



2021 – 2022

UCL Institute of Ophthalmology – IoO



Annual Review





INSTITUTE OF OPHTHALMOLOGY

We are a leading institute in ophthalmic research and education. Part of the UCL Faculty of Brain Sciences, our researchers work on fundamental science to understand eye health and disease. We aim to generate better therapies, diagnostics, and knowledge of eye care while training the next generation of vision health specialists who can make a difference to the lives of millions of people around the world.

- › Introduction from Institute Director, Professor Andrew D Dick

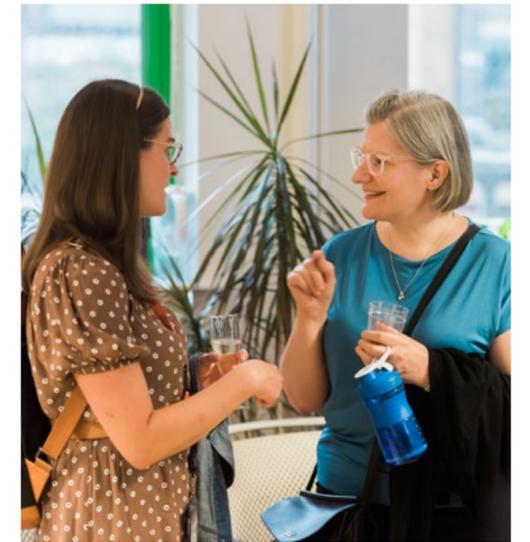
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Oriel



Most photos taken by James Tye at events held at the UCL Institute of Ophthalmology in 2022.



**UCL Institute of Ophthalmology Director,
Professor Andrew D Dick**

Foremost, I owe a huge debt of gratitude for everyone for achieving so much during another year of uncertainty. Despite COVID-19 continuing to present challenges for the first part of the year, and while its impacts will continue to be felt for years to come, we returned with vigour and progressive ways of working at the institute in the second half of the year. The sense of community, camaraderie, excitement, curiosity, dedication, and determination in our building was just as palpable

as ever. It has been an inspiring experience to see the corridors and Common Room alive with conversation again, and to hear plans and ideas for an ever-better culture, research portfolio and educational experience.

With hybrid teaching, we had students attend lectures online or face to face. All staff returned to work on site at least 40% of the time. Many seminars and events took on a hybrid format which gave us the opportunity to continue

Welcome to the 2021-2022 edition of our Annual Review

collaborations with colleagues from international universities. This year we reintroduced the Inaugural Lectures, where our new professors have the chance to showcase their career and work. Our Early Career Researchers (ECRs) celebrated a very successful annual symposium, held in person at the UCL Institute of Child Health. We were privileged to have Professor Mike Sapienza over from the University of Montreal, Canada, to deliver our Annual Lecture in person.

On the Research side, we received over £15 million in grants, developed and strengthened our four research themes, and published important studies that received national and international attention. Our partnership with Moorfields, the NIHR-Biomedical Research Centre, received a new five-year funding term with £20M of investment. This will continue to enable us to boost research

through support of essential infrastructure, develop careers, and accelerate treatments and technologies that will bring benefit across the healthcare and biomedical landscape, nationally and globally.

COVID-19 and other infectious diseases are not the only health challenge we face. Sight loss in the UK alone is expected to increase dramatically in the future. Therefore, now more than ever our mission to deliver research and education in vision and eye disease is of utmost relevance. Our institute was involved in two of the 15 impact case studies submitted as evidence of the breadth of research activities at the UCL Faculty of Brain Sciences. The impacts of our faculty's research on the wider world were recognised in the Research Excellence Framework (REF) 2021. We saw our educational offer and student numbers grow and

we secured some exciting student placement opportunities with our partners at the Singapore Eye Research Institute (SERI) and Australia's Children's Medical Research Institute (CMRI). We were thrilled to launch a new collaboration agreement with our international partner Santen, where one of the original PhD students who had received a Santen studentship was embedded within our institute to continue research, with support from UCL Translational Research Office (TRO).

In a year that saw the sad passing of Her Majesty Queen Elizabeth II, it was a great pleasure to have our long-term colleague, Mr Ian Murdoch, receive an MBE in the 2022 New Year honours for his extensive work in Africa.

This year, we established and inaugurated a Fellowship Committee (IoO FC) to foster early career candidates seeking support

in their career development, inviting potential colleagues from within UCL, nationally and internationally.

We are proud of our teaching staff. They received awards for equality, diversity and inclusion. We renewed our commitment to sustainability within our offices and labs and achieved gold again this year for Green Impact and LEAF.

Thanks to all of you who have worked, and continue to work on the committees, groups and events that enable a high-functioning and well-rounded environment at our institute, the faculty and wider UCL. The part you play in making our community vibrant and inspiring cannot be underestimated. I look forward to continuing to build research, engage with the themes and explore new collaborations, and for all to engage with all our educational programmes, mentoring and as personal tutors.

