LIFE SCIENCES SKILLS MAPPING REPORT

PADDINGTON LIFE SCIENCES

BA

NHS
Imperial College Healthcare
NHS Trust

Throughout March to July 2024, Bloomberg Associates and Paddington Life Sciences Partners undertook a series of interviews to understand skills needs across the sector and potential pathways for local residents to gain entry to careers in life sciences.

This report synthesises the findings of these interviews, although the recommendations of this report do not necessarily reflect the views of any individual partner.

FOREWORD

The UK's life sciences sector has long been recognised as a **key area of national strength**, delivering both health and economic benefits. The sector's workforce are integral to this success, enabling the UK to play a leading role in many scientific advancements, from penicillin to COVID-19 vaccination to sickle cell gene therapy, and many more.

Yet despite these strengths, the UK's life sciences sector is under increasing pressure to develop a workforce that can respond to shifts in required skill mix to capitalise on emerging industries and continue to differentiate itself from competitor markets.

We need to make sure our life sciences' partners have the skilled workforce they need to innovate and grow, while at the same time **benefitting our local communities** by making sure that pathways to careers in life sciences are well understood and accessible. This report, which builds on interviews of leading life sciences, pharmaceutical and health organisations around Paddington, aims to strengthen the UK life sciences skills base, and chart a course to establish a **diverse and inclusive life sciences workforc**e.

Prof. Bob Klaber (Director of Strategy, Research and Innovation), Imperial College Healthcare NHS Trust

Elizabeth Bennett (Strategy, Research and Innovation Programme Manager), Imperial College Healthcare NHS Trust

EXECUTIVE SUMMARY

- The UK is home to one of the most productive health and life sciences sectors in the world with 6,500 companies in the UK who directly employ over 300,000 staff and generating over £100 billion of turnover[1,2].

- Fast growth in employment locally, a wide breadth of sub-sectors and diversification of skills in response to emerging industries positions the sector well to provide significant employment opportunities for local residents.

- Paddington Life Sciences partners have a high demand for talent concentrated in two areas: 1) Growth occupations (particularly focused in data/digital and commercial roles), and 2) hard to fill occupations (particularly focused in clinical and regulatory affairs roles)

- Most of these roles have seen medium to high growth in employment nationally over the past 5 years and many have career pathway options for local residents who are A levels and below, providing excellent opportunities for priority communities within the Paddington area.

- However, there are a number of challenges in access to careers in life sciences by local residents which require action at both a company and sector level.

  » The highly specialised and highly regulated nature of the sector means that many roles do require higher education or experience with limited information about career pathways, including alternative options available.

  » There is also a narrow understanding from the general public about what industries make up the life sciences sector and the breadth of roles available.

  » There are ongoing challenges with diversity throughout all levels of the organisation with global majority populations making up on average only 2-20% of employees in entry, mid and senior level positions and women making up only 10-30% of employees in senior level positions.

  » Following the trend of other sectors, employee satisfaction is increasingly dependent on wellbeing, inclusivity and work-life balance in daily operations, particularly in younger employees. This is playing out in employee attrition, with turnover rates lower than other sectors but concentrated in junior level positions (15% annually vs 20% in other sectors), compared to most mid- (10% vs 15% in other sectors) and senior-level positions (8% vs 12% in other sectors).

- While the highly specialised nature of the sector means that many roles have significant educational or experience requirements, entry points to a broader talent pool exist. Through thoughtful programming to recruit, prepare and develop progression pathways for targeted populations, the life sciences sector can increase its accessibility to a wider range of candidates that bring a greater diversity of experience while addressing entrenched challenges in talent recruitment and retention.

INTRODUCTION

- The UK is home to one of the most productive life sciences sectors in the world with 6,500 companies in the UK who directly employ over 300,000 staff and generating over £100 billion of turnover[1,2].

- The sector provides a growing source of employment averaging an 8% increase in employment and a 3% increase in annual turnover over the past 10 years[3]. London is one of the fastest growing locations of life sciences employment in the UK, accounting for approximately 10% of all UK life sciences employment, with 20% of these based in Westminster local authority where Paddington is located[1,3].

