

Action Plan: Academic Career Development

1. Action plan

Our ACD strategy will nurture all staff to reach their full potential and as a result, have the most impact within the public health field. Our strategy builds four key principles:

1. Adopt a **multi-disciplinary approach** exposing staff to scientific, clinical, analytical, and policy skills.
2. Deliver **personalised training**, tailored to individual needs.
3. Foster **leadership across all career stages** to prepare future public health leaders.
4. Embed PPIEP and engagement with underserved communities to **cultivate inclusive, culturally responsible researchers**.

Academic Development Across Career Stages

All HPRU staff (0.25 FTE and above) students, and core support staff have bespoke training programmes co-designed with their line manager and/or ACD lead, Dr Hakki. Plans are structured to:

- Assess current role and career aspirations
- Identify development needs in research, PPIEP, knowledge mobilisation (KM), and leadership
- Plan concrete actions to achieve goals
- Specify required support and resources

ACD is fully embedded within our HPRU's structure. Each Research Theme is jointly led by a university professor and a UKHSA Lead, supported by Deputy Leads at an earlier career stage. This encourages mentorship, leadership development, and succession planning, preparing the next generation of public health leaders. Succession planning tools identify and address leadership skills gaps, supporting career progression to Theme Lead and other future leadership positions. If appropriate, Deputy Theme Leads will progress to Theme Leads positions, with new Deputy Theme Leads appointed as our HPRU evolves.

All staff across career stages are offered leadership opportunities, ranging from technicians leading work experience student projects to early-career postdoctoral scientists taking the lead on major grant applications.

Career, Capacity, and Interdisciplinary Development (including in Under-represented Disciplines and Specialisms)

Our HPRU is inherently multi-disciplinary, providing staff with organic exposure to a wide range of disciplines, including analytical literacy, laboratory virology and immunology, evidence synthesis, science communication, knowledge mobilisation (KM), policy development, and data analysis. Additional exposure occurs through weekly Wednesday laboratory meetings, HPRU 6-Month and Annual Symposia, and peer-to-peer ACD training days. For example, Mr

Nevin, originally appointed as a laboratory technician, progressed to a Technician and Data Analyst role through learning R programming and data analysis alongside skilled programmers within the team. This ensures trainees engage with the full translational research pathway, from laboratory-bench-to-patient-bedside-to-public health policy, gaining insights beyond their primary specialism and fostering a well-rounded skill set.

Interdisciplinary skill development is supported through joint supervision by university and UKHSA Theme Leads and Deputy Leads, including cross-HPRU mentorship. Training plans are personalised to career goals and include leadership development, succession planning for Deputy Leads, and culturally responsible research practices. PPIEP training helps researchers identify barriers to healthcare access for underserved communities, supporting growth in under-represented specialist areas.

Networking, Training and Peer Support

Networking and peer support are central to our HPRU's ACD strategy. Staff at all career stages will build networks, engage in cross-disciplinary learning, and exchange expertise through weekly Wednesday lab meetings, biannual Symposia, and in-person peer-to-peer training days. These events, open to UKHSA staff, collaborators, and other HPRUs, foster discussion and mutual support among early-career researchers in a collaborative environment.

All Imperial College London staff are entitled to ten training and development days per year, which may include NIHR initiatives such as the Doctoral Training Camp. Additional peer learning is supported through conferences, workshops, and seminars, strengthening professional connections and enabling cross-institutional collaboration. These opportunities are fully accessible to all staff, not only postdoctoral scientists.

Our HPRU has a strong record of supporting ECRs to lead publications with guidance from senior colleagues. For instance, former technician Derqui was first author on a landmark Lancet Microbe paper. ECRs also play leading roles in knowledge mobilisation (KM) activities, gaining valuable experience across the research pipeline, from developing lay summaries to producing outputs for public engagement.

Equality, Diversity and Inclusion (EDI) principles underpin all networking, training, and peer-support activities. Flexible working supports staff with parenting or caring responsibilities, and EDI compliance is reviewed annually by the HPRU Public Steering Committee and Independent Scientific Advisory Board (ISAB) to ensure practices remain inclusive. All staff undertake mandatory EDI training with biannual refreshers, embedding inclusivity into interdisciplinary development and enabling effective collaboration across disciplines and specialisms.

Partnerships with Other Parts of NIHR Infrastructure and Wider NIHR

Our HPRU is closely embedded within the wider NIHR research landscape, benefiting from strong collaborations with co-located NIHR-funded centres at Imperial. These include:

- **NIHR Imperial BRC Patient Experience Research Centre (PERC):** Enhances participation of underrepresented groups in research through established networks, expertise, and resources.
- **NIHR Imperial BRC Genomics Facility:** Provides sequencing platforms, analysis pipelines, and high-performance computing to support pathogen studies.
- **NIHR Applied Research Collaboration (ARC) Northwest London:** Directed by ISAB member Prof Azeem Majeed, this partnership facilitates access to health informatics, NW London patient populations, and established patient and public involvement processes.
- **Ethnicity and Health Unit (EHU):** Embedded within the ARC and led by Prof Mala Rao (HPRU Research Inclusion Lead), the EHU works with community organisations to involve ethnically diverse and underserved groups in research, improving real-world outcomes. We collaborate with ARC and EHU to create 'research-ready communities' in socioeconomically deprived areas.
- **NIHR Clinical Research Facility (CRF):** Hosts controlled human infection models (CHIM) for RSV, influenza, and SARS-CoV-2, enabling synergies with community-based cohort studies. During COVID-19, these partnerships allowed cross-validation of CHIM and real-world data, benefiting partners and the global scientific community. This integration will continue to enhance virology and immunology research.