At a glance

All data from financial year 2021-2022

Total number of bids awarded:



Total amount awarded: **£15,356,061.72**



Income from Education:
£2,249,262



Operating costs:
£24,172,700



Income for equipment and running costs
£1,859,011

Funding bodies:

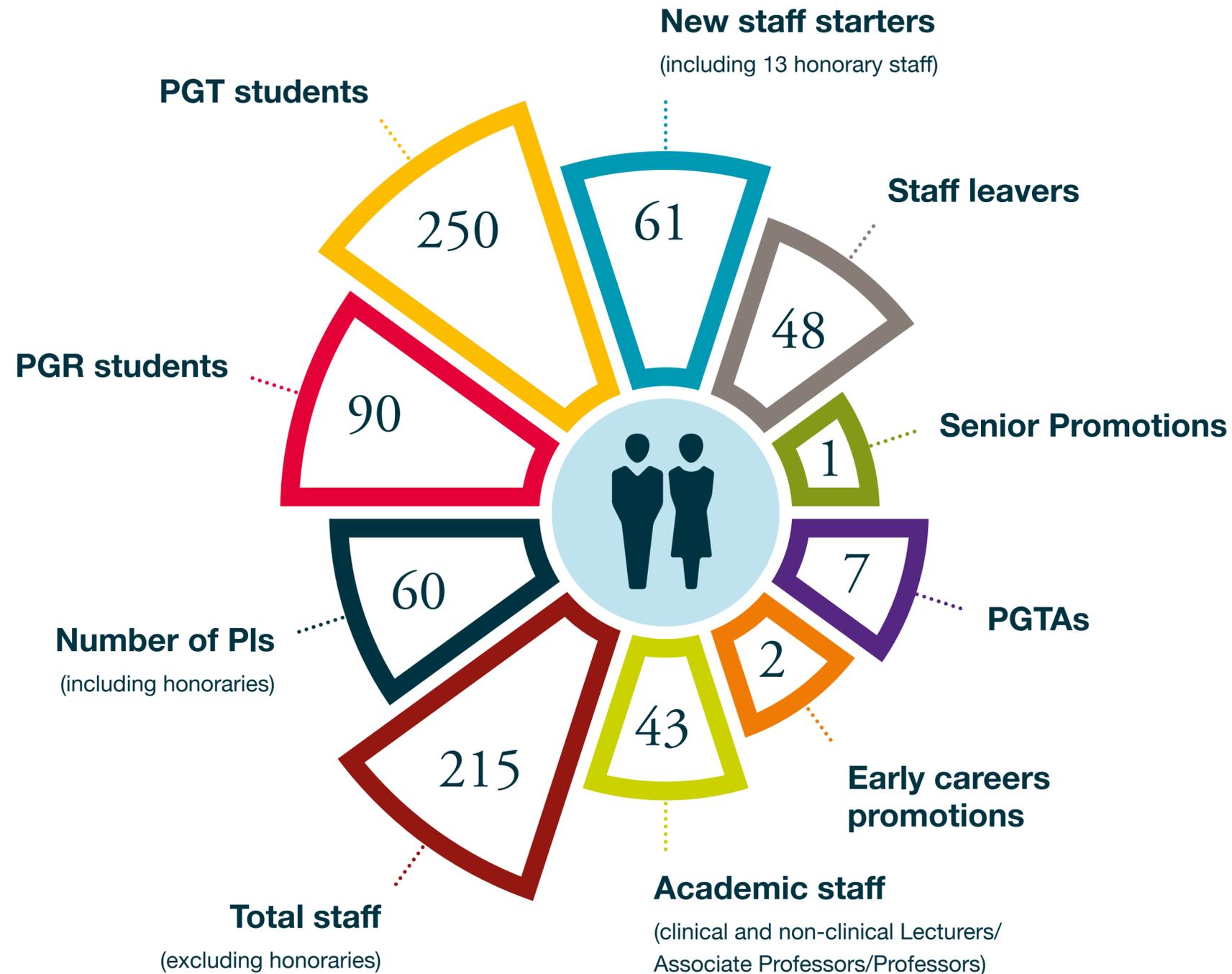
Biotechnology and Biological Sciences Research Council (BBSRC)
British Heart Foundation (BHF)
Bright Focus Foundation
Childhood Eye Cancer Trust (CHECT)
Horizon Europe
Fight for Sight
Innovate UK
Lister Institute of Preventive Medicine
Lowy Medical Research Institute
Macular Disease Society

Moorfields Eye Charity
Medical Research Council (MRC)
National Institutes of Health (NIH)
National Institute for Health and Care Research (NIHR)
The Royal Society
Santen
Thomas Pocklington Trust
Velux Stiftung
Wellcome Trust

Funding received from Moorfields Eye Charity

Funding programme	Total awarded	N. of grants awarded
Career development award	191,705	2
Equipment grant	166,862	3
Innovation grant	3,432	1
PhD Studentship	459,918	4
Research - Strategic initiative	679,527	1
Research enhancement award	4,264	2
Research project grant	1,056,581	7
Springboard Award	848,284	9
Grand Total	3,410,573	29

Human Resources



Senior and Early Career Promotions (effective from 1 October 2022)

One staff member from Moorfields Eye Hospital promoted to Clinical Professor
Richard Lee

One staff member promoted to Research Fellow
Yashica Parekh

One staff member promoted to Senior Research Fellow
Giulia De Rossi

From IoO Deputy Directors



Deputy Institute Director and Deputy Director for Research, Professor Alison Hardcastle

■ I would like to thank everyone for their contributions towards the excellent outcome of the REF; it made the task much more of a pleasure reading about all the exciting and diverse research at our institute for our submission. It has been a great year for individual grant success and collaborative awards such as the NIHR BRC and shared equipment driven through our research theme leads. We have enjoyed many in-person and hybrid events, seminars, workshops, and Inaugural lectures this year and the institute is buzzing with new early career researchers, PhD and PGT students.