- In the context of emerging industries, we need to ensure that life sciences organisations have the right skills to innovate and grow and are able to capitalise on new opportunities for the UK. At the same time, there is work to do to ensure that this investment also benefits our local populations by making sure that pathways to careers in life sciences are well understood and accessible.

- Changing skills needs to support and expand emerging industries in AI, data and digital, mean there is a growing need to ensure traditional skillsets in biomedical sciences are complemented by technical skills in areas such as data analytics, engineering, computer science[2,3,4].

- It is also crucial that the sector continues to develop a more diverse and progressive culture that attracts and retains people from all communities and backgrounds and is reflective of UK society[3,4]. Increasing diversity is critical to developing research, products and awareness approaches that are responsive to the entire population.

- The wide range of sub-sectors (e.g. pharmaceuticals and biotechnology, health care, education/research, data and software development, business operations), provide a huge opportunity for local residents. However, the breadth of roles available presents a challenge in raising awareness of the range of careers and pathways available[4].

- This report aims to support Paddington Life Sciences Partners to understand what we can do to provide local population with access to high quality jobs in the life sciences sector, while meeting skill needs.

Source: 1. UK Life Sciences Industrial Strategy Update **(here)**, 2. Bioscience and health technology sector statistics 2021 to 2022 **(here)**, 3. Science Industry Partnership 2030 Skills Strategy **(here)**, 4. Partner interviews – Paddington Life Science Partners

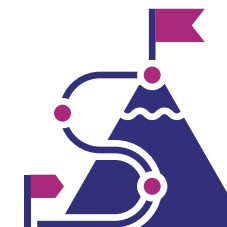# KEY EMPLOYMENT OPPORTUNITIES AND GROWTH OCCUPATIONS

These are the roles that continuously came up in partner interviews as either being positioned for growth or were chronically hard to fill. Findings from partner interview were contextualised with the compound annual growth rate in employment in life sciences for these roles over the past 5 years. Focusing in on those roles that may also present entry points to careers for community members that do not have extensive advanced education a few areas emerged as having potential for developing programs that support the sector's talent needs while developing strong pathways into the sector for local residents.

Demand type	Role	Degree requirement			
		A levels or below		**Advanced**	
Growth areas	Data	Data analysts	High	Data scientist	High
		Quality Assurance or Quality Control (QA/QC)	Medium	Product Development /Software Engineers	High
		User experience	Medium		
	Commercial	Marketing	Medium	Market access	Medium
		Sales/business development	Low		
Hard to fill roles	Clinical	Pharmacy Technician	High	Radiographer/Sonographer	Medium
		Laboratory Technician	Medium	Pharmacist	Medium
		Imaging Support Worker	Medium	Clinical Scientist	High
	Regulatory Affairs			Associate	Medium

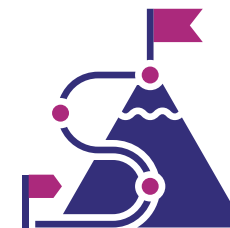**Growth in employment (past 5 years)** ● Low   ●● Medium   ●●● High

REQUIREMENTS AND PATHWAYS - GROWTH OCCUPATIONS (1/4)

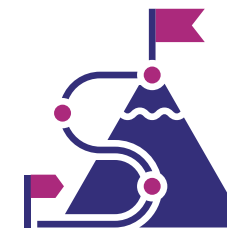| Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Data	Data Analyst	• Strong analytical and problem-solving skills • Business acumen • Excellent communication skills, ability to communicate technical information to non-technical audience • Collaborative team-based work style • Dedication to continual learning	🟠 • Entry possible via data analyst college courses or BTEC (data analytics – until 2025)	🟢 • A Levels (2-3 including maths) • T levels (digital business services) • Apprenticeships (e.g. data technician level 3)	🟢 • Bachelor's degree (statistics, maths, economics, computer sciences or related subjects)	🟢 • Graduate training schemes • MSc (data analytics), MBA (business management) • PhD (required for some research roles)
	Quality Assurance or Quality Control (QA/QC)	• Excellent organization and planning abilities • Detail oriented, self-motivated and able to work in dynamic environment • Ability to work in teams • Strong communication skills	🟠 • Entry possible via apprenticeship or college courses	🟠 • A levels (1-3)	🟢 • Apprenticeships (e.g. Level 4 Quality Practitioner) • Bachelor's degree (production management, business and management, science, engineering)	Not required for most roles

