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ASIA EDITION

Ã¢â?¬Å?Our ambition requires us to take long-term view, investing in scale and building unmatched capabilitiesÃ¢â?¬Â•

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The novel trend in single-cell analysis is revolutionising biological research, unravelling underlying genetic credentials while creating new therapeutic approaches and personalised treatments. For it to become more feasible, powerful, reliable tools can fuel scientific discoveries and drive exponential progress to refine genetic analysis for developing better treatment regimens.



A study by Grand View Research reveals that the global single-cell analysis market size was valued at $3.28 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 18.5 per cent from 2022 to 2030. Aware of the burgeoning growth of single-cell-analysis market, **Dr Ben Hindson, President & Co-Founder of 10x Genomics** explains how innovative single cell, spatial, and in situ technologies enable discoveries across oncology, immunology, neuroscience, and more areas using innovative diagnosis and therapy techniques.

What are the drivers and trends shaping the single-cell-analysis market? How do you identify growth segments for investment and expansion?

More and more, we see that single cell methods are becoming the standard for a growing fraction of life science research, an essential element of many new grant applications and are increasingly becoming a requirement for publication.

Our goal at 10x Genomics is to make single cell analysis accessible to every biology lab in the world to make it the standard for most biological research.

Since the initial launch of our Single Cell Gene Expression solution, we have released many new capabilities and versions of our products, focused on expanding the range of applications on the platform, including immune-profiling, epigenetics, proteins and multi-omics.

We have expanded the fundamental capabilities of the platform, highlighted by the release of the Chromium X instrument, which has made it possible for people to run up to 1 million cell experiments routinely.

We're also working to make more samples and more sample types available for routine single cell and spatial analysis.This is a big focus of our R&D pipeline. Last year, we launched several new products that help open up large volumes of archive tissue samples for single cell and spatial analysis, and we're excited to see what researchers uncover with these new capabilities.

Moving forward, we will continue to invest to drive broad adoption, remove bottlenecks, and create more value for researchers around the world.

What are the major milestones accomplished in the Asia Pacific region and what are the projections for FY 22-23?

We started to form our APAC commercial team in 2018, and it's been a great journey. APAC contributes about a quarter of our global revenue. We opened Singapore, China and Japan 10x Genomics entities during this time, as these markets have particularly strong research communities working hard to push science forward.

Our Singapore entity also serves as our APAC regional headquarters and is home to our Singapore manufacturing hub, our first manufacturing centre outside of the United States. Here, we manufacture our leading portfolio of consumables for single-cell analysis for global distribution.

We look forward to continued growth in the APAC region and around the world. In addition to the opportunities, we have to increase adoption with both current and new customers in academic research. There is increasing demand for our tools in clinical translational research, including in pharma/biopharma and in medical centres. This will be an area of focus for us in the coming years.

How does the company intend to invest in next-gen tools and technologies through innovation? In light of this, what are the key components and scope of the company's intellectual property portfolio?

At 10x, we are intensely focused on innovation; it's core to what we do. Since inception, we've invested more than $1 billion in R&D. Our culture of innovation has yielded a strong cadence of technological advancement and product development, launching over 20 pioneering products. What's more: 2022 is shaping up to be the most exciting and ambitious year of product launches in our history.

This velocity of innovation, development and execution is only possible because of the incredible cross-functional talent we have cultivated. Today, we have deep expertise across a wide range of disciplines, from biology, chemistry and microfluidics; to hardware engineering, data analysis and software development. This talent is supported by a robust product development infrastructure focused on integration across these diverse disciplines. Our foundational strength – what's truly differentiated about 10x -- are these integrated core capabilities which are essential for developing the breakthrough products and technologies in our pipeline.

We are able to achieve these outstanding results in part from the strength of our intellectual property, which now includes over 1,600 patents issued and pending. We believe that our deep and broad patent portfolio is a key competitive differentiator.

As we look forward, we will continue to drive our innovation engine, deliver on our R&D roadmap and invest in the long-term with discipline and focus.

How do you envision empowering next-gen innovations to achieve more medical breakthroughs?

We started the company with the premise that improving human health requires an exponential increase in our understanding of biology and that the main challenge to understanding biology is its enormous complexity. To address this complexity, we set out to build technologies to measure biology at the right resolution and massive scale. We catalysed the single cell revolution, built leading platforms for spatial biology, and we're still just getting started. With the launch of our Xenium platform for In Situ analysis, we'll be the only company to have the three fundamental technology approaches for single cell and spatial biology under one roof, uniquely positioning 10x to be the best partner to help researchers around the world interrogate, resolve and master biology.

How do you foresee the investment opportunities to integrate and scale APAC operations for FY 2023 while unlocking novel biological discoveries?

At 10x, we like to think of our technologies as being 'behind the breakthrough'. There have already been more than 4,100 publications using our tools. Our customers are making fundamental advances across oncology, immunology, neuroscience, and infectious diseases. In fact, it's hard to think of an area of biology that has not benefited from discoveries made using 10x products.

We expect that in future, just about all tissue samples, whether for basic research or for clinical diagnostics, will need to be analysed at single cell resolution in spatial context and at large scale. That's because, to understand normally functioning human biology and to understand disease, we need to measure and understand what's happening in individual cells.

The scope of our ambitions requires us to take the long-term view. Part of taking a long-term view is investing in scale and building capabilities that can't be matched. That's exactly what we had in mind as we built our APAC manufacturing and commercial hub in Singapore. We see our Singapore hub as a key part of our future growth, and we made sure to set aside the space to scale and grow along with us.

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