Life Sciences European Workforce Outlook:

Adapting to a Changing Industry

LIFE SCIENCES

Foreword

Barbara Bruno, Chief Practice Officer – Staffing at Gi Group Holding

Scientists chasing answers, clinicians saving lives, technicians making precision look easy. From the discovery of antibiotics to the rapid development of COVID-19 vaccines, **life sciences have powered some of humanity's most remarkable achievements**.

Thanks in no small part to breakthroughs like these, life expectancy has soared—from around 30 in the early 1800s to nearly 81 today. And with innovations like gene therapy and AI-driven personalised medicine pushing the boundaries of what's possible, the potential to transform human health has never been greater.

But life sciences success isn't just about chasing the next big breakthrough. From the lab researchers to the front-line caregivers to the manufacturing technicians, progress depends on people at every level delivering everyday excellence.

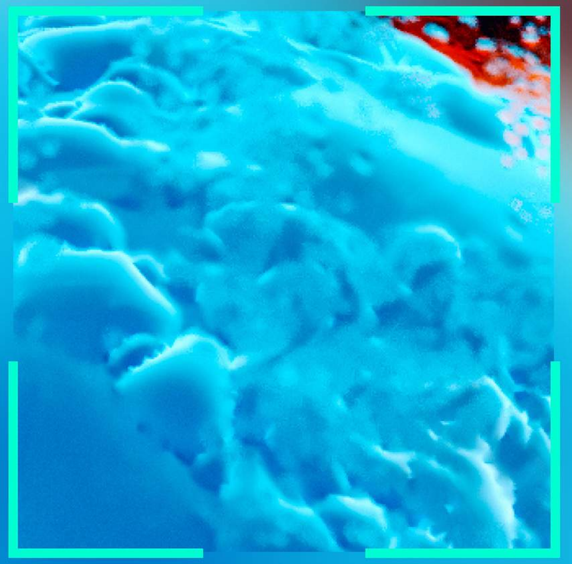
Yet life sciences talent is under strain. Critical skill shortages, intensifying regulations, and supply chain challenges are forcing leaders to rethink strategies.

To keep pace with a rapidly evolving industry, leaders must ask tough questions:

- **How do we build a workforce capable of driving innovation and resilience?**
- **Where can we uncover untapped talent or reskill for the future?**
- **What will keep our people engaged and ready for the challenges ahead?**

Tackling these challenges means breathing new energy into an industry that drives human progress. The future of life sciences depends on reimagining how we connect talent with opportunity, and the time to act is now.

Table of contents



1. Introduction

1. INTRODUCTION

Europe's life sciences sector is undergoing rapid transformation. From emerging technologies to demographic shifts and geopolitical disruptions, the **forces reshaping this industry are as complex as they are urgent**. For leaders navigating an increasingly competitive landscape, understanding these changes is essential.

That's why we have created this comprehensive report, **blending data from hundreds of thousands of job postings with expert insights** into workforce trends, industry shifts, and broader market dynamics. Inside, you will find a candid look at the **challenges and opportunities shaping the sector, along with actionable strategies to help you stay ahead**. Whether you are focused on upskilling your workforce, tapping into emerging talent hubs, or future-proofing your talent, this report is your guide to where Europe's life sciences talent stands today—and where it is headed. Our findings reveal a sector that is resilient and reinventing itself. **The life sciences industry remains a powerhouse for innovation, job creation, and economic growth across Europe**, outpacing growth in many other key sectors.

Yet, while traditional Western European hubs remain central, **emerging markets** like Bulgaria and Latvia are rewriting the map. These shifts signal a growing and diversifying sector, **creating exciting opportunities for businesses and workers alike**.

However, cracks are beginning to show. We **expect employment growth to slow through 2027**, widening the gap between the demand for skilled talent and the number of available professionals. **Europe's ageing workforce** will further exacerbate this trend. And despite high participation rates, women will remain underrepresented in senior industry leadership roles and certain key positions unless decisive action is taken.

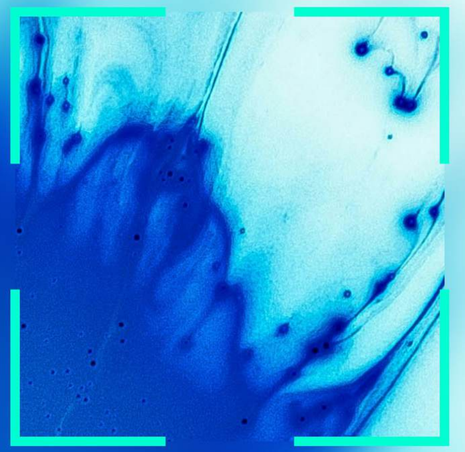
1. INTRODUCTION

Moreover, the pandemic, extreme weather events, and geopolitical tensions exposed the fragility of supply chains, forcing companies to rethink how and where they **source talent and materials**. With life sciences firms increasingly nearshoring production within Europe, we have seen a **notable surge in manufacturing job postings**. While countries like Ireland are capitalising on this shift, powerhouses like Switzerland and France face mixed trends.

Europe's ageing population also drives demand for **specialised skills in areas like cancer care, orthopaedics, and diagnostics**. At the same time, rising patient expectations and the push to digitalise are increasing demand for technology and AI expertise. **Many workers are struggling to keep up as their skills become outdated.**

Yet, **certain workforce segments**—such as women and older workers—**remain underutilised** in key roles, leaving significant potential untapped. Organisations must urgently invest in upskilling to close these gaps and build the capabilities they need from within. Without **fundamental restructuring**, Europe's life sciences talent workforce risks falling behind as regions like the US and China race ahead.

So, can Europe's life sciences industry rise to the challenge? That depends on whether leaders are willing to rethink how they attract, nurture, and retain talent. The companies bold enough to make these shifts will **secure Europe's leadership in life sciences while creating sustainable careers and growth that benefit everyone.**



2. Methodology

2. METHODOLOGY

Gi Life Sciences, the specialised division of Gi Group Holding focused on staffing, recruitment and workforce solutions within the life sciences sector, **and Lightcast**, a global leader in labour market analytics, **partnered to conduct a detailed study tracking job openings in Europe's life sciences sector from 2016 to 2024**. This analysis includes critical metrics such as job types, sub-sectors, geographic trends, and demographic markers like gender, age, and roles in operational or technical fields.

It's important to note that **the study spans EU member states and non-EU countries like Switzerland and the UK**. While having distinct political and regulatory landscapes, these countries play a significant role and continue collaborating intensely in the European life sciences sector.
This broader scope provides a practical picture of the region's workforce and talent supply.

2. METHODOLOGY

The life sciences sector in this study is broken down into three key sub-sectors:

BioPharma

Focused on the development and production of biologically derived pharmaceutical products, including vaccines, gene therapies, and biologics.

MedTech

Encompassing the creation and manufacturing of medical devices, diagnostic equipment, and health technologies.

Research, testing, and medical labs

Involving scientific investigations, clinical trials, and diagnostic testing to advance medical knowledge and product safety.

The results highlight crucial economic trends and workforce patterns, offering valuable insights into the life sciences sector's opportunities, challenges, and emerging dynamics. The findings will be invaluable to everyone, from employers and policymakers to workers and educational institutions.

3. Recruitment trends:

Opportunities and challenges

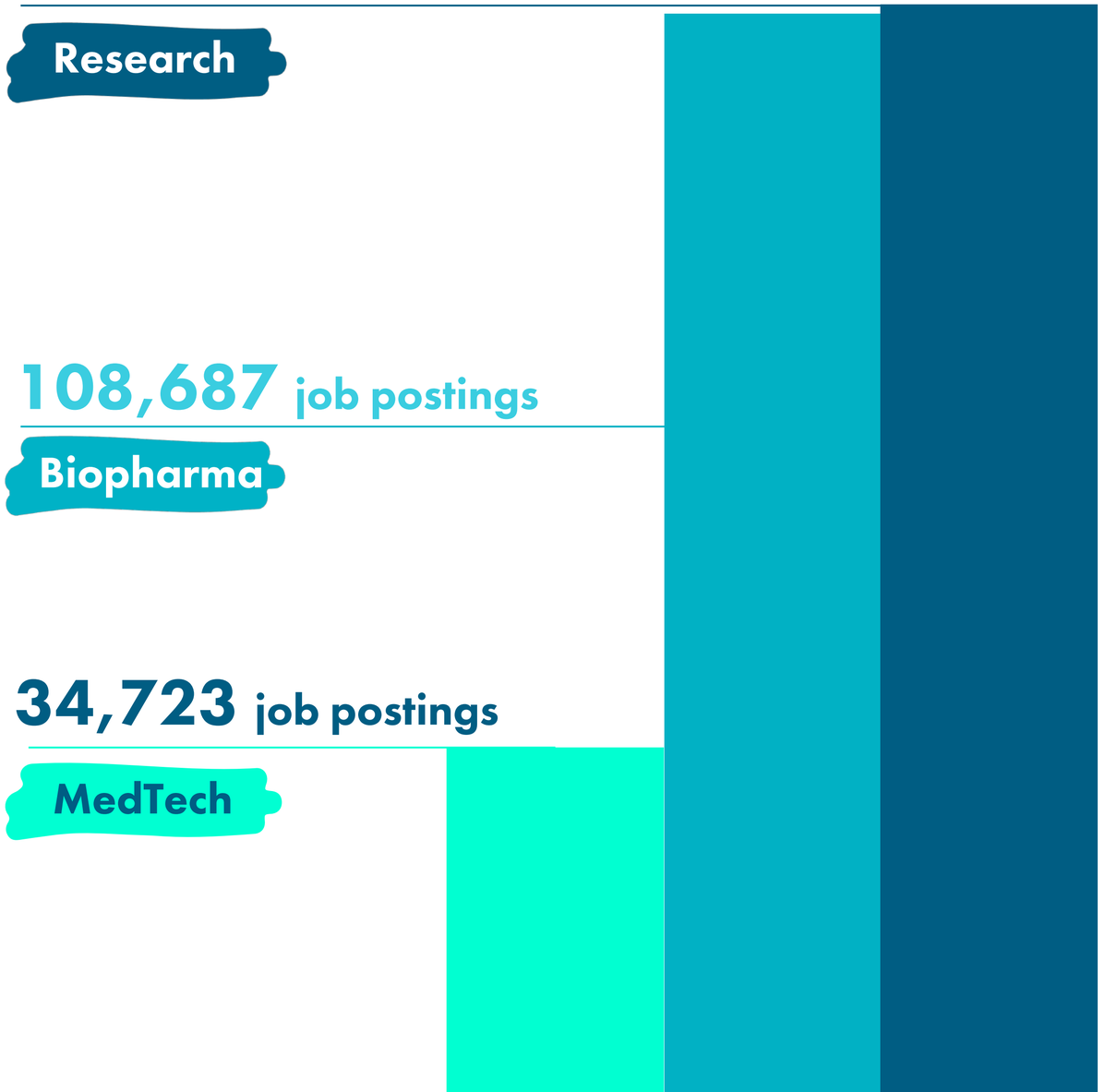
The life sciences sector faces a quiet crisis: roles are abundant, but the **skills** to fill them **are becoming harder to find**.

Recruitment trends point to a growing mismatch between job demand and workforce capabilities. While **core expertise remains vital**, emerging technologies and shifting healthcare needs are driving demand for specialised and human-centred skills. Without **swift and strategic action**, businesses risk being caught unprepared for the challenges ahead.