Employability Key 🔴 Low 🟠 Medium 🟢 High

Source: Partner interviews (Paddington Life Science Partners), National Careers Service, Barts Life Sciences – Life sciences career pathways (Tower Hamlets One Public Estate Partnership)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	A or T Level Equivalent	Foundation degree or certificate of higher education	Postgraduate degree
Data	User experience (UX)	• Excellent collaboration and communication skills, including ability to convey technical information to non-technical audiences • Ability to work in dynamic environment with multiple priorities • Commitment to continuous learning	🔴 • Entry possible via career accelerator courses but A levels recommended	🟠 • A Levels (computing) • T levels (digital production, design and development)	🟢 • Level 4 Certificate in Digital Media Design • Apprenticeships (e.g. digital user experience) • Bachelor's degree (product design, digital media and web design, digital marketing)	🟢 • Graduate training schemes • MSc (User experience design) • PhD (required for some research roles) • Post-doctoral fellowships
	Data Scientist	• Strong analytical and problem-solving skills • Excellent communication skills • Collaborative team-based work style • Dedication to continual learning	🔴 • Entry possible via career accelerator courses (i.e. data analytics/coding) but formal qualifications recommended		🟠 • Apprenticeships (e.g. Level 6 data science) • Bachelor's degree in STEM	🟢 • Graduate training schemes • MSc • PhD (required for some research roles) • Post-doctoral fellowships

Source: Partner interviews (Paddington Life Science Partners), National Careers Service, Barts Life Sciences – Life sciences career pathways (Tower Hamlets One Public Estate Partnership)

REQUIREMENTS AND PATHWAYS - GROWTH OCCUPATIONS (3/4)

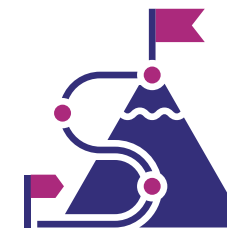| Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Data (continued)	Product Development/ Software Engineer	• Strong communication and ability to work in team environment • Commitment to ongoing learning • Strong personal accountability • Action-oriented	🔴 • Entry possible via career accelerator courses (i.e. Coding) but formal qualifications recommended		🟢 • Apprenticeships (e.g. Level 6 product design/ development engineer) • Bachelor's degree (engineering product design, engineering, materials science, maths, physics)	🟢 • Graduate training schemes • MSc (data analytics), MBA (business management) • PhD (required for some research roles) • Post-doctoral fellowships
Commercial	Marketing	• Excellent communication with ability to create and present clear messages • Data driven and analytical • Able to work in dynamic environment with multiple priorities	🟠 • No set entry requirements – GSCE (4-5 including English, maths and science) with work experience in sales, marketing, healthcare recommended		🟢 • Apprenticeships (e.g. Level 4 Sales executive, Level 6 Business to business degree) • Bachelor's degree (business, marketing, pharmacy, biomedical sciences)	🟢 • Pharmaceutical /med tech graduate training schemes • MSc (pharmaceutical science) • PhD (pharmaceutical science) • Post-doctoral fellowships

Employability Key 🔴 Low   🟠 Medium   🟢 High

Source: Partner interviews (Paddington Life Science Partners), National Careers Service, Barts Life Sciences – Life sciences career pathways (Tower Hamlets One Public Estate Partnership)