Deputy Director for Equality, Diversity and Inclusion, Professor Tim Levine

■ This year the institute started taking the actions planned in our Athena Swan Silver Award, including supporting many aspects of career development. For Professional Services and Technical (PS&T) staff, we introduced new shadowing placements, 1-to-1 career advice, and are currently supporting six secondments to/from the institute. For academics and researchers, we continued our annual appraisal and promotion workshop for ECRs and supported applications for promotion. For PhD students, we successfully piloted anonymising applications to reduce ethnicity bias, and introduced a new exit survey to find out more about their experiences here.

And finally, in efforts to mould a more inclusive culture, we are one of two UCL departments offering free sustainable sanitary products to staff and students through Project Period.



Deputy Director for Education and former lead for MSc Bioscience Entrepreneurship, Professor Marcus Fruttiger.

■ We have now firmly established our Bioscience Entrepreneurship programme which aims to enable bioscience graduates with the transition from science into the applied world. We've had intakes of just over 40 students for the third year and, based on this success, we were able to establish an

Assistant Professor position responsible for leading the programme. We are excited that Fiona Reid from UCL School of Management, who was involved with the programme since its inception, has now joined UCL IoO and taken on this role. I will remain involved with the programme as a deputy and will support the new lead, Fiona Reid, with developing the programme further.



Deputy Director for International Relations, Professor Sahin-Ichi Ohnuma

■ International activity has been significantly damaged by COVID-19 in the last couple of years. UCL global activity is finally returning to normal. In March 2022 we were delighted to launch a new research collaboration agreement with our international partner SANTEN to reinforce ophthalmic knowledge and research, with support from

UCL Translational Research Office (TRO).

Currently, we are actively communicating with Osaka University and Tohoku University to setup strategic collaborations in neuroscience including ophthalmology, which include research collaborations, PhD program, and exchange of ECR. These collaborations will apply large scale grants early next year.



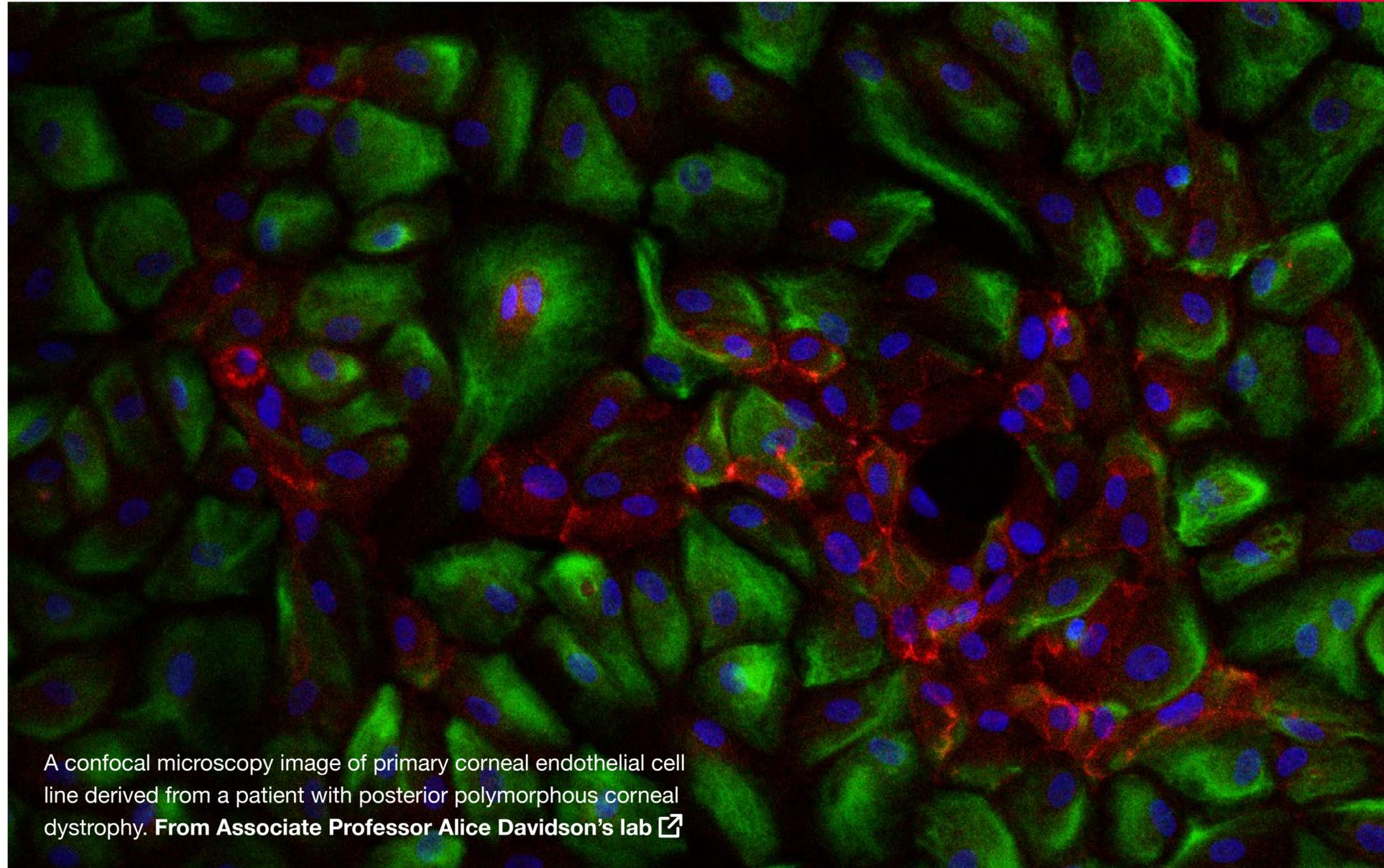
Deputy Director for Innovation and Enterprise, Professor John Marshall