A job market in motion

Europe's life sciences sector thrives on a mix of innovation and manufacturing, driven by Biopharma's rapid expansion and MedTech's precision focus. **Research leads with 108,778 job postings over the past 12 months, followed by Biopharma at 108,689 and MedTech with 34,723.**

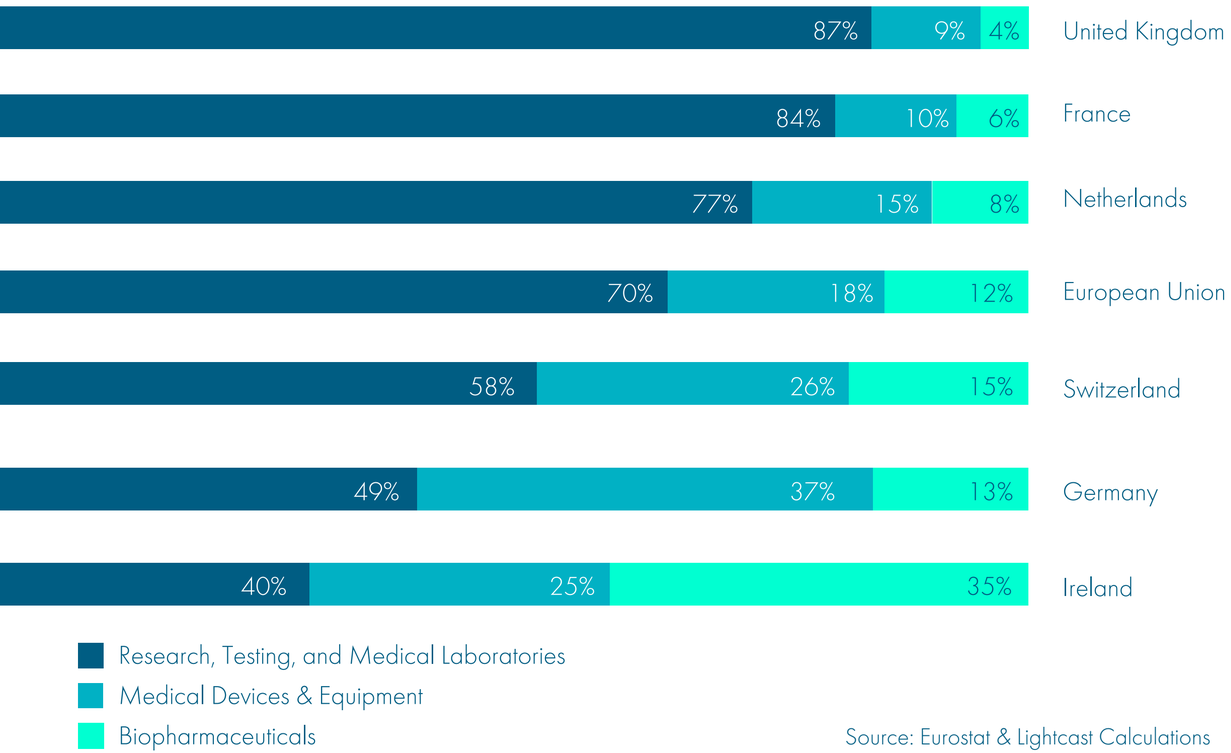
Source: Lightcast



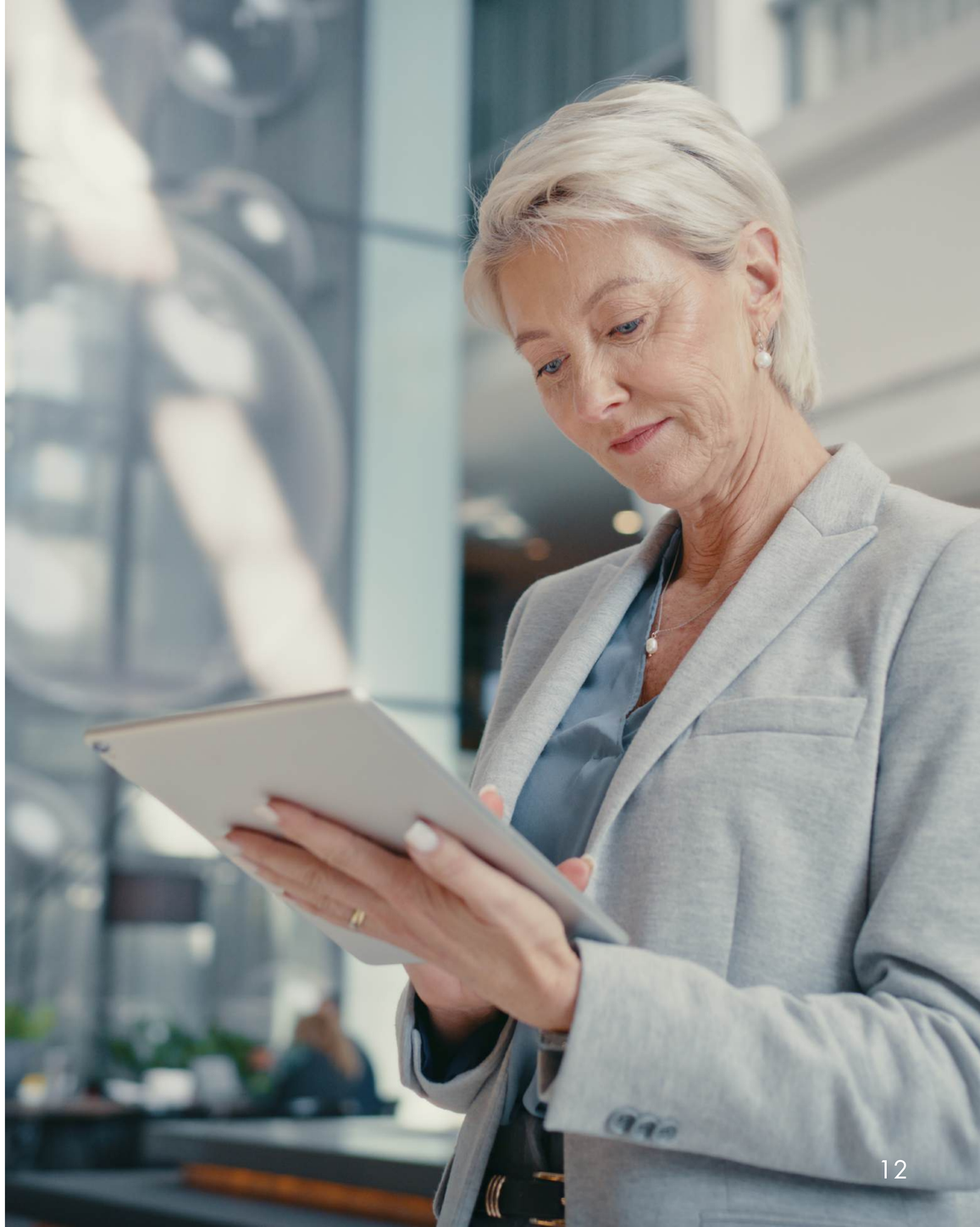
3. RECRUITMENT TRENDS

This data underscores the sector's dynamism and growth and its increasing complexity. As demand for specialised talent continues to outpace supply, **businesses must bridge the gap** by considering **targeted training strategies and exploring untapped talent pools.**

Share of Life Sciences Employment, 2024



Source: Eurostat & Lightcast Calculations



The operational surge

Demand for operational talent in life sciences is soaring, growing **37%** compared to a modest 7% for white-collar roles. Supply chain disruptions have prompted companies to **localise manufacturing**, reducing reliance on overseas production. Biopharma and Medical Devices are at the heart of this shift, relying on skilled workers for manufacturing, quality control, and compliance-heavy processes.

Most-posted vs. fastest-growing roles

Among the **sector's most-posted roles, laboratory technicians (92.5k) are nearly triple that of the next most in-demand positions. The next three roles—pharmacist/pharmacy director (31.9k), natural science research manager (30.9k), and project manager (26.1k)—** are foundational positions that connect scientific breakthroughs and their practical implementation, ensuring that research translates into impactful results.

Source: Lightcast

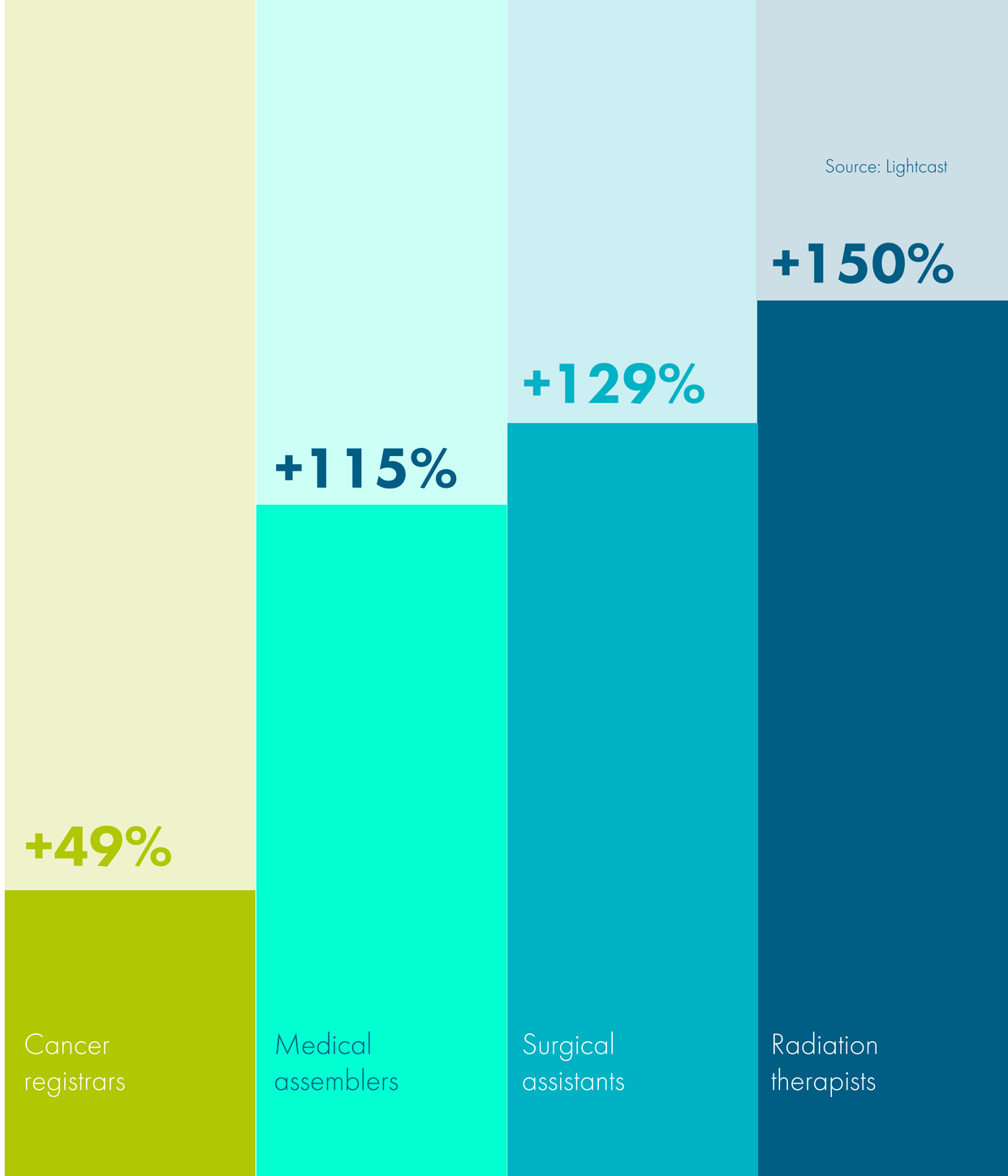
The sector's **fastest-growing roles** reflect evolving priorities, including advancements in medical technology and an increasing pivot towards the health needs of an ageing population. Leading the surge is the ***neurodiagnostic technician role*** **(+550%),** highlighting the increasing prevalence of neurological conditions. Similarly, the rising importance of dental health is reflected in the growing demand for ***dentists, orthodontists,*** **and** ***prosthodontists*** **(+161%)**, driven by the ageing population's complex dental care needs.

+550% Neurodiagnostic technician

+161% Dentists, orthodontists, and prosthodontists

Most-posted vs. fastest-growing roles

Indeed, **roles tied to age-related** conditions, particularly in cancer treatment and diagnostics, **are seeing a sharp surge in demand**. ***Radiation therapists*** (+150%) and ***cancer registrars*** (+49%) are in high demand, driven by better cancer diagnosis and advances in oncology care. At the same time, demand for ***surgical assistants*** (+129%) and ***medical assemblers*** (+115%) is rising, reflecting the **increasing need for skilled support in surgery and medical device manufacturing**, both of which are critical to modern healthcare delivery.



Source: Lightcast

Roles in decline

Postings for ***patient transporters/orderlies*** (-52.65%) and ***medical records/health information technicians*** (-27.24%) have seen substantial reductions, likely due to increased reliance on digital systems and more specialised, tech-driven patient management solutions. Similarly, ***clinical data systems specialists*** (-29.28%) are declining as electronic health records and automated data processing streamline previously manual tasks.

While the decline in positions like regulatory ***affairs specialists*** (-19.35%) might seem surprising given rising regulatory complexity, organisations may be shifting towards more senior or specialised experts, automation and advanced compliance software to handle these complexities. Additionally, roles like ***biochemists*** (-14.90%), ***microbiologists*** (-13.71%), and ***chemical technicians*** (-13.96%) are influenced by shifts in research priorities and evolving technology.

The sub-sector perspective

BioPharma

In 2024, **Biopharma** had the highest job postings, a natural outcome of the sub-sector's scale and its central role in Europe's healthcare economy. Key roles like ***pharmacist/pharmacy director*** (29,464 postings), ***clinical research coordinator/manager*** (14,785 postings), and ***quality control systems manager*** (12,156 postings) underscore the ongoing focus on regulatory compliance, clinical trials, and drug development.

MedTech

While **MedTech** posts fewer jobs overall, it continues to experience demand for key technical roles. Positions like ***biomedical equipment technician*** (5,681 postings) and ***quality control systems manager*** (3,143 postings) point to the sector's increasing reliance on precision manufacturing and regulatory compliance as medical devices evolve and integrate into healthcare systems.

Research

In **Research**, ***laboratory technician*** (17,030 postings) and ***researcher/research associate*** (14,850 postings) roles dominate the job landscape. The data reflects the ongoing need for scientific expertise and support in R&D, with additional demand for roles like ***quality control systems manager*** (5,335 postings), emphasising operational efficiency and stringent quality assurance in research environments.

