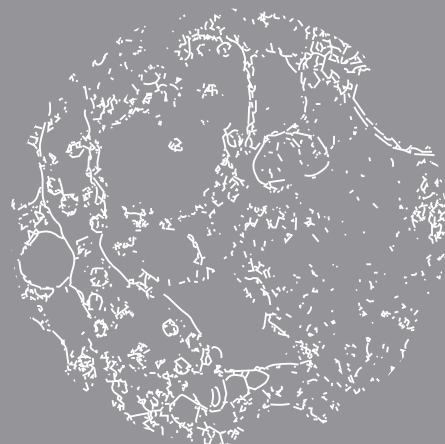
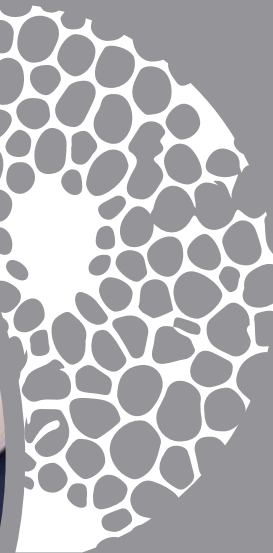




The Royal College of Pathologists
Pathology: the science behind the cure

Annual report & accounts 2020–2021





Introducing the College

The Royal College of Pathologists is a professional membership organisation with more than 12,000 fellows, diplomates and affiliates worldwide. We are committed to setting and maintaining professional standards and promoting excellence in the teaching and practice of pathology, for the benefit of patients.

Our members include medically and veterinary qualified pathologists and clinical scientists in 17 different specialties, including histopathology, haematology, clinical biochemistry, medical microbiology and veterinary pathology.

The College supports pathologists at every stage of their careers. We set curricula, organise training, run examinations, publish clinical guidance and provide opportunities for continuing professional development.

We engage a wide range of stakeholders to improve awareness and understanding of pathology and the vital role it plays in everybody's healthcare. Working with members, we run programmes to inspire the next generation to study science and join the profession.

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Welcome from the President Professor Mike Osborn

Hello and welcome to our
annual report for 2020-2021.



This report gives an insight into the activities of the College and our members over the last 12 months. Although no such report can ever hope to cover the whole range of exciting and important work that College members and staff have been involved in over this strangest of years, it can provide an overview – a flavour if you like – of the huge selection of activities that pathologists are responsible for and are vital to.

This report contains examples of activities across our 17 specialties. It demonstrates the innovation, dedication and hard work of the clinical scientists and pathologists who are involved in and vital to so many healthcare interactions.

Despite the COVID-19 pandemic continuing to overshadow all our lives and activities – both professional and personal – our members have continued to work and contribute to providing excellent healthcare, teaching, training and research. Much of this work relates directly to COVID-19, but so much does not. This demonstrates how pathology and pathologists are

integral to providing high-quality healthcare whatever the situation. Like our members, College staff have worked extremely hard in often difficult circumstances to support and develop the work of the College and of our members. Members and staff have worked closely to promote excellence in all areas of pathology practice, ranging from writing nationally and internationally recognised guidelines, to providing expert advice to the NHS and government, to developing novel and effective treatments through research and providing teaching and training for doctors, scientists and other healthcare professionals. The topics covered are diverse too – from cancer genomics to blood testing in livestock – and reflect the diversity of our specialties and how the work of our members affects almost everyone's life.

I would like to congratulate and thank everyone involved in our work – members and staff alike – for their considerable efforts during this difficult time.

Message from the Registrar Dr Lance Sandle

This year's annual report is again
very different from previous years.

The content of last year's report was agreed as we were going into the first lockdown and since then remote working has become the norm for many. This has raised challenges, not least for pathology trainees who rely on uninterrupted support during training and examinations as a core College function. The enforced contingency of developing an online examination platform in such a short timescale has been a major achievement that could not have been anticipated last year. We should applaud the work of the Learning Directorate who have sought to minimise the effect of the pandemic on training and career progression as much as possible. Our thanks also to trainees who have been tolerant and highly adaptable as we have responded to an unprecedented situation.

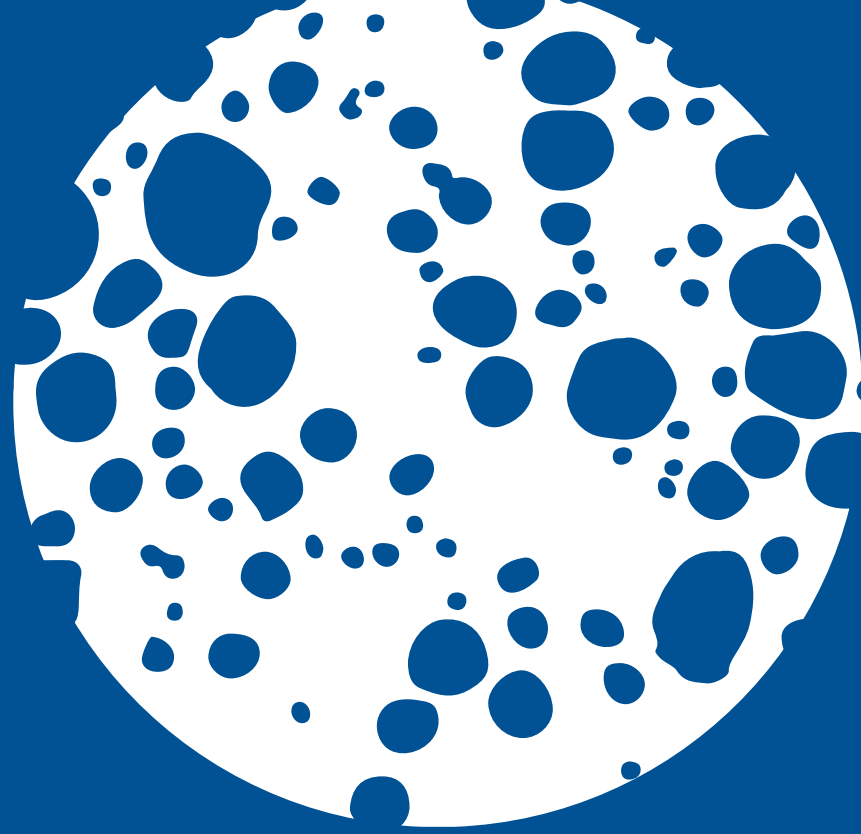
Many other teams across the College have had to adapt their way of working, with much of the work that would normally take place at our Alie Street premises moving online. This includes conferences, training courses, committee meetings, honorary officer meetings, management and team working, as well as interaction with government departments, other royal colleges and professional bodies. The second series of COVID-19 webinars was

launched in early 2021, providing essential updates during a fast-moving situation, and reaching hundreds of weekly attendees.

The inevitability of staff turnover means that some teams have staff who have never physically met, as is the case with the current honorary officers since the last Annual General Meeting was an online event. However, one of the advantages of holding events virtually is being able to connect with more people and from all around the world. Our virtual fellowship ceremonies allowed more fellows to attend and share this proud moment with their families and friends.

On behalf of the honorary officers I thank all our volunteers and College staff for the extra time and effort required to ensure continued College activity. We live in a time when the availability of information technology has ensured operational continuity for the College and we should be prepared to spend more time in virtual workplaces in future. Nevertheless, given that between 70 and 93% of communication is non-verbal we will always be more effective with conventional human interaction, and I look forward to the day when this can resume.



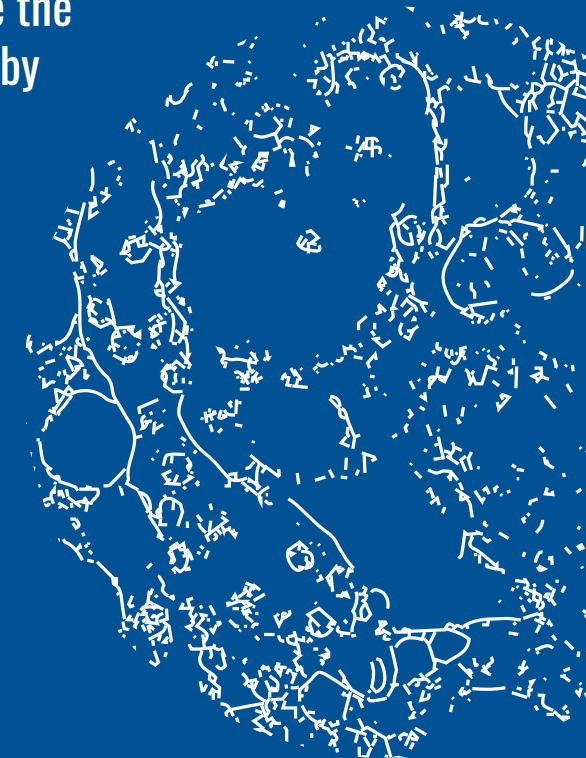


Our achievements

02.

“ I’m thrilled and honoured to be the 1,000th medical examiner trained by the College. The medical examiner system is vitally important to support bereaved families, the work of the coroner and improve patient care. The College course has provided me with an excellent grounding in the role of the medical examiner and I am looking forward to integrating this new role with my career as an emergency medicine consultant in the future.

– Dr Yasmin Kapadia, an Emergency Medicine Consultant from London



Shaping pathology services and supporting future pathologists

The College is at the forefront of developing standards for pathology education, training and research to improve patient care and safety. We continue to support members to excel in the practice of pathology in the face of ongoing and severe constraints of SARS-CoV-2. We have adapted significantly with major changes to support our essential work in relation to examinations and curricula with impressive progress and expansion of the medical examiner service. We continue to support and inspire the next generation of pathologists.

19

Certificates of Eligibility for Specialist Registration (CESR) evaluated

61

Certificates of Completion of Training (CCT) awarded

Launching our new curricula

The curricula produced by the College for all specialties and subspecialties ensure trainee pathologists develop the highly specialised technical and non-technical skills they will require to provide high-quality patient care.

Over the past three years, the Training team has been working with stakeholders across the UK to revise the curricula in line with the General Medical Council's (GMC's) revised standards. This requirement to produce new curricula has provided us with the opportunity to create curricula that better support the needs of patients and will meet future challenges for the workforce as pathology services evolve. In May and June 2021, we obtained GMC approval for seven of our curricula.

Transferring to the new curricula will require a period of adjustment. To keep our trainees up to date on developments, new pages on the website were developed outlining

the process of developing the new curricula with timelines. It is vital that we support trainees, trainers and education supervisors during this transition. The Training team hosted three launch events in August 2021 to introduce trainers and educational supervisors to the new curricula.

At our next New Trainee Welcome Day we will dedicate time to discuss the new curricula and we will hold events throughout 2022 for current trainees who will transfer to the new curricula from August 2022.

Supporting families through the medical examiner service

Despite the challenges of the pandemic, the implementation of medical examiner services has continued. About half of all deaths in England and Wales, predominantly in hospitals, are now scrutinised by medical examiners. Medical examiner services are now extending to cover deaths in the community and, ultimately, every death in

England and Wales will be reviewed. With no in-person events being able to take place, medical examiners have completed the interactive 'face-to-face' part of their training online and over 100 medical examiner officers have also attended online training days. In February 2021, we celebrated the 1,000th medical examiner to complete their training – Dr Yasmin Kapadia. Over 600 medical examiners and officers have now joined the College as members.

April 2021 saw the first annual Medical Examiner Conference, with 370 delegates attending online to hear the latest policy and implementation updates. The National Medical Examiner, Dr Alan Fletcher, launched his 2020 Report at the conference, highlighting the progress made over the last year.

Supporting bereaved families is at the heart of the medical examiner service and feedback from one relative sums up the importance of the service:

It was brilliant to speak to someone kind, who listened to my concerns and was understanding. It's like a voice for the person who's died. My mother would have liked that something good came out of it, with better care for other patients.

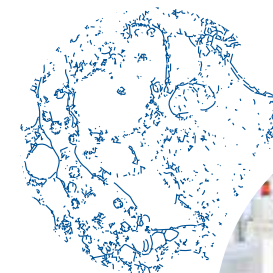
Transforming examination delivery

Throughout the last 18 months the College has had to adapt its way of working to ensure continuity of member services. A major challenge for both the College and trainees has been the disruption to examinations. Working closely with the Trainees' Advisory Committee (TAC), the Examinations team introduced a new online examination format to get examinations back on track. To support trainees as they prepared for the examinations, we launched a series of webinars – What I wish I'd known – which included informal tips and advice from trainees who have previously sat examinations.

The flexibility and adaptability of both trainees and the College was evident during this process. We will continue to work with the TAC and trainees whose feedback will be invaluable as we improve the experience for those participating in future examinations.

Key achievements

- Delivering 74 examinations across all 17 specialties, with 57 provided through online platforms for the first time in the College's history.
- Obtaining approval for seven curricula that meet revised GMC standards and strategic workforce needs.
- Training over 1,000 medical examiners to support bereaved families and improve patient safety.



153

new specialty registrars registered with the College

2,215

FRCPath, Diploma, Certificate, Stage A and Biomedical Scientist examination results issued

24

Pathology Foundation
Fellows successfully
applied for the scheme

8,261

workplace-based
assessments were
used in annual reviews
of competence
progression (ARCPs)

Welcoming our new trainees

Our annual New Trainee Welcome Day introduces trainees to the College and the role we play in pathology training. It is also an opportunity for trainees to get a clearer understanding of pathology training programmes, examinations and the support available. The 2020 welcome day in September was held virtually for the first time, which allowed our highest ever number of attendees to attend – over 140.

Adapting training delivery

It is essential that trainees feel supported throughout their training to help with the many and varied challenges they face. The need for support and the wellbeing of trainees are two areas that have been highlighted by the severe disruption to training experienced during the pandemic. The TAC has worked with the College to provide extra support mechanisms and address concerns.

A team of qualified coaches volunteered to provide free sessions, giving trainees opportunities to talk through experiences and develop new strategies to address specific challenges. Peer support is also very important during stressful times and the TAC Chair arranged evening drop-in sessions for trainees to talk about particular concerns that could then be addressed with the help of College officers.

Although the pandemic has disrupted training programmes, there have been some positive changes with the introduction of online tutorial and training sessions. These have allowed specialties with lower numbers of trainees and smaller training programmes to connect with geographically remote trainees.

Engaging Foundation doctors

In 2020, the College launched a new initiative – the RCPATH Foundation Fellowship scheme – which is open to Foundation doctors who secure a post in which they will rotate through a pathology specialty. The first 24 Pathology Foundation Fellows were announced at the end of September 2020 and the College will be continuing the scheme in 2021. It gives successful applicants access to a range of information and educational events to support them during their foundation training.

Support is needed to get training back on track. We have been in active discussion with HEE and other organisations around the need to embed training recovery into service reset.

Promoting reflective learning

Reflecting on performance is an important aspect of training and professional development, resulting in self-improvement and increased self-awareness. A new form of workplace-based assessment – assessment of performance (AoP) – was introduced for cellular pathology specialties. AoPs focus on capturing trainees' progress towards independent practice across the wide range of pathology activities and improving the feedback provided to consolidate learning and reinforce good practice.

Looking ahead

After three years' work, the College launched the new medical curricula and related workplace-based assessments. To complement this work, the LEPT platform will be developed to map to the new curricula and assessment programmes, with all trainees transferring to the new formats from spring 2022.

The Pathology Portal, which is being developed in conjunction with Health Education England (HEE), will provide pathology trainees with a bespoke and adaptive online learning platform mapped to the new pathology curricula. The Pathology Portal will launch in late 2021 and the aim is to add more specialties as the Portal develops.

Following our first online examinations in 2020, the College has reflected on the advantages and disadvantages of this format for the different examinations we offer. We plan to continue offering FRCPATH Part 1 examinations in their new virtual format while FRCPATH Part 2 examinations will return to their former face-to-face format as they are less suited to online delivery.

