Nanion's Port-a-Patch is used for bilayer research and education at the Technical University of Munich.

Munich, Germany, Dec. 17th; Starting in 2008, Nanion's Port-a-Patch is being used in education and research at the Institute for Biomolecular Systems and Bioelectronics, Department of Physics at the Technical University of Munich. Because of its ease of use and the high quality data generated, the Port-a-Patch is of great value in basic biophysical research and hands-on education of students.

"The Port-a-Patch allows students and researchers with no prior experience in electrophysiology to rapidly generate research grade data. Within the courses given at the Institute for Biomolecular Systems and Bioelectronics, the students gain hands-on experience in basic membrane biophysics and electrophysiology which is of great value for their education." says Professor Simmel, who holds the Chair of Bioelectronics at the TU Munich Physics Department. His group is devoted to research in bionanotechnology, systems biophysics, and bioelectronics.

Nanion's automated patch clamp system, the Port-a-Patch, is recognized as the world's smallest patch clamp device, allowing for ultralow noise recording of single ion channel events in artificial as well as cellular bilayers, in addition to whole-cell recordings. Using Nanion's Vesicle Prep Pro, giant unilamellar vesicles (GUVs) are produced, into which the ion channels of interest are reconstituted. The GUVs, containing ion channels, are used to form high-resistance, solvent-free bilayers, using the Port-a-Patch. The procedures of bilayer formation and protein introduction are greatly simplified, increasing the efficiency of the research, as well as drastically increasing data quality compared to other recording techniques, such as the use of black lipid membranes.

"We are excited to hear that our products enable students to discover a very broad and interesting field of academic research, which historically has been quite difficult to access and is known to have a notoriously low throughput. As a leading provider of tools for ion channel research, we have also noticed an increased interest from industry users for bilayer recordings." says Niels Fertig, CEO of Nanion.

About Nanion:

Nanion Technologies GmbH is a German Private Limited Company and was founded in 2002 as a spin-off from the Center for Nanoscience (CeNS) of the University of Munich. Nanion's team has developed and globally established two highly successful automated patch clamp instruments as enabling tools for sophisticated and high throughput applications for ion channel research and drug discovery.

Nanion's instruments use planar patch clamp chips which replace the traditional glass pipette used in the technique of patch clamping. Following the successful market introduction of two automated patch clamp devices, the Port-a-Patch (2004) and the Patchliner (2006), Nanion now introduces a massively parallel patch clamp platform, the SyncroPatch 96. Nanion was nominated in 2007 for Germany's most prestigious innovation award the **Deutscher Zukunftspreis** (German Future Prize, Federal President's Award for Technology and Innovation).

Contact details:

Niels Fertig, CEO, Phone: +49 89 2189 97972, Email: info@nanion.de, Web: www.nanion.de

About Professor Simmel's group, Technical University of Munich:

The Institute for Biomolecular Systems and Bioelectronics at the Technical University Munich explores the phenomenon of biomolecular self-organization and aims at its utilization for nanotechnology and synthetic biology.

Contact:

Prof. Dr. Friedrich C. Simmel, Phone: +49 89 289 13810, Email: simmel@ph.tum.de,
Web: www.e14.ph.tum.de