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SPECIAL REPORT · 2026
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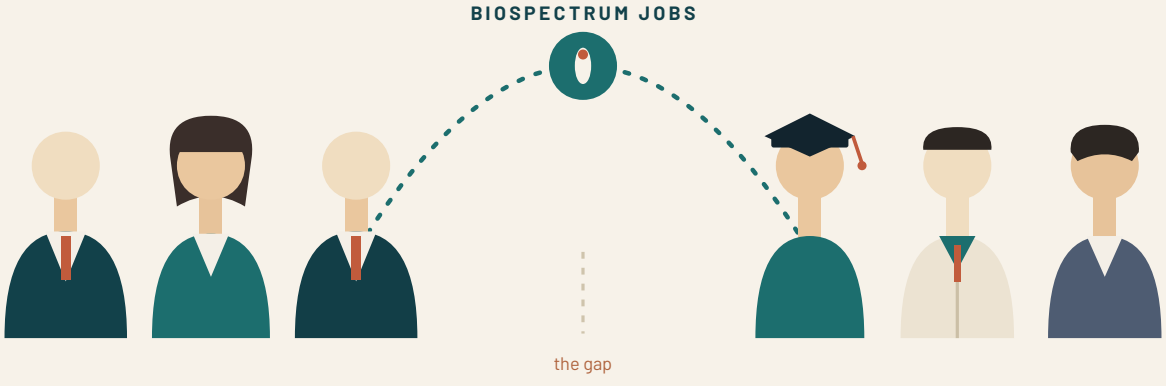
APAC LIFE-SCIENCES TALENT

The *Readiness* Gap

Why APAC's biopharma talent pipeline isn't filling the roles employers are racing to hire for.

By **Ankit Kankar**
Chief Operating Officer

Connecting employers with the talent to close the gap



EXECUTIVE SUMMARY

Building capacity faster than the workforce to run it

Asia-Pacific is building the world's next generation of biopharmaceutical capacity faster than it is building the workforce to run it. Across South Korea, Singapore, India and China, new suites for monoclonal antibodies, antibody-drug conjugates, viral vectors and cell and gene therapies are being commissioned on the assumption that qualified people will be there to operate them. In discipline after discipline, they are not.

What makes the picture distinctive is that this is not a supply problem in the crude sense. The region graduates enormous cohorts of science, pharmacy and engineering students every year. The constraint is not headcount — it is **readiness**. Employers report that a large share of graduates arrive without the regulatory depth, digital fluency and hands-on process experience that modern, inspected, data-driven operations demand.

~77%

of APAC employers report difficulty filling roles — nearly double a decade earlier
ManpowerGroup, 2025

36%

of biomanufacturing facilities cannot hire the process-development staff they need
BioPlan Associates, 2026

~44%

estimated job-readiness of India's pharma-discipline graduates
Industry assessment, 2026

The result is a labour market shaped like a barbell. At one end, cautious overall headcount and selective hiring. At the other, ferocious competition for a narrow band of specialists — with salary premiums, counter-offers and poaching concentrated on the same scarce mid-career profiles. The middle, where a healthy pipeline should sit, is thin. This report maps that gap: the roles employers cannot fill, why the pipeline is failing to fill them, where in the region the pressure is most acute, and what the organisations getting ahead of it are actually doing.