In the longer term, digital Part 2 examinations are planned for relevant specialties where digital images will be used, negating the need for microscopes. This will help standardise the examination and facilitate the creation of more examination centres globally. A working group has been set up to examine how this can best be achieved.

Many trainees have experienced disruption to their training because of the pandemic for a range of reasons, including a lack of routine biopsies to study or a focus on COVID-19 to the exclusion of many other infections. Some trainees have also experienced redeployment and sickness absence, the need to self-isolate and disruption to their examinations. Support is needed to get their training back on track. We have been in active discussion with HEE and other organisations around the need to embed training recovery into service reset. These discussions will be further informed by the results of our COVID-19 training impact survey, which was circulated to trainees by the TAC.

642

trainees used the LEPT
system to create annual
reviews of competence
progression (ARCPs)



Agile working and improving patient care

The College continues to champion new technology and new ways of working. This has enabled staff to work remotely and support our members. There has been an ongoing focus on guideline development and implementation, quality improvement, and patient safety. We have risen to the challenge of delivering high-quality academic activities during the pandemic with excellent attendance and feedback across a range of events supporting our many specialties.



36

conferences
and educational
events managed

Remote professional development

The need to adapt quickly in these challenging times has seen the Events team move all College academic activities online. This involved many hours running practice sessions and developing best practice for delivering high-quality online events.

Throughout the pandemic, the College has remained committed to providing continuing professional development (CPD) events. This has been highly valued by our trainees and members, with lots of positive feedback and a consistent satisfaction score of over 90%. One of the benefits of our online events was the engagement with more of our members, both regionally and internationally. This will be reflected in the strategy for our CPD programme, which will incorporate face-to-face events and online learning.

Opportunities for development

Increased workloads and limits on travel have reduced the opportunities for our members to undertake CPD activities. To help members, the CPD deadline was deferred by three months and the Professional Standards team ensured all CPD returns were processed even if submitted late.

Weekly and monthly postings were included on our website, social media and in the President's newsletter directing members to the various ways in which they could collect CPD, be it through reflective learning, participating in clinical audit certification or attending College educational events. This resulted in a CPD return rate of over 90% by March 2021.

Improving maternity safety

Progress is being made on improving maternity safety in the UK, but more improvements are still required to achieve the national aim of halving rates of stillbirths, neonatal deaths, maternal deaths and brain injuries that occur during or shortly after birth, by 2030.

The College is advocating for improved maternal safety and pathological investigations after stillbirth. Alongside the Healthcare Safety Investigation Branch (HSIB) and NHS England, we are working to understand and overcome the barriers to wider implementation of our guideline for histopathological examination of the placenta. A shortage of specialist paediatric pathologists is also an issue in some parts of England.

We have recommended that medical examiners (ME) work with coroners to investigate stillbirths and neonatal deaths. This would help identify unusual patterns, such as high numbers of deaths at one hospital, which can be a strong indicator of poor care.

Our evidence to the Health and Social Care Committee's Expert Panel on the safety of maternity services in England showed the value of the role of MEs, noting '...a further benefit of expanding the jurisdiction of MEs to include

stillbirths would be their ability to provide independent scrutiny of maternity services, including speaking to relatives to hear their views.'

□□ We have recommended that medical examiners work with coroners to investigate stillbirths and neonatal deaths. This would help identify unusual patterns, such as high numbers of deaths at one hospital, which can be a strong indicator of poor care.

3,515

people attended events

271

events approved for continuing professional development

90%+

satisfaction score for our new online-managed events

Key achievements

- Providing support, advice and assistance to over 6,000 CPD participants at the onset and during the COVID-19 pandemic.
- Delivering our second COVID-19 webinar series highlighting new developments in diagnostics, vaccines and therapeutics.
- Launching our guideline webinar series to support the pathology community to implement our NICE-accredited guidelines.

10

NICE-accredited
guidelines were
published

14

audit templates
were published

Learning through experience and collaboration

Patient safety bulletins are submitted case studies that recall an experience in the workplace where something happened, action was taken and where lessons were learned.

They are an excellent tool for self-reflection and a valuable resource for sharing knowledge and experience among pathologists in different specialties. The College is committed to improving patient care and safety and we have developed our patient safety bulletin programme, publishing eight in the past year.

In January 2021, we signed a Memorandum of Understanding (MOU) with the Care Quality Commission that will safeguard the wellbeing of people receiving care in England and support improvements in care. The MOU confirms that we will share information about the quality of pathology services including any concerns or evidence of safety risks.

Providing pathology input into consultations

As a NICE stakeholder, the College represents the professional interests of our members by providing expert pathology input into consultations. Our members are instrumental in providing the evidence and advice

NICE relies on to inform clinical guidelines on patient care and to appraise the clinical benefits and cost of technologies.

Supporting the implementation of our guidelines

The clinical guidelines produced by the College are important resources for members, providing data on best clinical practice and ensuring a high standard of care for patients. It is therefore important that the guidelines are implemented quickly and consistently.

A survey of our members in 2020 highlighted the difficulties they faced in implementing specific areas of the guidelines. A webinar programme was proposed by the Clinical Effectiveness team and Working Group on Cancer Services to provide support.

▮▮ Patient safety bulletins
... are an excellent tool for
self-reflection and valuable
resource for sharing
knowledge and experience
among pathologists...

A programme of guideline implementation webinars is now in place and these have proved a popular learning resource among our members, with over 450 people attending the first two webinars. The webinars provide practical tips on how to collect data and clinical scenarios for data items.

Looking ahead

The increasing use of digital pathology and artificial intelligence in the management of patients across pathology specialties has the potential to improve patient safety and support the pathology workforce. While the College supports the use of such technologies, we will continue to highlight the need for investment in IT, workforce and staff training.

Through our Digital Pathology Committee, we will promote digital pathology in both diagnostic services and research arenas by producing standards, best practice guidance and resources for the profession.

There is the opportunity to increase the use of digital pathology in screening programmes and the Digital Pathology Committee has engaged with Public Health England on the proposed changes to breast screening. The Committee will continue this dialogue.

To ensure the success of digital pathology as a diagnostic tool, it must be integrated into curricula and trainees' learning must reflect the need to develop these skills.

Digital pathology can also assist in the education and training of pathologists through online educational platforms and its use in the delivery of examinations. The College will work with stakeholders and committees both in the UK and internationally to identify areas where digital pathology can support our members, share experiences and improve its implementation.

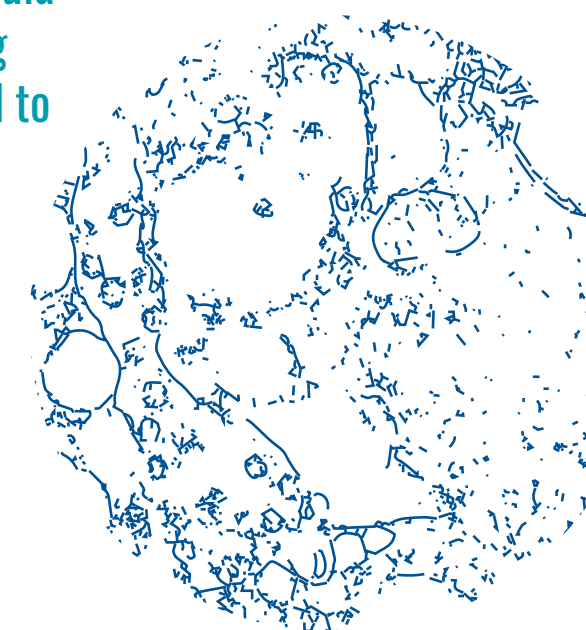
▮▮ To ensure the success
of digital pathology as a
diagnostic tool, it must be
integrated into curricula
and trainees' learning
must reflect the need to
develop these skills.

39

audits were submitted
to the audit certification
scheme for evaluation

8

patient safety
bulletins published



Influencing policy, championing pathology and strengthening the workforce

The College greatly values and promotes the expertise of our medical and scientific workforce across all our pathology specialties. We have been very actively engaging with governments, ministers, parliamentarians and policymakers to raise awareness of pathology as essential to safe, high-quality patient care. We are highlighting the ongoing challenges that have arisen during the COVID-19 pandemic with the need to address the backlog of tests to support diagnosis and treatment. We have focused attention particularly on concerns over cancer services and screening, the backlog of diagnosis and treatment, and pathology workforce issues.

402

job descriptions
reviewed and
approved

Our COVID-19 response

With pathology at the core of the healthcare response to the pandemic and many of our trainees and members involved, the College has an important role in advising the government, and engaging stakeholders, media and members of the public.

The College continues to publish guidance to reflect advances in knowledge and changes in policy. Although much of this guidance is for our members and healthcare professionals, it's important that the public can access up-to-date guidance. We published a user-friendly guide to COVID-19 tests that covers the most widely used diagnostic tests, exploring their accuracy and when they should be used. The guide is one of the most visited pages on our website and was referred to in the media.

Our members attended All-Party Parliamentary Groups (APPGs) and various committees to provide data

and evidence on testing, vaccines and how core NHS services could be delivered during the pandemic. Professor Mike Osborn spoke to the media about the need to use the data and information currently available to inform decision making and to adjust advice as the situation evolves.

The focus now is on what we can learn and recovery. Members have given evidence to APPGs and the Health and Social Care Committee on the testing programme, long-term health implications and the next steps for diagnostics. Our members listened to the concerns of patients whose diagnoses and treatments have been affected by the pandemic.

Raising concerns on the backlog and patient care

The pandemic has affected services across healthcare and there have been growing concerns about the backlog of tests to diagnose and treat a range of illnesses, including cancer. The College anticipates a backlog of

as many as a million pathology tests. Anxiety among patients, together with limitations to services, have caused a significant drop in cancer referrals with an estimated 350,000 fewer referrals over a period last year and a gap of 36,000 in the number of first cancer treatments in England.¹

The College submitted evidence and attended roundtable discussions and cancer summits informing reports, including 'Catch Up With Cancer – The Way Forward'. This report sets out seven recommendations to the government, highlighting the need for urgent action. We will continue to support colleagues, raise members' and patients' concerns and advocate on workforce issues as the backlog is tackled.

Tailoring diagnosis and treatment

Genomic medicine is an opportunity for faster diagnosis and tailored treatment for people with cancer and inherited diseases. One of our core strategic aims is the development of a high-quality, user-friendly genomics service and we will ensure the voices of our members are heard as NHS England roll out the Genomics Medicine Service (GMS) via the seven Genomic Laboratory Hubs (GLHs). All seven GLHs and their equivalents in the devolved nations now have cellular pathology representation, and we will support these leads as the service develops.

Our Cellular Pathology Genomics Focus Group has become the main contact group for NHS England for cellular pathology and we aim to achieve representation on working groups involved in the National Genomic Test Directory.

The College has continued to showcase the benefits of genomic medicine through discussions with other experts and policymakers. The President has emphasised the potential of genomic medicine to transform healthcare and the need for investment in genomic services, with laboratories with the right equipment and enough staff trained and equipped with the right skills.



▮▮ The College anticipates a backlog of as many as a million pathology tests and the number of first cancer treatments shows a gap of 36,000 in England.

Key achievements

- Delivering our first fully virtual National Pathology Week with 50 online member-led events engaging members of the public and medical professionals around the UK.
- Successfully advocating for funding towards an additional 35 histopathology and four haematology training posts in England.
- Working with key partners to expand the eligibility criteria for the Higher Specialist Scientific Training in haematology for biomedical scientists, which will help to address the scientific workforce shortage.
- Working with our members, faith leaders and communities to create 27 videos addressing specific myths and misconceptions that exist about COVID-19 vaccinations.



Only 8% of inflammatory bowel disease services have enough histopathologists.

Succession planning

Succession planning is an important aspect of the work carried out by the College's Workforce team to ensure continuity of the profession and patient care. Accurate and current data is central to this planning. A new feature on our website uses pop-up reminders to encourage members to complete the online workforce census and this has resulted in a huge increase in submissions. Around 30% of UK members have responded in the last month compared with 1.5% across the whole of 2020 – a 180% difference in response rate.

We used the workforce data collected to lobby Health Education England (HEE), highlighting the widening gaps in the pathology workforce and the need for urgent action. HEE have now allocated funding for 35 additional histopathology training places and four haematology posts.

Collaborative working

As well as collecting data through the census we also use workforce surveys to gain a better understanding of the changing

landscape of both the pathology workforce and pathology services. Our workforce data was used by Cancer Research UK in their report on the cost of growing the cancer workforce. We were closely involved in the production of the report, which indicated a 45% staff increase is needed across seven cancer-related professions to provide a world-class cancer service by 2029.² This included histopathology, for which current trends suggest a decline in staff numbers.

It is not just cancer services that are affected by a shortage of pathologists. A recent report by the IBD UK alliance (of which the College is a member) found that people were waiting too long for Crohn's and colitis diagnoses and only 8% of inflammatory bowel disease services have enough histopathologists.³

Succession planning is an important aspect of the work carried out by the College's Workforce team to ensure continuity of the profession and patient care. Accurate and current data is central to this planning.

Bringing pathology to those who would not usually access our activities and resources is important in diversifying the future pathology workforce...

Pathology for all

Bringing pathology to those who would not usually access our activities and resources is important in diversifying the future pathology workforce and improving public confidence in pathology services. We have worked with a range of different partners, including the Social Mobility Foundation (SMF) who provide opportunities for young people who aspire to study at university but who lack the support at home. We ran several medical ethics workshops over the past year with over 380 school students attending.

Approximately 15,000 people in the UK have sickle cell disorder – a group of inherited health conditions that affect the red blood cells – and haematologists treat patients with sickle cell disorder. We worked with the Sickle Cell Society to produce interviews with several of our members who detailed how they treat patients and how treatment has changed over time.

The virtual science festival for visually impaired young people organised by the charity VICTA provides inspiring activities and careers talks about different areas of science. Five of our members contributed to the festival providing recorded interviews about their careers and running a virtual art-science workshop about the heart.

Starting conversations

To mark the start of British Science Week 2021, we launched a new set of free resources called Viruses and Vaccines, which aim to stimulate discussion and improve understanding of the vital role vaccines play in preventing disease.

The Viruses and Vaccines collection includes colouring in and origami activities, hands-on STEM activities for primary and secondary schools, and video interviews with pathologists. We also ran several online events for schools, families and undergraduates, with the help of our members who kindly volunteered their time and expertise to answer questions from the virtual audience.

We reached out to faith leaders and members within specific communities to help dispel misinformation and concerns about the COVID-19 vaccines. Imam Mohsen Elbeltagi from Swansea University Mosque prepared answers to questions surrounding the COVID-19 vaccines and fasting during Ramadan.

100+

volunteers delivered public engagement activities

£4,000

was awarded across seven projects by the Public Engagement Innovation Grant Scheme

We also created a series of 27 short videos with information about the COVID-19 vaccines. The videos feature messages from eight pathologists that address specific myths and misconceptions that exist within their community or ethnic group. The messages have been recorded in English as well in French, Spanish, Arabic, Hindi, Punjabi, Urdu and Tamil.

Delivering virtual NPW

With restrictions in place during November 2020, we delivered our first online National Pathology Week (NPW), which provided the opportunity to innovate and engage with a wider audience both in the UK and beyond.

Our theme was 'Pathology: at the heart of healthcare' and new art-science resources that explored health and disease were developed. Families were able to attend workshops where they could make their own origami 'beating heart' and ask questions about the heart and how it works.

NPW 2020 also saw the launch of our RCPATH Book Club series. The virtual event featured 'Pandemic Century' and explored a range of topics, including pandemics through recorded history and what we can

learn from them. Since then, we have delivered three more book clubs reaching audiences around the world, with 20–35% of the audience based outside the UK.

...a new set of free resources called **Viruses and Vaccines ... aim to stimulate discussion and improve understanding of the vital role vaccines play in preventing disease.**

Inspiring the next generation of pathologists is a core function of our public engagement activities and NPW is a chance to showcase the diverse nature of a pathology career.