■ The past year has seen significant activity in commerce and industry as the number of COVID-19 sufferers has reduced. Several commercial companies are interested in negotiating joint projects with our institute and the hospital in the fields of genetics and nanotechnology. There is also a growing interest from external companies in

collaborating with us in the fields of artificial intelligence particularly in developing algorithms to predict cardiovascular health from analysing fundus photographs. These potential projects should materialise in commercial funding next year

Research

The impacts of UCL Faculty of Brain Sciences research on the wider world have been recognised in the **Research Excellence Framework (REF) 2021** [🔗](#). As part of the Faculty, our institute appears in two of the 15 impact case studies submitted as evidence: one on **Transforming treatment for glaucoma patients and reducing healthcare costs** [🔗](#), and the other on how **World-first gene therapies transform lives of children with sight impairment** [🔗](#).



A confocal microscopy image of primary corneal endothelial cell line derived from a patient with posterior polymorphous corneal dystrophy. **From Associate Professor Alice Davidson's lab** [🔗](#)

We had 556 research papers published throughout 2021, with highlights including:

A demonstration of cone function plasticity after gene therapy in achromatopsia [🔗](#)

Modelling autosomal dominant optic atrophy associated with OPA1 variants in iPSC-derived retinal ganglion cells [🔗](#)

Identification of 4 novel human ocular coloboma genes ANK3, BMPR1B, PDGFRA, and CDH4 through evolutionary conserved vertebrate gene analysis [🔗](#)

Lateral gain is impaired in macular degeneration and can be targeted to restore vision in mice [🔗](#)

Electrical responses from human retinal cone pathways associate with a common genetic polymorphism implicated in myopia [🔗](#)

Watch our Institute Director, Professor Andrew D Dick, and our Deputy Institute Director and Deputy Director for Research, Professor Alison Hardcastle talk about the ideas behind our research strategy.



Institute Director,
Professor Andrew D Dick



Deputy Institute Director and
Deputy Director for Research,
Professor Alison Hardcastle



Research themes

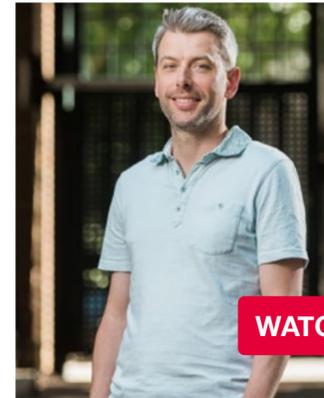
Our four inter-related research themes have continued to inform a multitude of activities at our institute over the last year including: seminars, workshops, guest lectures, monthly meetings, events, away days and training on the use of the equipment.

Watch the research theme leads and deputy theme leads talk about research life at the institute.

Development, Ageing and Disease - Led by



Professor
Clare Futter



Dr
Ryan MacDonald



Rescue, Repair, and Regeneration - Led by



Professor
Pete Coffey



Dr
Amanda Carr



Population and Data Science - Led by



Professor
Paul Foster



Dr
Nikolas Pontikos



Visual Neuroscience and Function - Led by



Professor
Andrew Stockman



Dr
Jennifer Sun



Dr
Tessa Dekker



UCL IoO Fellowship Committee



This year we established the **UCL IoO Fellowship Committee**  (IoO FC) to attract and support excellent early career researchers in applying for independent career development funding at our institute. The committee is composed of senior academics, with both fundamental and clinical fellowship expertise, and the institute's managers. The committee meets regularly to discuss candidate suitability for upcoming fellowships and the individual support they will require. This year the committee supported seven researchers in total in their applications for independent fellowship funding. An important goal is that every candidate receives feedback on their applications, including whether they are suitable for the intended award and how their applications can be improved. This committee is a crucial mechanism to build and grow the scientific expertise at the UCL Institute of Ophthalmology.

