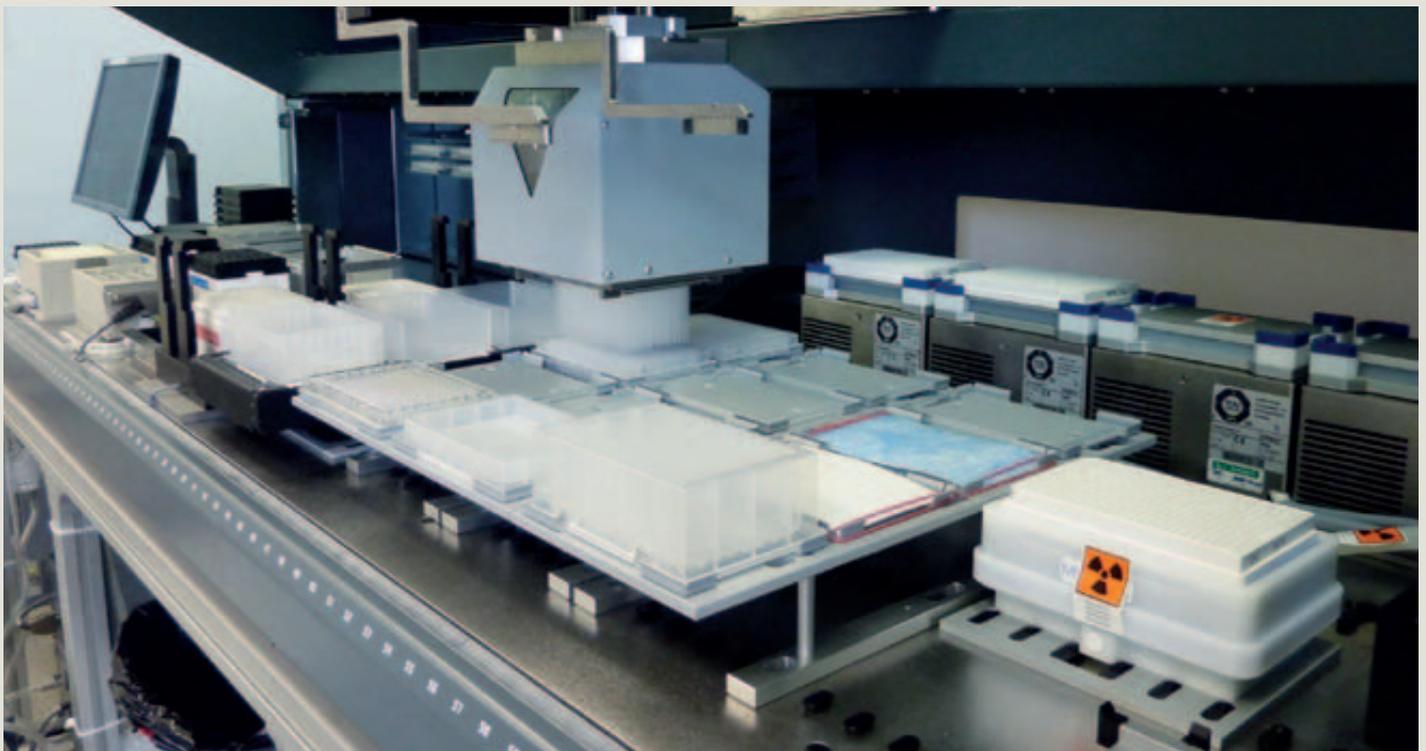


# The future is smaller

Merz Pharma has taken advantage of the greater flexibility and large pipetting volumes offered by the Freedom EVO® workstation's MultiChannel Arm™ (MCA) 384 option to accelerate its drug discovery pipeline, eliminating the need for single concentration analysis in its screening processes.

Merz Pharma is an independent pharmaceutical company based in Frankfurt, Germany, specializing in drug discovery and development for neurological and psychiatric disorders including Alzheimer's disease, Parkinson's disease and tinnitus. The Company's drug discovery pipeline uses a radioligand-based screening strategy to identify candidate compounds which interact with disease-relevant membrane receptors, as Dr Meik Sladek, Section Head, *in vitro* screening at Merz Pharma, explained: "Our *in vitro* screening department is responsible for functional and binding studies for potential drug candidates. We use preparations of membrane receptors – either from tissues or transfected cell lines – to identify novel target binding activities, and our entire assay processing workflow is automated using a Freedom EVO workstation."

"The availability of membrane material has historically been the limiting factor in our throughput, however we have now increased the number of assays we are able to perform per membrane preparation by switching from a 96-well to a 384-well microplate format. To accommodate this change in our workflow we have upgraded our Freedom EVO workstation, taking advantage of the flexibility of the MCA 384 pipetting arm. Our instrument is equipped with a MCA 384 channel head and, by using different adapter plates, the MCA 384 gives us the capability to automatically switch between 96- and 384-well microplate formats. This has given us greater flexibility than before and enabled us to increase the number of assays we are able to perform per membrane preparation."



The MCA 384 in operation on Merz Pharma's Freedom EVO platform



Tanja Bauer (left) and Sabine Denk preparing Merz Pharma's Freedom EVO platform for screening

The instrument prepares seven dilutions of up to nine different drug candidates in a 96-well plate, and then converts these dilution series to a 384-well format, allowing us to quickly and easily run each assay in quadruplicate.”

“The pipetting volume range offered by the MCA 384 is also very important for our screening workflow. Because our assay involves both filtration and washing steps, we needed a system that was capable of parallel pipetting at least 100  $\mu$ l per channel in 384-well format. At the time, most automated liquid handling systems using this format were only capable of pipetting

30 or 50  $\mu$ l per well, but the MCA 384 is able to reliably aspirate and dispense 125  $\mu$ l per channel, allowing us to perform our filtration assay rapidly and effectively. This change to our workflow has improved productivity and reduced costs, and could not have been achieved without the pipetting flexibility offered by the MCA 384,” Meik concluded.

To find out more about Tecan's MCA 384 option for Freedom EVO workstations, visit [www.tecan.com/mca384](http://www.tecan.com/mca384)

To learn more about Merz Pharma, go to [www.merz.com](http://www.merz.com)