3. RECRUITMENT TRENDS

Talent hotspots and city hubs

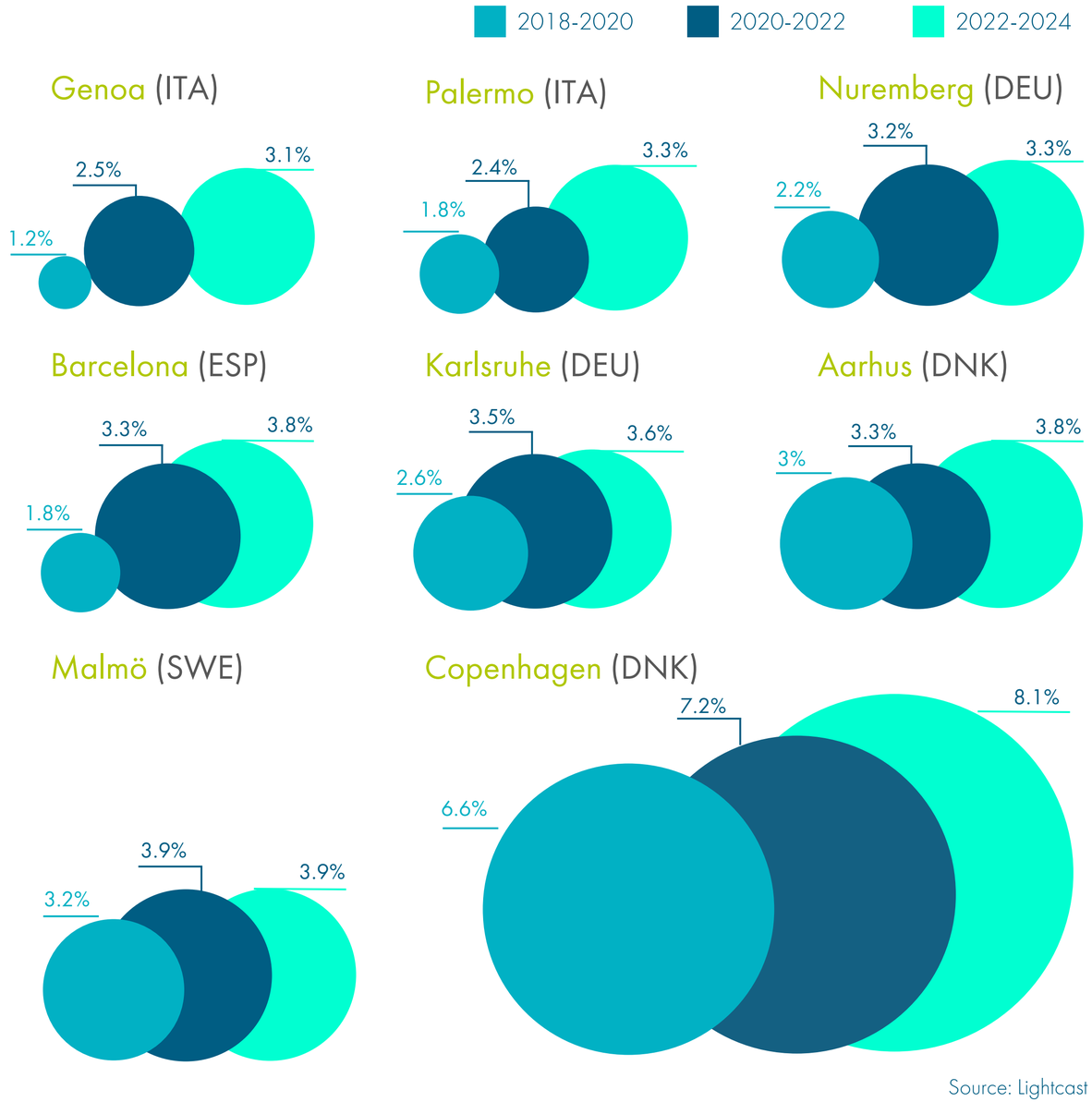
The European's life sciences sector is thriving across key hubs, with demand for talent concentrated in markets like **Germany (493,023 postings, 3.13% demand concentration)**, which continues to see strong demand, reinforcing its dominant position in Europe, and **Switzerland (76,713 postings, 4.58% demand concentration)**, which maintains its position as a key hub.

Ireland (56,741 postings, 7.25% demand concentration) sees solid demand, with five of the top ten cities for life sciences talent located there, showcasing the country's remarkable rise since the 1990s and offering a promising outlook for emerging markets in Europe.

Denmark is the fastest-growing market in GDP terms and continues to lead in its demand for talent, with cities like Copenhagen and Aarhus becoming prominent hotspots. In **Italy** (97,718 postings, 2.59% demand concentration), traditional life sciences **talent strongholds like Milan** remain, but others are emerging.

Genoa's increasing demand for talent reflects its robust life sciences ecosystem and thriving port, while **Palermo benefits from** urban regeneration and **the growth of its tech and service industries**.

Emerging Life Sciences Talent Hubs – Demand Concentration Growth, EU



Source: Lightcast

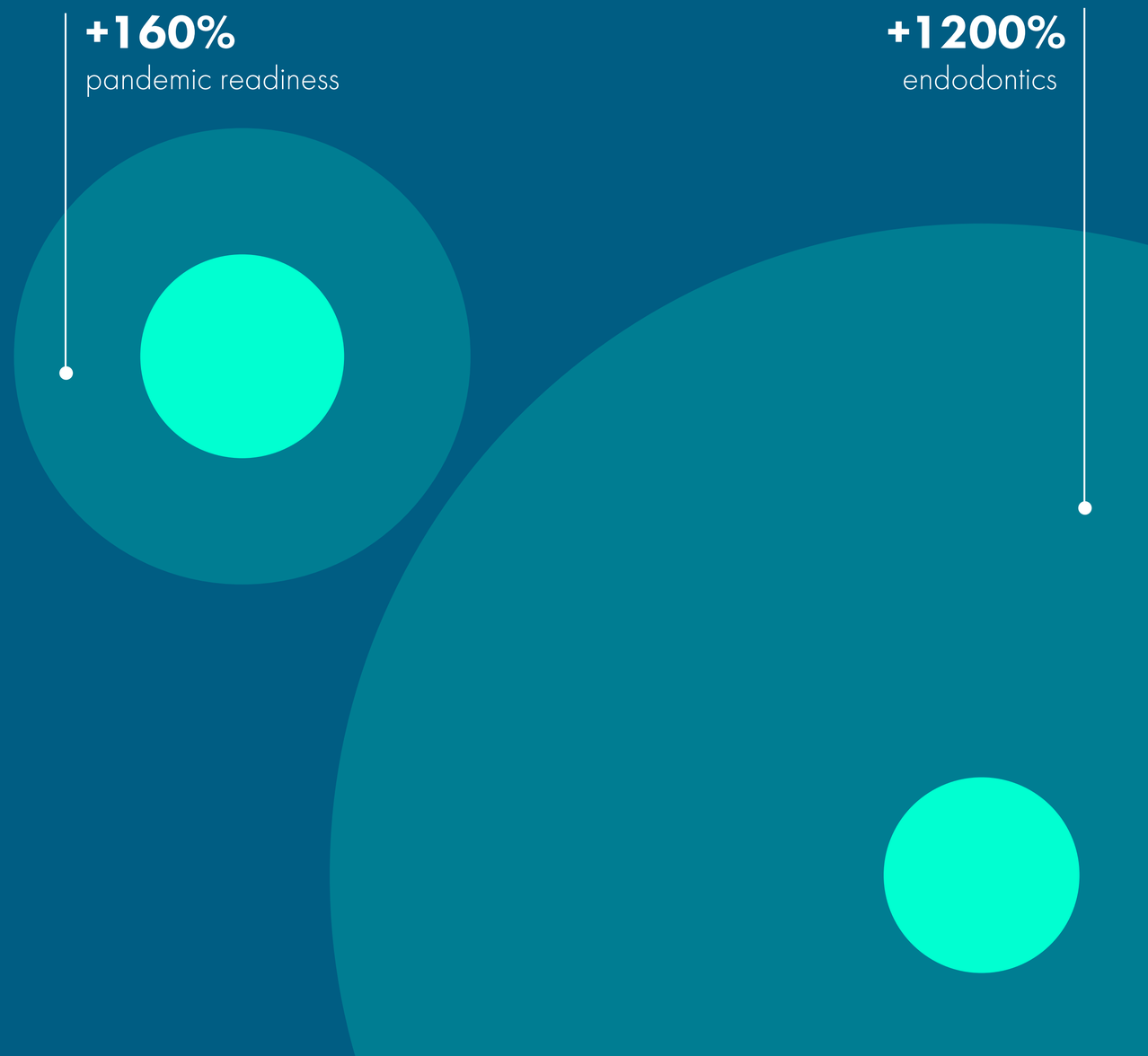
Europe’s looming skills crunch

Europe’s life sciences job market may seem stable, but a closer look reveals growing pressure in key areas. **Skills shortages are intensifying, making crucial roles harder to fill**.

Our research shows that while core life sciences skills like **pharmaceuticals (411k postings) and chemistry (189k postings)** continue to dominate, the demand for specialised expertise is rising. Rising demand for skills in niche areas like **pandemic readiness (+160%) and endodontics (+1200%)** may reflect an intensifying mismatch between supply and need.

Niche areas

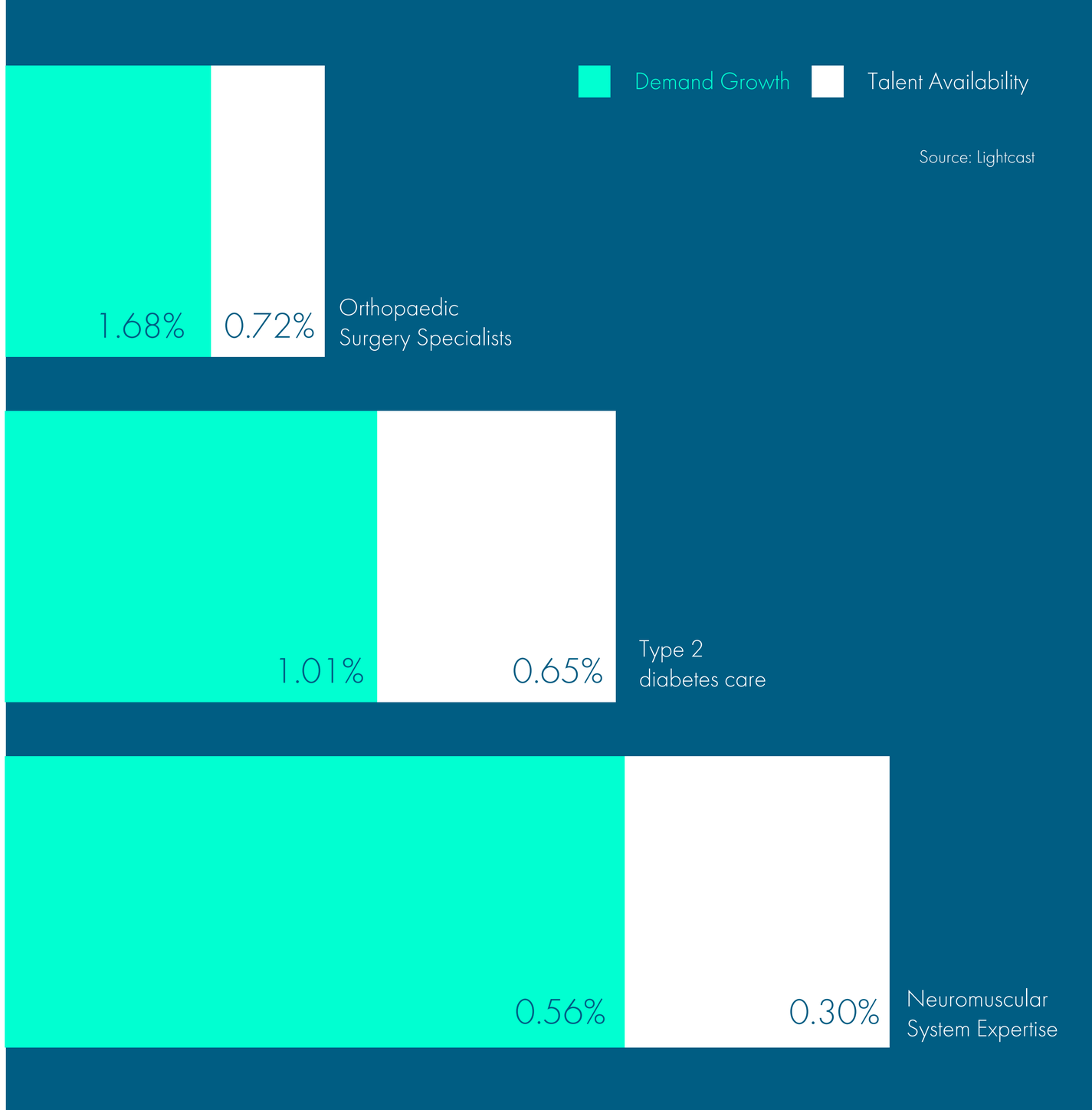
Source: Lightcast



3. RECRUITMENT TRENDS

Europe’s looming skills crunch

The demand for skilled healthcare professionals to support Europe’s ageing population is reaching a critical juncture. As the elderly population continues to grow, **specialised care for conditions such as orthopaedic surgery, type 2 diabetes, Alzheimer's, and neuromuscular disorders** is becoming increasingly urgent. However, a significant gap exists between the available skills and the sector's needs. For example, the demand for ***orthopaedic surgery specialists*** has grown by **1.68%**, but only **0.72%** of the workforce currently possesses the necessary skills. Similarly, the demand for **expertise in type 2 diabetes care** has increased by **1.01%**, yet the talent pool only grew by **0.65%.** The gap is evident across various sectors, with **neuromuscular system expertise** growing by **0.56%**, but only **0.30%** of the workforce trained in this area.

