Jenny Zheng â?? SVP & GM of Greater China, Illumina

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Drawing on a wealth of Big Pharma experience, Jenny Zheng now leads China operations for Illumina, a global leader in genomics, specialising in DNA sequencing technology that drives innovation in healthcare, research, and personalised medicine. Illumina continues to see China as a crucial part of its global strategy due to its significant market potential and population, as Zheng outlines, also touching on the importance of integrating regional talent and scientific strengths into global strategy. She also explores Illuminaâ??s shift from a product-centric to a customer-centric approach, focusing on embedding deeper into customersâ?? workflows across different sectors in China, continuing to drive innovation in genomics, and leveraging its open-source platform to stay ahead in a competitive market.

Having spent most of your career at a single Big Pharma company, what prompted you to make a change and join Illumina?

Since 2005 I have been working on understanding cancer patientsâ?? need for pain management. I then moved on to launching multiple innovative oncology therapies in different countries, an experience that allowed me to witness the transformative impact of advancements like targeted therapy and the rise of genomics and companion diagnostics. Over the past decade, the life sciences field, especially in oncology, has seen remarkable progress, particularly in understanding genetic mutations and their implications for medical treatments. This evolution planted a seed in my

mind about the potential of genomics.

What truly motivated me to join this field was the prospect of delving into genomics in a deeper, more impactful way. Illumina, as a pioneer at the frontier of life sciences, stood out. The company is at a strategic crossroads under new leadership, envisioning genomics as foundational to future innovations in life sciences, medical treatments, including vaccines, and beyond.

Joining Illumina was not just about the role itself but also about aligning with a vision and a team that embraces the potential of genomics globally. Even personal conversations, like those with my daughter, reinforced that this move was both significant and forward-looking. The recent changes and opportunities at Illumina further affirmed my decision, underscoring that this is a pivotal time for transformation and growth in genomics.

As Greater China lead, you also serve on Illuminaâ??s global executive management team. What does this say about the strategic importance of this part of the world to the company?

Our executive team is structured around global functions and four geographical regions: Americas (AMR); Europe; Asia Pacific, Middle East and Africa (AMEA) and Greater China. Each region holds significant strategic importance, with Greater China standing out not only for its substantial size, representing about 9% of Illuminaâ??s global business in 2023, but also for its potential as a growth engine.

Our CEO Jacob Thaysen has outlined a bold vision for global expansion, where China plays a pivotal role despite geopolitical complexities. This strategic positioning reflects our belief in genetic science transforming human health trajectories worldwide. Considering Chinaâ??s status as the second-largest economy and its vast population of 1.4 billion, integrating it into our global strategy is not just logical but essential for advancing our mission.

Personally, having served in various leadership roles across Asia Pacific and now as head of Greater China, joining the executive team provides me with a fresh perspective and a direct involvement in shaping Illuminaâ??s global initiatives. It allows me to contribute actively to discussions that impact our global strategy and innovation efforts.

This integration of Greater China into Illumina executive team underscores our commitment to leveraging regional strengths to drive global impact in advancing genetic and life sciences innovations for human health.

How have you approached broadening your understanding of genomic sequencing and navigating this new realm of science?

My initial 90 days at Illumina were indeed focused heavily on immersion. Approximately 70% of my time was dedicated to activities outside the office environment. This included frequent visits to San Diego, Illuminaâ??s headquarters, where I engaged extensively with key stakeholders such as our CEO, executive team, and board members. And I also made a visit to Singapore where our regional manufacturing and R&D hub are located. These interactions were pivotal in gaining insights into Illuminaâ??s global strategies, network dynamics, and partnership models, essential for comprehending the foundational aspects of genomic science.

Simultaneously, the remaining 30% of my time was spent at our offices in China, where I familiarized myself with local team members, internal procedures, and the regulatory landscape crucial for effectively running operations. Beyond these foundational aspects, my focus shifted to engaging directly with customers across the Greater China region. This involved visiting various stakeholders, including service providers, distributors, hospitals utilizing our instruments, and esteemed professors long associated with Illuminaâ??s advancements.

My travels took me to many of our customers across Mainland China, Hong Kong and Taiwan, where I witnessed firsthand the impact of Illuminaâ??s technologies, such as the comprehensive genome profiling panel recently included in local insurance system in Taiwan. These engagements provided critical insights into regional applications of genomic solutions and their broader implications for healthcare.

Reflecting on my learning journey, I found Michael Watkinsâ?? concept of the â??break-even pointâ?• particularly resonant. He emphasizes that effective leadership hinges on reaching a point where the leader begins to drive outcomes based on informed inputs. By the conclusion of my initial 90 days, I felt confident in having reached this break-even point, enabling me to synthesize customer feedback, identify strategic priorities, and align these insights with Illuminaâ??s overarching objectives.

Genomics, like AI, is much discussed but tangible results are sometimes harder to grasp for a broader audience and not just direct users. Do you think we are at a turning point for genomics, especially in China?

Illumina has been in China since 2005, marking nearly 20 years of progress. In terms of academic impact, Illuminaâ??s platforms are used extensively in scientific publications. For example, in oncology clinical research and studies utilizing NGS technology over the past five years in China, Illumina platforms have been cited in numerous NGS related original articles among high-impact journals like Cell, Science, Nature. This strength underscores our impact and value in the genomics field, both globally and in China.

Furthermore, Illuminaâ??s ecosystem in China includes numerous partners who are developing clinical applications on our platform. To date, there are over 20 clinically approved panels based on the Illumina platform in Greater China. We have also made significant contributions to society, supporting initiatives for rare disease awareness and public education.

However, recent financial reports show that our sales in China have been under pressure, reflecting a decline over the past year. Despite this, the foundation of the business remains strong, and our goal is to turn this trend around. This strategic pivot is critical for our future success in China and globally.

