

Beyond the Clinic: How Fellowships Enhance Career Opportunities for Ophthalmology Trainees

Parth Arvind Shah (ST7 London Deanery - Medical Retina TSC)

Vishal Shah (ST7 London Deanery - Glaucoma TSC)

Caroline Kilduff (ST5 London Deanery)

Introduction

The increasing popularity of fellowship during training amongst ophthalmology trainees has allowed many to explore areas beyond clinical practice, offering opportunities to upskill in fields like research, leadership and digital health. These fellowships not only enhance clinical knowledge but also equip the trainees with diverse and transferable skills for more holistic career development.

In this article, we highlight the unique experiences of three trainees who have undertaken fellowships during their specialty registrar years. We will be shedding light on the exciting opportunities available.

Clinical research fellowship in clinical development at a pharmaceutical company

After my ST5 year, I took time out of training to join Roche Products Limited UK as a clinical research fellow working in the global clinical development team. My primary motivation was to build more research expertise but at the time was unsure of committing to a PhD or MD. The fellowship, which was advertised through the BMJ, provided a full-time position within the global ophthalmology development team based at the Roche Welwyn site. This offered an invaluable insight into the complexities of late-stage drug development, particularly the efforts required to advance a drug from Phase 3 trials through to regulatory approval.

Key contributions and projects

During this fellowship, I contributed to various critical areas, including clinical trial design, drug development strategy and management, Phase 3 medical data review, regulatory approval processes, real-world data analysis, and pharmacovigilance/safety.

A key highlight was leading a novel analysis of Phase 3 trial data of the TENAYA, LUCERNE, YOSEMITE and RHINE trials of intravitreal faricimab treatment, which was presented at ARVO 2023 and has since been published in a peer reviewed journal. My responsibilities also included serving as a medical monitor for a sub-study of one of the Phase 3 trials, conducting medical data reviews for ongoing trials, and guiding data scientists in the interpretation of adverse events. Additionally, I collaborated on analysing data from two real-world studies with key opinion leaders in ophthalmology, contributing to the development of abstracts and publications for other international symposia.

Collaboration and cross-functional work

Beyond research, I worked closely with internal experts, external investigators, and academic partners, which greatly enhanced

my skills in conducting clinical trials and working within a global cross-functional team. This included collaborating on regulatory pathways for new disease areas for a molecule and organising two internal cross-functional team workshops to discuss the strategic direction of late-stage development molecules. My role required coordinating across multiple time zones and functions, including biostatistics, regulatory, safety, and real-world data sciences, as well as engaging with affiliate medical and commercial teams in both the UK and the US.

Personal and professional growth

This fellowship significantly deepened my understanding of the challenges and intricacies of late-phase drug development and complexities of designing a clinical trial that could support regulatory approval. It also reinforced the importance for real-world data to support the results achieved from Phase 3 clinical trials. Ultimately, the post enabled me to develop a range of transferable skills, effective collaboration, project management and leadership within a global team. That has greatly increased my confidence and enthusiasm for participating in clinical trials and industry collaborations in my future clinical practice.

Parth Arvind Shah (ST7 London Deanery - Medical Retina TSC)

National Medical Director's Clinical Fellowship Scheme (Faculty of Medical and Leadership and Management)

In the demanding world of ophthalmology specialist training, it's easy to feel like we're on a conveyor belt focused on surgical numbers and exams. However, once a surgeon feels confident in their skills and has completed their exams, the question often arises: what's next?

Addressing this concern and preventing burnout are essential for sustaining a fulfilling career in medicine. Diversifying roles beyond traditional clinical practice is essential for career fulfilment and preventing burnout. My solution was to embark upon the National Medical Director's Clinical Fellowship Scheme run by the Faculty of Medical and Leadership and Management¹. My time was divided between the NHS and the RCOphth, providing hands-on NHS management experience and strategic influence at the College.

Contributions and achievements

During this period, I served as Interim Co-Clinical Lead for the National Eye Care Recovery and Transformation Programme, gaining insights into eye care's evolving needs through site visits to hospitals such as Oxford and Frimley Park. With my College hat on, I authored the RCOphth report on the GMC's national training survey and published a Concise Practice Point. These efforts aimed to enhance training and practice standards, reflecting a commitment to improving medical education and patient care.

Another significant project involved leading the final phase of the development of 28 patient information videos. This initiative was designed to enhance patient understanding and engagement, highlighting the importance of clear, accessible communication in healthcare.

At the provider level, I authored a 'How To' toolkit that carefully outlined how a service can establish a hydroxychloroquine monitoring pathway.