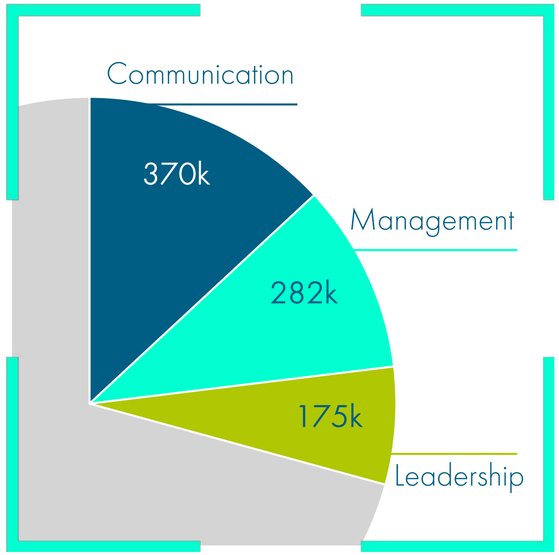


To meet this challenge, healthcare systems must prioritise **targeted workforce development**, including upskilling and reskilling existing professionals, to ensure they can address the needs of an **ageing population.**

The discrepancy between current capabilities and future needs presents a critical opportunity for investment in education and training to prevent a shortfall of essential talent.

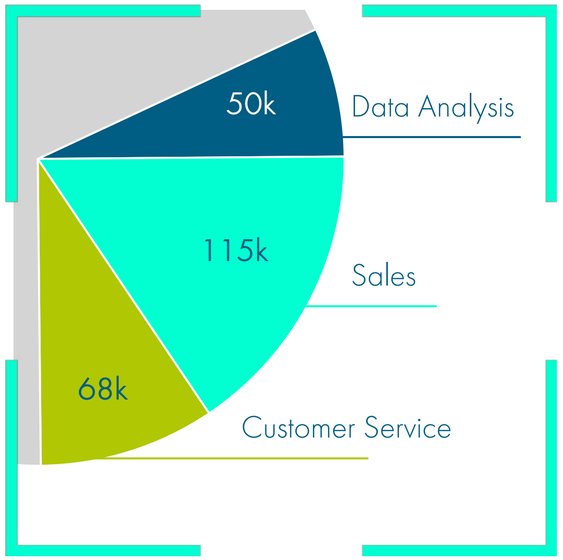
Soft skills

Source: Lightcast



Even as automation and AI embed themselves in the sector, **human skills are more vital than ever**. Demand is surging for **communication** (370k postings), **management** (282k postings), and **leadership** (175k postings) skills. These are essential for managing change and driving innovation. **Project management** (148k postings) and **operations** (126k postings) are also key to integrating new technologies smoothly.

Hard skills



Source: Lightcast

As the sector moves towards digital health, roles in **data analysis** (50k postings), **sales** (115k postings), and **customer service** (68k postings) are becoming critical. These skills support adopting new technologies and ensure **patient-centred outcomes and experiences.**

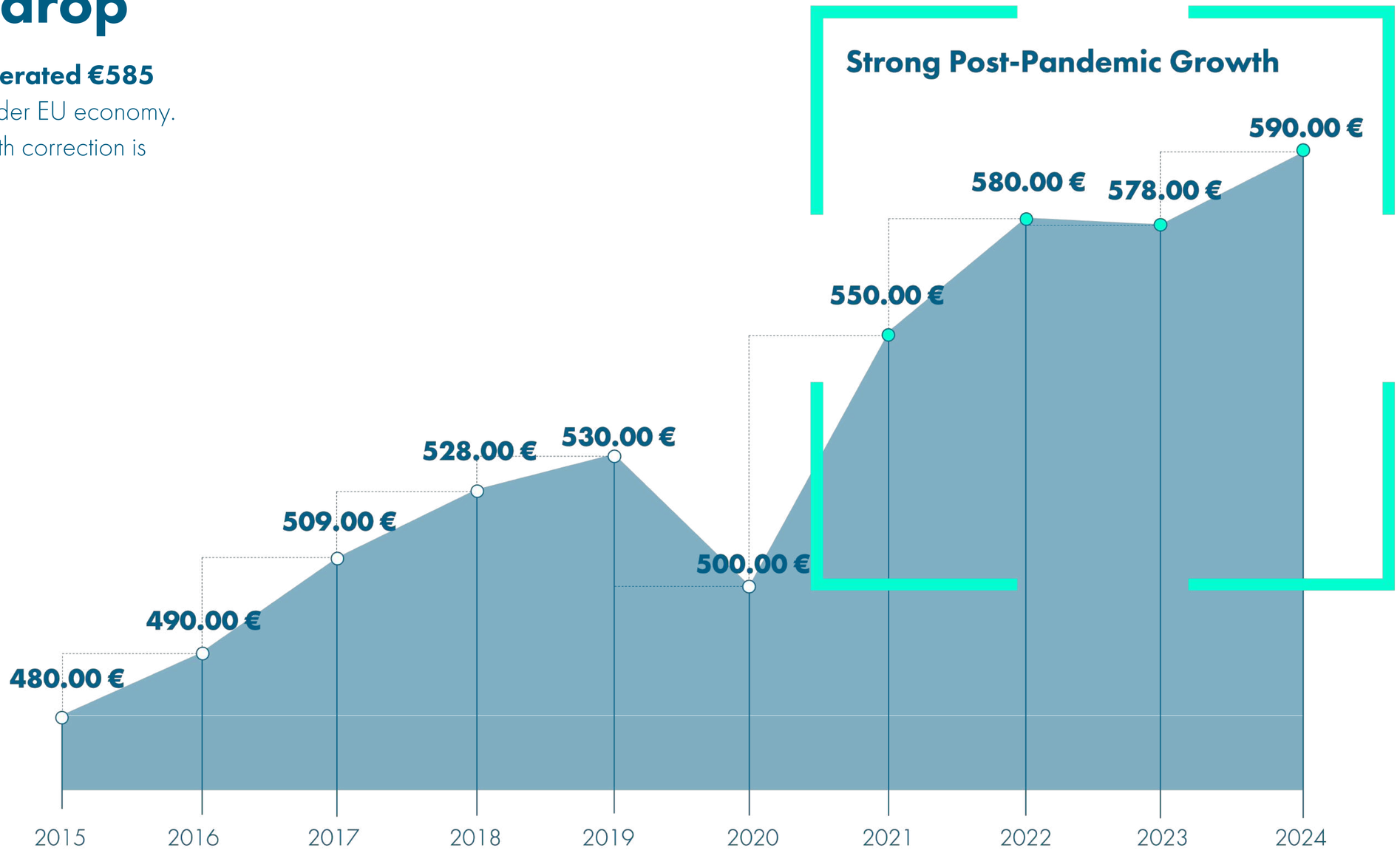
Bridging the gap

The gap between workforce skills and emerging needs is widening. That much is clear. **Organisations need to rethink their talent strategies, focusing** not just on technical expertise, but **on the human skills necessary to navigate transformation.**

4. The European life sciences industry today

Economic backdrop

Europe's life sciences sector generated €585 billion in 2024, outpacing the broader EU economy. Yet, despite its resilience, a slight growth correction is underway.



EU Life Sciences – Value Added Economic Output

Source: Eurostat & Lightcast Calculations

So, what is behind this slowdown?

The pandemic exposed the fragility of global supply chains in a way no one could ignore. As a result, **companies shifted to regional manufacturing**, diversifying their suppliers and prioritising sustainability.

How do these shifts impact the sector's long-term stability?

Europe's regulatory landscape may be more complex than regions like the US or Singapore, but that complexity may also be a strength. Its robust data privacy laws and ethical standards help businesses build trust with customers and investors. On top of that, **EU initiatives like Horizon Europe, are pouring billions into research and collaboration, supporting Europe's competitive position**.

But then there is inflation...

While we may see some easing in specific sectors, healthcare remains **highly exposed**. **Rising drug costs clash with reduced consumer spending power**, particularly for high-ticket items like medical devices.

For HR leaders, inflation creates a dual challenge: rising living costs drive up wage expectations, while economic uncertainty makes workers hesitant to switch jobs, limiting the flow of fresh talent. Ironically, top performers are often tempted to leave for better opportunities, while less critical employees dig in, waiting for more stable times.

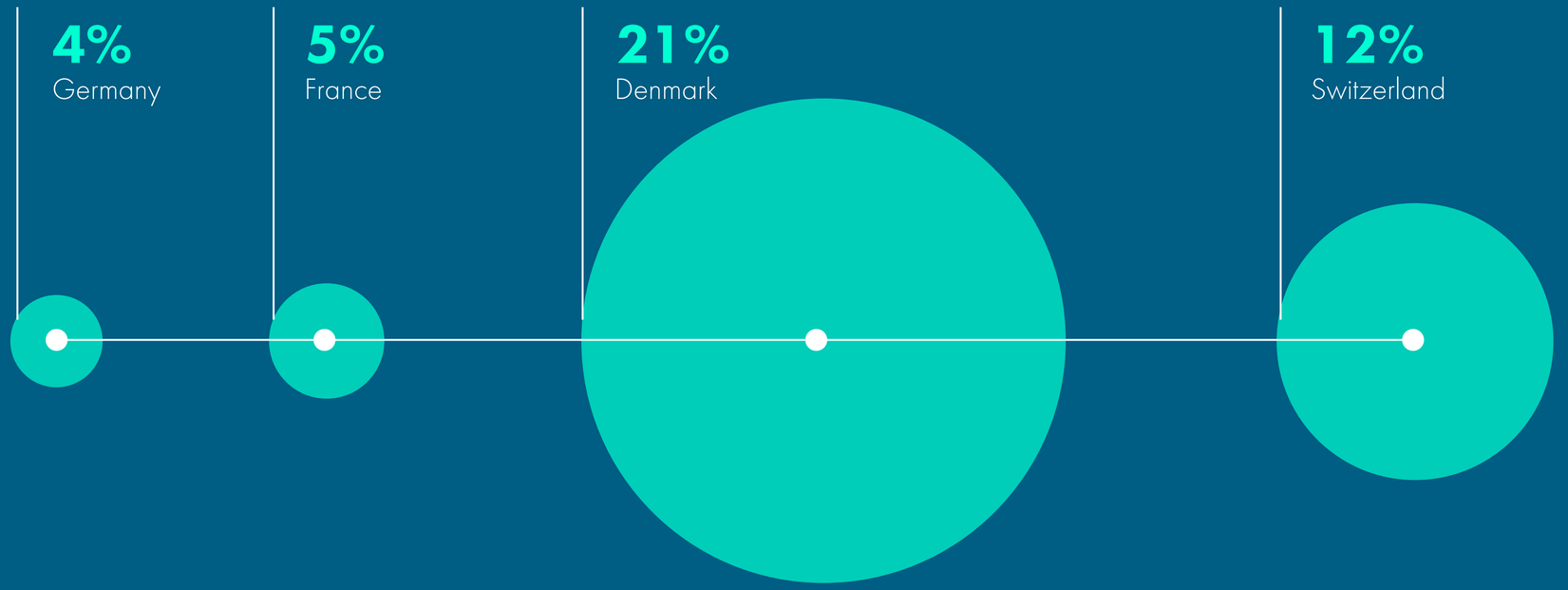
Biotechnology faces even greater pressure. **The sector's reliance on highly specialised skills means talent shortages are already a persistent issue**, and inflation only makes it harder to compete. **Companies must go beyond salaries to attract and retain top talent**, offering clear **career growth, stability, and a sense of purpose in driving scientific progress.**

Uneven growth trajectories

Europe's life sciences sector growth is moving at different speeds. Established Western hubs are undergoing restructuring and are doubling down on high-value, advanced research. At the same time, Eastern European hubs are emerging as a dynamic source of talent, innovation, and cost advantages.