REQUIREMENTS AND PATHWAYS - GROWTH OCCUPATIONS (4/4)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Commercial (continued)	Sales and business development	• Proactive and enthusiastic • Customer service oriented • Able to build and maintain strong relationships • Excellent communication • Strong integrity, ability to learn new processes	🟠 • No set entry requirements – GSCE (4-5 including English, maths and science) with work experience in sales, marketing, healthcare recommended		🟢 • Apprenticeships (e.g. Level 4 Sales executive, Level 6 Business to business degree) • Bachelor's degree (business, marketing, pharmacy, biomedical sciences)	🟢 • Pharmaceutical /med tech graduate training schemes • MSc (pharmaceutical science) • PhD (pharmaceutical science) • Post-doctoral fellowships
	Market access	• Excellent communication including presentation and delivering complex information to non-technical audience • Strong customer service orientation • Ability to build and maintain strong relationships	🔴 • Entry possible via work experience (e.g. pharmaceutical companies) but formal qualifications recommended		🟢 • Bachelor's degree (life sciences)	🟢 • MSc (life science) • PhD (required for some research roles) • Post-doctoral fellowships

Source: Partner interviews (Paddington Life Science Partners), National Careers Service, Barts Life Sciences – Life sciences career pathways (Tower Hamlets One Public Estate Partnership)

REQUIREMENTS AND PATHWAYS – HARD TO FILL ROLES (1/4)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Clinical	Pharmacy Technician	• Strong analytical and problem-solving skills • Business acumen • Excellent communication skills, ability to communicate technical information to non-technical audience • Collaborative team-based work style	🟢 • 4- 5 GSCEs (A* to C), including English, science and maths with Level 2 Diploma in Applied Science or equivalent qualification		🟢 • Apprenticeships (Level 3 Pharmacy Technician)	Generally not required
	Laboratory Technician	• Excellent organization and planning abilities • Detail oriented, self-motivated and able to work in dynamic environment • Ability to work in teams • Strong communication skills	🟠 • Entry possible via apprenticeship or college courses	🟢 • A levels (3) • T Levels (Science) • Technical college (NHD, NHC, VET)	🟢 • Apprenticeships (e.g. Level 3 Laboratory Technician, Level 5 Technician Scientist) • Bachelor's degree (science)	🟢 Not required for most roles • MSc (medical laboratory science, bioinformatics) • PhD (laboratory science)

Employability Key   🔴 Low   🟠 Medium   🟢 High

Source: Partner interviews (Paddington Life Science Partners), National Careers Service, Barts Life Sciences – Life sciences career pathways (Tower Hamlets One Public Estate Partnership)

REQUIREMENTS AND PATHWAYS – HARD TO FILL ROLES (2/4)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Clinical (continued)	Imaging Support Worker	• Ability to work in teams • Strong communication skills • Dedication to continual learning	🟠 • Entry possible via apprenticeship or college courses	🟢 • A levels (Science) • T Levels (Healthcare science) Certificates (e.g. Level 2 Certificate in Health and Social Care) • Apprenticeships (e.g. Healthcare Science Assistant Level 2 Intermediate Apprenticeship)	🟢 • Apprenticeships (e.g. Level 3 Diploma in Healthcare Support)	Generally not required
	Radiographer/ Sonographer	• Ability to work independently • Excellent accountability and communication. including in stressful and emotional situations • Good situational judgement	🔴 • Entry possible via imaging support worker roles	🔴 • A Levels (2,including at least 1 science)	🟢 • Apprenticeships (e.g. Level 6 Diagnostic or Therapeutic Radiographer) • Bachelor's degree – (e.g. BSc Diagnostic Radiography)	• For sonography – postgraduate certificate or postgraduate diploma in medical or clinical ultrasound (recognized by the Consortium for the Accreditation of Sonographic Education)