We engaged with school students through our 'Meet the Pathologists' series, which gave students an insight into a typical day and the different paths you can take to work in pathology.

NPW 2020 showed once again how successful online events are with more people than ever coming to our website to view activities and career resources.

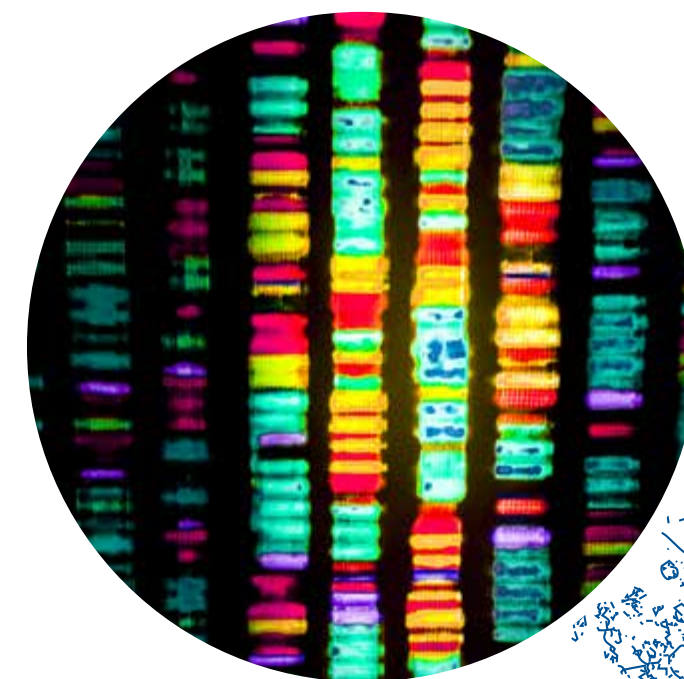
Looking ahead

After a significant reduction in the number of patients being referred for cancer diagnosis and treatment during 2020, we are now seeing a surge in referrals both for cancer and other illnesses. This will severely affect pathology laboratories and our members. The College will continue to raise this issue with policymakers to ensure that funding is prioritised and appropriately distributed among laboratories, to ensure there are sufficient numbers of staff to cope with this sudden increase in workload.

Genomic medicine has tremendous potential and investment is essential to ensure its success. To better understand the effect on the pathology workforce, and to gain an overview of how testing is implemented, can be improved and the effect on service delivery and patient care, we surveyed members in September 2021. The evidence will be used in discussions with health agencies and commissioners of pathology in genomic medicine. It will provide us with information for our advocacy with parliamentarians.

The Genomics Medicine Service roll out will require user-friendly and integrated IT systems, as well as workforce recruitment and training. The College has positioned itself to be part of the conversation around logistics and financing and will put forward its concerns and suggestions to MPs, civil servants and policymakers.

The [Genomics Medicine Service] roll out will require user-friendly and integrated IT systems, as well as workforce recruitment and training. The College will position itself to be part of the conversation around logistics and financing...



¹ Summary of the Commons Health and Social Care Committee session on Cancer Services. 13 July 2021.

² Cancer Research UK. Estimating the cost of growing the NHS cancer workforce in England by 2029. Published October 2020.

³ IBD UK alliance. Crohn's and Colitis Care in the UK: The Hidden Cost and a Vision for Change. Published April 2021.

Resourcing the future of the College

The College is a responsible, sustainable organisation committed to delivering first-class services to all members. We have worked hard to improve our financial stability in the face of the challenges of the pandemic to achieve our strategic aims and charitable objectives. We are committed to supporting and developing our staff, and we have reviewed and strengthened lay involvement in key College activities and function.



The outsider inside: taking advantage of lay involvement

We all have views and perceptions, but often when you have a group of like-minded individuals with similar experiences, the views and perceptions you have can be too similar to allow for effective challenge. This limits opportunities and thinking. The College recognises this and engages with non-medical members of the public to ensure the work of the College is challenged and benefits from diverse views and thinking. This is achieved in two ways – through the lay trustees on the Trustee Board and a Lay Network, which supports the committees and work of the College.

The College's Trustee Board has previously had two lay members as trustees. With elected College trustees they are responsible for the management and administration of the charity to ensure it is solvent, well run and delivers the outcomes for which the charity was set up. The lay trustees provide independent views and strengthen the overall Board with specific skills in areas such as business, governance or legal experience.

Following a governance review, several changes were agreed and approved to provide greater continuity of experience and broaden available skills. These changes relate to the extension of available terms by lay members from one to two, the appointment of a third lay trustee and the appointment of a lay trustee as Board Chair. The previous Lay Governance Group was replaced by a Lay Network comprising eight members who provide a lay point of view to College business and are a 'critical friend' to the College.

Our lay members provide an outside, independent perspective on the activities of the College, helping us work to maximise the contribution of pathology to high-quality patient care.

– Professor Mike Osborn, President



The Lay Network brings expertise from diverse backgrounds and their input and feedback helps ensure the College's outputs are in line with the needs of our members and the public and our work is transparent. The Lay Network is involved in work to develop a robust framework for external quality assurance and the delivery of patient safety awareness weeks that will support improvements in care and promote patient safety. They are also involved in decisions around award nominations and review public engagement resources, which allow the College to champion pathology, and raise the profile of our members, our work and our specialties with the public. Lay members also have specific roles for designated areas of College work according to their expertise, for example reviewing best practice recommendations and clinical guidelines that support patient safety by promoting best practice in pathology.

The Lay Network will continue to develop and provide valuable input into College work.

I joined RCPATH as a lay trustee in May 2021 and it has been a pretty immersive experience so far... Everyone has been incredibly welcoming to such an extent that I feel I will suffer from some level of 'imposter syndrome' but hopefully, will be able to genuinely contribute to the great work being done!

– Vince Voon, lay trustee

Key achievements

- Gaining Investors in People accreditation, highlighting the College's focus on supporting and developing its staff.
- The appointment of a third lay trustee and a lay Trustee Board Chair to further broaden the skills and experience across our Board.

Supporting and motivating staff

The College recognises the positive effect that investing in its staff has in terms of continuity, productivity and achieving our strategic aims. After several years of using the Investors in People framework as our strategic benchmark for organisational development and following external appraisal from Investors in People, including an opportunity for staff members to provide feedback, we received accreditation in June 2021.

As a membership organisation this is a significant achievement – it means that we have the principles and practices in place to support our staff and everyone understands how to use them to make the College a better place to work. The people management strategy follows this framework to support, motivate and develop staff to deliver the best services to our members.

Some of our achievements recognised during accreditation include the transition to remote working between 2020 and 2021. Staff were supported during this transition by IT and HR and wellbeing measures were put in place to support staff's wellbeing. Collaboration has been key during this period of remote working and teams have ensured a continuous service to members regardless of location.

Our focus on learning and development of staff has continued with training now delivered online and adapted to reflect the new challenges staff face working remotely. For example, management training focused on specifically how to support teams while working remotely. Our 2020 annual staff survey showed increased scores under leadership and communication despite teams not being together in the office, which shows the value of adaptable and reflective learning.

As we transition to a hybrid model of in-office and remote working, we will continue to provide staff with the resources they need to provide a high-quality service to our members.

▮▮ Collaboration has been key during this period of remote working and teams have ensured a continuous service to members regardless of location.

Member engagement through committee work

The College's 37 committees engage with members to advance and disseminate knowledge across all pathology specialties. Despite

COVID-19 and increased workloads, members continued to give time and provide expert advice and perspective through their committee roles. For example, they contributed evidence-based insight to a myriad of national consultations, including the development of clinical guidelines in the management of COVID-19.

Two new committees were developed during 2020 and 2021 to support work of immediate importance. The COVID-19 Advisory Group was created to respond to urgent requests for opinions and advice relating to SARS-CoV-2 from a range of organisations and members. As part of self-evaluation exercises within both Trustee Board and College Council, the Diversity & Inclusion Advisory Group was created.

The Advisory Group considered how the College could promote inclusivity and diversity in committee membership. Changes to and new processes for committee appointments have been agreed to improve transparency and fairness. The intent is to ensure College committees reflect the diverse nature of our membership and our commitment to diversity and inclusion. In May 2021, the Trustee Board agreed the establishment of a Diversity Network, which will focus on the changes needed to improve diversity and inclusion within the College and in all aspects of the College's work.

▮▮ Despite COVID-19 and increased workloads, members continued to give time and provide expert advice and perspective through their committee roles.

There has been a growing move towards building networks for members to be better involved and supported. This included ending the formal structure of the England Regional Council and developing four English Regional Representative roles to better represent members across the English regions.

▮▮ ...the Diversity Network ... will focus on the changes needed to improve diversity and inclusion within the College and in all aspects of the College's work.

Throughout the year, the Governance Committee has continued work to deliver organisational governance aligned to best practice and effective committee governance, service and engagement for members.



We are regional

The College's Regional Councils provide professional leadership within their regions and contribute to a national steer on the development of pathology services and the quality of care that patients receive. They form links to help influence stakeholders and build strong relationships with key decision makers on behalf of the College. The Councils for the devolved nations have continued to facilitate two-way communication between the College and its members. The England Regional Council has been replaced with four new representatives exploring new ways to strengthen connection with members in their regions.



Our election priorities

As a medical royal college one of our aims is to work with governments, associated bodies, opinion formers and decision makers across all devolved nations to raise awareness of the critical role of pathology.

In May 2021, the people of Scotland and Wales elected their representatives to the Scottish parliament and Welsh Senedd, respectively. These new governments have now taken responsibility for a range of devolved areas, including health services. Prior to the elections, the College launched its priorities for the new governments, which were drawn up by members of the College Councils for those countries.

The College priorities for Scotland focused on the challenges facing already stretched laboratory services and we called on the new government to address these areas. Our priorities for Wales highlighted the variation in access to services depending on location. For people in rural areas of Wales access to healthcare can be limited,

with people in these areas facing longer waits for appointments and diagnoses. This was further worsened by the pandemic. Difficulties in recruiting and retaining staff and a reliance on agency staff to fill gaps in the workforce can affect patient care.

There were overlapping priorities that highlight the challenges all pathology services face regardless of where they are based within the UK. These included investing in workforce, IT and infrastructure.

Our policy calls have been welcomed by parliamentarians in both countries and we will continue to advocate for the vital role of pathologists in prevention, diagnosis and treatment.

Workforce concerns

The need for investment in the pathology workforce and infrastructure to prevent delays in the treatment of patients for non-COVID-related illnesses has been a key message from the College over the past year. Dr Jonathan Kell, Chair of the Wales Regional Council, met

Chris Bryant MP to discuss workforce concerns in Wales and the backlog of cancer diagnosis and treatment as a result of the COVID-19 pandemic.

Chris Bryant has highlighted workforce concerns leading to delays in treatment in parliament and the media and has been supportive in promoting the College's key messages.

We are calling for increased investment in pathology services, particularly in the recruitment and training of pathologists and scientists. More funded training places are needed to help meet the rising demand for cancer diagnosis, which has been exacerbated by the COVID-19 pandemic.

– Dr Jonathan Kell,
Wales Regional Council Chair

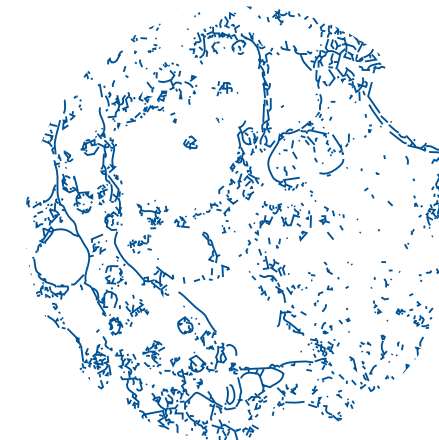
The Northern Ireland Regional Council has been voicing its members' concerns about the workforce challenges they are currently facing. Following a meeting between Professor Ken Mills, Chair of the Northern Ireland Regional

Council, and Department of Health officials we updated our briefing on pathology specialties involved in cancer services in Northern Ireland.

Key messages from the policy briefing included the need for capital investment in pathology modernisation and investment in pathology services, particularly in the recruitment and training of pathologists, scientists, biomedical scientists and laboratory staff.

There are concerns around training posts, with trusts indicating they will not take on future Scientist Training Programme posts unless there is a consultant post available for them in the future, as well as a lack of funding for higher specialist training. It is essential funding for posts is supported to bridge gaps in the workforce and address the issues facing specialist services such as paediatric histopathology.

The Elective Care Framework published in June 2021 proposes investment over the next five years and plans to reduce the backlog of patients currently waiting for assessment and treatment. It commits to supporting the pathology Network so Health and Social Care pathology services are equipped to support delivery across all relevant rebuild programmes.





Pathology services are critical to prompt and accurate diagnosis of patients with cancer and other diseases. It is essential that the Stormont Executive recognises the impact that pathologists and clinical scientists make and invests in their expertise and technologies.

– Professor Ken Mills, Northern Ireland Regional Council Chair

Improving regional representation

One of the College's priorities is to support our members across all regions and ensure they are part of College discussions and strategies. We recognise that the challenges our members face can be region specific and these issues need to be explored with that in mind. The disbanding of the England Regional Council was an opportunity to put a new structure in place that provided more digital and interactive forms of communication for local and regional representation.

Four new English Regional Representatives were elected to represent the North, Midlands and East, South, and London. They will explore new ways to connect with members in their regions and will represent their interests across all specialties at College Council meetings.

The COVID-19 pandemic has once again highlighted the importance of laboratory tests and laboratory professionals within the healthcare landscape. As we emerge from the pandemic, it is vital that such services are reinforced and supported to optimise healthcare recovery...

– Dr Bernie Croal, Scotland Regional Council Chair

Scotland

In response to a letter sent to the Cabinet Secretary for Health and Social Care Humza Yousaf, Dr Bernie Croal, Chair of the Scotland Regional Council, received a welcome letter from the Scottish government recognising the vital contribution laboratory professionals have made in these unprecedented circumstances.