Western Europe: deep research and economic roots

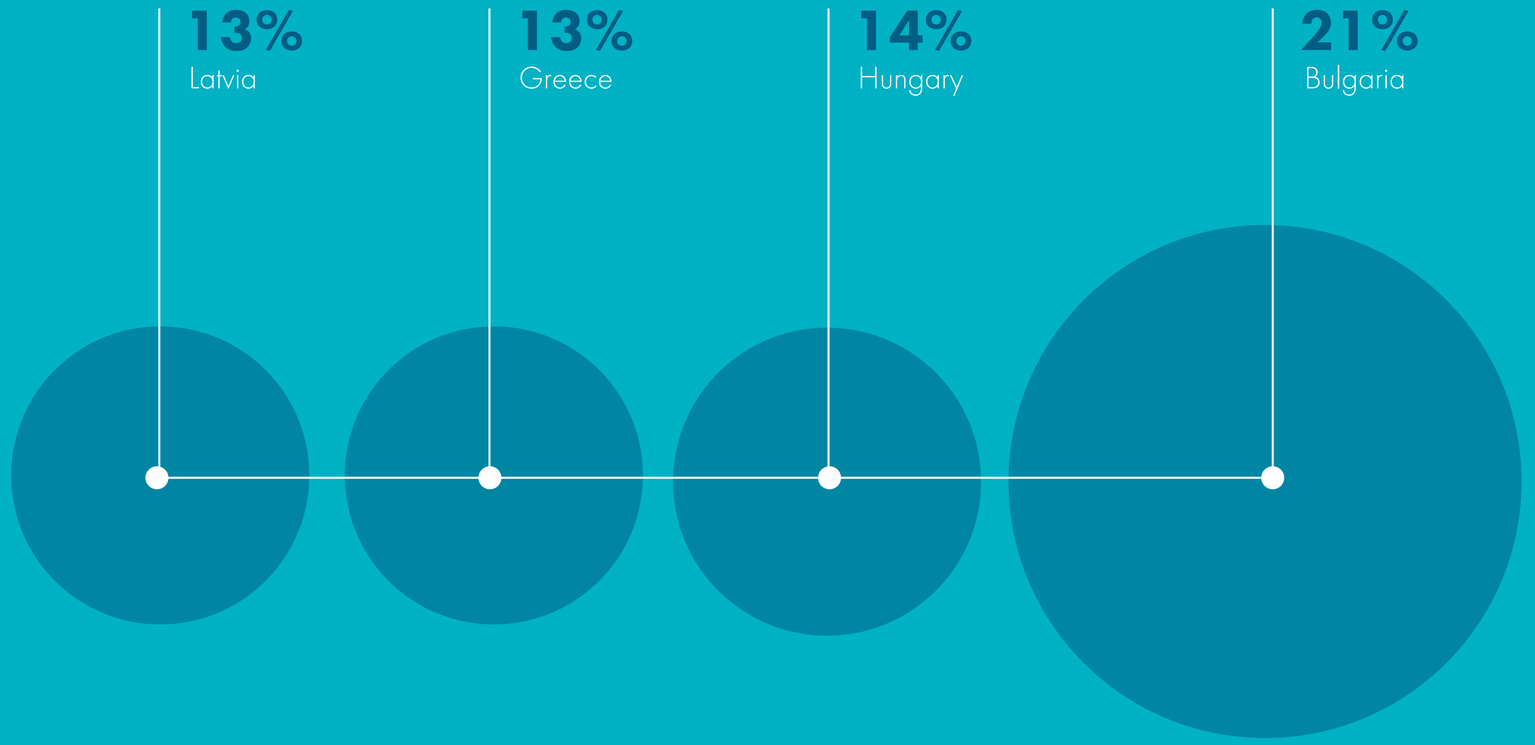
Western Europe is home to the region's top life sciences hubs. Countries like Germany, France, Switzerland, and Denmark continue to lead with top-tier research infrastructure and a reputation for innovation that attracts some of the brightest international talent. **Germany** (4%) and **France** (5%) are seeing steady growth, while **Denmark** (21%) is the industry's fastest-growing market. Despite recent restructuring, **Switzerland** maintains a strong position, with life sciences making up 12% of its GDP.



Source: Eurostat & Lightcast Calculations

Eastern Europe: the next innovation frontier?

Look east. Bulgaria, Hungary, Latvia, and Greece have led **life sciences GDP growth** since 2021. **Bulgaria**, for instance, has seen a 21% increase, **Hungary** (14%), **Latvia** (13%) and **Greece** (13%). These regions benefit from affordable labour, highly educated and multilingual workforces, and excellent universities. While their overall life sciences GDP is smaller than Western Europe's, they are quickly gaining traction. With EU investments in infrastructure and innovation rising, Eastern Europe is set to strengthen its position as a key player in cost-effective production. **HR leaders should watch these regions closely—they could be key to talent sourcing and optimisation**.



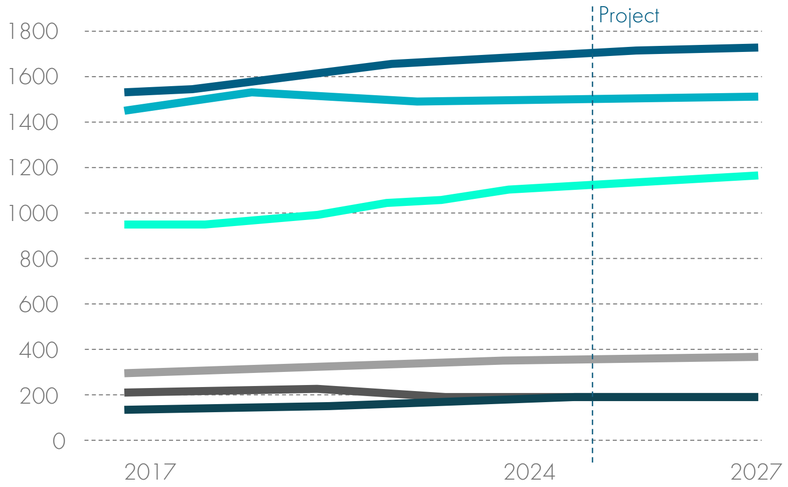
Source: Eurostat & Lightcast Calculations

But it's not just about the growth numbers. As markets evolve and demand shifts, **leaders must ensure they are tapping into the full breadth of talent across the continent, not just in the traditional hubs**.

So, **how to stay ahead of evolving talent needs** and ensure we are building the right capabilities for the future? Let's look at the employment trends shaping Europe's life sciences workforce.

Workforce dynamics: key employment trends

While demand for life sciences talent continues to outpace other industries, employment growth is undeniably slowing. **Ireland** and the **Netherlands** are seeing sharp slowdowns, while job creation in **France** has flatlined. **Switzerland**, hit by global restructuring and cost-cutting—especially in middle management—continues to shed workers.



Source: Eurostat & Lightcast Calculations

Beneath the slowdown, regional shifts are reshaping the workforce around strategic advantages**. Countries are leaning into their strengths** and deepening regional specialisation.

Emerging economies: cost, scale, and efficiency

Countries like **Poland** and **Portugal**, often overlooked in industry narratives, offer cost advantages, plentiful skilled workers, and robust infrastructure. These countries have become important destinations for production facilities, clinical trial sites, and biotech services. While not at the forefront of cutting-edge R&D, growing demand for outsourcing increases their importance, especially from larger markets.

Enduring giants: Germany and the UK

Germany holds the largest workforce share, with employment projected to rise from 1.7 million in 2024 to 1.75 million by 2027, bolstered by its advanced manufacturing strength. **The UK** has experienced steep growth, from under 1 million employees in 2017 to a projected 1.4 million in 2027, thanks to its clinical trials and biotech services. In the **Netherlands**, growth is more subdued. After an influx of jobs from the relocation of the European Medicines Agency, post-Brexit growth is slower, from 300k in 2024 to 369k by 2027.

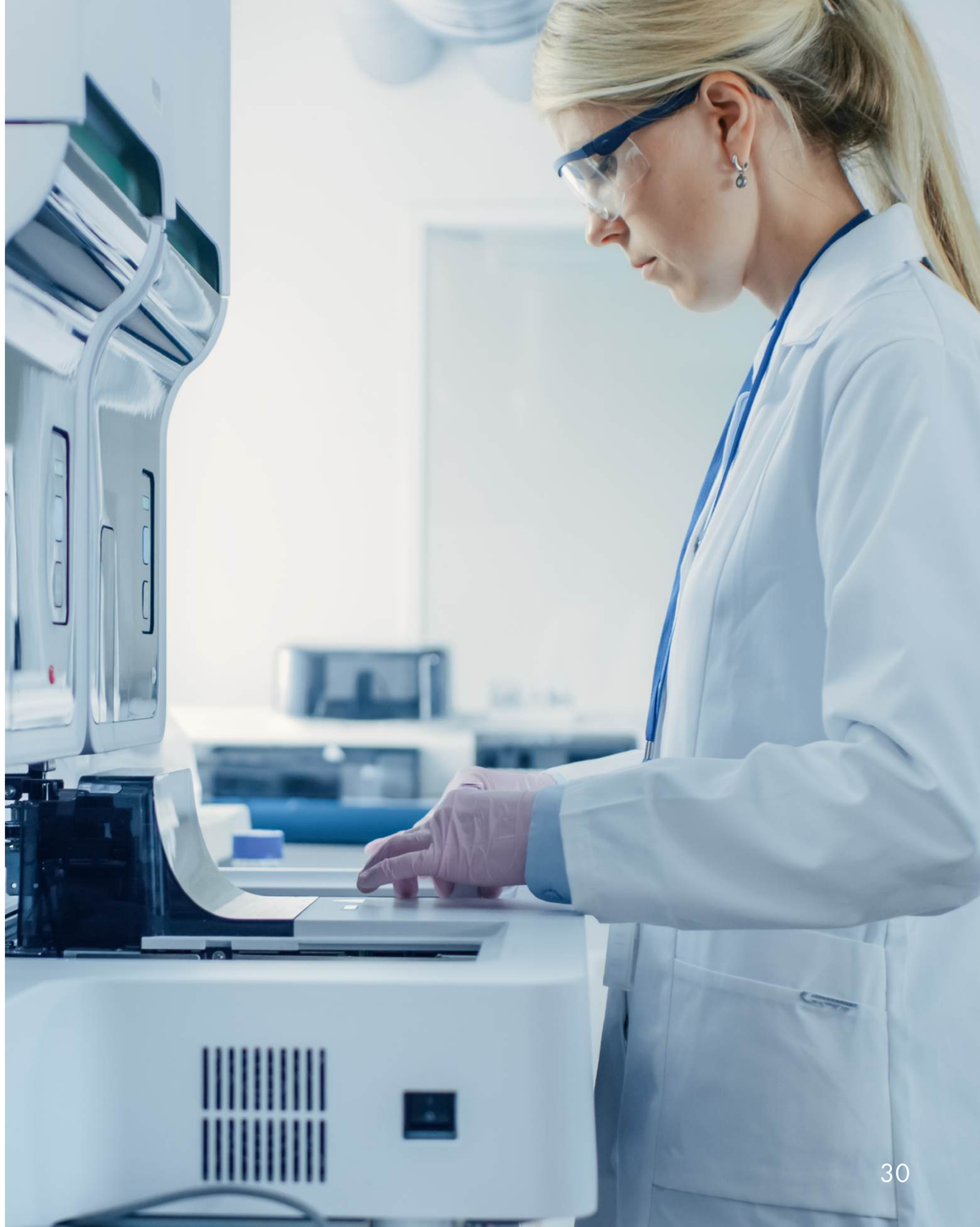
Stabilising or slipping? France, Switzerland, and Ireland

Ireland, Switzerland, and France have seen flatter growth, but for different reasons. Despite recent restructuring, **Switzerland**'s position is reinforced by its highly skilled R&D workforce. **Ireland**'s life sciences workforce, which rose exponentially in the 1990s, is stabilising. **France**, although still second in workforce size, has seen a slight decline from its 2022 peak, stabilising at 1.53 million by 2027.

Life sciences sub-sectors and why leaders should pay attention

Europe's life sciences sector thrives on a balance of innovation and production. **Research, testing, and medical labs lead the way in GDP terms**, accounting for 53% of output and driving breakthroughs across the sector. Biopharma follows at 29%, powering global exports, while MedTech, at 18%, is catching up with rapid advancements and rising demand. **Understanding how these subsectors shape Europe's leadership is key to attracting and retaining talent**.

While many European countries focus on one subsector, **Ireland** stands out by spreading its strengths across all three, carving out a unique position as a growing hub for both innovation and manufacturing.



4. THE EUROPEAN LIFE SCIENCES INDUSTRY TODAY

Research, testing, and medical labs: the innovation engine

Around 70% of life sciences jobs are in Research, Testing, and Medical Labs. **The UK, France, Switzerland, and the Netherlands** hold the region's R&D firepower, driving innovation and boosting GDP. But there is a shift happening. Countries like **Ireland** are ramping up their research capabilities. Three-quarters of Ireland's MedTech companies are now developing next-gen products, not just manufacturing them. This is driven by strong life sciences universities and a talent ecosystem drawing top international professionals.

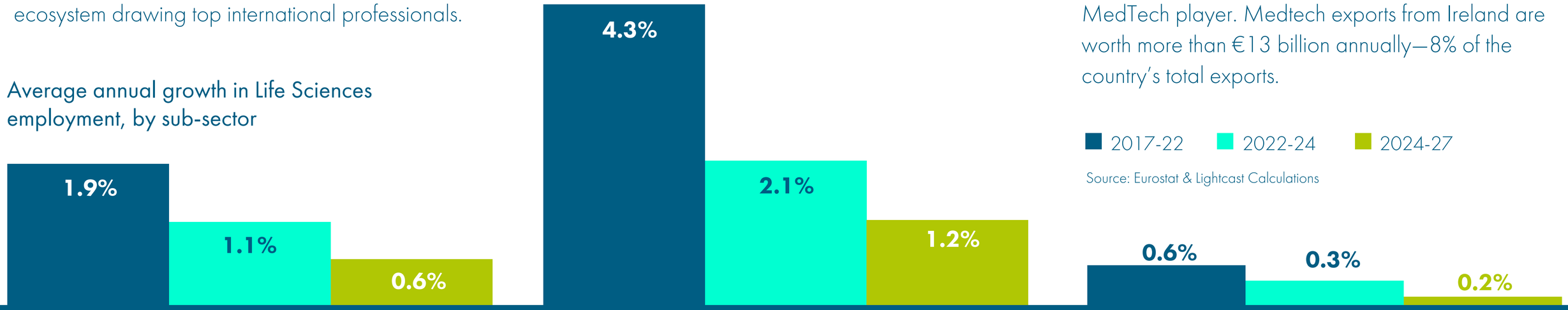
Biopharma: innovation meets manufacturing

This subsector represents 18% of life sciences employment but contributes 29% to European life sciences GDP. **Switzerland** leads in biopharma GDP by a wide margin, followed by **Germany** and Denmark, underscoring its dominant economic role. Ireland, however, stands out for a different reason. While just 15% of the Swiss life sciences workforce is employed in biopharma, Ireland has the highest proportion of its life sciences workforce (35%) in this subsector.