REQUIREMENTS AND PATHWAYS – HARD TO FILL ROLES (3/4)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Clinical (continued)	Pharmacist	• Ability to work well in team environment • Ability to organize work and set priorities in dynamic environment	🔴 • Entry possible via BTEC (pharmaceutical science– until 2025) or National Extended Diploma in Applied Sciences/ Access to HE Diploma	🔴 • A levels (3, including chemistry) or T levels (health and science, not always required)	🔴 • Pharmacy foundation degree (followed by experience as pharmacy assistant/ technician)	🟢 • MPharm – approved by General Pharmaceutical Council, followed by pharmacist foundation training scheme
	Clinical Scientist	• Ability to work well in team environment • Ability to organize work and set priorities in dynamic environment	🔴 • GSCE (4-5 including English, maths and science)	🔴 • A Levels (2-3 including maths and physics) • T levels (healthcare science)	🟢 • Apprenticeships (e.g. Level 6 healthcare science practitioner) • Bachelor's degree (life sciences, biomedical sciences) • NHS Practitioner Training Programme	🟢 Not required for most roles • MSc (clinical science, clinical trials) • PhD (clinical science) • NHS Scientific Training Programme

REQUIREMENTS AND PATHWAYS – HARD TO FILL ROLES (4/4)

Role type	Role	Skill Requirements	Pathway options by degree entry level			
			GSCE Equivalent	**A or T Level Equivalent**	**Foundation degree or certificate of higher education**	**Postgraduate degree**
Regulatory affairs	Associate	• Excellent organization and planning abilities • Detail oriented, self-motivated and able to work in dynamic environment • Ability to work in teams • Strong communication skills	🔴 • GSCE (4-5 including English, maths and science)	🔴 • A levels (2-3)	🟢 • Apprenticeships (e.g. Level 7 Regulatory Affairs Specialist) • Bachelor's degree (e.g. life sciences, biomedical sciences, pharmacology), public health	🟢 • MSc (regulatory affairs, medical affairs) • PhD (clinical science)

STRATEGIES FOR CONNECTING TO PRIORITY COMMUNITIES

Context	Priority communities	Need		Potential pathways into priority roles
There is a significant need for access to high quality work in Paddington. While there are a number of routes to join the UK Life sciences sector, these are not always known or accessible to the priority communities. Potential routes include: • Academic education: moving from GSCEs to A levels, to Foundation and/or bachelor's degrees, to postgraduate degrees and PhDs • Vocational education: with Intermediate, Advanced, Higher and Degree-level apprenticeships, and T levels • Career agility: requiring sector-relevant skills training to facilitate moves into the sector from other sectors, e.g. academia, the health service, software development etc.	Young people not in education, employment or training (NEET)	~1k	18-24 year olds claiming out of work benefits	• Recruitment campaign to junior sales roles • Training program connecting to UX roles
	Returning caretakers	~6k	Residents providing >20 hrs. unpaid care per week	• Targeted training/bootcamp in QA/QC • Apprenticeship program in Regulatory Affairs
	Residents who do not have English as a first language	~7k	Residents who cannot speak English or cannot speak English well	• Credential transfer support and bridge programming into data and clinical roles • Contextualised ESOL for Pharmacy Technicians program
	Over 50s	~2k	Residents 50+ claiming unemployment related benefits	• Short term training program into Lab Technician roles • Targeted training/bootcamp in data analysis
	Residents in in-work poverty	~13k	Residents earning below the London Living wage in North Paddington	• Apprenticeship program into pharmaceutical marketing roles • Stipend Diploma in Radiography Courses

UNDERSTANDING
EMPLOYER PRIORITIES

VISABILITY
Increase awareness and promote interest in life sciences as a career

DIVERSITY
Increase sources, background and diversity of talent at all levels

CONTEXTUALISATION
Equip entering candidates with industry relevant and applied learning in order to onboard more quickly

MODERNISATION
Prepare new and exiting workers to understand and adopt emerging tools and technologies

RETENTION
Reduce churn amongst early career staff that results from mis-aligned expectations, unawareness of progression pathways, and cost of living challenges

"Young people need to know what the life sciences sector offers – they think if they aren't a scientist, it isn't for them."

"AI is gaining steam and will be very prevalent in industry in next few years - will require a different approach to work and a slightly different skill set...we need to be figuring out how to prepare people in the industry and people entering the industry for this and no one has."

"Investors asking a lot of questions about diversity and really influencing their decisions about who to give money to."