PART ONE

The barbell market

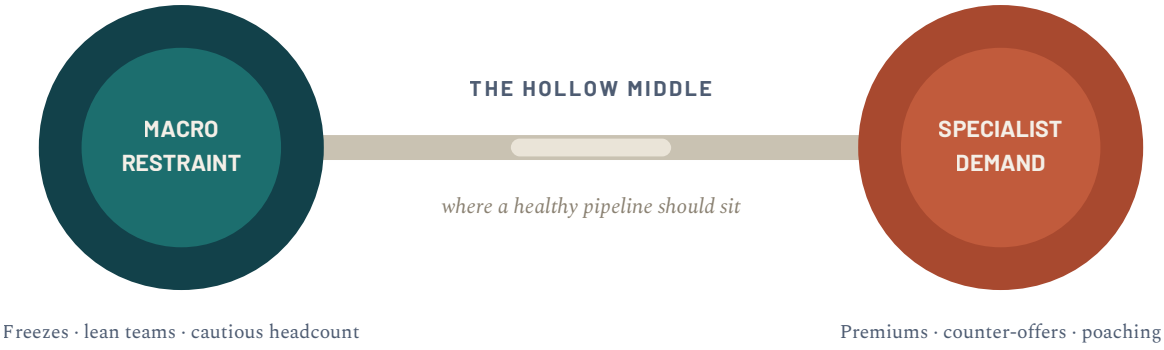
For most of the last decade, the story of biopharma hiring was expansion. The story of 2026 is precision. Across the region and globally, many companies remain deliberately restrained on total headcount. The exuberant, cash-burning hiring of 2021 and 2022 gave way to a long correction: hiring freezes, lean teams, and recruitment confined to genuinely critical roles. Global biopharma layoffs rose sharply through 2025, and the number of companies conducting workforce reductions climbed with them.

And yet — at the very same time — competition for scarce specialists has intensified to levels that look nothing like a soft market. This is the barbell: restraint at the macro level combined with aggressive,

sometimes desperate, recruitment for narrow skill families. A company can be freezing generalist roles in one division while paying above-market premiums and losing candidates to counter-offers in another.

In India, the specialist end is unmistakable. Pharma hiring grew by roughly a tenth in 2026, and healthcare and pharma postings saw a surge of more than 60 percent year-on-year at one point in early 2025. That growth concentrated in AI and drug-discovery roles — which now command salary premiums of around a fifth — alongside biosimilars, pharmacovigilance and regulatory affairs.

FIGURE 1 · THE SHAPE OF THE MARKET



Restraint at the macro level and fierce competition for specialists sit at opposite ends of the same market — with a thin, under-supplied middle tier between them.

> *The average hiring signal understates the pain. Aggregate postings look cautious while business-critical roles stay open for months.*

The forces pushing the specialist end are structural, not cyclical:

Patent cliffs and the biosimilars window. A wave of biologic patent expiries is opening a multi-billion-dollar opportunity. As of mid-2025, the FDA had approved more than 70 biosimilars and the EMA more than 110 — a market that has moved from novelty to mainstream. Every programme needs process, quality, regulatory and manufacturing talent that did not need to exist at this scale a few years ago.

The shift to biologics. Biologics now account for well over 40 percent of the industry pipeline. A biologic is more complex to make, harder to characterise and far more intensive to monitor after launch than a small molecule — and the newest modalities are precisely where experienced people are thinnest.

The GCC pull. Global Capability Centres have quietly rewired the demand curve, competing for the same specialists that domestic players and CDMOs chase, and pulling demand up-market faster than the pipeline can respond.

Attrition. Surveys through the cycle found a majority of workers in India and roughly half in Singapore wanting to change jobs — turnover that makes every specialist vacancy harder to close because the same people are courted from several directions at once.

PART TWO

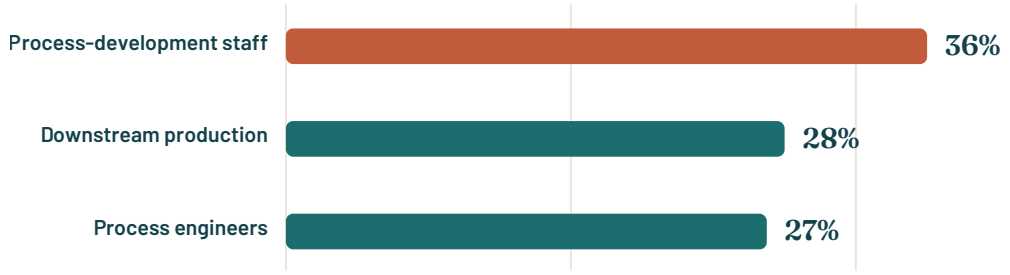
The five roles employers can't fill

Beneath the barbell sit a handful of role families where demand has decisively outrun supply. These are the vacancies that most directly constrain what companies can make, launch and keep compliant.