The HPRU works closely with the NIHR Academy and national HPRU ACD programme. Our ACD Lead, as a NIHR Academy Ambassador, helps plan nationwide events, promoting continuous learning and best practices. Eligible staff are encouraged to join the Academy to access development opportunities, networking, and career support.

2. **Impact** - mechanisms for capturing and measuring the impact of academic career development.

Collaboration with Other Partners (Including Industry)

Our HPRU collaborates closely with UKHSA, partner universities (Oxford, Bristol, Sheffield), NHS Trusts, third-sector organisations, and industry. These strategic partnerships enable translational research across diagnostics, vaccines, digital health, and health protection policy. PhD students and postdoctoral researchers benefit from joint supervision and collaborative projects across Imperial College, partner universities, UKHSA, and external organisations. These interactions foster cross-disciplinary expertise and develop future public health leaders equipped to bridge research, policy, and practice.

Researchers are encouraged to reflect on the potential translational value of their work, including opportunities for intellectual property, licensing, or revenue generation, where appropriate. This mindset ensures that research not only advances knowledge but also maximises its potential for public benefit and innovation.

Community-based civil society organisations, guided by our Public Steering Committee, extend engagement to underserved populations. The Committee's remit is to hold the HPRU Leadership to account, ensuring transparent justifications, understandable to the public, are provided for strategic decisions. Lay members, each representing different forms of underprivilege or marginalisation, advise on how best to address health disparities and strengthen our ability to reach underserved communities.

Academic Development Across Career Stages

- **Mechanisms:** Individual training plans co-designed with supervisors and the ACD Lead; annual appraisal of development goals; succession planning for Research Themes.
- **Measures of success:**
 - Proportion of staff with completed training plans.
 - Leadership opportunities taken up across all levels (e.g. technicians supervising students, ECRs leading grants/publications).
 - Case studies of successful career progression.

Career and Capacity Development in Under-represented Disciplines and Specialisms

- **Mechanisms:** Exposure to multiple disciplines via multidisciplinary team and structured events; Targeted support for under-represented fields.
- **Measures of success:**
 - Diversity of disciplines represented in HPRU projects and leadership roles.
 - Uptake of training in under-represented disciplines.
 - Increase in outputs (publications, presentations, grant applications) from those fields.

Networking, Training, and Peer Support

- **Mechanisms:** Conference/networking event attendance; peer-to-peer training days; entitlement to 10 training days/year.
- **Measures of success:**
 - Conference/networking event attendance.
 - Use of 10 training days by staff.
 - ECR-led outputs (e.g. first-author papers, knowledge mobilisation projects).
 - Feedback surveys on perceived value of organised events.

Interdisciplinary Training and Development Needs

- **Mechanisms:** Joint supervision (university + UKHSA), cross-theme mentorship, exposure to translational research pathway.
- **Measures of success:**
 - Number of staff with supervisors from different institutions/disciplines.
 - Evidence of cross-disciplinary skills acquisition (tracked via training records).
 - Case studies (e.g. technician → data analyst transitions).
 - Interdisciplinary grant applications or publications.

Partnerships with Other Parts of NIHR Infrastructure and Wider NIHR

- **Mechanisms:** Engagement with NIHR Academy, BRC facilities, ARC collaborations, Clinical Research Facility synergies.
- **Measures of success:**
 - Number of staff joining the NIHR Academy.
 - Participation in NIHR-wide training (Doctoral Training Camp, Academy conferences).
 - Joint projects/publications leveraging NIHR infrastructure.
 - Examples of improved inclusion (e.g. via PERC, EHU, ARC).

Collaboration with Other Partners

- **Mechanisms:** Joint supervision with partner universities and UKHSA; engagement with industry for translational research; Public Steering Committee oversight.
- **Measures of success:**
 - Number and scope of collaborations (academic, NHS, industry, third sector).
 - Outputs with industry or civil society partners (IP, patents, co-funded projects, policy impacts).
 - Evidence of public accountability (Steering Committee minutes, PPIEP feedback).

3. Summary

Our ACD strategy will nurture all staff to reach their full potential and evolve into leadership roles within the public health research community. The unifying ethos of our RCD strategy is a relentless focus on translating health protection research and evidence into tangible benefits for patients and the public.

Our strategy builds four key principles:

1. Adopt a **multi-disciplinary approach** exposing staff to scientific, clinical, analytical, and policy skills
 - Staff gain hands-on experience across laboratory virology, immunology, data analysis, evidence synthesis, policy development, and knowledge mobilisation, supported by joint supervision and cross-HPRU mentorship.
2. Deliver **personalised training** tailored to individual needs
 - Training plans are co-designed with supervisors and the ACD Lead to assess career goals, identify skills gaps, and map actionable development pathways, including leadership, PPIEP, and technical competencies.
3. Foster **leadership across all career stages** to prepare future public health leaders
 - Opportunities include supervising students, leading grant applications, heading research projects, and succession planning for Deputy and Theme Leads to ensure continuity of expertise.
4. Embed PPIEP and engagement with underserved communities to **cultivate inclusive, culturally responsible researchers**

- Staff receive training to identify healthcare access barriers, work with diverse populations, and integrate community input into research design, fostering inclusive and socially responsible research outcomes.