Northern Ireland

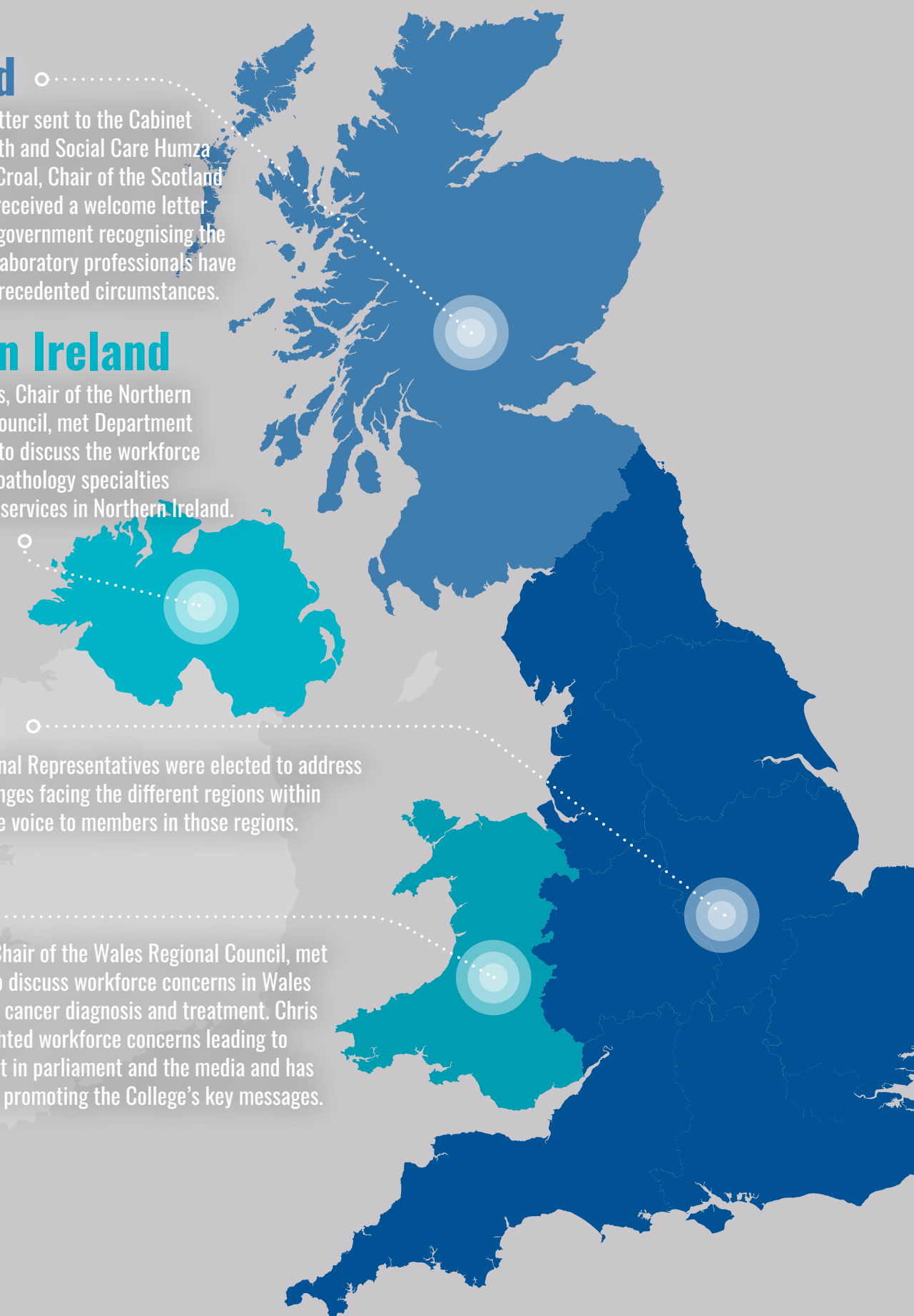
Professor Ken Mills, Chair of the Northern Ireland Regional Council, met Department of Health officials to discuss the workforce challenges facing pathology specialties involved in cancer services in Northern Ireland.

England

Four English Regional Representatives were elected to address the specific challenges facing the different regions within England and to give voice to members in those regions.

Wales

Dr Jonathan Kell, Chair of the Wales Regional Council, met Chris Bryant MP to discuss workforce concerns in Wales and the backlog of cancer diagnosis and treatment. Chris Bryant has highlighted workforce concerns leading to delays in treatment in parliament and the media and has been supportive in promoting the College's key messages.



We are international

The College has a clear vision and goal to support and advance excellence in pathology internationally as outlined in our 'Pathology is Global' strategy. We have appointed new international team members to support many key activities engaging overseas members and sharing knowledge and expertise as widely as possible. Our achievements include a highly successful virtual International Pathology Day, launch of a new International Pathology School toolkit together with essential support for overseas trainees for GMC registrations and preparation for examinations.

International Pathology Day 2020

International Pathology Day (IPD) recognises and celebrates the contribution and achievements of pathology and laboratory medicine services in addressing global health challenges and improving the health outcomes of global communities. It is an opportunity to share knowledge and expertise with pathologists around the world based on international best practice.

IPD 2020 explored how the global pathology community has managed infectious outbreaks in the past and how it is dealing with the current COVID-19 pandemic. For the first time it was delivered online, which allowed participants to join without restrictions.

Four COVID-related presentations explored the social, economic, cultural, technical and biological factors that affect the spread of infections, as well as the role of testing, the development of new diagnostic approaches and the search for vaccines and treatments.

The roundtable was a multifaceted discussion on the importance of international information exchange – especially in a pandemic – and how screening, diagnosis, treatment selection and health monitoring differ between countries. Against the backdrop of COVID-19, it was agreed that it has become more important than ever not to place boundaries on our ability to learn from one another.

International Pathology Day 2020 is very important for acknowledging the efforts made by the pathologists around the globe, especially during a pandemic. The day gives us an opportunity to share our knowledge globally and raise awareness about our contributions in the field of medicine.

Global collaboration

Strong global coalitions that provide reciprocal opportunities to pool knowledge and resources and to share and acquire new skills are vital to the College's international work. Our aim is to promote capacity building to improve pathology provision, predominately in resource-limited countries.

The importance of international collaboration between intercontinental agencies, government departments, non-governmental organisations and professional pathology bodies is recognised in the form of a memorandum of understanding (MOU), which allows a clear programme of work over a three-year period to be agreed.

In November 2020, the College signed a new MOU with the Mohamed Bin Rashid University of Medicine and Health Sciences (MBRU) with agreement to cooperate on a range of activities. We now have MOUs with eight international organisations, including the Shupyk University of National Healthcare of Ukraine (SUNHU) and the National Postgraduate Medical College of Nigeria (NPMNCN).

Several of our MOUs cover areas of shared interest that focus on assisting international medical graduates (IMGs) with their pathology training and FRCPPath examinations. They are essential in strengthening our relationships with international pathology institutions.

Representing our international members

With around 20% of our membership located internationally it is vital that they have the opportunity to contribute to the College's decision-making processes and governance structures. Our International Committee acts as a representative voice for both international members and UK members with international interests.

Over late 2020 and early 2021, the International Committee went through a number of changes as terms came to an end and new roles were included to provide greater coverage across international regions. A new Clinical Director of International Activities was appointed along with six International Regional Advisors.

20%

of the College's membership are located in one of six overseas territories



Key achievements

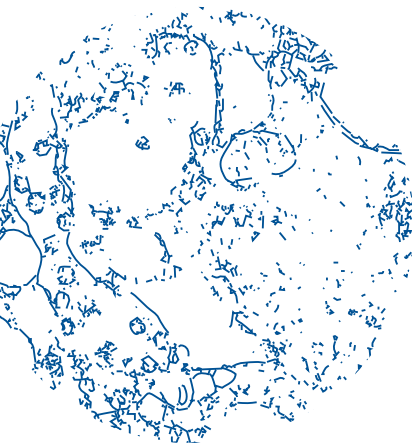
- Delivering our first-ever virtual International Pathology Day to over 100 people across 18 different countries.
- Developing our new International Pathology School toolkit to offer international undergraduate medical students the opportunity to learn more about a career in pathology and its integral role in healthcare.
- Supporting overseas medical graduates and undergraduates to apply for GMC registration and Tier 5 (Government Authorised Exchange) visas and prepare for FRCPPath examinations through our international schemes.

45

overseas doctors applied for General Medical Council (GMC) registration

110

medical schools attended this year's International Pathology School



The International Regional Advisors will provide proactive advice, leadership and direction in relation to the development and implementation of the College's activities and champion the College's international strategy 'Pathology is Global' within their respective regions.

▮▮ **My firm belief is that fellows practicing overseas should maintain strong links and be involved with the College. This belief fired my desire to be an integral part of championing the importance of keeping up to date with high standards of practise, training and assessment.**

– Professor Ismail Matalka, Clinical Director of International Activities

Supporting international students and trainees

The Medical Training Initiative (MTI) scheme enables IMGs to come and train in the UK for a maximum of 24 months before returning to their home countries. The College works closely with the GMC and the Academy of Medical Royal

Colleges to assist IMGs in obtaining registration with the GMC and the Tier 5 visa. The College also supports IMGs who wish to pursue a career in pathology through the Sponsorship Scheme, assisting with their GMC registration so they are able to work and train in the UK.

These schemes benefit both the IMGs and UK hospitals. IMGs develop new skills, expertise and practices that can be used to advance the level of patient care in their countries of origin on their return. UK hospitals who provide a placement for IMGs benefit from increased workforce capacity and the experience and skills that IMGs can share with their UK colleagues.

▮▮ **One of the most valuable aspects of the MTI scheme is the immense clinical experience you gain. Every day is a chance to gain new experience and knowledge.**

The International Trainee Support Scheme supports and mentors IMGs in preparation for their FRCPPath examinations by identifying gaps in their knowledge and training. Our two newly appointed International Educational Leads

will help the College to further develop this scheme, which currently runs for histopathology and medical microbiology.

▮▮ **Strong global coalitions that provide reciprocal opportunities to pool knowledge and resources and to share and acquire new skills are vital to the College's international work.**

Our recently designed International Pathology School toolkit offers international undergraduate medical students the opportunity to learn more about pathology and its integral role in healthcare and how rewarding a career in pathology can be. In January 2021, the toolkit was piloted through a two- to three-day interactive event in the MENA region, in collaboration with the University of Science and Technology in Jordan. The event was attended by over 110 medical students from regions including Jordan, Qatar and the United Arab Emirates.

Looking ahead

According to the British Medical Association, there are approximately 800 refugee doctors in the UK; however, the number of those who are pathologists is unknown. The College has produced a plan to support refugee doctors in pathology, which includes signposting to relevant information and resources from a dedicated College webpage, creation of a mentor database, free College membership for one year, access to a defined number of free College events and free or reduced fees for up to two attempts at FRCPPath Part 1.

The International team is working to promote the College's aims in knowledge and excellence worldwide through the new International Pathology Schools, as well as the established International Pathology Day, which in 2021 will focus on digital pathology and artificial intelligence.

▮▮ **I cannot emphasise enough how useful it can be for UK trainees to work and study alongside overseas trainees ... For me this was a mutually enriching partnership in preparation for the FRCPPath examination...**



Award winners: celebrating pathology

The College greatly values excellence in pathology practice, research and education. In particular, we recognise the excellent achievements of our trainees with medals for original research and the Furness Prize for Science Communication.

We continue to remember two colleagues through essay prizes named in their memory. The Hugh Platt Foundation Essay Prize this year recognises a heartfelt and personal experience of the impact of pathology. The Paola Domizio Undergraduate Essay Prize was awarded for a clear account on the benefits and challenges of technology. Many congratulations to all our winners.

Trainee Research Medals

The College's research medals are awarded for outstanding research work undertaken by trainees.

Gold medals

Matthew Clarke
Histopathology

Matthew Clarke won the gold medal with a paper on infant high-grade gliomas that comprise multiple subgroups characterised by novel targetable gene fusions and favourable outcomes.

Caroline Watson
Haematology

Caroline Watson won the gold medal with a paper on the evolutionary dynamics and fitness landscape of clonal haematopoiesis.

Silver medals

Lara Menzies
Clinical Genetics

David Marshall
Clinical Biochemistry

Ben Challoner
Cellular Pathology

Marwan Kwok
Haematology

Thomas Milner
Neuropathology

Hugh Platt Foundation Essay Prize – Chuer Zhang

Chuer's essay, 'Tiny test, huge impact' follows the case of a six-year-old boy who was taken to the emergency department by his family to assess 'an apparently innocuous ecchymosis' (bruise) on his left arm. The essay is a touching account of the importance of pathology and its effect on patients and their families. Chuer reveals, towards the end of the essay, that the young boy in her story is in fact her brother.



“I'm honoured to have my experience read by more people. Entering the competition makes you reflect on your experience more and appreciate the role pathology plays in the course of a patient's treatment.”

Furness Prize for Science Communication – Matthew Clark

Our annual science communication prize celebrates and recognises trainees and undergraduates who have undertaken public engagement activities to cultivate the awareness and understanding of pathology. Matthew's dedication to delivering public engagement and science communication activities over the last couple of years was clear to see. Matthew has tirelessly promoted pathology and helped to inspire the next generation of pathologists.



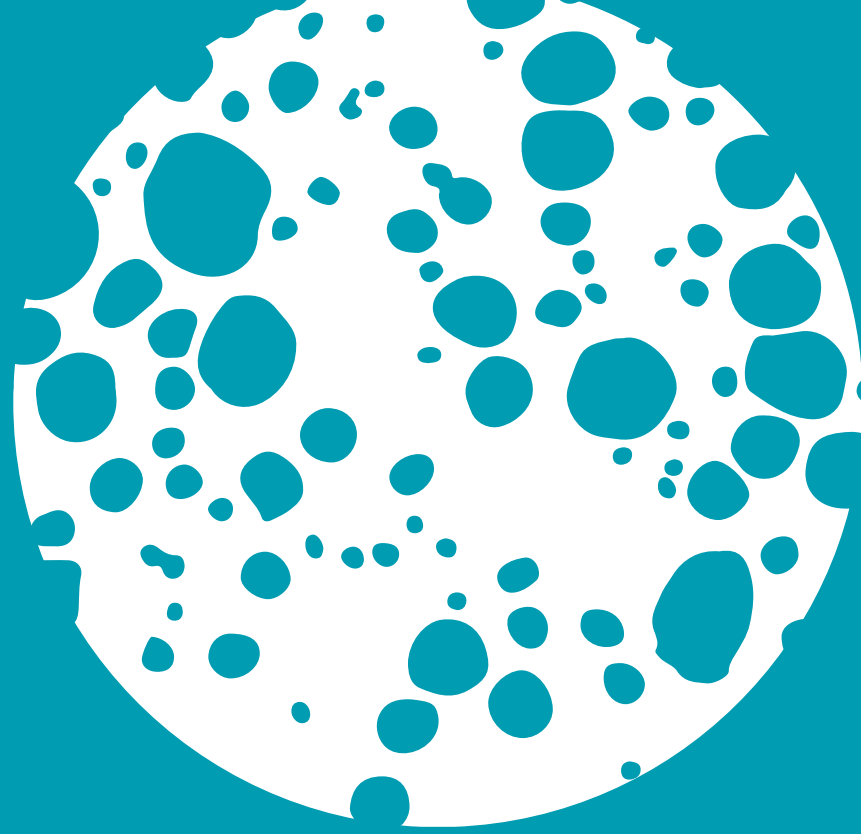
“It is a wonderful feeling to have won this year's prize! Winning this prize encourages me to continue pursuing my science communication projects with the general public, undergraduates and junior doctors.”

Paola Domizio Undergraduate Essay Prize – Harry Adams

Could pathologists soon be replaced by robots? In his essay, Harry considered the potential benefits and challenges posed by technology, as well as the impact on patients and on pathologists' working lives.



“It is a great opportunity to practice essay writing skills and appreciate topics not usually taught at university.”

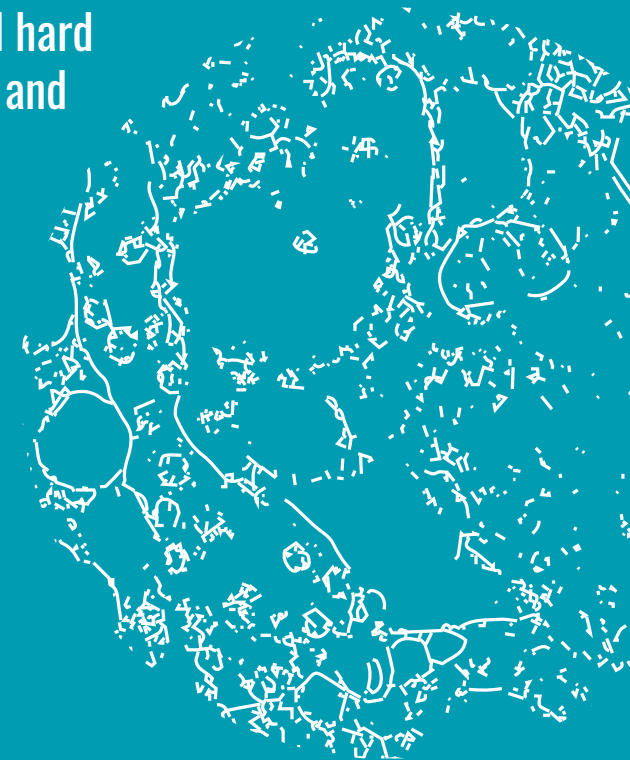


Our specialties and case studies

03.