1. Biologics & biosimilars manufacturing

This is the epicentre. The build-out of biologics capacity assumes a manufacturing workforce that, in many disciplines, does not yet exist in the numbers required. Global survey data is blunt: more than a third of facilities cannot hire process-development staff, over a quarter cannot fill downstream production roles, and roughly a quarter lack sufficient process engineers — persistent constraints that are worsening as advanced-modality demand accelerates.

FIGURE 2 · WHERE BIOMANUFACTURING CAN'T HIRE



Share of facilities reporting they cannot fill the role — BioPlan Associates, 2026

2. Pharmacovigilance & drug safety

India has become, in effect, the world's drug-safety back office, and multinational GCCs have expanded specifically to house PV functions. But the shortage is acute where it counts: a large majority of PV professionals report understaffed teams, and the sharpest scarcity sits at the three-to-eight-year band — the specialists who drive aggregate reporting, signal management and benefit-risk assessment.

3. Regulatory affairs & regulatory science

As global regulatory landscapes expand and diverge, regulatory professionals have moved from support function to strategic bottleneck. The role rewards a rare combination — scientific literacy, multi-agency jurisdictional knowledge, and command of structured digital submissions — that takes years to build and cannot be conjured from a fresh graduate pool.

4. Bioprocess engineering & scale-up

As products move from clinic to commercial scale, the premium shifts from innovation to reliability — to people who have navigated scale-up, inspections and sustained GMP operations. This experience is chronically short and, almost by definition, cannot be trained quickly. The newest modalities compound the problem, because the expertise to run them is still being invented.

5. AI, data science & digital-in-R&D

AI and advanced analytics are being embedded inside core functions — forecasting, digital submissions, signal detection, real-world evidence. This has created demand for a genuinely hybrid professional who combines deep domain knowledge with enough data fluency to operationalise new tools in a regulated environment. The profile is new, the education system has not produced it at scale, and these roles carry the steepest premiums in the market.

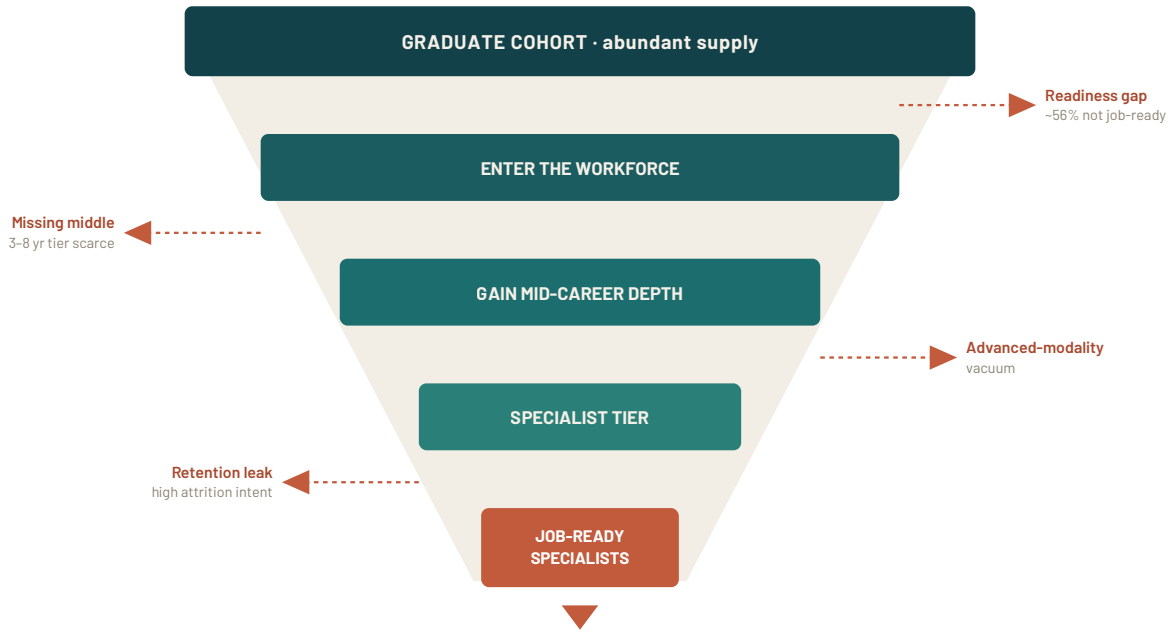
A sixth category is emerging: real-world evidence and health-economics analytics (HEOR). As payers and regulators lean harder on real-world data, the analysts who can generate and defend it are moving from niche to mainstream — one to watch rather than a crisis today.