Research Focus

Associate Professor Dr Alice Davidson



Q1. Tell us about your background and how you came to join our institute

I studied Genetics as an undergraduate, and subsequently undertook a PhD in molecular genetics and cell biology at the University of Manchester. In 2010, I arrived at the UCL Institute of Ophthalmology fresh-faced and ready to throw myself into my first postdoc role within Professor Andrew Webster's team. Here I was primarily focused on investigating the genetic origins of inherited retinal degeneration and was able to take advantage of rapidly evolving DNA sequencing technologies to make exciting and clinically relevant genetic discoveries. I was privileged to work alongside clinicians and genetic counsellors and this strong interdisciplinary context offered me a stimulating and inspiring environment to work within.

Q2. What have been the greatest achievements in your career so far?

After working with Professor Webster's team, I was very fortunate to be offered a position, under the leadership of Professor Alison Hardcastle and Professor Stephen Tuft, exploring the genetic origin of inherited corneal disease. During this period, I was inspired by the opportunities in the field and slowly began to believe (with much support and encouragement from my mentors Alison Hardcastle, Mike Cheetham and Stephen Tuft) I could begin to develop an independent research niche for myself in this area. This culminated in me gaining a 'Fight for Sight Early Career Investigator Award' in 2015. On reflection this award represented a pivotal springboard for my independence. Without the unwavering support and encouragement of my mentors and colleagues, and the amazing interdisciplinary environment offered at the UCL Institute of Ophthalmology, I would never have had the confidence or opportunity to make this leap to independence.

Q3. In 2019, you were awarded a UKRI Future Leaders Fellowship, an award that funds and recognises future leaders within science and innovation. How do you feel it has helped you develop?

Being awarded an UKRI FLF has empowered me to cement my independence at the institute and continue to build my research team. It has provided me with the support and flexibility to develop some longer-term research objectives and collaborate with key bio-tech partners to develop my translational research outcomes. It also gave me the security to take maternity leave after the birth of my second child in 2020. Sadly, this is not trivial as for many early career researchers in the process of establishing their independence, juggling maternity leave with fixed-term position can prove to be extremely difficult and often mean that they end up leaving academia altogether.

Q4. What attracted you to the area of Ophthalmic Genetics/Functional Genomics, and why?

From a really young age I was totally fascinated by how we as humans inherit different traits and generally just awestruck by the workings of the human body: this fascination has never left me! Studying how and why inherited forms of ocular disease occur offers an amazing opportunity to advance our understanding of the human genome and harness this knowledge to develop gene-directed therapies to treat visually disabling diseases.

Q5. What aspect of your work most excites you and why?

I feel extremely privileged to do a job I truly love. Every working day is different and offers new possibilities. As scientists, the excitement we get to experience exploring the unknown is truly awesome and even more special when we can share this joy with amazing colleagues.

Q6. What would you like to do next?

I want to continue to apply new technologies and approaches to advance our understanding of ocular biology and the human genome. I am so excited to see where this journey takes us and genuinely believe it has the potential to transform how we diagnose and treat ocular diseases over the next decade.

Inspiration and innovation from the NIHR Moorfields Biomedical Research Centre (BRC)

Our NIHR Moorfields Biomedical Research Centre (BRC) has been at the forefront of ophthalmic research over the last year, promoting innovative studies leading to major updates to national NHS guidelines (LiGHT Study, led by Professor Gus Gazzard [↗](#)), supporting PhD students making significant contributions to rapidly expanding areas of medical research (PhD student Yukun Zhou on 'Automorph' [↗](#)), and delivering powerful Patient and Public Engagement experiences (The Bloomsbury Festival 2021 [↗](#)).

In February 2022, The National Institute for Health and Care Research (NIHR) announced a nearly £160 million funding award for the next five years to 28 NIHR Clinical Research Facilities across England. This was a £49 million (43%) increase from the previous term, with the aim to expand early-phase clinical research delivery in NHS hospitals. Our NIHR Moorfields Clinical Research Facility (CRF) received funding for its next five-year term, which was a monumental milestone, as it will ensure that the facility's innovative and world-leading research, in progress since 2007, can continue to break new ground. In September, The NIHR also awarded nearly £800 million to 20 Biomedical Research Centres across

England to translate scientific discoveries into new treatments, diagnostic tests, and medical technologies to improve patients' lives. This included **a new £20 million award to the NIHR Moorfields Biomedical Research Centre [↗](#)**. The BRC was first established in April 2007 and this award is the fourth five-year term to support research designed to take advances in basic medical research from the laboratory to the clinic. The centre's broad spectrum of research into eye disease enables patients to benefit more quickly from world-class scientific breakthroughs, treatments, and diagnostics, and has demonstrated a wider reach into other health conditions through digital technology and advanced therapies.

Research infrastructure

Over the last year, support from our core funder **Moorfields Eye Charity [↗](#)** has once again expanded and enhanced the capabilities at our institute, enabling our investigators to work towards a deeper understanding of disease processes and facilitating new experimental approaches to a wide range of eye diseases.