▮▮ Our 17 specialties ... demonstrate the innovation, dedication and hard work of the clinical scientists and pathologists who are involved in and vital to so many healthcare interactions.

– Professor Mike Osborn, President



Our specialties

The College is very proud of all our medical and scientific colleagues working across 17 specialties and many subspecialties. Our colleagues make exceptional contributions to health at all stages of our lives. Examples of this essential work range from diagnosing inherited and acquired disease in the fetus and newborn, immunisation in childhood and adults, care of pregnant mothers, diagnoses, investigation and treatment of a multitude of disorders, infections and cancers together with screening programmes right through to post-mortem examinations that inform the care of the living. We have briefly outlined the key roles of each specialty with a further spotlight on just some of the ongoing work in the clinical case studies in the next few pages.



Cellular pathology

Cellular pathology includes many subspecialties, including cytopathology and dermatopathology. Cellular pathologists are doctors and scientists who diagnose and study diseases including cancer and inflammatory diseases, such as ulcerative colitis, in tissues and organs. Cytopathologists diagnose cervical cancers through the screening of cells. Examination by microscope of a small biopsy or tumour can provide the diagnosis but, increasingly, this is supplemented by DNA examination of cancers to tailor treatment.

Chemical pathology

Chemical pathologists and clinical biochemists monitor bodily fluids like blood and urine to detect important changes in the body's chemistry. They play a key role in diagnosing and monitoring patients

with a wide variety of illnesses, from high cholesterol to thinning bones. Chemical pathologists interact with patients at several different points through their treatment journeys – they investigate test results and meet patients in person to support their treatment.

Forensic pathology

Forensic pathologists perform medico-legal post-mortem examinations to determine the cause of death, including cases where a crime is suspected. They collect, examine and interpret tissue specimens under the microscope, as well as documenting and interpreting injuries, including on living victims. They provide scientifically objective expert reports for the police, coroners, procurators fiscal and solicitors and give expert evidence in crown, family and coroner's courts among others.

Genetics and genomics

As advances in technology have allowed us to study DNA in ever greater detail, genetics and genomic medicine have become an important weapon in the fight against disease. Doctors and scientists working in genetics diagnose inherited diseases and advise families on treatment. Genomic testing also contributes to the better understanding of infection, including mapping of the COVID-19 pandemic.

Genomic medicine is at the forefront of transforming patients' lives by enabling a quicker diagnosis for patients with a rare disease; matching people to the most effective medications and interventions; and increasing the number of people surviving cancer each year because of faster, accurate diagnosis and tailored treatment with targeted therapies.

Haematology

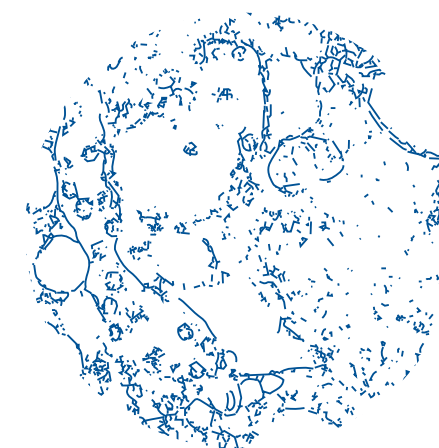
Haematologists are experts in blood cells, including those circulating round the body and in the blood cell factories of the bone marrow. Haematologists diagnose and treat malignancies such as leukaemia and anaemias like sickle cell disease. They also deal with abnormalities of the blood clotting system, such as haemophilia. Haematologists care directly for patients on hospital wards and out-patient clinics, and carry out diagnostic work in laboratories.

Histocompatibility and immunogenetics

Histocompatibility and immunogenetics (H&I) is the study and testing of the genes and proteins that are important in the matching of organ and bone marrow transplant donors with recipients. H&I scientists ensure that transplanted organs and cells are compatible with the recipient to lessen the chances of rejection. They also support transfusion of platelets and granulocytes and are involved in investigations into transfusion reactions. H&I tests are important in the diagnosis of inflammatory diseases and can help predict adverse reactions to drugs used to treat disease, e.g. HIV.

Immunology

Immunologists deal with the study, diagnosis and management of people with disordered immune systems and immune deficiency. They advise on conditions in which immunological treatment forms an important part of therapy and/or prevention. Immunologists also specialise in the diagnosis and treatment of allergies. This specialty is playing a key role in better understanding the immunological response to SARS-CoV-2, including the development of potential therapies and vaccines.





Microbiology

Medical microbiologists support and oversee the prevention, diagnosis and treatment of illness caused by microorganisms such as bacteria. They give advice on clinical and laboratory diagnosis of infection, identify the best treatment for infectious diseases and monitor patients following treatment. They also ensure antibiotics are prescribed and used appropriately so patients receive the best treatments and to minimise antimicrobial resistance.

Microbiologists have been at the forefront of the response to the SARS-CoV-2 pandemic, advising on infection prevention and control measures, public and occupational health, strategic planning and overseeing COVID-19 testing and diagnosis in centres where there is no onsite virologist.

Molecular pathology

Pathologists working in this specialty examine molecules, particularly DNA, within organs, tissues or bodily fluids to study and diagnose diseases. Molecular tests check for specific changes in genes or chromosomes that can cause disease, such as cancer and infectious diseases. Molecular pathologists have an important role in personalised medicine, which identifies patients that can benefit from targeted therapies based on the molecular characteristics of the tumour present.

Neuropathology

Neuropathology is concerned with diagnosing and investigating diseases in the nervous system,

i.e. brain, spinal cord and nerves, as well as the muscles of the skeleton. These include a wide range of disorders, such as tumours, inflammatory disorders, infections and genetic diseases. Neuropathologists use microscopes to examine samples of tissues but in recent years, findings from molecular tests have been increasingly incorporated into their reports, for example for brain tumours. This provides much more detailed information to the clinicians with whom they work closely.

Oral and maxillofacial pathology

This lesser-known branch of dentistry – oral and maxillofacial pathology – is concerned with diagnosing diseases in the head, neck, mouth, jaws and face. Oral and maxillofacial pathologists use soft tissue and bone biopsies alongside information from dental examinations and X-rays to investigate patients' cases. They are also involved in research into the development of treatments for head and neck cancer and the investigation of the genetic causes of developmental diseases.

Paediatric and perinatal pathology

Paediatric pathologists diagnose, investigate and monitor disease in children from conception up to 18 years of age. This includes areas such as genetic disorders, congenital diseases, cancers, disorders of metabolism, inflammatory disorders and infection. They are experts in a range of pathology specialties, such as cellular pathology, laboratory medicine and medico-legal pathology. Perinatal pathologists diagnose and

investigate disease processes that affect unborn babies, neonates and infants. They investigate causes of pregnancy loss, miscarriage, stillbirth and neonatal disease. They are experts in pathology involving the placenta.

Reproductive science

Using increasingly sophisticated technology, scientists working in reproductive science can give hope to couples who are having trouble conceiving. They are experts in diagnosing infertility, as well as investigating, offering advice and insight on treatment options and delivering treatments, such as in vitro fertilisation.

Toxicology

Toxicologists are scientists who work across a broad range of environments in healthcare. In hospitals, they analyse samples from patients who have, for example, taken recreational drugs or overdoses of prescription medicines. They also advise public health bodies and industry on chemical and environmental hazards and on drug safety.

Transfusion medicine

Transfusion doctors and scientists are haematologists who specialise in transfusion medicine. They make sure that every patient who needs a transfusion is matched with blood from a suitable donor. They oversee the health and wellbeing of donors, the testing of blood for infections, the management of hospital blood stocks and promotion

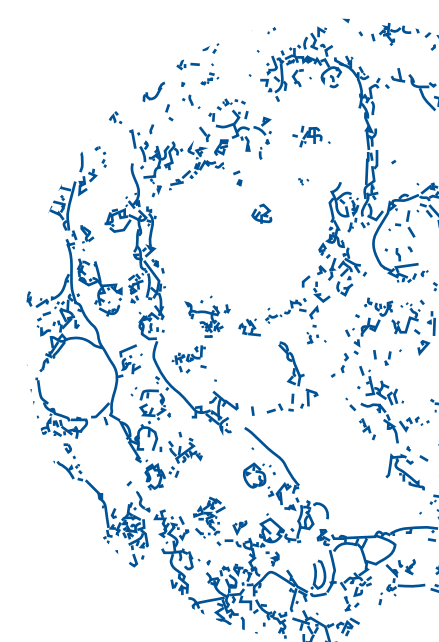
of the safe and appropriate clinical use of blood and components. Transfusion staff participate in and contribute to haemovigilance activities promoting patient safety.

Veterinary pathology

Veterinary pathologists work in animal disease surveillance, prevention, diagnosis and treatment. They play a key role in the development of safe and effective medicines and vaccines for animals and humans. They investigate diseases in pets and farm animals, as well as exotic species. They also contribute to animal conservation and protection, and public health.

Virology

Virologists are doctors and scientists who oversee the diagnosis, management and treatment of patients with viral infections, from common viruses like chickenpox to emerging infections like Zika and Ebola. Virologists are also involved in public health – studying and advising on infections spreading globally as a result of travel and climate change. Some virologists specialise in vaccine development. This specialty has been particularly recognised in making an enormous contribution to COVID-19 testing and diagnosis, which have been essential to the care of healthcare staff and patients throughout the pandemic.



CASE STUDY

Targeted cancer therapy using CAR-T cells

Reprogramming a person's own immune system to target cancerous cells provides a truly individual approach to cancer treatment, which involves collaboration between haematology and pathology services. Here, Dr Julia Wolf and Dr James Griffin describe how CAR-T therapy was used to treat an aggressive form of blood cancer.

CAR-T therapy is a novel and highly complex immune therapy that redirects the body's own immune system to fight cancer. CAR-T cells are often described as 'the living drug' because they actively search and target malignant cells. It uses a type of immune cell called a T-cell, which is extracted from patients' blood before being genetically altered to allow it to target surface proteins found on cancer cells.

□□ CAR-T cells are often described as 'the living drug' because they actively search and target malignant cells.

The cell collection is performed by passing the blood through an apheresis machine that separates the white cells, including T-cells. The collected cells are then transported to manufacturing sites where the CAR-T cell drug is created by inserting a man-made gene, the chimeric antigen receptor (CAR), into the DNA of T-cells. As a result, the engineered cell can recognise and fight cancer cells. The CAR-T cells are then expanded and infused back into the patient after chemotherapy.

Since Food and Drug Administration approval in the USA in 2017, CART-T therapy has emerged as one of the biggest breakthroughs in cancer therapy in decades. Several products are now used routinely or in trials to treat a range of haematological and non-haematological malignancies.

The collection, processing and storage of patient cells that form the basis of CAR-T therapy depends on a multitude of clinical and laboratory processes, which are supported by NHS Blood and Transplant (NHSBT) and pathology services.

□□ Prior to the emergence of CAR-T therapy, treatment options for relapsed ALL following stem cell transplant were extremely limited and outcomes sadly often extremely poor.

The first patient to receive CAR-T therapy at University Hospitals Bristol and Weston (UHBW) NHS Foundation Trust was Nitya. Nitya was diagnosed with acute lymphoblastic leukaemia (ALL), an aggressive form of blood cancer, at the age of 16. She received standard multiagent

chemotherapy and achieved a good initial response but, unfortunately, her leukaemia relapsed only 23 months into treatment. Nitya required more chemotherapy, which achieved a complete remission from ALL. Despite her intensive treatment she also managed to complete her A-levels and received a place to study at University College London (UCL). However, these remissions are a fragile and temporary state and need to be consolidated with allogeneic (donor) stem cell transplant.

□□ Nitya was accepted as one of the first NHS patients to receive CAR-T cells ... What followed was a journey filled with anxious waiting.

The histocompatibility and immunogenetics laboratory in NHSBT Filton carried out tissue typing, which tests to see how closely a donor's stem cells or tissue match your own, and found that Nitya's sister was a full match for her. Her sister underwent successful apheresis stem cell collection. Nitya received more chemotherapy to prepare her body for transplant before having an infusion of her sister's stem cells. She tolerated the treatment well despite developing graft versus host disease (GvHD). GvHD is a frequent complication of allogeneic stem cell transplant that occurs when the donated cells view the healthy cells of the person receiving the transplant as foreign and attack them. Unfortunately, three months after the transplant, Nitya had relapsed again.

Prior to the emergence of CAR-T therapy, treatment options for relapsed ALL following stem cell transplant were extremely limited and outcomes sadly often extremely poor. However, UHBW had set up its own CAR-T programme and was now offering this treatment as one of only six sites in the UK. As CAR-T therapy is associated with significant and complex adverse events, the decision of whether to offer CAR-T therapy to Nitya was not taken lightly. Specifically, there were concerns that Nitya's GvHD could recur and be exacerbated through further immune therapy.

As other treatment options were inadequate, Nitya was accepted as one of the first NHS patients to receive CAR-T cells in December 2018. What followed was a journey filled with anxious waiting. Nitya received further chemotherapy, which again put her into a complete remission. She achieved a good apheresis collection but cells had to be cryopreserved and shipped to the USA for manufacture. The manufacturing process for CAR-T cells is complex and not always successful meaning some patients need further chemotherapy to hold their disease at bay. Some relapse despite this, making CAR-T treatment impossible. In Nitya's case, the CAR-T cells were returned to the UK four weeks later. Nitya underwent yet more chemotherapy to prepare her body for the CAR-T cells before receiving the infusion.

Her treatment went well but was complicated by severe GvHD affecting her liver. While this was predicted as a possible complication, it had not been previously described in the literature. Nitya was very unwell and required treatment with extracorporeal photopheresis. This is an apheresis-based therapy that involves collecting the patient's white blood cells, adding a chemical to the cells and exposing them to ultraviolet light outside of the body to cause programmed cell death. The dying cells are re-infused back to the patient where they affect how the patient's immune system works. Nitya received this therapy regularly for a year after CAR-T treatment but has now stopped after achieving a complete response.

And Nitya's leukaemia? The CAR-T therapy appears to have cured the ALL with no detectable disease in her bone marrow within a month after treatment. This remains the case 18 months later.

Despite her often tumultuous treatment course, Nitya managed to start her studies at UCL and is planning on spending a year abroad soon. This would have been impossible without the close collaboration between pathology and clinical haematology services at UHBW, NHSBT and international manufacturing sites, highlighting the need for teamwork and partnership when aiming to achieve the best outcomes for our patients.

CASE STUDY

Using molecular pathology to unveil the rare ocular tumour behind masquerade syndrome

Molecular testing is becoming a vital tool in diagnosing cancers, as well as guiding and monitoring treatment. Here, Professor Sarah Coupland, a Consultant Histopathologist specialising in ocular pathology, explains how molecular pathology is improving the detection of a rare type of eye tumour and, potentially, patient outcomes.

The use of novel molecular diagnostic technologies is advancing at a fast pace not only in the most common cancers, but also rare types. An example of the latter is vitreoretinal lymphoma (VRL) – a highly aggressive B-cell lymphoma that is associated with central nervous system lymphoma.¹ B-cells are a type of white blood cell called a lymphocyte that make antibodies specific to pathogens, such as bacteria or viruses, and are involved in the immune response. B-cell lymphomas develop when the body produces abnormal B-cells that grow out of control.

VRL has an estimated incidence of 0.46 to 1 per 100,000 persons per year. However, the incidence of VRL is increasing, in patients both with and without immunosuppression (where your immune system doesn't function as effectively). VRL is currently associated with a poor prognosis, typically due to delays in diagnosis and a lack of effective therapies once it spreads to the brain.^{1,2}

VRL most often affects patients over the age of 50 years, with a mean age of 63, and affects both males and females equally.^{1,2} VRL is known for its gradual and slow onset, often mimicking a

wide range of other ocular diseases; therefore, it is often called the masquerade syndrome. It can affect one or both eyes, and can present before or at the same time as brain disease.