MedTech: rising demand for medical devices

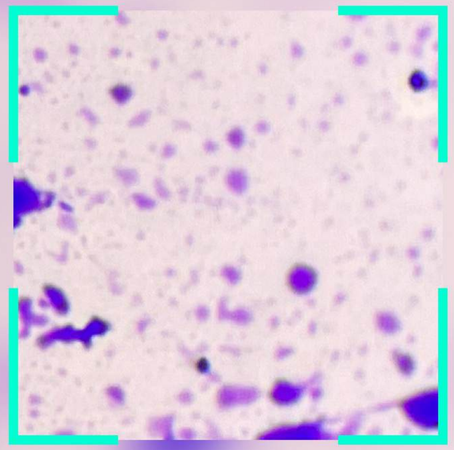
The MedTech subsector, contributing 18% of the sector's output, is growing fast. **Germany** is by far the largest MedTech market in Europe and the third-largest globally after the **United States** and **Japan**. This is reflected in its workforce proportions, with the largest share (37%) of **Germany**'s life sciences workforce employed in MedTech. **Switzerland** also retains its strong footing in the subsector with Europe's second-largest MedTech workforce. Ireland continues its ascendency as a key MedTech player. Medtech exports from Ireland are worth more than €13 billion annually—8% of the country's total exports.

Average annual growth in Life Sciences employment, by sub-sector



Source: Eurostat & Lightcast Calculations

As Europe's life sciences sector diversifies, it grapples with significant demographic shifts. In the next section, we'll examine two of the most pressing issues: the gender gap and the ageing workforce.



5. Demographic trends:

Addressing gender and age diversity

5. DEMOGRAPHIC TRENDS

Talent markets are tightening, yet underrepresented segments, such as **women and older workers, present a significant untapped opportunity**.

This report explores two key shifts—gender representation and the ageing workforce—and their impact on the sector's workforce.

> More and more employers see the value of engaging older workers through flexible arrangements and mentorship. Retirement should be about energy, not age—many 'retirement-age' professionals are far from ready to step away.

Leading the way in female representation, but challenges persist

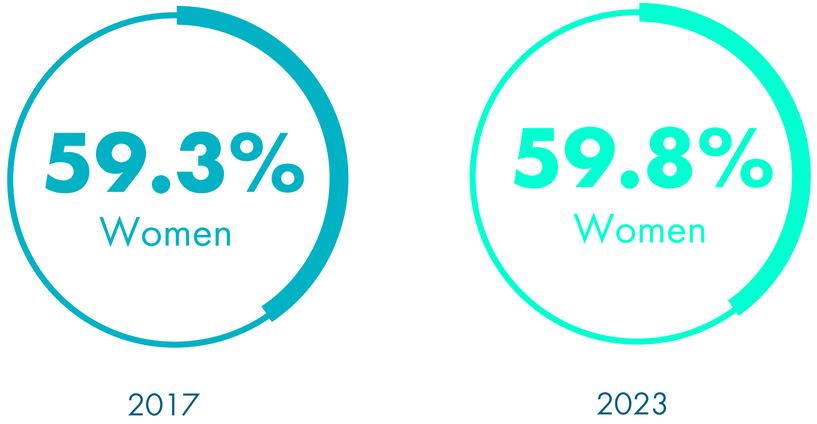
Across Europe, **women comprise 60% of the life sciences workforce**, supported by a strong supply of female graduates in natural sciences and good representation in the sector's front-line roles. This trend underscores women's out-sized role in delivering healthcare and highlights the potential for further increasing their representation in key sector areas.

While women remain underrepresented in leadership roles across most industries, life sciences is doing better than most. For context, the **World Economic Forum found that women occupy around 44% of senior roles within Healthcare and Care Services compared to an average of just 23% across all industries.**

So, what's driving the sector's success story, and how can we maintain the momentum?

The life sciences sector has historically aligned with gendered expectations, with **women viewed as more suited to caregiving and health-related roles**. Our data reflects this, with women more commonly found in medical assisting and personal care. To unlock their full potential, women must be empowered and supported to pursue the sector's full spectrum of opportunity.

Female Share of Employment in Total Life Sciences, EU



Source: Eurostat
& Lightcast Calculations

Roles and representation: strengths and challenges

Our research found that **women are well represented in various higher-impact roles**, including *physicians, quality control systems managers, researchers, psychologists,* and *pharmacists.* However, we also uncovered **notable concentrations persisting in roles that rank lower on the pay scale**, including *nursing assistants* and *home health aides.*

While essential to healthcare delivery, these roles often have weaker advancement opportunities. Moreover, **women remain underrepresented in certain leadership and specialised technical positions**. Roles such as *director of rehabilitation* and *clinical case manager* remain areas with significant disparities.

So, while the sector has made great strides, it's important to remain cautious. During economic downturns, **women's careers are often the hardest hit**. Recent layoffs have disproportionately impacted middle management roles, which serve as a key stepping stone for women and other underrepresented groups.

The tech gender gap

Our research also found that **women are underrepresented in key tech roles within life sciences**. Roles like *medical dosimetrists, health information managers/directors*, and others are crucial in shaping the future of healthcare but remain male-dominated.

Women's underrepresentation in tech roles isn't just a blocker to fair and equitable career pathways. Without strong female voices, the teams developing these technologies miss **the diverse perspectives essential to their best and most equitable implementation**. This is both a pressing societal challenge and a **missed competitive opportunity.**

This challenge intensifies as the sector moves toward AI-driven health solutions and big data. For years, **medical research has prioritised male-biased models**, overlooking how women's health conditions, symptoms, and responses to treatments may differ.

As a result, women's health is a massive untapped market, with unique needs and conditions that remain under-researched. And as AI systems can **amplify existing biases**, critical health solutions may even exacerbate the industry's tendency to **overlook or misinterpret health issues that disproportionately affect women**.

That's why having women in these roles or at least represented in teams developing these technologies is vital for improving the accuracy of health solutions and ensuring they are equitable and comprehensive. Without proactive efforts to increase gender representation, **these gaps will continue limiting innovation and healthcare outcomes**.

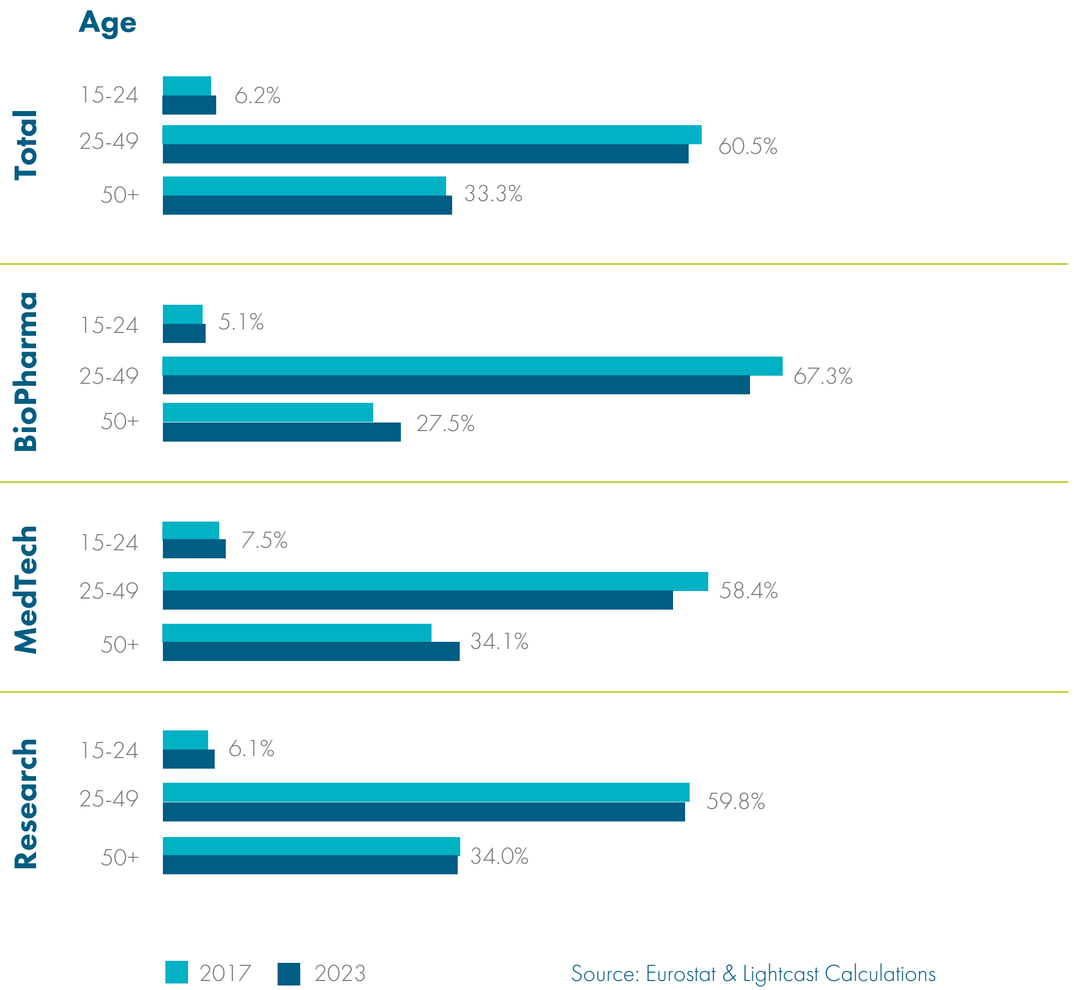
The silver lining in a greying workforce

Europe is one of the fastest-ageing regions globally, with one-third of the life sciences workforce over age 50.

Older workers are particularly prevalent in technical and operational roles compared to professional, white-collar ones.

Across all life sciences subsectors, **the prime-age workforce (25-49) is shrinking**, partially offset by increased participation among younger and older workers. In biopharmaceuticals, the losses in prime-age employment are most significant, with medical devices and equipment also seeing a decline. **These sectors, which have low shares of younger and older workers, present an opportunity to diversify recruitment strategies** .

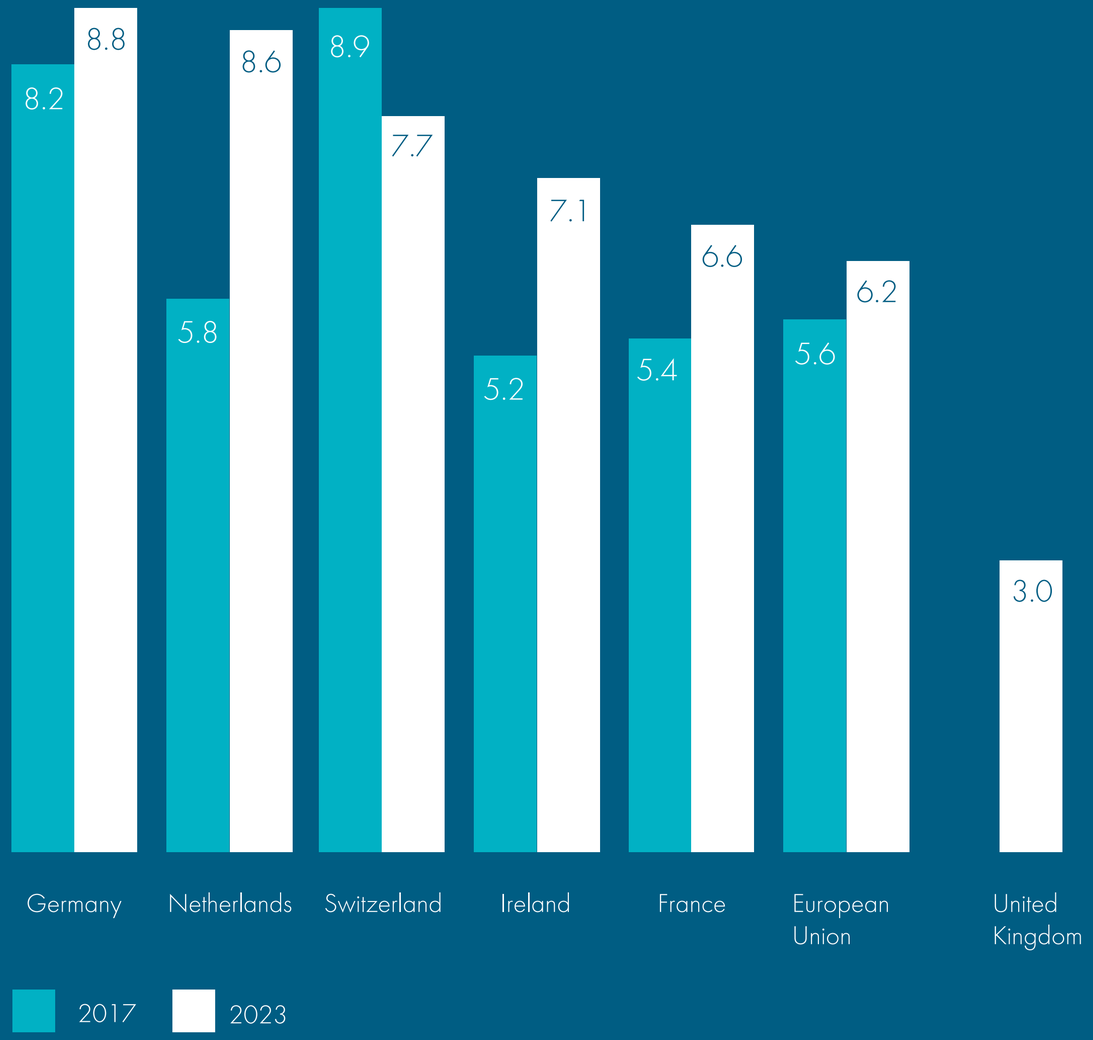
Age Distribution of Employment in Life Sciences,
EU Total 15+ Sub-Sector Employment =100%