For example, some fundamental unknowns still exist on how the eye uses parallel light sensing systems. Breaking these systems down into components that can be studied is difficult but is important to better understand how they are affected to different degrees in various eye diseases. Furthermore, if individual systems survive in disease, can they be harnessed to improve the patient's vision? How can therapies targeted at individual systems be tested to see if they work? The powerful technique of 'silent substitution' is an elegant solution to this challenge. Pairs of light stimuli are chosen that are indistinguishable, or silent, to all but one of the photoreceptive systems when they are substituted for each other. Thus, individual systems can be stimulated in patients while their reactions are recorded. Funding to establish this equipment at the institute is a first step in advancing this research which aims to support work that improves patients' vision, such as the recent work carried out by Mr Michael Gilhooley, clinical lecturer in the department of Genetics at our institute.



Early Career Researchers' activity

The ECR committee has continued to provide activities that support early careers at the institute and promote science, networking, and collaboration. The ECR IoO Lates, aimed at giving ECRs a chance to present their own research in lay terms in an informal setting, has continued to be a popular and recurring event that has grown over the years. Over the last year we collaborated with other committees such as the Wellbeing and Equality Challenge committees, to offer already established and new events such as: 'Careers Outside Academia', 'Meet the Directors', as well as social and networking events, such as quizzes, which have been positively received.

Our annual ECR symposium was the highlight of the summer. This fifth edition was held in person at UCL Institute of Child Health and was supported by Moorfields Eye Charity, NIHR Moorfields BRC and the IoO. There were over 100 attendees and more than 30 early career researchers showcasing their research in talks and posters. We were joined by Dr Emily Patterson as the keynote speaker, who shared her inspirational yet personal career story along with her research achievements and advice.



We awarded over £1400 across five categories that celebrated the accomplishments and work of the institute's ECRs:

ECR winners this year were:

Award	Position	Winner
Best Scientific Image	First place	Elena Ioannou
	Second place	Lyes Toualbi
	Third place	Victoria Rashbrook
Best Data Visualisation	First place	Tianyi Liao
	Second place	Andreea-Maria Aldea
	Third place	Riccardo Cheloni
Best Lay Abstract	First place	Joshua Harvey
	Second place	Amina Abdirahman
	Third place	Noha Soliman
Best Poster	First place	Elena Ioannou
	Second place	Athina Dritsoula
	Third place	Bledi Petriti
Best Talk	Joint first place	Giovanni Canu & Natalia Jaroszynska
	Second place	Giulia De Rossi
	Third place	Joshua Harvey

Education



Joint Director for Education,
UCL IoO/Moorfields,
Professor Michele Russell

It has been a very busy year for the Education team. The focus of activity has been on getting the institute's programmes to a post-pandemic 'new normal' where we are adopting more of a hybrid approach to our teaching and learning strategies, building on the innovative approaches which developed out of necessity to keep our students learning and to enhance their educational experience. The MSc in Ophthalmology had another successful year. It has been going through a metamorphosis inspired by innovative teaching developments pioneered on the programme in the last couple of years, as a consequence of the COVID-19 pandemic. The shift to online teaching has shown that students can learn not only effectively but that educational communities can thrive in a virtual environment. This has led to a rethink of the way the course is delivered, leading to a restructuring from the traditional model of a face-to-face course to becoming a largely online course, where the six modules and the dissertation are taught via remote learning. The culmination of the course will be the clinical attachment at Moorfields Eye Hospital/UCL, which will now become a two-week 'Enhancement Activities' module in the summer. This module is an action-packed two-week event including clinical observerships, surgical simulations and wet labs, clinical skills sessions and TED-type talks from our renowned ocular specialists as well as international colleagues. We feel this course has the potential to serve as the blueprint for

We feel this course has the potential to serve as the blueprint for ophthalmic education courses of the future

ophthalmic education courses of the future and are planning the first year with great anticipation.

This has been an exciting year for the MSc in Optometry and Ophthalmology suite of programmes. We launched two new modules based on workforce requirements and student interests: Principles of Advanced Practice, and Ocular Emergencies. These were eagerly received and evaluated by students. We had our first graduates on the degree apprenticeship programme and held our first end point assessments, a process which was new to the university and our team. Students found the experience brought together all their learning, cemented their capabilities as advanced practitioners and our graduates have gone on to take up Advanced Clinical Practice roles in their Trusts.

We had an Internal Quality Review in May which provided an excellent opportunity to have a deep dive into our programmes and gain invaluable scrutiny from colleagues across UCL. We also have been re-thinking some of our programmes and making changes through the PMAP process, as well as successfully approving a new PGCert in Independent and Supplementary Non-Medical Prescribing aimed at nurses, allied health professionals, optometrists, and orthoptists. The genesis of this came out of

my 'Leading Change in Education Project' which identified opportunity for innovation to support the London non-medical health workforce. It was developed and will be taught with by a multi-professional cross faculty team.

Associate Professor Rashmi Mathew and Dr Christin Henein received the **Sarah Guise Award for Catalyst for Change** , which recognises a person or a team doing things differently by incorporating EDI values into the way they work, resulting in a positive shift in UCL culture. Rashmi and Christine, with students Fong Yee Liu and Elsa Lee also were recipients of the Faculty Education Award, and Finalists for the main UCL awards for their work on enhancing the student experience through 'Belonging'.