PART THREE

Why the pipeline fails

If the region graduates so many science students, why can't it fill these roles? Because volume and readiness are two different things, and APAC's pipeline is long on the first and short on the second.

FIGURE 3 · THE LEAKY TALENT PIPELINE



A large graduate intake narrows sharply at each stage. The shortage is a conversion problem, not a supply problem — losses compound from readiness through experience to retention.

The job-readiness gap

The single most important number in this report may be the least discussed: in India, industry assessments put the employability of pharma-discipline graduates at around 44 percent. More than half of the people entering the market with the right degree are not, in employers' judgement, ready for the roles that need filling. A plain

BSc or MSc — once a sufficient entry ticket — is no longer enough; employers want candidates who are job-ready and tech-enabled.

The missing middle

The shortage is sharpest in the mid-career band — roughly three to eight years — across PV, regulatory, bioprocessing and quality. This is the tier that does the highest-value work and takes longest to replace, because the experience cannot be compressed. When a market grows faster than people accumulate that experience, the middle hollows out.

The advanced-modality vacuum

For cell and gene therapies and viral vectors, the expertise problem is more fundamental: in many cases the knowledge has not been developed in the workforce yet, because the modalities are young. Companies commissioning these suites hire from a near-vacuum, and often build the capability from scratch.

Automation shifts demand — it doesn't remove it

A tempting assumption is that AI will quietly solve the shortage. The evidence points the other way. In PV, analysts expect a large share of routine case-processing to be automated within a few years — but organisations that automate are not eliminating teams, they are redeploying them into quality oversight, exception management and interpretation. Automation raises the skill floor. It removes the tasks a junior could do and increases demand for the judgement a specialist provides.

The retention leak

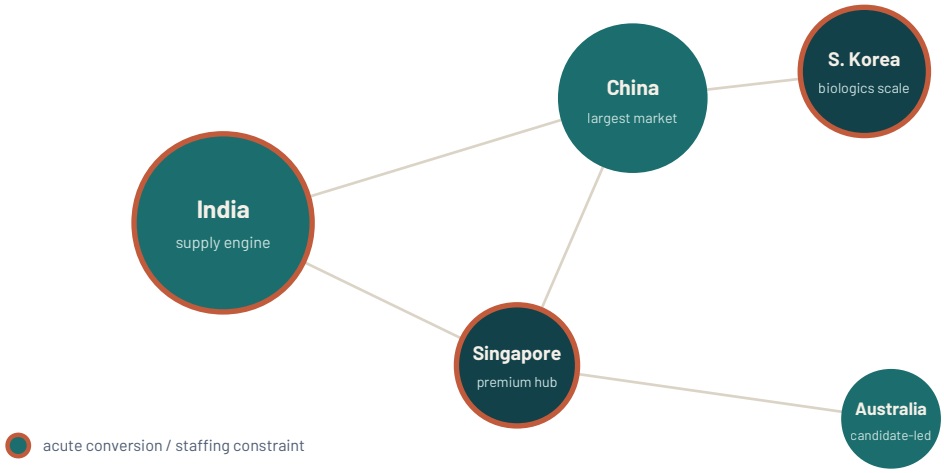
A pipeline is not just what enters; it is what stays. With a majority of workers in some APAC markets intending to move, and quit rates elevated above pre-pandemic norms, the pipeline leaks at exactly the points where it is most expensive to refill.