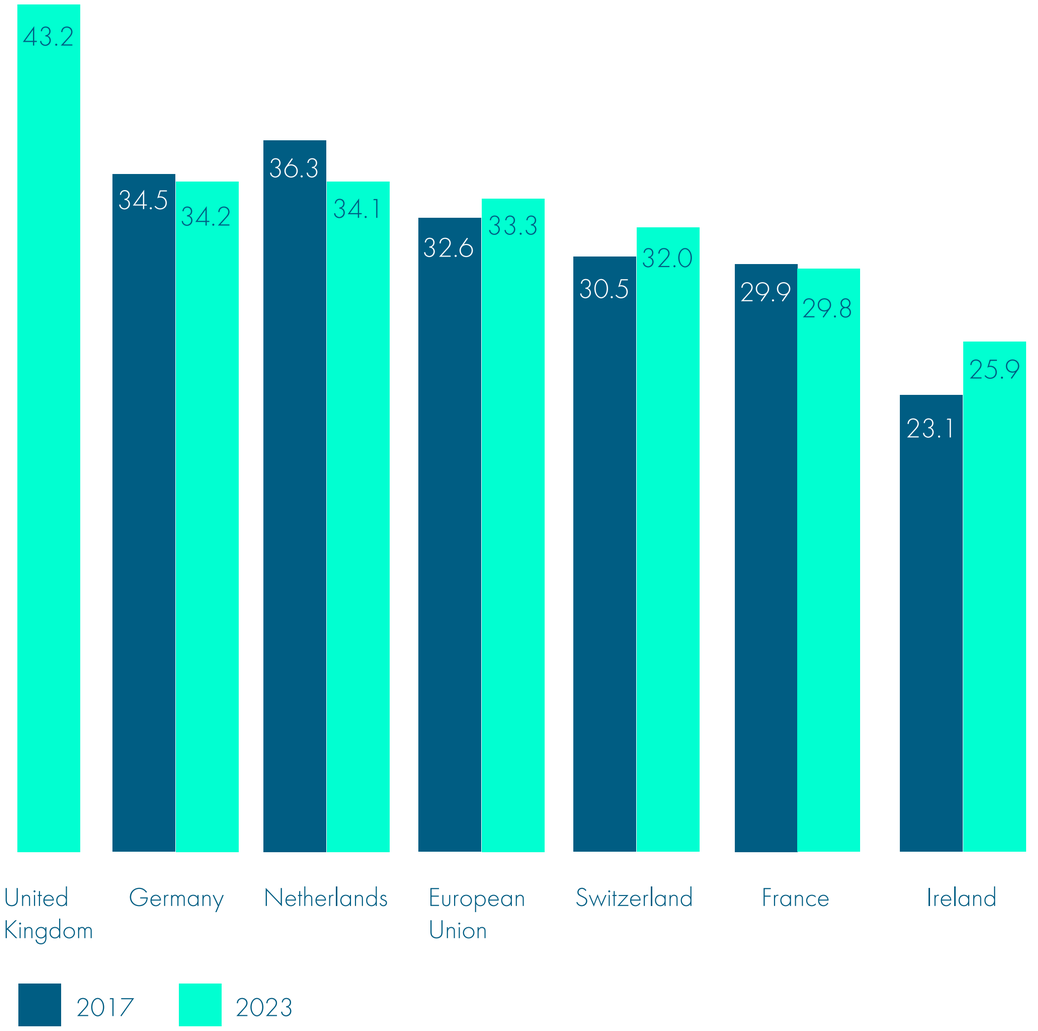
Source: Eurostat & Lightcast Calculations

5. DEMOGRAPHIC TRENDS

Share of 15-24 Employment (%)



Share of 50+ Employment (%)



Source: Eurostat & Lightcast Calculations

5. DEMOGRAPHIC TRENDS

At the country level, the **UK** has the oldest life sciences workforce, while **Ireland** and **Switzerland** have notable ageing populations. Switzerland has seen a sharp decline in youth employment, whereas Ireland and the **Netherlands** have recorded significant gains in younger workers.

The 50-64 age cohort in life sciences has seen a general increase in participation over the past seven years. **Men's participation remained stable (13.7% in 2013 to 13.6% in 2023),** while **women's participation increased from 18.9% to 19.7%**, indicating a modest but positive trend for older women in the sector, though the gender gap persists.

Yet**, according to the UN,** women's labour force participation across all sectors remains below that of men in every age group, reflecting gender gaps in education, and the **predominant share of women in unpaid work**, and gender biases, among other concerns.

Despite such concerns, there are reasons to be optimistic about population ageing. According to the same UN report, based on current global trends, future cohorts of working-age and **older persons are likely to be healthier, better educated, and more productive**. This shift could have positive economic impacts, provided countries continue investing in healthcare, education, and eliminating age-related discrimination, **allowing older individuals to contribute fully.**

Whether these potentially positive effects materialise depends on countries maintaining or increasing public investments in health care and education for all, including lifelong learning**. Eliminating age-related discrimination and barriers to formal employment** are other critical measures for older persons to make continued contributions.

Indeed, when managed well, workforce ageing may allow employers to tap into the '**longevity dividend**: the deep expertise, institutional knowledge, and valuable mentorship potential of older workers. But this takes effort.

Many older workers face barriers like biased training priorities favouring younger employees. Moreover, **older workers who leave the workforce often struggle to return,** with many exiting earlier than planned. Reframing upskilling as an investment, not a fix, could bridge skill gaps and spark innovation.

Flexible, phased retirement plans offer a further solution, enabling experienced employees to contribute while transitioning more gradually. At the same time, succession planning must shift from reactive to strategic—**unplanned retirements can derail operations without a clear continuity plan**.

To thrive in this new reality, life sciences organisations must harness the potential of every group in the workforce. Inclusive workplaces are a competitive edge.

Flexible roles, targeted upskilling, and smarter knowledge-sharing turn demographic challenges into opportunities.

The gender-age divide: hidden barriers to career advancement

The **intersection of age and gender** in life sciences reveals critical patterns, especially when we break it down by subsector.

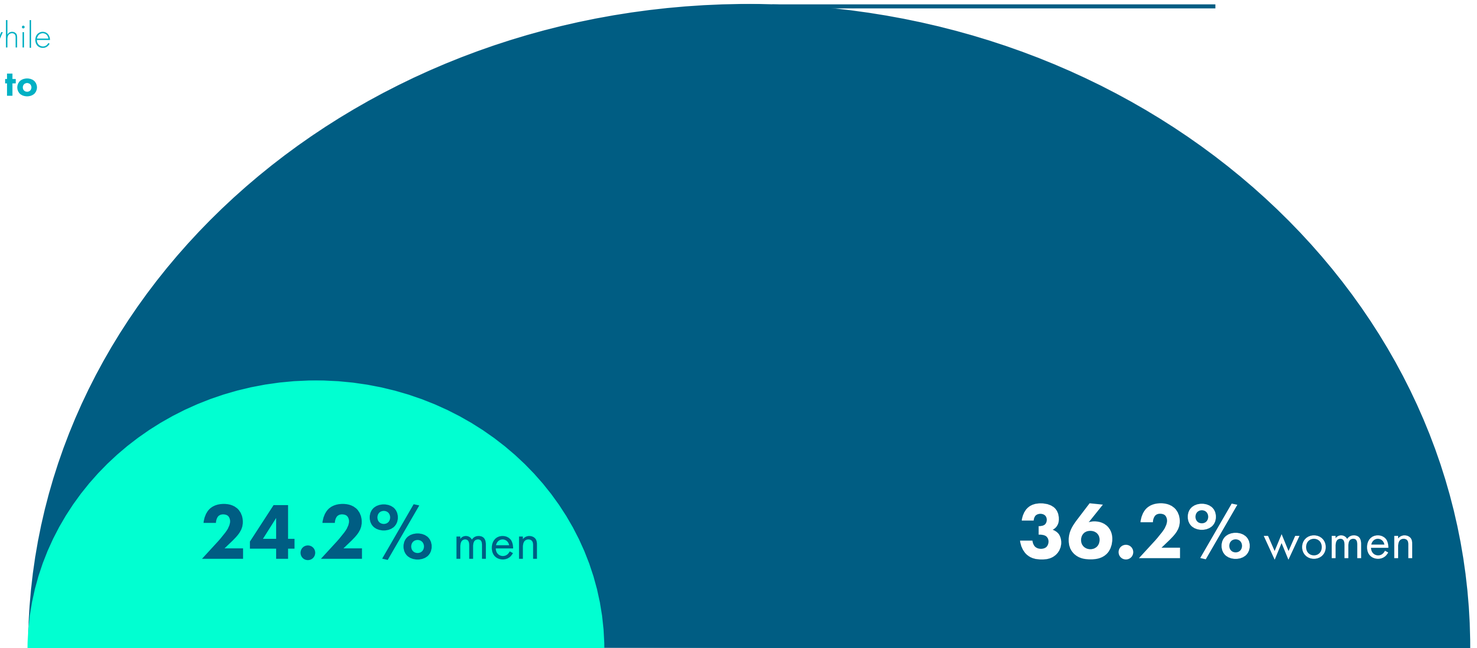
While women are increasingly represented in fields like Research, Testing, and Medical Laboratories, their participation drops in technical and operational roles, particularly in Medtech. These shifts suggest that while women enter the workforce in strong numbers, **there are barriers to their progress into specialised and leadership roles**.

In 2023, **60.5%** of the life sciences workforce fell into the 'prime age' category (25-49), with women making up **36.2%** and men **24.2%.** As this stage marks the transition to senior roles, the fact that women are well-represented but still lag in leadership positions points to barriers to progression. So, **what challenges are women facing in these prime years that hinder advancement?** Understanding this could be key to addressing gender parity in life sciences.

Source: Eurostat & Lightcast Calculations

60.5%

of the life sciences workforce fell into the 'prime age' category (25-49) in 2023