The Sarah Guise Award for Catalyst for Change recognises a person or a team doing things differently by incorporating EDI values

What have our graduates been up to this year?

We asked Alexander Vassallo and Sejal Mistry what life after completing a Master of Science (MSc) at our institute has been like.

Student focus: Alexander Vassallo

Winner of Best Thesis for the MSc in Bioscience Entrepreneurship.
Funding received: £1,000 cash prize for winning the thesis award



Q1. How did winning the MSc BE thesis prize help you in the last year?

In addition to the immense personal pride that I felt for winning the award as it took me months of exceptionally hard work to produce the thesis, it is now something that I have highlighted on my CV and is regularly brought up in job interviews by the interviewer. It's a statement of my work ethic.

Q2. Why did you choose to study this programme at the UCL Institute of Ophthalmology?

I chose to study the programme to expand my knowledge of the business side of the bioscience industry and complement my rigorous scientific background with more practical skills suited to a business career. I chose the UCL Institute of Ophthalmology because of UCL's world-leading academic reputation.

Q3. What did you enjoy most about the programme?

The thing I enjoyed most was learning about the diverse areas of the business world that could be applied to the bioscience industry, including intellectual property (IP), financing and understanding a balance sheet, pitching and entrepreneurial agency, and developing new ideas and then evaluating them thoroughly to find the ideal solution to a problem.

Q4. What impact has receiving the scholarship had for you?

The main impact is that I now stand out against other applicants as and when I am approached by recruiters for new positions and opportunities in the biotech sector (I am currently employed full-time).

Q5. What advice would you give prospective students thinking of studying at the UCL Institute of Ophthalmology?

The most important question to ask yourself is: do I have a genuine desire to pursue rigorous education in entrepreneurship related to the life sciences? If your answer is yes, then apply to the programme and make the most of the amazing opportunity. If your answer is no, you should consider a different programme for your post-graduate studies, as the MSc in Bioscience Entrepreneurship takes dedication and commitment to succeed in. Also, the more you view your time at the institute as an opportunity to prepare for the professional world of work, as opposed to viewing your time as 'completing your degree' or 'doing your assignments on time', the better off you will be to benefit from the incredible array of resources that the institute provides to participants in this programme.

Q6. What would you like to do next?

I completed my degree over a year ago and have been in full-time employment as a Business Development Manager for a biotech in Boston ever since. My goal is to start my MBA in two-three years, and then from there, to transition to working for a professional CMO or CRO in their Business Development Management division. I would also eventually like to work for a start-up as their CBO and help them grow from Seed to Acquisition.

Student focus: Sejal Mistry

MSc Advanced Practice in Ophthalmology and Optometry

(Part-time course 2019-2022)

Funded by employer



Q1. Why did you choose to study your programme at the UCL Institute of Ophthalmology?

The UCL Institute of Ophthalmology/Moorfields partnership provides an excellent opportunity to be taught by experts in eye care with a flexible style of online learning. It's very useful to hear first-hand experiences, as well as clinical theory and guidelines, to be able to apply these teachings to clinical work both in community and hospital optometry settings. The modules available cover a range of clinical subjects to suit individual interests, and the choice continues to expand as new courses are developed. The modules help to further us as clinicians and include both core and extended role optometry elements. I have been able to enhance my knowledge and experience in topics such as Glaucoma, Medical Contact Lenses, Clinical Leadership, and Research and Statistics. I was able to study part-time to achieve the MSc in Advanced Practice in Ophthalmology and Optometry whilst working as a hospital optometrist.

Q2. What did you enjoy most about the programme?

I enjoyed the clinical modules within the course, including Glaucoma and Medical Contact Lenses, as these are directly related to my clinical work as an optometrist. I can apply the knowledge that I gained to my daily practice and improve the level of patient care that I can provide. These modules act as standalone elements of the course and can also be used towards College of Optometrist accredited qualifications. In addition, the non-clinical elements including Research and Statistics and Clinical Leadership exposed me to new areas of optometry and have enabled me to explore new career avenues.

Q3. What have you been up to since completing your degree?

Since completing the MSc, I have started a Darzi Clinical Leadership Fellowship which involves further study at London Southbank University in addition to undertaking a complex change initiative within Moorfields Eye Hospital. I also continue to work as a specialist optometrist at Moorfields Eye Hospital.

Q4. What advice would you give prospective students thinking of studying at the UCL Institute of Ophthalmology?

To be organised and to maintain good relationships with your peers throughout the course - you will all be able to support each other through this challenging but rewarding process.

Operations



Institute Manager, Dr Wing-Chau Tung

In the past year, all staff in our team returned to work on site for at least 40% of the time (pro rata for part time staff). The new hybrid way of working enabled us to provide ongoing support to all staff and students by assisting and recording online meetings, coordinating face-to-face events, offering a wider range of training opportunities (online and onsite), sharing surveys, reviewing the duties and responsibilities of some teams, and making changes, where necessary, to improve the structure and efficiencies of the core institute support.