▮▮ The use of novel molecular diagnostic technologies is advancing at a fast pace not only in the most common cancers, but also rare types.

Once VRL is suspected, a vitrectomy (the surgical removal of a gel-like fluid that fills your eye called vitreous) is performed by ocular surgeons. Cytological examination – where cells within the vitreous fluid are examined under a microscope – is required, followed by immunocytology (where stains are used to highlight specific cell types) and, when possible, molecular analyses.

Since these samples are often small and consist of fragile cells, clear communication between the ocular surgical team and the receiving

laboratory is essential to ensure the samples are transported quickly after the operation to the laboratory. In turn, experienced biomedical scientists and ocular pathologists play a major role in successfully processing the diagnostic material and interpreting the results.

▮▮ The advantage of NGS panels is that they are flexible and allow for the inclusion of new genes as more is revealed about the different types of cancer.

Molecular examination of these samples has become a valuable tool to confirm the diagnosis of lymphoma. For example, B-cell immunoglobulin gene rearrangement tests detect changes (rearrangements) in specific genes in B-cells. Rearrangements are part of the normal development of B-cells and create an array of B-cells with different profiles that can protect you against different kinds of infections. In lymphomas, the abnormal B-cells produce identical copies of themselves, creating rearrangement profiles that are identical. The test determines whether the rearrangement profiles are diverse or identical and is a mainstay in VRL diagnosis.

The sensitivity of these tests ranges from between 65% and 95%, depending on a number of factors, including the quality of material and experience of the laboratory.^{1,2} False-negative results, however, may still occur in these analyses, because of the large number of naturally occurring (somatic) mutations that occur in B-cells reducing the effectiveness of the test.

To overcome this problem, bespoke next generation sequencing (NGS) panels, which allow DNA and RNA to be sequenced, have been designed over the last five years for VRL.^{3,4} The panels have been created based on the improved understanding of the molecular biology of the disease, including the revelation that around 75% of VRL show a mutation in the *MYD88* gene in neoplastic B-cells.³

Consequently, *MYD88* mutational analysis is becoming part of the routine work-up of VRL in many laboratories worldwide, and has enabled earlier definitive diagnoses in patients.

In a recent multicentre collaboration, VRL was shown to display additional mutations and alterations in their tumour cells. These involved the following genes: *PIM1*, *CD79B*, *IGLL5*, *TBL1XR1*, *ETV6*; and deletions in chromosome 9p21/*CDKN2A*.⁵ The study also showed that cell-free DNA of the vitreous fluid supernatant (i.e. the non-cellular component of the sample) could be used to demonstrate the presence of the above mutations with reliability. This is of importance since the number of viable cells within vitrectomy samples can be very low.

▮▮ [Vitreoretinal lymphoma] is currently associated with a poor prognosis, typically due to delays in diagnosis and a lack of effective therapies.

The advantage of NGS panels is that they are flexible and allow for the inclusion of new genes as more is revealed about the different types of cancer. It is likely that the VRL NGS panels will be modified further to include some of the new genes discovered in the multicentre study, to further improve the detection of this disease. There is also promise that one or more of these genes could be targeted by new therapeutic agents designed to treat this aggressive and usually fatal disease.

1. Araujo I, Coupland SE. *Asia Pac J Ophthalmol* 2017;6:283–289.
2. Fend F, Ferreri AJM, Coupland SE. *Br J Haematol* 2016;173:680–692.
3. Bonzheim I, Giese S, Deuter C, Süßkind D, Zierhut M, Waizel M. *Blood* 2015;126:76–79.
4. Cani AK, Hovelson DH, Demirci H, Johnson MW, Tomlins SA, Rao RC. *Oncotarget* 2017;8:7989–7998.
5. Bonzheim I, Sander P, Salmeron-Villalobos J, Süßkind D, Szurman P, Gekeler F. *Blood Adv* 2021; doi: 10.1182/bloodadvances.2021004212 (Epub ahead of print).

Image (page 44): May Grunewald Giemsa (MGG) stain of a cytospin made from the intraocular biopsy taken from the affected area.

CASE STUDY

The role of pathology and healthcare scientists in the diagnosis and management of bowel cancer syndrome

Medical pathologists and healthcare scientists work collaboratively to improve pathology services for patients. Here, Dr Jo Horne and Patrick Kumah describe the role of consultant scientists in the diagnosis and treatment of bowel cancer.

Every year over 40,000 cases of bowel cancer are diagnosed in the UK.¹ Most diagnoses are made through diagnostic biopsies, taken at colonoscopy, where images are taken of the colon to detect any abnormalities. Biopsies (small samples of tissue) are taken to investigate symptoms that patients presented with, such as a change in bowel habit or bleeding. We usually receive biopsies from patients who are being investigated via the national bowel cancer screening programme.

Surgical resection specimens (larger pieces of diseased tissue) are examined, described and dissected by both medical histopathologists and healthcare scientists, with representative areas of individual specimens sampled and processed through the laboratory. The samples are stained to assess any significant changes in the structure of the tissue.

Consultant histopathologists, and increasingly, consultant scientists make the diagnosis. Consultant scientists have been eligible to train to report histopathology samples from the gastrointestinal tract (and other sites)

since 2012. Our main role is to produce a histopathological report on the patient's specimen. For biopsies, the report will contain diagnostic information and molecular test results.

Diagnosis is usually made on a glass slide using a light microscope but, increasingly, digital pathology is being utilised for routine diagnostic histopathology. In digital pathology, images of the glass slide are created and captured with a scanning device to provide a high-resolution image that can be viewed on a computer screen or mobile device.

Cells that have grown normally have a uniform and organised appearance. By contrast, abnormal cells show a different range of features, a deeper colour on staining and a disorganised growth pattern. The bowel is made up of tissue layers, and when these abnormal cells grow in the wrong areas, this is known as cancer. To aid diagnosis, further investigations, using genetic testing or immunohistochemistry (a technique that makes proteins visible and helps to identify whether the patient has abnormal mismatch

repair genes), are performed. Mismatch repair genes are responsible for correcting any errors that are made when DNA is copied within a normal cell. Cells with abnormal mismatch repair genes build up many DNA mutations, which can lead to bowel cancer developing. Knowing whether there are abnormalities in the mismatch repair genes helps to exclude an inherited disorder called Lynch syndrome. It can also predict how the tumour will respond to any treatments that are planned for the patient.

Part of the role of healthcare scientists is to attend colorectal multidisciplinary team meetings (MDTs). In these meetings the team confirms the cancer diagnosis and sets out the patient's individual treatment pathway. We review the histopathology reports beforehand. With increasing access to rapid molecular testing, we inform oncologists of any gene mutations that may indicate Lynch syndrome. All newly diagnosed cases of bowel cancer are assessed for Lynch syndrome. This is an inherited condition that puts people at a much higher risk of developing bowel cancer, as well as increasing the risk of other cancers including ovarian cancer, stomach cancer and womb cancer. Family members may have the condition, and they can be referred for genomic testing and counselling.

Attending MDTs allows scientists to fully integrate within clinical teams and has the added benefit of releasing time for medical histopathologists to undertake other, more complex work. The role of pathology in the diagnosis, staging and monitoring of colorectal cancer has increased greatly over the last few years. Scientists and pathologists are responsible for ensuring that the right tests are carried out to the highest standard on behalf of patients. As the workload continues to increase, there must be an appropriately trained and experienced clinical workforce, comprising both medical histopathologists and healthcare scientists.

Scientists are highly qualified and experienced individuals and, with appropriate training programmes and opportunities, in line with other healthcare professions, are in a perfect position to contribute to safely managing the increasing workload within histopathology. We can act as the

conduit between the laboratory, MDT coordinators and clinicians, ensuring that cases are ready for discussion at MDT. We have the skills and knowledge to increase collaboration and integration between histopathology, molecular pathology departments and genomic testing laboratories, and to develop and quality assure new tests and ways of working, such as digital pathology or rapid molecular testing and interpretation.

The key now is to develop new, improved and widened workplace and academic training programmes for scientists in histopathology. We need to work towards more collaborative and integrated training programmes for medics and scientists, both nationally and within pathology networks. Undertaking this work, alongside increasing training places for medical histopathologists, is essential to safely sustain and improve histopathology services, ensuring that every person diagnosed with bowel cancer receives the right diagnosis and right treatment at the right time.

1. Cancer Research UK. [Bowel cancer statistics](#).

Image (page 46): H&E section of the patient's colonic biopsy showing a malignant tumour (adenocarcinoma).

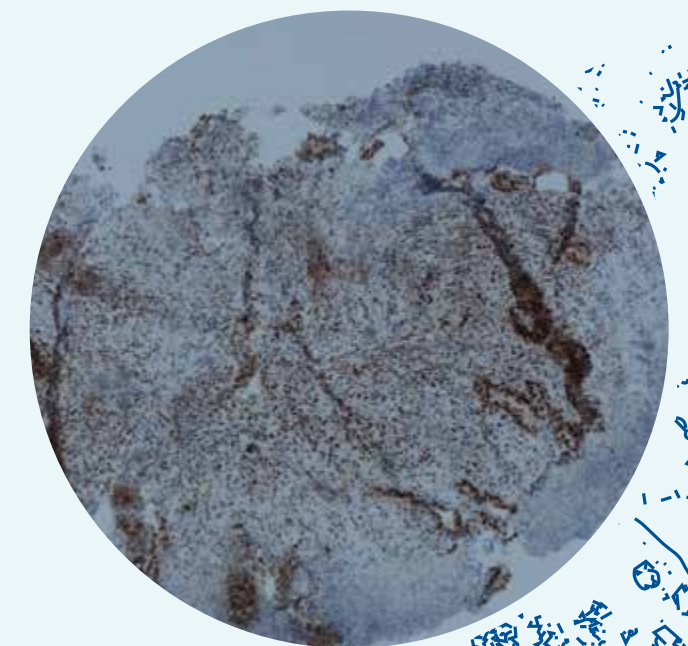


Image above: Positive staining within the tumour cells in the patient's biopsy for the mismatch repair protein, MLH1.



CASE STUDY

Improving patient outcomes through clinical studies

To ensure the best outcome for patients, early intervention is essential in cases of major traumatic haemorrhage. Here, Dr Harriet Tucker, Trauma Research and Whole Blood Fellow, and Dr Laura Green, Consultant in Haemostasis and Transfusion Medicine, share the story of a patient who received a combined red blood cell and plasma transfusion from paramedics at the scene of the injury.

The red cell and plasma study was a multicentre cohort study to establish the feasibility of pre-hospital transfusion of a combined red blood cell and plasma product delivered at the roadside to critically injured patients.¹ The study was a collaboration between NHS Blood and Transplant, Barts Health NHS Trust and Queen Mary University of London.

The use of a combined component ... can overcome ... logistical challenges allowing quicker, earlier delivery of blood products in equal ratios, and the potential to improve survival rates.

The UK standard of care in-hospital for traumatic haemorrhage is early haemostatic resuscitation – delivering a balanced ratio of blood products to the patient as early as possible. Most potentially preventable deaths for people who bleed due to traumatic injury occur in the first three hours

of injury, and acute traumatic coagulopathy begins at the point of injury. Trauma-induced coagulopathy (TIC) is a clinical syndrome driven by the combination of shock and tissue injury, resulting in uncontrolled bleeding; management focuses on stopping the bleeding, reversing the shock and preventing worsening TIC by restoring the circulating blood volume.

Most potentially preventable deaths for people who bleed due to traumatic injury occur in the first three hours of injury...

To help reduce these early deaths, which often occur before the patient reaches the hospital, most UK Air Ambulances carry separate bags of red blood cells and plasma. The latter is carried either in the form of pre-thawed fresh frozen plasma (which has a short shelf-life and must be stored cold) or lyophilised plasma (which has a longer shelf life but must be reconstituted prior to use). The use of these separate components in

a pre-hospital setting presents storage, resource, logistical and operational challenges. These challenges include a limited number of transfusion sets, limited blood warmers to warm the blood prior to use to prevent hypothermia and prevent worsening of TIC, storage constraints to carry enough bags of each component, and the time taken to ensure safety checks are carried out appropriately for each blood component transfused.

The use of a combined component, such as red cell and plasma, can overcome many of these logistical challenges allowing quicker, earlier delivery of blood products in equal ratios, and the potential to improve survival rates. For example, one bag of combined red cell and plasma is the equivalent of transfusing one bag of red blood cells and one bag of thawed plasma – all of which need to undergo safety checks, be transfused separately and sequentially, through limited intravenous sites.

Alvin's story

In December 2018, Alvin suffered a stab injury to his right thigh, just above the knee. He lost a lot of blood on scene, and a bystander performed initial first aid by putting pressure on the wound and applying a tourniquet made from rope. The paramedic team then applied three combat application tourniquets to reduce the bleeding.

Alvin's story highlights the benefits of trialling new products and interventions and constantly striving to improve patient care...

20 minutes after the injury, the London Air Ambulance arrived. Alvin was unwell, displaying signs of shock from significant blood loss. He had a reduced level of consciousness, his heart rate was very fast and his blood pressure was low. In the 22 minutes that the pre-hospital critical care team were on scene, they performed a pre-hospital anaesthetic, gained intravenous access into a large central vein and transfused

three bags of red cell and plasma through this single line and through one blood warmer. By only having to transfuse three bags (instead of six separate bags) through one intravenous line, Alvin could be resuscitated rapidly, reducing the time needed for blood transfusion on scene, correcting TIC earlier and allowing the small team to perform other time critical interventions, all of which was paramount to his survival.

Alvin was flown to the Royal London Hospital arriving just 70 minutes after the time of his injury, where he was met by the 'Code Red' trauma team. The Code Red team manage patients who are bleeding and who need immediate attention to stop their bleeding and save their lives. He received a blood transfusion in the Emergency Department and was taken directly to the pre-prepared operating theatre. Here, he underwent repair of the blood vessels that had been damaged in his leg and further blood transfusion. Alvin was transferred to the intensive care unit and less than ten days after being admitted, he was discharged home to his family. Alvin was able to move independently and was shortly back to work with support from the hospital's After Trauma Team.

Alvin's story highlights the benefits of trialling new products and interventions and constantly striving to improve patient care to give them the best possible opportunity to go home to their families and continue their lives as they would want to.

¹ Red cell and plasma study. Available at: <https://www.c4ts.qmul.ac.uk/research-programmes/red-cells-and-plasma-transfusion-study>





CASE STUDY

A One Health approach to high blood cholesterol

As the past 18 months have shown us, the health of humans, animals and ecosystems are interconnected. Here, Dr Simon Spiro, Wildlife Veterinary Pathologist at the Zoological Society of London, explains how studying disease in one species can further our understanding of pathogenesis in humans.

The great joy of being the veterinary pathologist for the Zoological Society of London (ZSL), the international conservation charity behind ZSL London and Whipsnade Zoos, is getting to work with the widest possible range of species, from the smallest corals to the biggest whales. Every species presents its own challenges at post mortem. For an elephant, these are mostly solvable with a team of helpers and a JCB, while a starfish may require long hours of reading and Googling just to familiarise myself with the anatomy. Against this background, a post mortem of a medium-sized, non-venomous, soft-bodied animal like a meerkat may seem like an opportunity to relax into familiarity. However, as this case will demonstrate, nothing can be taken for granted in the world of wildlife.

▮▮ The great joy of being the veterinary pathologist for the Zoological Society of London ... is getting to work with the widest possible range of species, from the smallest corals to the biggest whales.

Meerkats are a common species at zoos around the world and their high levels of activity and anthropomorphic qualities make them a favourite of visitors and keepers alike. We were all very saddened when one of our older meerkats, Hari, was found collapsed and semi-responsive in his enclosure at ZSL Whipsnade Zoo last December. Hari was immediately rushed to our veterinary hospital, where radiology revealed changes to the meninges (the surface coverings of the brain) that blurred the distinction between brain and skull. Because of the poor prognosis and lack of response to supportive therapy, the sad decision was taken to put Hari down. Post-mortem examination quickly revealed the true nature of the brain lesion – a gelatinous mass fusing the parietal lobes of the brain and the overlying skull into a single, indivisible unit.

