In 1984, three doctoral students – Metin Colpan, Karsten Henco and Jürgen Schumacher – founded a company in Düsseldorf with support from their supervisor, 43-year-old biophysicist Detlev Riesner. It was a very unusual step at the time, as West German academia and industry existed so separately it was as if a wall divided them. The four researchers broke down that wall by founding one of the first biotech spin-offs from a German university: Diagen. The name, a combination of “diagnostics” and “genetics”, reflected the founders’ vision: to detect pathogens at a molecular level using simple methods based on their nucleic acids. The breakthrough came in summer 1986, when Colpan invented a two-part, single-use plastic system that made it possible to reliably and affordably extract nucleic acids from plasmids in just a few hours. Previously, research labs had to do this using stainless steel columns, and the process took two to three days.

Colpan’s single-use kits paved the way for the company’s success. By that stage it had changed its name to QIAGEN, employed 20 staff and operated from a production facility that it sublet from the company Henkel. But when QIAGEN diversified too much, it led to a liquidity crisis and the company split in 1993. Henco and Schumacher left to found their own companies. Colpan took over sole leadership of QIAGEN and, with newly recruited economist Peer Schatz, drew up a business plan that focused exclusively on separation technologies, expanded their areas of application and pushed ahead with their automation. In 1996, QIAGEN introduced BioRobot 9600, its first automated lab solution for purifying nucleic acids. Now employing 450 staff and generating US$54 million in turnover, QIAGEN took the bold step of becoming the first German biotech company to list on the US technology index NASDAQ. A year later, in 1997, it listed on the Neuer Markt index (now TecDAX) in Frankfurt, and built prestigious headquarters in Hilden, a town close to Düsseldorf.

QIAGEN soon became the poster child of Germany’s biotechnology sector. But it still wasn’t playing in the premier league internationally. That all changed in 2007 with the multibillion-dollar takeover of Digene, a company based in Maryland, USA, with what at the time was the only approved test for detecting human papillomavirus (HPV), which causes cervical cancer. QIAGEN’s acquisition of Digene made it a global leader in molecular diagnostics. In 2009, its revenue exceeded US$1 billion for the first time. Since then, QIAGEN’s diagnostic solutions have covered all steps from biological sample to the corresponding insights (sample to insight). The automated process extracts, purifies and stabilises nucleic acids and proteins, then measures them and interprets them using bioinformatics.

Now nearly 40 years old, the company is a heavyweight on the global stage. It has been listed on the New York Stock Exchange since 2018, and CEO Thierry Bernard took QIAGEN onto Germany’s leading share index, the DAX, in September 2021. Around 6,200 QIAGENers, as they proudly call themselves, serve over 500,000 customers worldwide and generated over US$2.26 billion in revenue in 2022. Half of that came from molecular diagnostics for clinical patient care: QIAGEN is a leader in companion diagnostics for personalized medicine. During the coronavirus pandemic, 750 million COVID-19 tests contained QIAGEN products. The company also offers a groundbreaking blood test for tuberculosis, the world’s most deadly infectious disease. Unlike the often-used skin test, the blood test diagnoses tuberculosis objectively and reliably. QIAGEN is working to make the test available globally, including in poorer countries. The other half of the revenue came from QIAGEN’s life sciences business, which serves the needs of research and forensics. The importance of this area is reflected in two figures: QIAGEN’s products have been referenced around 3.5 million times in scientific articles, and QIAGEN solutions are used to process one forensic sample every ten seconds.