Some of the highlights have included: receiving a gold award again this year for Green Impact (sustainable offices) and LEAF (Laboratory Efficiency Assessment Framework); doing more to support career development opportunities by encouraging secondment placements; installing facilities on site to enable hybrid meetings; assisting research themes' leads and deputy leads with the administration around seminars and workshops. On the communications side, we worked closely with our faculty colleagues to implement website improvement project; we moved the marketing function to our faculty to streamline processes; we refreshed the look of the Weekly Bulletin; we launched an online community on LinkedIn, IoO Connect, to offer a platform for our alumni staff and students to connect; we had a 14% increase in Twitter followers and a 50% increase in LinkedIn followers. On the events side we

We delivered a very successful Annual Lecture as part of a week-long celebration of all things IoO

delivered a very successful Annual Lecture as part of a week-long celebration of all things IoO, including the annual IoO Awards. We relaunched the IoO Inaugural Lectures series with a popular hybrid lecture by Professor Pearse Keane which can be viewed in the recording now on the website. In line with the approach of UCL Continuous Improvement, we are continuously thinking about making appropriate changes to our processes using evidence-based systems such as the annual IoO Operations Support Survey, to help our colleagues and promote collaboration and well-being.

Sustainable IoO



This year we were proud to again achieve a gold award for Green Impact and LEAF. We additionally received an award from the ECL Small grants Scheme. The team led by Jill Cowing worked hard to improve the local environment, reduce waste, and minimise the institute's carbon footprint. Some of the things we focused on in 2022 were to revive our garden space and set up a cycle club. After COVID-19 struck and we were closed down for all but essential work, many of the plants in the garden were no longer cared for and died. We have now replaced many of the plants and, with a generous award from the ECL Small grants Scheme, purchased lots of new herbs. The idea of the herb garden is to provide fresh herbs for anyone wanting to take a little home to put in their cooking but they also attract insects and smell wonderful when you brush past them, particularly the lavender.



Sustainability highlights

Gold award for green Impact (offices)



Gold award for LEAF (laboratory efficiency assessment framework)



The UCL IoO/MEH cycle group was set up and is led by Michael Crossland



The Faculty Sustainability Committee was set up and includes a representative from our institute



Ice packs we receive with deliveries are collected and taken to MEH pharmacy for them to re-use



We donated £93 to Moorfields Eye Charity, raised from recycling crisp packets with Terracycle



We took part in the big Christmas and Easter switch-off campaigns and saw a small reduction in energy consumption over the holidays

EDI highlights

The IoO Equality Challenge Team



Began investigation into the PGT award gap



Implemented system to capture consistent, accurate information regarding bullying/harassment at the institute.



Lead department in organising the first Faculty PS&T Away Day.



Organised career surgeries for PS&T staff in the faculty with senior institute managers.



2022 UCL IoO Annual and Inaugural Lectures

Our series of Annual lectures to honour scientists who have made outstanding contributions in the field of ophthalmology and visual science continued this year. We were delighted to welcome Professor Mike Sapienza from the University of Montreal, Canada. Professor Sapienza delivered an engaging talk in our Lecture Theatre titled “Revascularizing the Ischemic Retina.”



On the same day, as tradition, we announced the winners of the 2022 IoO Awards:

Teaching award

Dipesh Patel
Leena Patel

Research Excellence

First place – Thomas Burgoyne
Second place – Cher Chang

Collegiality award

Dhani Tracey-White

Directors' award

Professor Clare Futter

BRC Patient and Public Involvement and Engagement award

Siegfried Wagner, Jane Clipston and Caroline Kilduff for the ‘Windows of The Soul’ art exhibition

We resumed our Inaugural Lectures with a popular talk by Professor Pearse Keane. The recording can be viewed on the [Inaugural Lectures section](#) of our website.



Oriel



Oriel

The 2021-2022 academic year has seen some exciting key milestones reached for Oriel. Oriel is a joint initiative between UCL Institute of Ophthalmology (IoO), Moorfields Eye Hospital NHS Foundation Trust (Moorfields) and Moorfields Eye Charity, to build a new state-of-the-art centre for eye health, research and education. It would see services move from the current location near Old Street, Islington, to part of the St Pancras Hospital site in Camden. The new centre would harness the expertise of the partners under one roof and will enable closer collaborative working between clinicians and researchers to speed up the delivery of the highest quality treatments and therapies for patients. The UCL Oriel Full Business Case was approved in December, and the Moorfields Board and Membership Council approved their Full Business Case in May. This showed the joint commitment to support the creation of the new centre.

The Moorfields business case is now being reviewed by NHS and government regulators, with a final decision expected by the end of 2022. In December, after a robust selection process, a preferred developer, Derwent London plc, was appointed for the Bath Street site and Moorfields City Road site and in May conditional sale contracts were exchanged with them. The contract remains conditional and subject to some central Government approvals, but this milestone secures an important funding source for the delivery of Oriel. Also in May, the Greater London Authority approved plans for the new centre at St Pancras and in August Camden Council granted Oriel full planning permission. Going into 2022-2023, there will be a focus on further staff engagement on stage 4 internal design of the building, early enabling works beginning on the St Pancras site and full construction work starting, subject to regulatory approval.

For more information on Oriel please visit the website: oriel-london.org.uk 