Meerkats are most closely related to cats, of all the domesticated species. If I had seen a similar lesion in a domestic cat, I would have expected the symptoms to have been caused by tumours, such as a meningioma or osteosarcoma, or a chronic inflammatory process such as osteomyelitis. Histopathology revealed that the true diagnosis was one almost unique to meerkats – a meningeal cholesterol granuloma.

Cholesterol granulomas are an inflammatory lesion formed of needle-shaped cholesterol crystals surrounded by foreign-body type inflammation. In humans, they are most commonly found in the petrosal bone around the ear, while in veterinary medicine they are sometimes found within the lateral ventricles of horses' brains. In both cases, they are thought to be the result of chronic haemorrhage, with the cholesterol-rich membranes of the blood cells slowly breaking down and inducing a granulomatous response. In meerkats, no association with haemorrhage has been shown. Instead cholesterol granulomas seem to be directly related to high blood cholesterol (hypercholesterolaemia).

In human medicine, hypercholesterolaemia leads to cholesterol plaques being deposited in the walls of arteries (atherosclerosis), potentially leading to coronary heart disease. In meerkats, these plaques are deposited in the brain causing neurological disease. In both humans and meerkats, hypercholesterolaemia is, at least in part, the consequence of poor diet choice. In the wild, meerkats eat a wide variety of arthropods, such as beetles, termites and scorpions. In captivity, however, such variety is hard to replicate, and zoos have traditionally fed meerkats high calorie, high fat foods like mealworms, mice and day-old chicks. These are the meerkat equivalent of burgers and chips.

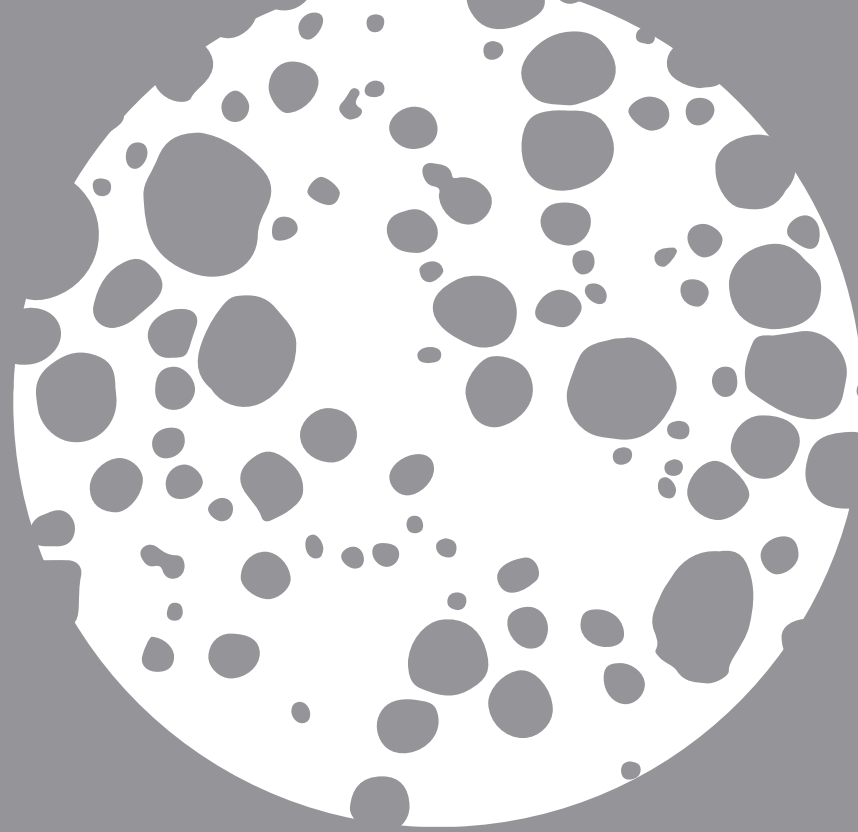
▮▮ By thoroughly investigating ... we hope to not only improve the health of captive and wild meerkats around the world, but also understand more about the fundamental pathology of disease in animals and in humans.

At ZSL, we carefully monitor the blood cholesterol of our meerkats and feed a high protein, low fat diet including crickets and mixed vegetables to minimise and manage the risk of hypercholesterolaemia, although cases such as

Hari's do still present. We know that a minority of visitors to our zoos ignore our signage and will attempt to feed the meerkats with inappropriate treats. When we were closed during the COVID-19 lockdowns we saw the meerkats start to lose weight, suggesting that they were receiving significant amounts of unsuitable food in this way.

ZSL takes a rounded approach to animal health, and employs specialists in veterinary medicine, pathology, behaviour, welfare and nutrition to tackle these knotty problems. By thoroughly investigating and publishing these cases, we hope to not only improve the health of captive and wild meerkats around the world, but also understand more about the fundamental pathology of disease in animals and in humans.



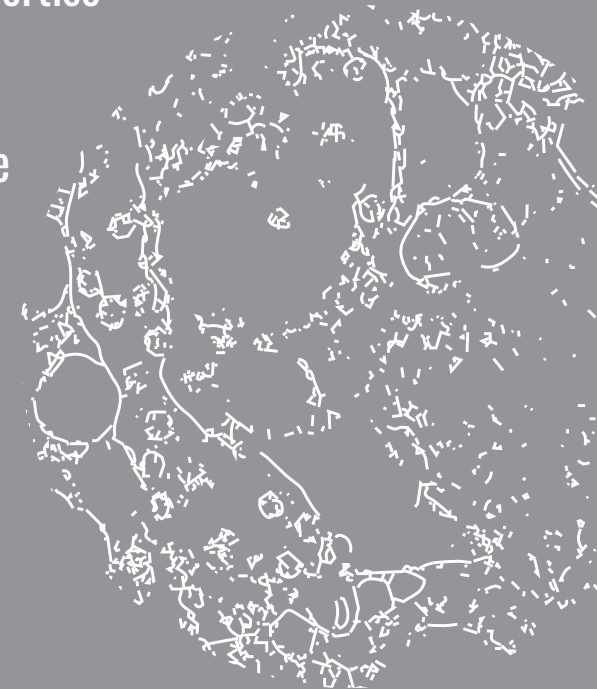


Our governance

04.

▮▮ The Lay Network brings expertise from diverse backgrounds and their input and feedback helps ensure the College's outputs are in line with the needs of our members and the public and our work is transparent.

— Robert Smith, lay trustee
and Chair of Trustee Board



Governance of the College

College review of the Royal Charter, Ordinances and Bye-Laws

Following a review of our Royal Charter, Ordinances and Bye-Laws and in consultation with College fellows, proposed changes were approved at the 2020 Annual General Meeting and subsequently put forward to Privy Council. These changes have now been approved and will see the role of College President rotating between candidates working in different specialties. The President will be unable to stand for re-election after serving their three-year term. Gender-neutral terminology will replace masculine pronouns in the Charter and Ordinances and voting rights have been extended for our diplomate members. They will now be able to participate in the election of honorary officers, general Council members and, if the diplomate lives in England, English Regional Representatives on Council. This will provide diplomates with a valuable opportunity to contribute to the future of the College.

The Trustee Board also enacted a change that provides for a lay trustee to take on the role of Chair for the Board. A third lay trustee appointment has been added to the Board to strengthen overall diversity of skills and experience.

Council and Trustee Board as at 30 June 2021

Trustee Board

- Robert Smith, Chair and Lay Trustee
- Professor Mike Osborn, President
- Professor Sarah Coupland, Vice President for Communications
- Professor Angharad Davies, Vice President for Learning
- Professor Peter Johnston, Vice President for Professionalism
- Dr Andrew Boon, Treasurer
- Dr Lance Sandle, Registrar
- Dr Esther Youd, Assistant Registrar
- Professor Ken Mills, Chair, Northern Ireland Regional Council
- Dr Bernie Croal, Chair, Scotland Regional Council
- Dr Jonathan Kell, Chair, Wales Regional Council
- Jill Gauntlett, Lay Trustee
- Vincent Voon, Lay Trustee

Regionally Elected Members

- Dr Laszlo Igali, England, East Midlands Region
- Dr Rachael Liebmann, England, London Region
- Dr Negar Maghsoodi, England, South Region
- Dr Alison Robb, England, North Region

Nationally Elected Members

- Professor Simon Cross, Elected
- Professor Roger Feakins, Elected
- Dr Giovanni Satta, Elected
- Dr Ravinder Sodi, Elected

Co-opted Members

- Dr Lisa Ayers, Chair, Clinical Science Committee
- Dr John Ashcroft, Chair, Intercollegiate Committee on Haematology
- Dr Maadh Aldouri, Former Chair, International Committee
- Professor Neil Anderson, Chair, Clinical Biochemistry SAC
- Dr Louise Jones, Chair, Genomics and Reproductive Science SAC
- Dr Darren Treanor, Chair, Digital Pathology Committee

Observers By Invitation

- Dr Shubha Allard, Clinical Director of Publishing and Engagement
- Dr David Bailey, Chair, Death Investigations Committee
- Dr Adrian Bateman, Chair, Cellular Pathology SAC
- Professor Louise Burke, Dean, Faculty of Pathology RCPI
- Dr Nicki Cohen, Clinical Director of Training & Assessment
- Dr Nigel Cooper, Chair, Forensic Pathology SAC
- Dr Matthew Clarke, Chair, Trainees' Advisory Committee
- Professor Paul Cross, Chair, Cytopathology Sub-committee

- Dr Samantha Holden, Chair, Prenatal, Perinatal and Paediatric Pathology SAC
- Lt Col (Dr) Emma Hutley, Military Observer
- Professor Roberto La Ragione, Chair, Veterinary Pathology SAC
- Dr Lynne Jamieson, Chair, Dermatopathology Sub-committee
- Dr Ann-Margaret Little, Chair, Histocompatibility and Immunogenetics SAC
- Dr Sanjiv Manek, Clinical Director of Examinations
- Professor Ismail Matalaka, Clinical Director of International Activities and Chair, International Committee
- Dr Berenice Lopez, Clinical Director for Safety and Quality and Chair, Quality Assurance in Pathology Committee
- Dr Suzy Lishman, Chair, Medical Examiners Committee
- Dr Stephen Morley, Chair, Toxicology SAC
- Dr Shruthi Narayan, Chair, Transfusion Medicine SAC
- Professor David Roberts, Chair, Research Committee
- Professor the Hon Richard Tedder, Chair, Joint Medical Microbiology and Medical Virology SAC
- Dr Stephen Warton, Chair, Neuropathology SAC
- David Wells, IBMS Representative
- Dr Patrick Yong, Chair, Immunology SAC

Financial report

The income of the College amounted to £6.7 million, with expenditure of £5.9 million, and a resultant surplus of £803k.

During the previous financial year, the College was unable to run the spring 2020 examinations owing to the COVID-19 pandemic, which were deferred until this financial year. The fees payable by candidates, although received in the bank account of the College, could not be brought into the accounts until the point in time that examinations had actually taken place, hence the reason why income from postgraduate education and examinations has increased to £2.2 million compared with £895k last year.

Income from the trading activities of the College through the Events@No6 conference centre had to cease operation in March 2020 and have operated on an extremely limited basis for allowable educational events as and when permitted to do so. Some staff from the commercial arm of the College, unfortunately, had to be made redundant because of the severe reduction in income.

Some other staff for this activity and generally across the College were furloughed under the Coronavirus Job Retention Scheme. All such staff have returned from furlough as of 30 June. Costs for the trading area of activity were reduced and managed wherever possible, with a conscious decision to retain the sales and marketing function in place to ensure that the College is on the front foot as this activity recommences. Further savings have been made against the salaries budget due to vacant positions that were not filled during the year, or which were delayed before being recruited to.

The College has been holding virtual committee meetings rather than face-to-face meetings throughout the year, so there have been savings on travel and related costs and the provision of refreshments at meetings. Most meetings

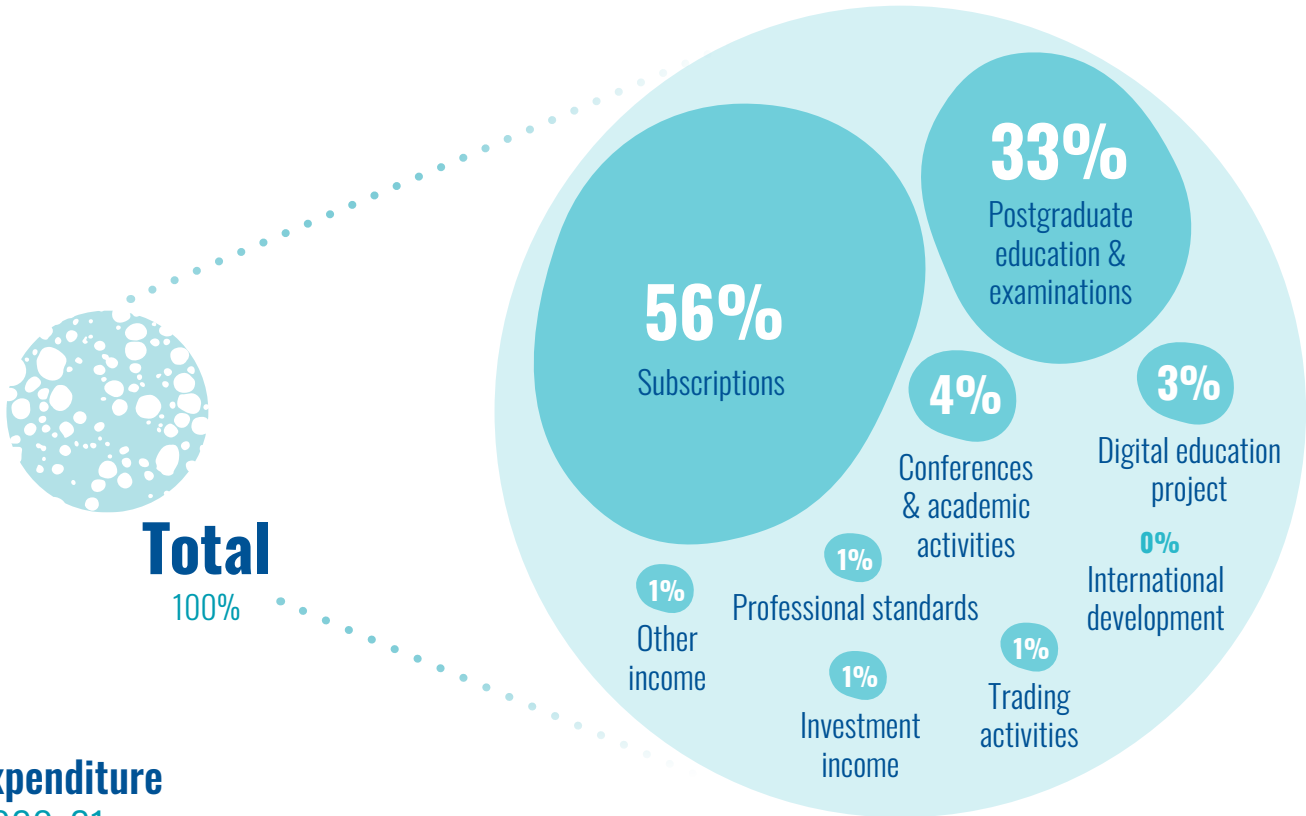
will continue virtually for the ensuing financial year. Savings in building-related costs (including cleaning, energy consumption and building maintenance) have been identified as a result of closing the building on 24 March 2020. All staff have been working remotely since that date. The office reopened on 13 September 2021, with the conference centre opening fully from 19 July 2021.

