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ASIA EDITION

“We are exploring opportunities to collaborate with startups and incubators”

01 May 2024 | Opinion | By Hithaishi C Bhaskar

Agilent Technologies, a global leader in analytical and clinical laboratory technologies, has named Padraig McDonnell (left in the image below) CEO-elect and Chief Operating Officer (COO), succeeding current President and CEO Mike McMullen (right in the image below). Upon joining Agilent's Board of Directors on May 1, 2024, McDonnell will become company’s President and CEO. In an exclusive interaction with BioSpectrum Asia, both outgoing and incoming CEOs shared their vision for strengthening the life-science potential during their recent visit to the Asia Pacific hub in Singapore.

- **How is Agilent advancing cell and gene therapy modalities to enable next-gen therapeutics and applications? What are Agilent's strategies for further stabilising its footprint in APAC?**

Mike McMullen: Agilent has always been ahead of the curve and aligned with the latest trends in the bioscience industry. The company has achieved a global footprint in life sciences, diagnostics, and applied markets with sales offices, logistics centres, and manufacturing facilities in three major regions. In 2015, Agilent spun off key parts of its operation to become a purely biotechnology company.

After acquiring Seahorse Bioscience for $235 million in 2015, Agilent then acquired BioTek Instruments in 2019, and subsequently integrated with Seahorse Bioscience. Together, these interdisciplinary portfolios give us a very complementary suite of technologies for analysis of cell metabolism and functions. These technologies are likely to be in high demand. Ultimately, Agilent Singapore remains a key operational zone with important investments, especially in the development of new modalities, such as CAR-T cells.

Furthermore, in September 2023, Agilent Technologies signed a Memorandum of Understanding (MOU) with the Advanced Cell Therapy and Research Institute, Singapore (ACTRIS), to develop cell-based therapy advancement. The collaboration aims to boost the nation’s role as a leading cell and gene-therapy manufacturer and clinical services enabling translational research and development.

These emerging modalities will be crucial in the future for patient care, and they will be a vital part of our innovation strategy. Our collaboration with organisations like ACTRIS is crucial for advancing alternative therapies so that more patients can receive treatment tailored to their immune system.

Cell and gene-therapy is expected to gain increasing traction in the coming years, so we have built a compelling cell-analysis business with innovative approaches. Using the Seahorse platform, for example, we can perform metabolic analysis on live cells, which allow us to see how live cells respond to different therapeutics, making sure what we propose is safe for patients. We are providing core technologies to the R&D workflow to advance this domain and these efforts will further contribute toward reducing the cost of treatment in the near future. Also, the Companion-Diagnostics (CDx) business leads the cell-analysis workflows, and we are already working on next-gen biomarkers for therapeutics and personalised medicine.

Our Nucleic Acid Solutions Division (NASD) as well as cGMP-grade CRISPR platform for gene editing serve as backbones for molecular technologies by generating cGMP-grade oligonucleotides which are vital for next-gen therapeutics. So, we are investing heavily in biopharma across both instrumentation and modalities enabling customers to seamlessly execute their workflows.

- **Agilent's market capitalisation was estimated at $7 billion in fiscal 2023. How is Agilent positioning its diversified business across manufacturing, operations, and logistical hubs?**

Mike McMullen: Across Asia and globally, biopharma is an important market, and we are able to assist customers with these modalities with suitable workflows. A substantial part of our revenue comes from the pharma/ biopharmaceutical space, where we have been strategically investing for nearly a decade and built a sizeable biopharma business.

Singapore is the gateway to other countries in the region, so we have set-up a Global Solutions Development Center (GSDC) here to engage in activities around these workflows. Agilent, in Singapore, is an APAC regional hub that serves for commercial and legal affairs, instrument manufacturing, procurement, supply chain, and other businesses and operations. With an approximate S$85 million investment, the Singapore GSDC facility is dedicated to developing integrated end-to-end workflows across a range of disciplines, including pharma, biopharma, lipidomics, and food testing. An 11,000-square-foot centre boosts productivity and optimises laboratory processes with 30 functions. Application scientists and R&D teams collaborate to identify market priorities.

Focusing mostly on the CRISPR technology and oligonucleotides potentials in therapeutics, we have invested nearly $500 million to date, with another $750 million investment planned for the upcoming initiatives globally. Approximately Agilent's direct investment in biopharma is close to $1 billion. Agilent also acquired roughly $2 billion' worth of assets through M&A deals.

In addition, we continue to bring more workflow tools and technologies, and ongoing acquisitions will supplement further augmentation. We will continue to invest in our consumable space to expand our instrumentation and technology workflow portfolios.

- **Amidst the upward trend of laboratory management costs across the R&D value chain, how do Agilent's transformative workflows make a difference?**

Mike McMullen: Since the biopharma industry is very dynamic, Agilent’s suite of tools continues to grow to provide a more productive workflow for laboratories. Our enhanced capabilities provide uptime and biopharma services.

Further, Agilent has an application programming interface (API) which enables customers to seamlessly integrate outside applications with iLab’s billing and reporting modules to support numerous workflows.

We are strategically partnering across the entire value chain of biopharmaceuticals. Besides research tools, we implement analytical technologies for bioprocessing, quality control, and QA/QC workflows - in addition to R&D tools to advance discovery, and development activities in biopharma.

- **What are the initiatives you've implemented to achieve your goal of net-zero greenhouse gas emissions by 2050?**

Padraig McDonnell: Agilent implements an ESG programme with defined operational plans and goals. With industry digitalisation, the transformation of workforces and sustainability is paramount for our business in the future. In other words, we believe that by automating the production process, we can actually reduce our footprint of consumption, as well as consumption during manufacturing. The four infrared technologies, for example, allowed us to monitor every single litre of gas we use, the temperature of every single instrumentation we use, and control electricity consumption at the facility.

Plus, we diligently monitor Environmental Impact Factor (EIF) criteria for all our manufacturing operations by adhering to the ACT Environmental Impact Factor Label which emphasises Accountability, Consistency, and Transparency (ACT) around manufacturing, energy, and water use and packaging.

Agilent has achieved the My Green Lab Certification by further reducing power consumption, and minimising the use of hazardous solvents and glasses.

- **In your new role, how do you envision business- transformation potential to drive innovation and profitability in the evolving market landscape?**

Padraig McDonnell: Over the past 10 years of accelerated growth in Agilent, Mike McMullen has played a crucial role at this Singapore-based regional centre. In the short term, my primary focus will be on transitioning into my new role and building my leadership team so we can execute on our strategy. One of our key focus areas is increasing customer centricity, as well as expanding our global capabilities to help serve our customers around the world. We will continue to invest in our digital capabilities and the APAC region represents a great potential driver for us.

We will continue to support our research-and-innovation academic initiatives through Agilent University; and continue to sponsor similar activities and advance the technology frontier together with Singapore.

The biopharma market is diversified. So, we're looking at how we can invest and differentiate in certain areas, as well as how we can bring together capabilities to create new modalities to add value for our customers. We are also investing in our digital efforts to accelerate all aspects of our business as we help our customers bring great science to life. Moreover, we are exploring opportunities to collaborate with startups and incubators. Our intent is to remain nimble and agile so we can quickly pivot to changing market dynamics.

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