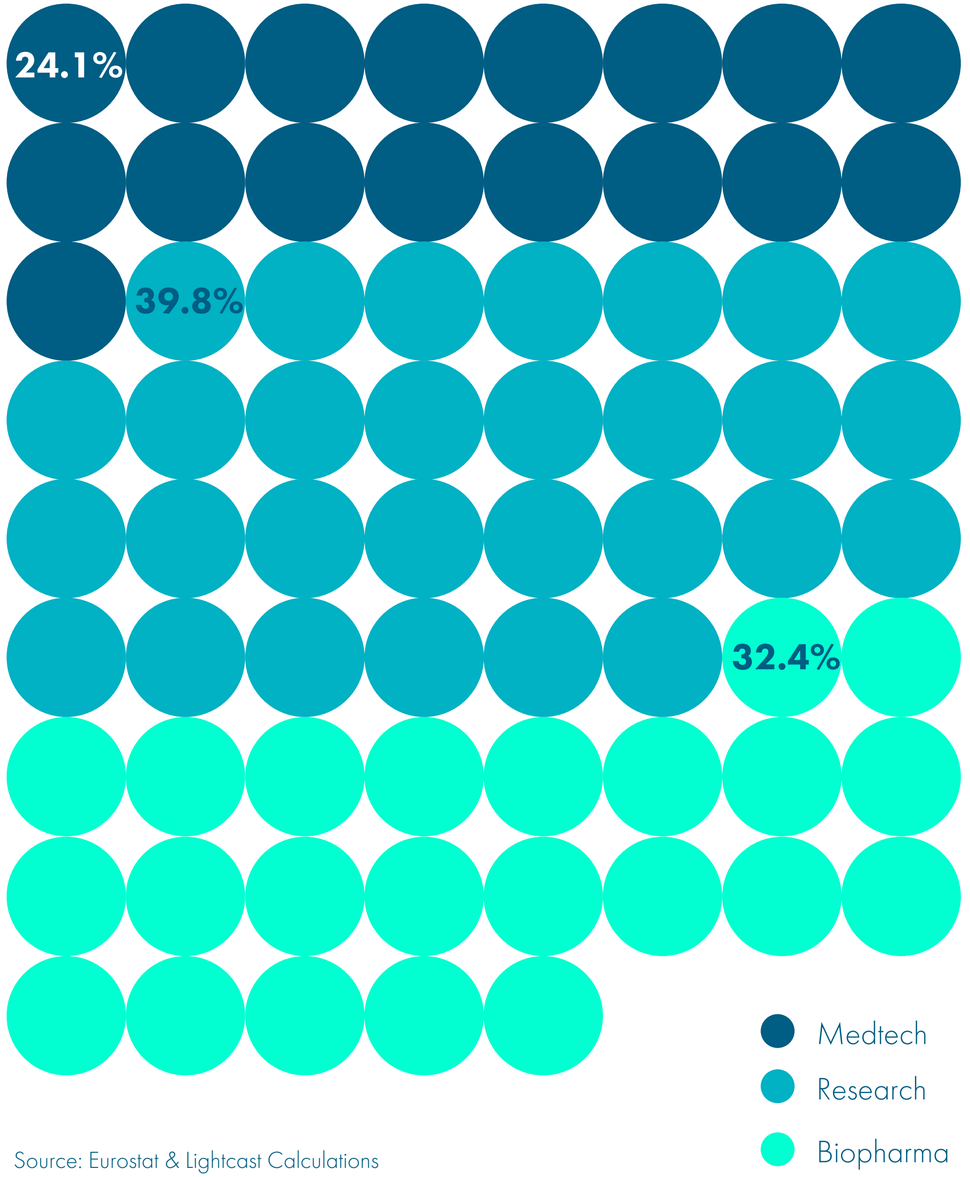


5. DEMOGRAPHIC TRENDS

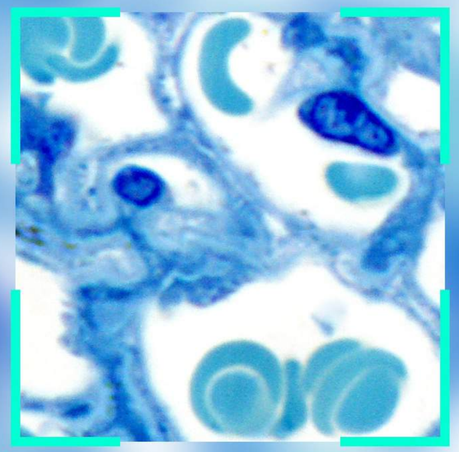
Medtech, Research, and Biopharma: subsector differences

- **Medtech** remains male-dominated, with women making up only **24.1%** of prime-age workers. The sector's technical nature and the fast-paced evolution of technology may make it particularly challenging for women to re-enter after a career break, like maternity leave.
- **Research** shows a different story. Women dominate the prime-age group, making up **39.8%**, a gap that widens further in the over-50s category. Does this suggest that this sub-sector's roles, like research and academia, may offer more flexibility, enabling women to have longer careers and more leadership opportunities?
- **Biopharma** sees a closer gender balance, with **32.4%** of prime-age workers being women. However, the over-50 age group still skews male, suggesting that while the field is relatively balanced, women face career retention and advancement hurdles.

These gender and age patterns hint at **systemic barriers limiting women's career growth**. The prime age data is essential because it reflects a crucial period when women should be advancing to leadership, but the disparities suggest they are often left behind. Understanding these dynamics is crucial to **fostering a truly inclusive workforce in life sciences.**



Source: Eurostat & Lightcast Calculations



6. Recommendations

As the life sciences sector adapts to new, unprecedented challenges, **the ability to attract, retain, and develop talent will be crucial**.

Now is the time to rethink how we can future-proof our workforces.

6. RECOMMENDATIONS

1. Embrace skills-based hiring, training and promotions

The life sciences industry has traditionally placed a premium on advanced degrees and specialised research roles, making it feel out of reach for many. **Unnecessary restrictions on the talent pool mean missing out on workers with fresh perspectives, adaptability, and cross-functional skills**.

Indeed, the **World Economic Forum highlights** that over 60% of businesses face skills gaps, struggling to align talent with business needs, noting that skills-based recruitment can boost female representation in talent pools by 24%, especially in underrepresented fields like life sciences.

Understand your workforce's current and future skills gaps

Before jumping into hiring or training, look closely at where your workforce stands today versus what it will need in the next 1, 5, and 10 years. Do you have the right digital capabilities to handle personalised medicine or the rise of AI in clinical trials? Understanding where the gaps are is critical.

Prioritise practical skills over credentials

When filling a lab technician position, will the best candidate be the one with formal educational qualifications or the one with hands-on experience operating the lab equipment and handling real-world challenges? Skills like problem-solving, critical thinking, and adaptability often make a bigger impact.

Invest in upskilling and reskilling

This means clear career pathways for fresh talent—apprenticeships, mentorships, and targeted learning that foster technical and leadership skills. The real opportunity often lies within your existing workforce. But how do you spot employees ready for new roles? Look for those with deep knowledge who can shift into critical roles with the right training. The goal is to embed a culture of continuous growth, where reskilling becomes part of your company's fabric, driving internal mobility and retention and proactively closing skill gaps.

Build interdisciplinary thinking

Encourage employees to expand their skill sets across different functions. The more versatile their expertise, the better they can respond to industry changes and drive innovation. Sector mobility is also essential—facilitating transitions from diverse fields can bring fresh ideas and help bridge critical skills gaps without requiring significant retraining.

2. Keep diversifying your workforce

Life sciences is a vibrant, global industry. Your workforce should reflect that. This requires more than checking boxes. It is about **nurturing talent across the demographic spectrum**, so your workforce is agile, inclusive, and equipped for the challenges ahead.

Know where you stand

Start with solid demographic data—age, gender, ethnicity—and use it to identify gaps. This insight should drive your recruitment, retention, and development strategy. It is not just about gathering data; it is about using it to create real change.

Leverage experience across generations

Your senior workforce holds invaluable experience, while younger talent, especially Gen Z, can bring tech-savvy and fresh perspectives. Combining the strengths of all generations through mentorship, flexible roles, and upskilling can create a winning workforce dynamic.

Empower underrepresented groups

Don't just offer opportunities. Facilitate them. Role models, mentorship, and active support can make all the difference in getting diverse talent ready for leadership.

Close the digital gender gap

Ensure women are getting the same opportunities to develop and lead in digital roles as their peers. Track participation in digital skills initiatives and close any gaps.

3. Build the next generation of leaders

In life sciences, **leadership demands agility and the ability to innovate under pressure**. Building leaders who thrive in complex, regulated environments will be critical to the sector's success.

Tailor leadership development

In life sciences, where innovation demands agility and collaboration, we need all kinds of leaders. The best leadership development programmes recognise that potential leaders bring different strengths to the table—and tailor development to bring out the best in them. Some might shine in the spotlight, while others lead quietly but powerfully. Focused mentorship, practical experience, and personalised support are essential. Equip people with the tools they need to lead in their way, and the whole organisation will benefit.

Create mentorship opportunities

Pair future leaders with seasoned professionals who have navigated regulatory complexities, led innovation, and steered through industry disruptions. By acting as sounding boards and sparring partners, mentors can help emerging leaders build confidence and foster a culture of psychological safety, creating a foundation for sustainable, impactful leadership.

Nurture adaptability

The pace of change in life sciences is relentless—from the lab to the marketplace. Leaders need to go beyond reacting to change; they need to anticipate it and guide their teams through it. Real-world exposure to challenges—like scaling innovations, navigating regulatory updates, or leading cross-border collaborations—builds resilience and adaptability. These are the skills that will define the next wave of leaders in this ever-evolving sector.

4. Adopt diverse workforce strategies

As the life sciences sector faces increasing pressure from evolving regulations, cutting-edge innovations, and the demand for highly specialised talent, a one-size-fits-all approach to workforce management is no longer sufficient. **Companies must explore diverse workforce models to build flexibility, resilience, and scalability** while meeting the industry's complex operational and regulatory demands. Here's how you can start making an impact today:

Adopt flexible workforce models

Blend permanent, contingent, and outsourced talent to scale your workforce up or down as needed. This enables life sciences organisations to quickly adapt to changes such as regulatory shifts, clinical trial demands, or research breakthroughs, without overextending resources.

Consider RPO, MSP, or other outsourced solutions for key initiatives

For critical projects like large-scale clinical trials, setting up research hubs, or expanding into new markets, consider leveraging outsourced solutions such as Recruitment Process Outsourcing (RPO) or Managed Services Providers (MSP). These services provide the specialised expertise, scalability, and operational efficiency needed to address talent gaps and manage high-volume hiring, allowing you to stay agile in a competitive and fast-moving sector.

Consult external experts for talent strategy

Bring in external consultants to guide your workforce planning and talent acquisition strategy. Their industry-specific expertise can help optimise recruitment processes, identify emerging trends in life sciences, and develop succession plans even in highly regulated and dynamic environments.

INSIDERS' INSIGHTS

"The life sciences industry is at a crossroads. With challenges like an ageing workforce, shifting global dynamics, and AI-driven disruption unfolding in unexpected ways, it's clear that attracting and developing talent requires a new approach. But these unprecedented changes also bring exciting opportunities. Every day, our teams at Gi Life Sciences encounter passionate, skilled talent eager to apply their expertise to this dynamic sector. There's no one-size-fits-all solution to attracting and retaining that talent—it takes vision, tailoring, and hard work. From Europe's established life sciences powerhouses to emerging markets, and from elite professionals to people not currently participating in the workforce, for whatever reason, companies must create environments where this talent wants to join and can truly thrive in".

Franck Teboul

Country Manager at Gi Group Holding France

"Europe's life sciences landscape is incredibly diverse—some regions are growing rapidly, while others are restructuring. It's not just about finding what talent's out there—it's about understanding what motivates people from different economies and cultures, from the brand-new manufacturing hubs of Eastern Europe to the centuries-old research centres in the West. In the Netherlands, flexibility is what seals the deal, for example, while higher pay matters more in Bulgaria. Where's the best pool of MedTech engineers? Will there be enough operational workers to staff that new manufacturing site? These are the kinds of questions we help our clients answer daily".

Tony Goonan

Global Sales Senior Director - Life Sciences at Gi Group Holding

INSIDERS' INSIGHTS

"As Western populations age, demand for specialised skills in areas like orthopaedics and diabetes management is surging. Simultaneously, employers must adapt to the disruption brought by AI and automation. Talent shortage is a growing reality, with half of workers likely needing to reskill in the coming years. Our clients are increasingly challenged to keep pace with these changes and secure the right talent. Access to these skills is vital for maintaining competitiveness and driving growth. External recruitment expertise - professionals with deep knowledge of the life sciences sector - offers significant value".

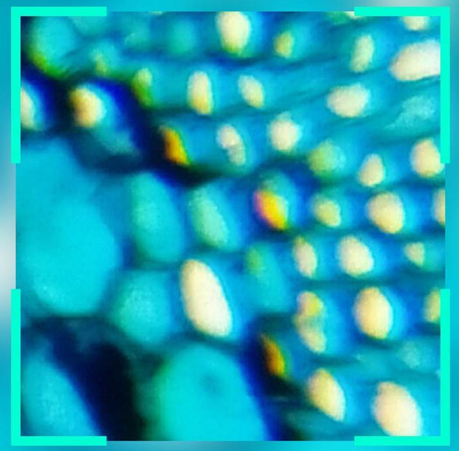
Stephane Miras

Director at Gi Life Sciences Switzerland

"Skills-based hiring shifts the focus from traditional qualifications to the tangible abilities that actually drive performance. It can open up new talent pools, especially in sectors like life sciences, where the demand for specialised skills changes quickly. But it's not just about identifying the right competencies—it's about understanding the broader context in which those skills will thrive. That's where an external recruitment partner like Gi Life Sciences can make all the difference. Because you really need a nuanced understanding of the talent landscape to match the right skills with the right opportunities".

Chiara Auteri

Professional Team Leader at Gi Life Sciences Italy



7. Conclusion

7. CONCLUSION

The future of life sciences is happening now. **The talent needed to fuel that change is out there.** But to capture it, we must reimagine how we approach recruitment and education. **Building a thriving workforce requires more than just filling gaps.** Investing in upskilling, engagement, and diversity is essential to fostering innovation and shaping the future.

Yes, the skills gap in life sciences is real. But it's not insurmountable. If we get this right, we'll contribute to Europe's health and prosperity and create meaningful, sustainable jobs for generations.

7. CONCLUSION

Gi Life Sciences: Bringing Science to Life

2nd

POSITION IN SIA'S 2023 LARGEST EU LIFE SCIENCES STAFFING COMPANIES RANKING

700+

NUMBER OF ACTIVE LIFE SCIENCES CLIENTS

300+

SPECIALISED LIFE SCIENCES CONSULTANTS IN EMEA

With **over 30 years of expertise**, Gi Life Sciences specialises in delivering tailored staffing, recruitment and workforce solutions that create impactful connections, **empowering companies to drive progress in the Pharma, Biotech, Medical Devices, and Fine Chemicals sectors.**

Our team of **industry insiders**—many of whom are scientists by training—understands the nuances of life sciences, connecting you with the specialised, hard-to-find talent you need to thrive.
From temporary staffing for peak periods to custom permanent staffing solutions, we offer flexibility, scalability, and deep sector knowledge. Our long-term partnerships with global life sciences leaders speak to our **commitment to quality, innovation,** and building **lasting relationships**.

Ready to move forward?

Let's talk about how we can help you build the team that will lead the way.

Click here to schedule a consultation


LIFE
SCIENCES