Engaging in broader healthcare discussions

My role also extended into advocacy and policy. I was invited to a Parliamentary roundtable on access to minimally invasive glaucoma surgery, joining 34 other panellists in discussing critical issues. Additionally, as part of a college contingent, I lobbied MPs in Westminster for increased funding for eye healthcare, reflecting a commitment to improving policy and resource allocation in the sector.

Beyond these formal responsibilities, I engaged in several activities that further broadened my perspective on healthcare. I organised a speaker series with talks from eminent healthcare leaders such as Professor Mala Rao CBE, inaugural director of India's first Indian Institute for Public Health and Professor Tim Briggs CBE, founder of the revolutionary GIRFT programme. Another highlight was listening to Professor Chris Whitty delivering the keynote speech at the Annual College Council dinner.

Investing in future skills

The fellowship secured a fully funded position on Harvard Business School's Value Based Healthcare Intensive Seminar Series, further supporting my professional growth. Moreover, my involvement in the College Culture Review Pilot Group and the E-portfolio Steering Group both enabled me to contribute to important internal reviews and decision-making processes.

Conclusion

This fellowship offered a unique opportunity to gain new perspectives and develop skills beyond daily clinical practice. By engaging in diverse projects, advocacy, and strategic initiatives, I contributed to the medical field and enriched my own professional experience.

Vishal Shah (ST7 London Deanery - Glaucoma TSC)

Topol Digital Health Fellowship - Health Education England

Taking a year out of training to pursue the HEE Topol Digital Health Fellowship² was one of the most transformative decisions of my career. For those considering a similar opportunity like this, I want to share how it has shaped my work in ophthalmology and beyond, and why it may be valuable for your development. Just a note, mostly these fellowships can be done alongside clinical training, but I did mine as an OoPE in 2021 because it was during the covid-pandemic, my husband was slammed on Covid-ICU and we had a 4 month old baby, so I needed flexibility.

The fellowship offers clinicians the chance to lead on digital transformation projects, equipping you with skills that go beyond clinical expertise and into the realm of healthcare innovation and leadership. I was also able to work with a national team, exploring the feasibility of 'digital hubs', where a dedicated team could review source agnostic patient data and direct patients to appropriate clinical services. This work preceded the Single Point of Access initiative, which has now been running for over a year.

Innovation project

My innovation project focused on introducing "Bring Your Own Device" (BYOD) clinical smartphone photography to ophthalmology. I explored harnessing the increasingly sophisticated mobile camera technology to reshape how we document and assess clinical changes, important in a healthcare service where patients rarely see the same clinician twice.

BYOD photography was quickly adopted in oculoplastics and lid oncology clinics, where high-quality imaging is essential for monitoring lesions and surgical planning. Consequently, a pilot study in a virtual glaucoma clinic showed that smartphone images altered the management of a quarter of patients, enabling us to secure funding to develop a more user-friendly interface on our electronic patient record (EPR), OpenEyes, which is now live, allowing easy, fast and secure acquisition of ocular images, within the patient record, using smartphones.

Personal growth

Leading this project was a crash course in leadership, stakeholder engagement, and teamwork. I had the opportunity to work with diverse groups of people to make change happen, and I saw the bigger picture of how digital health can fit into and improve existing workflows. The fellowship gave me the confidence and skills to navigate complex healthcare environments and develop solutions that work not just in theory but in practice.

Future opportunities

Since completing the fellowship, I've pursued further digital health roles, including the Moorfields Digital Health Fellowship, Sky's "Get into Tech" software engineering course, and have secured a funded place on The Digital Academy's Digital Health Leadership PG Dip, which starts next year. These experiences have built upon the foundation laid during the Topol Fellowship and shaped my career aspirations in paediatric ophthalmology and strabismus, where digital innovation will play a central role.

For those feeling overwhelmed by the increasing clinical burden, stepping out of your routine to engage in a fellowship like this can provide the tools to tackle challenges head-on. It certainly did for me.

Caroline Kilduff (ST5 London Deanery)

Summary

Here we have discussed three areas where ophthalmology trainees can upskill through fellowships in research, leadership, and digital health. These experiences provide valuable insights into drug development, healthcare policy, and technological innovation. Diversifying their focus enriches their professional development and future career opportunities.

References

- <https://www.fmlm.ac.uk/services-programmes/clinical-fellow-schemes/current-schemes/national-medical-directors-clinical>
- <https://topol.hee.nhs.uk/digital-fellowships/>

Focus editor: **Pouya Alaghband**

Trainee editor: **Parth Shah**