"We are generally able to find and hire candidates, but there is a lot of demand for candidates with a couple of years of experience and retention for this group is hard...Investing in creating a clearer career trajectory so they know how and when they can grow might improve retention."

RECOMMENDATIONS

1

INCREASE AWARENESS AND INTEREST IN LIFE SCIENCES CAREERS

Showcase the breadth of positions and increase the connection points between employers and candidates

2

DEVELOP AND MAINTAIN STRATEGIES THAT SUPPORT DIVERSITY

Support best practices sharing and industry wide initiatives to increase diversity of talent at all levels

3

LAUNCH A TARGETED TRAINING-SUPPORTED CAMPAIGN TO DEVELOP A TALENT PIPELINE FOR HIGH PRIORITY OCCUPATIONS

Publicise strategic training offerings that lead to life sciences "feeder" positions

4

DEVELOP 2-3 STRUCTURED CAREER PROGRESSION PROGRAMS

Partner with employers to develop explicit pathways to progress entry-level employees in high-turnover roles

5

BUILD 1-2 SECTOR SPECIFIC TRAINING MODULES ON DEMAND-SKILLS

Develop contextualised learning modules focused on emerging competencies to supplement gen ed and/or upskill existing workforce

6

SUPPORT LOCAL COMMUNITY TO HARNESS ECONOMIC BENEFITS FROM GROWTH OF SECTOR

Forecast growth in complimentary sectors and create employment and small business programs that prepare local community to access emerging opportunities

7

RESOURCE WORK FOR IMPACT AND COORDINATE FOR EFFICIENCY

Resource a strategic position to advance work and leverage aligned efforts to maximise impact

RECOMMENDATION CONSIDERATIONS

Recommendation	Impact	Resource requirement	Inter-dependency	Suggested Lead	Key partners
1. Increase Awareness and Interest in Life Sciences Careers	🔴 Low	++	++	Paddington Life Sciences/ Industry Association	Schools, youth organisations, employers, workforce services
2. Develop and Maintain Strategies that Support Diversity	🟢 High	++	+++	GLA/ Industry Association	Employers, recruiters, workforce services
3. Launch a Targeted Training-Supported Campaign to Develop a Talent Pipeline for High Priority Occupations	🟢 High	++	++	Paddington Life Sciences/ Industry Association	Employers, education and training providers, workforce services, community organisations
4. Develop 2-3 Structured Career Progression Programs	🟠 Medium	+++	+++	Paddington Life Sciences/ Industry Association	Employers, Westminster Adult Education Service (WAES), apprenticeship programs
5. Build 1-2 Sector Specific Training Modules on Demand-Skills	🔴 Low	+++	++	GLA/ Westminster Adult Education Service (WAES)	Employers, education and training providers
6. Support local community to harness economic benefits from growth of Sector	🟢 High	++	+	Westminster City Council / Paddington Life Sciences	WAES, small business/ entrepreneur assistance, community based organisations
7. Resource Work for Impact and Coordinate for Efficiency	🟢 High	+	+++	Westminster City Council / Paddington Life Sciences	Industry associations, local authorities' life sciences support efforts

Assessment   🔴 Low   🟠 Medium   🟢 High

1 INCREASE AWARENESS AND INTEREST IN LIFE SCIENCES CAREERS

Overview and core activities	Partner commentary

Description
Leverage existing career awareness to increase awareness of the Life Sciences field, the breadth of career opportunities it offers, and multiple routes into life Sciences careers at all levels.
 	
Impact
Increased broad awareness of roles within field, associated requirements and how to pursue opportunities
 	
Core activities
• Develop template for incorporating life sciences field into career awareness programming
  » Overview of the sector and range of roles
  » Description of day-to-day tasks, skills, pathways associated with occupations
  » Personal stories and testimonials from employees in variety of positions
  » Site visits and "simulation" projects
  » Strategies for initiating job search, application, and promotional opportunities
  » Relevant education and training pathways according to occupation
 	
• Train career advisors and job coaches on the industry
 	
• Build network of industry-based coaches and mentors available to interested candidates
	"We need a program that opens up these big buildings and makes the jobs they hold transparent."
	