PART FOUR

The cluster map: where the pressure sits

Talent demand in APAC is not diffuse. It concentrates in clusters, and the shape of the shortage differs by geography. Understanding *where* the pressure is — and where the training response is strongest — is essential for anyone planning a workforce or a career.

FIGURE 4 · THE APAC CLUSTER NETWORK



Illustrative. Node size reflects relative prominence in APAC life-sciences hiring; a terracotta ring marks clusters where the conversion or staffing constraint is most acute.

CLUSTER	CHARACTER	DEFINING CONSTRAINT
India	Supply engine; bioeconomy past USD 130bn, workforce past 300,000	Not supply but conversion — turning a vast graduate pool into job-ready specialists fast enough
India GCCs	Nearly half the top 50 pharma run capability centres; now doing discovery, RWE, regulatory	Pull demand up-market, accelerating mid-career scarcity
Singapore	Premium strategic hub; moving into cell & gene and digital health	Structural scarcity — competes on speed of its conversion machinery, not supply
South Korea	Large-scale biologics manufacturing; region's most conspicuous demand source	Staffing at scale — world-class plants need people who have run world-class plants
China / Australia	China largest market, aided by returning scientists; Australia mature, candidate-driven	Capacity and ambition running ahead of the experienced workforce

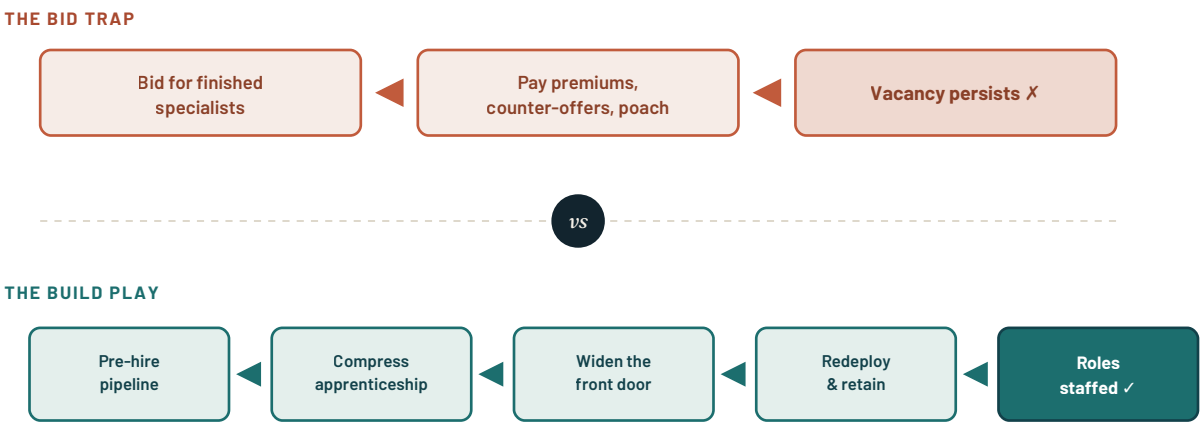
The common thread is that the build-out assumes a workforce that, in many disciplines, does not yet exist in the required numbers. World-class plants are rising across the region. The unanswered question is who will run them.

PART FIVE

What forward hiring looks like

The organisations getting ahead of the readiness gap are not waiting for the market to self-correct. They have concluded — correctly — that a shortage rooted in readiness rather than raw supply cannot be solved by competing harder for the same finished specialists. It has to be solved by **building** them.

FIGURE 5 · BID VS BUILD



A readiness shortage cannot be won by competing for the same finished specialists. The organisations pulling ahead build the talent they need rather than bidding for it.

Build the pipeline before the vacancy

The most forward-thinking employers establish long-term relationships with pharmacy colleges, biotech institutes and engineering schools, creating pre-hire pipelines before candidates ever reach the open market — a shift from transactional recruitment to pipeline ownership.

