a lively meeting point for discussions around ion channels, membrane transporters, and electrophysiology workflows.

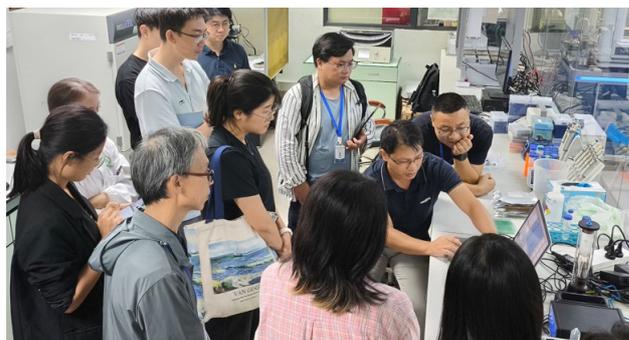


Nanion team and partners at BPS 2025 in Los Angeles, California

We showcased our full instrument portfolio and presented six posters covering automated patch clamp, solid-supported membrane-based electrophysiology (SSME), impedance-based assays, and high-throughput approaches to ion channel and transporter research. Our exhibitor-sponsored session, featuring talks on deep learning tools to design hASIC1a modulators, lysosomal ion channels assays using SSME, and integrated optical and electrical approaches to investigate lipid bilayer dynamics, was very well attended and sparked engaging discussions throughout the meeting.

The Drug Discovery for Ion Channels XXV Satellite Meeting, brought together leading researchers from academia and industry to present and discuss cutting-edge advances in ion channel biology, modulation strategies, and therapeutic applications, reinforcing the strength and momentum of the field.

Beyond major conferences, a strong focus in 2025 was placed on instrument demonstrations and practical training. We enjoyed running workshops in Aachen, Innsbruck, Munich, Liverpool, Shanghai, for our instruments. These events continue to be an important way for us to support high-quality experimental work and exchange directly with users in practical settings.



CardioExcyte 96 workshop in Shanghai, China

Growing communities: the Membrane Physiology Symposium

A major highlight of 2025 was the continued growth of the Membrane Physiology Symposium (MPS) series. Inspired by the success of the inaugural meeting in Napa Valley, California, the symposium expanded globally, with additional events held in Tokyo (Japan) in July and Shanghai (China) in September.

All three meetings were very well received, and we were thrilled to see how researchers from academia, CROs, and pharma came together to exchange ideas, discuss data, and establish new collaborations. The continued growth of the MPS series highlights the importance of dedicated spaces for in-depth scientific discussion.



Poster session during Membrane Physiology Symposium in Napa Valley, California

Nanion User Meeting

Another standout moment of the year was the Nanion User Meeting 2025, held at our headquarters in Munich. This was our largest User Meeting to date, with more than 100 participants joining us on site from around the world.

Under the theme "Guided by the light", we enjoyed two days of outstanding science, lively discussions, poster sessions, and networking. The meeting once again

demonstrated the strength and openness of the Nanion user community and the value of sharing experiences across disciplines.



Nanion User Meeting 2025

SyncroPatch 384 Instrument Grant

In 2025, we continued the SyncroPatch 384 Instrument Grant, inviting research groups worldwide to submit proposals focused on ion channels and membrane proteins.

Once again, we received a large number of excellent applications, covering a wide range of scientific questions and experimental approaches. The quality of the proposals made the selection process particularly challenging.

We would like to congratulate the groups of Glenn King from the University of Queensland, and Medha Pathak from the University of California, Irvine. We look forward to supporting you as you use the SyncroPatch 384 in your research and to seeing the results that emerge from your work.

A sincere thank you also goes to everyone who applied. We greatly value the ideas shared with us and hope to continue working with many of you in 2026.

People behind the company: Nanion Day Out

Beyond science, 2025 also offered moments to pause and reconnect as a team. During our annual Nanion Day(s) Out, our team spent time together in Donaustauf castle ruins and Nagelstein waterfalls, combining nice hikes, outdoor activities, shared meals, and informal conversations.

These moments remain an important part of Nanion's culture, strengthening team spirit and helping us return to our work energized and focused.



Nanion team hiking to the Donaustauf castle ruins

A look to the future

As we celebrate Nanion's 24th birthday, we look back on a year defined by scientific progress, strong collaboration, and meaningful exchange. Many exciting developments are already underway, and we look forward to sharing more with you in 2026.

On behalf of everyone at Nanion Technologies, thank you for your trust, collaboration, and continued partnership. We look forward to continuing our journey together.