	"Within our early leadership programs, we lose about 50% of applicants just because they don't follow the detail of the application instructions."
	
	"We need to give people in education and training programs a better understanding of the day-to-day tasks and the typical progression for these roles so they are more prepared for the reality coming in."

2 DEVELOP STRATEGIES THAT SUPPORT DIVERSITY

Overview and core activities	Partner commentary

Description
Develop recruitment strategies and partnerships that increase diverse talent from non-traditional sources and support the success and retention of diverse employees.
 	
Impact
Increase access to and success within life sciences careers by broader group of candidates
 	
Core activities
• Build recruiting pipelines from non-traditional sources of talent
  » Identify educational, professional, and other sources of talent with strong transferability to industry
  » Adopt a skills based (as opposed to education based) framework
 	
• Support the success of diverse employees
  » Analyse retention and progression to identify and solve any disparities
  » Facilitate peer networking and mentorship
 	
• Cultivate diverse leadership
  » Launch a diverse leaders in Health Care and Life Sciences Professional Association
 	
• Convene HR leadership roundtable, highlighting best practices in market
	"D&I initiatives are all aimed at entry-level but we need to figure out how to bring more diverse candidates into senior position – that's a really big pain point. There's no network for diverse leaders."
	
	"At this point, the business case for increasing diversity is pretty well established. The greater the diversity of backgrounds and experiences you have on a team, the better your products and the more market you can capture."
	
	"We've switched from university recruiting to 'early career,' and then switched that to 'early profession' realising that some of the best people were coming in from other industries where they have had careers. Bringing in talent from non-traditional sources has had big returns for us."

3 LAUNCH A TARGETED TRAINING-SUPPORTED CAMPAIGN TO DEVELOP A PIPELINE FOR HIGH PRIORITY OCCUPATIONS

Description and core activities	Partner commentary

Description
Pursue a marketing effort to mobilise targeted job seekers to enroll in short-term training programs that prepare them for in-demand, employer-agnostic roles that can be entry points into the industry
 	
Impact
Increase employment by priority communities in strategic entry points that lead to life sciences careers
 	
Core activities
• Leverage collective communications resources, pro bono employer support, and existing platforms
  » Partner with community-based institutions and non-traditional sources of talent to target outreach
 	
• Align with effective training providers to deliver training appropriate to strategic occupations
  » Partner with employers to verify relevance of training
 	
• Coordinate with employers to recruit from graduate pool
  » Request feedback on readiness of referrals and refer rejected candidates to applicable jobs/training/services
	"There are huge gaps in preparedness of people in fast tracked, remote and computer-based certificate programs vs. standard 12 week care certificate."
	
	"Except for very entry level generalist roles like reception or porters, large hiring events haven't worked – we've had much more success with a broad call for interest in the field and then screening and guidance of what roles would be best fit."
	
	We need to improve awareness of good paying entry-level jobs. People don't know that with just a little bit of training or experience they can have a much better career."

4 DEVELOP 2-3 CAREER PROGRESSION PROGRAMS

Description and core activities	Partner commentary

Description
Identify and create structured programs that advance entry-level/junior roles along a clear trajectory into strategic higher-level roles.
 	
Impact
Junior employees in high turnover, entry-level roles will have increased access to meaningful careers
 	
Core activities
• Leverage community of practice/employer network to identify strategic entry level/junior roles and destination role, articulate pathway
  » Identify training needs – desk and applied
  » Develop communication strategy that imparts opportunity and sets expectations for participation and success
 	
• Partner with employers well-positioned for customised training/apprenticeship to design and deliver program
  » Build from existing employer-based and industry programs
 	
• Align with effective training providers to deliver training appropriate to strategic occupations
 	
• Set participants up for continued success
  » Build in ongoing peer-based support and mentorship
	"Really invaluable to have staff that are fully familiar with the company, the product, and how customers have experienced the product to then work on its development."
	
	"Experience in the sector is a real premium and might be able to trump education if training programs are able to develop applied learning experiences."
	