Compress the apprenticeship

The most effective regional models give trainees hands-on time on representative equipment before they touch a live GMP batch. Dedicated institutes exist precisely to "manufacture the manufacturers" — to shorten the apprenticeship that experience would otherwise demand.

Widen the front door

A significant share of biomanufacturing roles — by some estimates a third or more — can be performed by people with strong technical training rather than advanced degrees. Routing polytechnic and vocational graduates into structured plant training widens the talent front door dramatically, at exactly the tier where volume is most needed.

Redeploy, don't replace

As automation absorbs routine work, leaders redeploy rather than shed staff — moving people into oversight and interpretation. Digital-first upskilling — giving domain experts data fluency and data experts domain context — turns a routine workforce into a hybrid one.

Hire for trajectory, not checklist

Where the perfect candidate rarely exists, leaders hire people with the potential and transferable skills to grow into a role. Some split complex roles in two, reduce initial complexity, or promote from within and pay to upskill — internal development is often faster and more reliable than an external search for a profile the market cannot supply.

Treat retention as recruitment

The cheapest specialist to hire is the one you already have. With attrition intent running high, investment in development and workforce stability has become a frontline competitive strategy — not an HR nicety.

PART SIX

The BioSpectrum Jobs vantage point

Aggregated third-party reports describe the region. A live jobs platform describes the market *as it moves* — which roles stay open longest, where applications cluster and where they dry up, how quickly a specialist vacancy converts, and which skills employers are actually screening for versus merely listing.

WHAT A LIVE MARKET REVEALS

Signals only a specialist platform can see

- **Time-to-fill by role family** — the clearest quantitative confirmation of the mid-career and advanced-modality bottlenecks, comparing manufacturing, PV, regulatory, bioprocess and data/AI roles.
- **Applications per posting** — the single sharpest measure of scarcity, exposing the barbell directly: thin response on specialist roles, heavy response on generalist ones.
- **Skills demand index** — the fastest-growing terms in employer postings, giving a forward read on where competition is heading before it shows up in salaries.
- **Geographic heat** — posting volume and fill difficulty by cluster, grounding the map in live demand rather than survey memory.

For an employer deciding where to invest in pipeline, or a candidate deciding where to build a career, a live market signal is worth more than any survey. That is the vantage point BioSpectrum Jobs is built to provide.

CONCLUSION

Close the gap, or cap the growth

APAC's biopharma ambition is real and, on the capacity side, largely on track. The plants are being built. The investment is flowing. The pipelines are maturing from small molecules to biologics to advanced therapies. The one input that cannot be commissioned on a construction timeline is the experienced, job-ready, digitally

fluent workforce those plants require — and that input is running short in exactly the disciplines that determine how much the region can make, launch and keep compliant.

The gap is not primarily a supply problem. The region graduates more than enough people. It is a readiness problem — a mismatch between what education produces and what inspected, data-driven workplaces demand, made worse by a hollowed-out middle, a retention leak, and automation that raises rather than lowers the skill floor.

That framing matters because it points to the solution. A supply problem is solved by producing more graduates. A readiness problem is solved by **converting** them faster — through pre-hire pipelines, compressed apprenticeships, wider vocational front doors, digital-first upskilling and serious retention. The organisations already doing this will staff the next decade of growth. The rest will spend it bidding for specialists who do not exist in sufficient numbers, and quietly capping their own capacity in the process.

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Ankit Kankar writes across the BioSpectrum portfolio on the intersection of life-sciences industry growth, talent and commercial strategy in Asia-Pacific. This report draws on BioSpectrum Jobs' view of the regional life-sciences hiring market.

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BioSpectrum Jobs is the specialist life-sciences careers platform connecting biopharma, biotech, medtech and life-sciences employers with Asia-Pacific talent. To discuss talent-pipeline strategy or the platform data behind this report, visit www.biospectrumjobs.com.

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