Does China have national genomic projects shaping up population health data and what role is Illumina playing in them?

China has been actively incorporating genomics into its Healthy China 2030 initiative. A significant aspect of this involves creating a genomic baseline through large-scale national genomic initiatives (LNGI).

Regions with the resources and scientific capability are establishing their own genomic baselines, and we are excited to support them with Illuminaâ??s cutting-edge technology. Take Hong Kong as an example. Leveraging the regionâ??s large base of Southern Chinese, the city rolled out the Hong Kong Genome Project (HKGP) in 2021 as its first large-scale whole genome sequencing (WGS) initiative with an initial target of collecting 50,000 samples for WGS by 2025. Similarly, Singapore, with its predominantly overseas Chinese population, has a cohort study of 100,000 people using Illuminaâ??s sequencing and analytics software, the same used by the UK Biobank.

In China, initiatives like West China Hospital cohort focus on disease-specific cohort studies as well as general population studies. Public hospitals lead these efforts with support from companies like Illumina in a way in consistent with Chinaâ??s regulatory requirements, highlighting the collaborative nature of these projects. As the field advances, we anticipate more LNGI, increased data insights, and broader international academic collaborations, enhancing our understanding of rare diseases and other health challenges.

These efforts are part of a broader strategy to integrate genomics into healthcare, ensuring that scientific advancements translate into tangible health benefits. The goal is not just to gather data but to apply it effectively for drug development, public health initiatives, and personalized medicine.

I am deeply fascinated by the potential of genomics. Currently, we see smaller, individual cohort studies, but in the next five to ten years, we anticipate a significant increase in these studies, as the science advances and collaboration deepens. This growth will have immense utility for drug development and companion diagnostics.

We will also see networks of these cohorts emerging, leading to data interchange and consolidation, which will amplify their impact. For example, studying a rare disease with an incidence of 0.5 per 100,000 requires a large population to identify enough cases. Aggregating data from multiple cohorts allows researchers to capture these rare occurrences effectively.

China government has already prioritized a list of rare diseases, and thereâ??s a broader initiative to identify and understand many more. As our knowledge expands, large cohort studies will become essential for capturing and analyzing genomic data.

Who are Illuminaâ??s customers in China?

In China, Illuminaâ??s customer base spans across academia, hospitals, biotechs, and other research institutions. Historically, Illuminaâ??s focus has been on product-centric solutions, but moving forward, thereâ??s a strategic shift towards a customer-centric approach. This means embedding more deeply into the workflows and needs of their customers rather than solely focusing on products.

Illumina categorizes its customers into two main groups. Clinical, this group comprises hospitals, medical centres, independent clinical laboratories (ICLs), and diagnostic service providers that utilize Illumina platforms for diagnostic testing. Key areas of focus within this group are Oncology, Non-Invasive Prenatal Testing (NIPT), Genetic Disease, and Infectious Disease, all of which directly impact patient care.

Research and Applied Markets, this includes academic and public research institutions, government laboratories, pharmaceutical companies, agricultural firms, and research service providers that utilize Illumina technology for genomic studies, population health research, and various commercial applications.

This strategic approach not only reflects Illuminaâ??s adaptation to customer needs but also positions them to drive genomic innovation and application across various sectors in Chinaâ??s evolving healthcare landscape.

While drug development in Greater China has seen several successes in recent years, perhaps where the region has really excelled is in testing and companion diagnostics. Against this backdrop, how does Illumina compete and differentiate itself?

We are proud to be an open-source system, which differentiates us as the leading platform. Although there is competition, Illumina leads the industry by enabling our customers to pursue their most important strategic priorities and continually driving our technology forward through our innovation engine.

In pharmaceuticals, you see patents on specific molecules, but that doesnâ??t stop other molecules from targeting the same issue. Genomics and next-generation sequencing (NGS) are relatively young fieldsâ??25 and 20 years, respectively. Competition within the industry has increased significantly, and we expect to see more competition going forward.

Do you see China as a significant source of development for Illumina in the future?

China certainly has the potential to become a major development hub for Illumina. It primarily comes down to the scientists and their ideas. China has a vast pool of talented scientists, which is crucial for development. This is particularly evident in pharmaceuticals, where at the recent ASCO conference, around 50% of the ADC category developments originated from Chinese scientists. Whether through acquisitions or commercialization, these innovations are coming from China.

This is definitely a topic for future discussion with our executive team. The presence of manufacturing capabilities here already lays a solid foundation for potential growth in development as well.

What are your financial, and non-financial targets, in the short and medium term?

Financially, my goal is to meet our targets, which include driving top-line growth and delivering operational excellence by improving margins through increased productivity.

Non-financially, there are a few key objectives I want to achieve. First, we aim to establish a clear and cohesive China strategy that aligns with our executive team. This strategy will encompass not just commercial goals but also an end-to-end innovation strategy.

Second, we focus on organization, talent, and culture. Success in life sciences depends heavily on talent. To thrive in the next five years, Illumina China needs an innovative domestic portfolio, which means attracting top scientists and highly qualified talents in all main functions. We need to ensure we have the right talent both within and in collaboration with external scientists, whether in China or globally.

Lastly, we want to create a roadmap for developing future leaders within the company. My legacy should include nurturing a pool of talent that can eventually produce a handful list of general manager talent pool for Illumina Greater China. If we can develop a future GM, then we can build a

strong leadership pipeline across the board.

Beyond these, I envision Illumina China as a hub of scientific exchange, a place where scientists want to engage, regardless of whether they work for us. We will continue our efforts to strengthen our brand and reputation, which in turn attracts top talent. Reputation is crucial; it is what draws great people to work with us.

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