	"Advancement is encouraged and promoted but both training and applying to more senior roles is left entirely to the individual."
	
	"Companies need to do the work to structure things internally to support people coming from training programs to be successful... need to develop strategies for making sure they aren't overwhelmed and can transition into the job successfully."

BUILD 1-2 TRAINING MODULES ON DEMAND SKILLS

5

Description and core activities	Partner commentary

Description
Create modular trainings that can increase sector-specific offerings centered on contextualised application and/or key new technologies to better prepare interested students to enter the field, upskill existing workforce, and/or support pivoting professionals
 	
Impact
Graduates of life sciences relevant education and training programs will be better prepared to enter the life sciences field with the specific skills, tools, and knowledge they will need to apply within roles specific to the life sciences sector
 	
Core activities
• Leverage community of practice or employer network to identify emerging skills, tools, and competencies
 	
• Partner with well positioned employers to design and deliver training program
  » Emphasise applied learning
  » Incorporate employer-based training and education whenever possible
 	
• Align with training providers to incorporate modules into course offerings
	"Particularly within data analysis and clinical research fields, we've found that students have not gotten training in university that applies to the kind of data available within healthcare and life sciences fields."
	
	"We do a lot of work around skills and... have developed lots of internal resources to support self-learning....and accreditation. Lots of training exists already...increasing access to those training modules by members of the community to actually get accredited will make them more employable."
	
	"We don't necessarily need developers or people to build machine learning systems but will need people in roles who are able to work with machines to produce the output needed in their area of function."

6 SUPPORT LOCAL COMMUNITY TO HARNESS ECONOMIC BENEFITS FROM GROWTH OF SECTOR

Description and core activities	Partner commentary

Description
Publicise and prepare local community to successfully connect to job and small business opportunities anticipated from growth of cluster.
 	
Impact
Local residents and entrepreneurs will maximize their participation in and benefit from the broad economic growth associated with development of the Paddington Basin project
 	
Core activities
 	
• Partner with development entities to forecast short- and long-term job, small business, and other opportunities associated with the growth of the Life Sciences Cluster and increased demand for services by its employees
 	
• Align local programming to outreach, prepare, and connect residents to high potential opportunities as they come on-line
  » Build from existing programs wherever possible (British Land's Brightlights Program, etc.)
  » Leverage Community of Practice/employer network to connect service orgs directly to employers
 	
• Leverage communications resources, pro bono employer support, city real estate
  » Drive storytelling efforts through Community of Practice, employer network
	"Prepare entrepreneurs/small businesses to harness the increase in demand that is expected to result from life sciences cluster."
	
	"In order to really be supported by the community...it can't just be people from outside commuting in and out of the jobs that are created. Local residents need to see the opportunity that it creates for them and have ways to realise those opportunities."
	
	"Beyond opportunities in life sciences, there may be significant growth in supportive industries around life sciences cluster that could create significant opportunities."

7 RESOURCE WORK FOR IMPACT AND COORDINATE FOR WEFFICIENCY

Description and core activities	Partner commentary

Description
Ensure appropriate staffing to drive work forward in impactful way by coordinating partners and engage industry associations, incubators, accelerators, private and public led sector support efforts throughout the region to align similar initiatives and reduce duplication.
 	
Core activities
• Hire a Project Manager responsible for coordinating initiatives and partner roles in implementation
 	
• Map aligned and complimentary efforts underway and initiatives being advanced within them
  » Identify points of alignment, intersection, and leverage as well as duplication and conflict
 	
• Establish a roundtable aimed at information sharing and coordination of efforts
  » Establish leads and roles with respect to similar initiatives
  » Convene regularly in order to ensure ongoing communication and coordination
 	
• Leverage resources, network and communications to ensure widespread awareness and scale successful efforts
	"There are many mapping efforts underway and many conversations about how to support the industry. Few are looking at how to connect life sciences opportunities to the community."
	
	"Build upon what the Partnership has begun so that residents are aware of the opportunities and educational providers are prepared to train for relevant skills and connected to the employers form an institutional perspective."

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