The last 12 months proved eventful for world economies and markets. Equity and other risk markets have performed well against this backdrop, with financials, industrials and materials challenging technology returns for the first time in decades – their rally being prompted by the vaccine news in November. Unsurprisingly, given the strong economic upturn, defensive sectors like utilities and consumer staples lagged at the bottom. The College’s portfolio has seen a good return of +24.5% in the 12 months to 30 June 2021. Over the longer term, the portfolio has delivered +40.5% and +74% on a three-year and five-year timeframe, respectively.

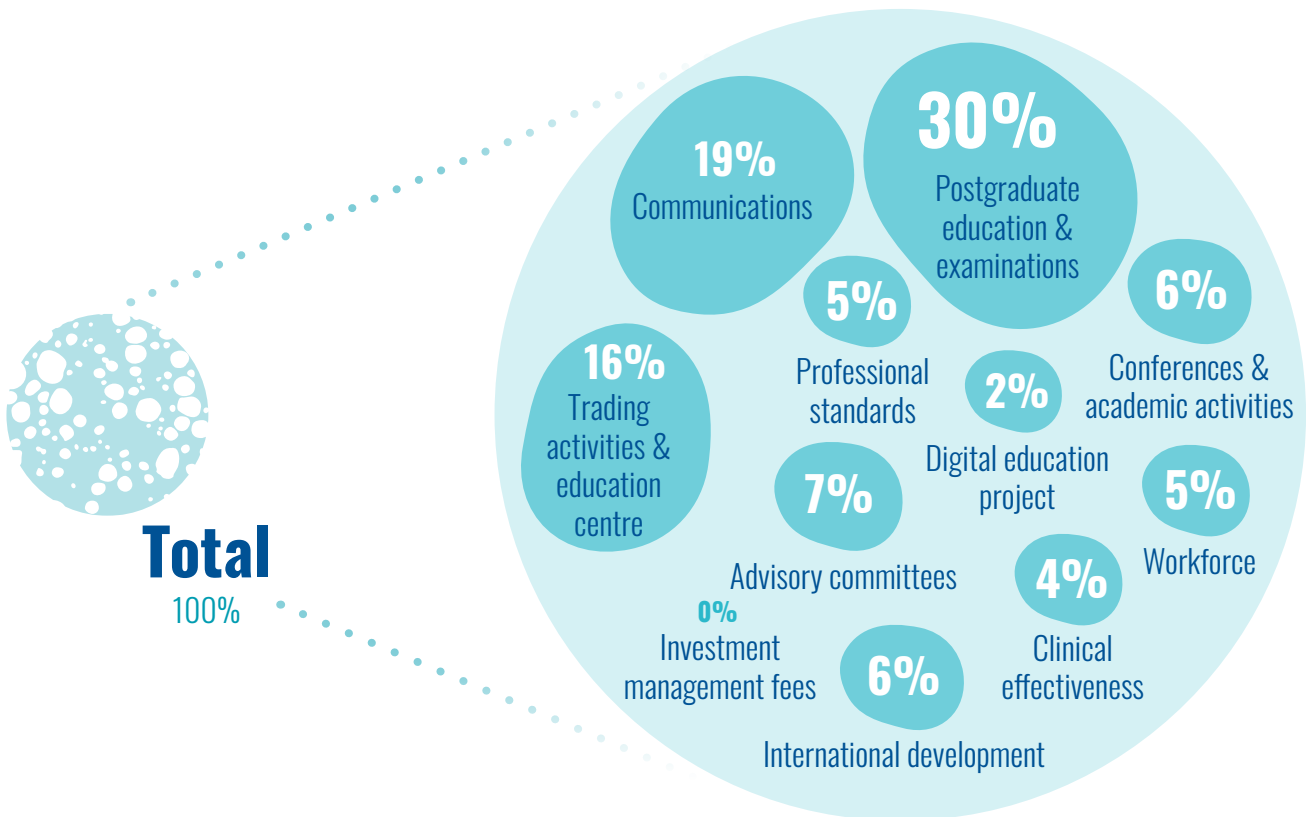
The accounts published overleaf are not the statutory accounts, but a summary of information relating to both the statement of financial activities and the balance sheet. The full financial statements have been audited and contain an unqualified audit report. They were approved by the Trustee Board on 5 August 2021 and have been submitted to the Charity Commission. Any member may request a copy of the full accounts by writing to the Chief Executive.

Dr Andy Boon, Treasurer
Mr Daniel Ross, Chief Executive

Income 2020-21



Expenditure 2020-21



Consolidated Statement of Financial Activities

for the year ended 30 June 2021

	Unrestricted General Funds	Unrestricted Designated Funds	Restricted Funds	Total Funds 30 June 2021	Total Funds 30 June 2020
	£	£	£	£	£
Income from:					
Donations & legacies	1,483	-	-	1,483	3,892
Charitable activities					
Subscriptions	3,785,867	-	-	3,785,867	3,622,145
Postgraduate education & examinations	2,194,501	-	5,000	2,199,501	894,774
Pathology Portal	-	-	175,000	175,000	100,127
International development	14,316	-	-	14,316	108,787
Conferences & academic activities	262,107	-	-	262,107	187,950
Professional standards	52,626	-	-	52,626	59,788
Communications	423	-	-	423	5,000
Trading activities	68,324	-	-	68,324	743,280
Investments	91,757	-	2,189	93,946	147,619
Other	79,820	-	-	79,820	79,751
Total income	6,551,224	-	182,189	6,733,413	5,953,113
Expenditure on:					
Raising funds					
Trading activities	945,670	600	-	946,270	1,408,765
Investment management fees	23,557	-	-	23,557	14,472
Charitable activities					
Postgraduate education & examinations	1,737,826	-	13,000	1,750,826	1,672,503
Pathology Portal	-	-	138,871	138,871	26,153
International development	355,670	-	5,000	360,670	420,827
Conferences & academic activities	262,873	-	91,943	354,816	385,451
Research	-	-	3,462	3,462	3,884
Professional standards	269,543	-	-	269,543	332,372
Clinical effectiveness	251,717	7,583	-	259,300	299,697
Workforce	313,000	-	-	313,000	337,097
Communications	1,095,270	-	820	1,096,090	1,235,916
Advisory committees	391,165	22,584	-	413,749	478,274
Total expenditure	5,646,291	30,767	253,096	5,930,154	6,615,411
Net income / (expenditure) before net gains on investments	904,933	(30,767)	(70,907)	803,259	(662,298)
Net gains on investments	871,548	-	164,075	1,035,623	150,475
Net income / (expenditure)	1,776,481	(30,767)	93,168	1,838,882	(511,823)
Transfers between funds	(604,420)	603,420	1,000	-	-
Net movement in funds	1,172,061	572,653	94,168	1,838,882	(511,823)
Reconciliation of funds:					
Total funds brought forward	6,424,037	28,864,164	1,364,466	36,652,667	37,164,490
Total funds carried forward	7,596,098	29,436,817	1,458,634	38,491,549	36,652,667

Consolidated Balance Sheet

as at 30 June 2021

	2021	2020
	£	£
Fixed assets:		
Tangible assets	38,403,585	39,036,481
Investments	6,294,113	5,281,517
Total fixed assets	44,697,698	44,317,998
Current assets:		
Stocks	4,900	11,231
Debtors	477,465	564,210
Cash at bank and in hand	6,143,921	5,202,564
Total current assets	6,626,286	5,778,005
Liabilities:		
Creditors: Amounts falling due within one year	(4,040,079)	(4,332,997)
Net current assets	2,586,207	1,445,008
Total assets less current liabilities	47,283,905	45,763,006
Creditors: Amounts falling due after more than one year	(8,792,356)	(9,110,339)
Total net assets	38,491,549	36,652,667
The funds of the College:		
Unrestricted funds – general funds	7,596,098	6,424,037
Unrestricted funds – designated funds	29,436,817	28,864,164
Restricted funds	1,458,634	1,364,466
Total College funds	38,491,549	36,652,667

The financial statements were approved by the Trustee Board on 5 August 2021 and signed on behalf of the Trustee Board by Professor Mike Osborn, President, and Dr Andy Boon, Treasurer.

Independent Auditor's Statement

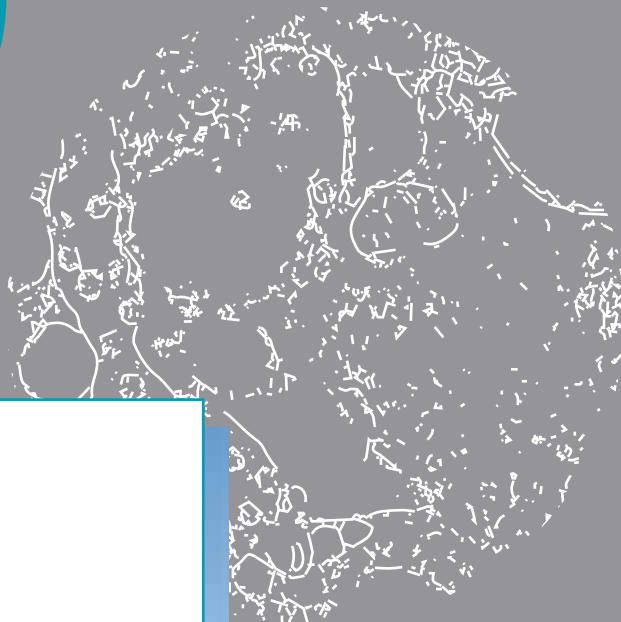
to the Trustees of the Royal College of Pathologists

The full financial statements were audited by Begbies, Chartered Accountants, and approved by the Trustee Board on 5 August 2021 and signed on their behalf by Professor Mike Osborn and Dr Andy Boon.

Begbies
Chartered Accountants and Registered
Auditors 9 Bonhill Street, London EC2A 4DJ
5 August 2021



The Royal College of Pathologists
Pathology: the science behind the cure



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The Royal College of **Pathologists**
Pathology: the science behind the cure

Annual report and financial statements

For the year ended 30 June 2021

Registered charity number 261035



The Royal College of Pathologists
6 Alie Street, London, E1 8QT, UK
Tel: 020 7451 6700, www.rcpath.org

The Royal College of Pathologists
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The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

The Trustee Board are pleased to present their report together with the financial statements of the College for the year ended 30 June 2021.

Objectives & activities

The College's mission is to promote excellence in the practice of pathology and to be responsible for maintaining standards through training, assessments, examinations and professional development, to the benefit of the public. The trustees have complied with the duty in the Charities Act 2011 to have due regard to guidance published by the Charity Commission, including public benefit guidance.

Pathology is the science at the heart of modern medicine, vital for the understanding, diagnosis and planning clinical management of disease. 70 – 80% of all health care decisions affecting diagnosis or treatment involve a pathology investigation. *(Department of Health, England. Report of the Review of NHS Pathology Services in England, chaired by Lord Carter of Coles, 2006.)*

Pathologists study the causes of disease and the ways in which disease processes affect our bodies. Recognising the patterns that disease takes allows us to understand what's at the root of a problem, enabling accurate diagnosis. Following up this understanding helps treatments to be devised and preventative measures to be put in place.

The fact that much pathology goes on behind the scenes may account for the fact that many people are almost unaware of its ongoing contributions to modern medicine. Without the work of pathologists there could be no firm answers, and improving or even maintaining the quality of medical care would be impossible.

The College's unique role ensures that high quality standards of knowledge and expertise are maintained in all areas relating to pathology. The College ensures that pathologists are qualified and up to date in their practice by:

- Setting standards for education and training in pathology.
- Examining against these standards.
- Providing a leading continuing professional development programme.
- Running scientific seminars and expert workshops on a national and regional basis.

The College looks after the interests of patients by:

- Producing guidelines and other documents that set standards of best practice.
- Providing advice to pathologists and governments.
- Ensuring lay representation on all designated College committees.
- Working with organisations such as Lab Tests On-Line and Labs Are Vital as a resource for patients to find out about the various clinical tests that are used in their diagnosis and treatment.

The College helps in the search for cures to disease by committing to strengthening the research base of the specialty. This is achieved through:

- Supporting fellows and trainees who undertake research activities as part of their day to day work.
- Awarding bursaries and prizes for research.

The Royal College of Pathologists
Report of the trustees for the year ended 30 June 2021

Objectives & activities (continued)

The College has a public engagement programme whose aims include inspiring secondary school students to learn about science through an innovative and creative programme focusing on health and disease. The goals of this programme are to:

- Raise awareness of pathology and its crucial role in treating and curing disease.
- Increase interest in pathology as a career option.
- Contribute to the wider initiative of engaging the public in contemporary science.
- Support the teaching of science in secondary schools.
- Change attitudes towards science, in particular pathology.

Activities

To achieve our objectives the College has undertaken significant activities during the year under review:

Training, examinations and assessments:

- Setting the standards for training in pathology through the provision of medical, clinical science and veterinary pathology curricula.
- Administering medical pathology training through College Specialist Training Committees, who advise and provide guidance on all major issues relating to specialist training in pathology.
- Managing the development, implementation and evaluation of workplace-based assessments for medical trainees and advising on the development of workplace-based assessments for clinical science trainees.
- Registering and monitoring Specialty Registrars for the duration of their training and recommending them for the award of a Certificate of Completion of Training (CCT) to the General Medical Council (GMC).
- Providing electronic training portfolios to allow registered trainees to record their progress in training.
- Development, implementation and delivery of the FRCPPath part 1 and part 2 examinations in the 17 pathology specialties, and the Stage A, Stage C, Certificate and Diploma examinations.
- Ensuring that curricula, assessments and examinations are approved by the appropriate regulator, and that transitional arrangements are in place where these change significantly.
- Recommending to the GMC whether or not the training and/or qualifications and experience of pathologists applying to the Specialist Register under the Certificate of Equivalence of Specialist Registration (CESR) rules is equivalent in content and duration to that required for a Certificate of Completion of Training.
- Responding to initiatives from the Departments of Health.
- Management of the process of admission to membership by published works.
- Attending, and providing support for local and national careers fairs.
- Supporting training through the provision of e-learning materials.
- Supporting the provision and promotion of pathology in undergraduate and foundation training.

Patient safety

- Support pathologists and their teams to improve safety and quality of care.
- Encourage shared learning to advance patient safety and quality improvement.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

Activities (continued)

Professional standards

- Deliver a leading continuing professional development scheme and user friendly online CPD and revalidation portfolio for members.
- Supporting the Professional Performance Panel to deal with revalidation queries and concerns about professional performance in all disciplines of pathology.
- Delivering invited reviews of pathology services for healthcare organisations and providing formal advice on professional performance in pathology.
- Supporting the external quality assessment stakeholders forum.

Consultancy services

- The provision of consultancy services to providers or commissioners where an authoritative independent review is required on the provision of high-quality pathology services.

Clinical Effectiveness

- Providing guidance and support to members and trainees on patient safety and quality improvement methodologies including clinical audit and to deliver continuous quality improvement awareness months.
- Ensuring pathology input into guidelines and standards produced by national bodies
- Continued membership of the International Collaboration on Cancer Reporting to support the production of common and internationally validated and evidence-based pathology datasets for cancer reporting for use throughout the world.
- The production of high-quality evidence based clinical guidelines in pathology to accredited standards.

Workforce

- Maintaining standards in pathology by reviewing and approving consultant level job descriptions and overseeing the College's statutory role in consultant advisory appointment committees (AAC's).
- Collecting data from direct surveys and the outcomes of appointments to enable the College to define the workforce required to deliver high quality patient centred pathology services throughout the UK.
- Providing data to enable the College to have a clear voice on pathology workforce planning.

Conferences and academic activities

- Management and development of the programme of in-house symposia and online webinars designed to keep participants up to date with current thinking and practice in the pathology disciplines.

Advisory committees

- Much of the work of the College is achieved through the College's committee structure reporting to Council. These activities provide professional advice and guidance through specialty advisory committees, intercollegiate and joint committees.
- Committees deal with generic matters crossing all pathology specialties whilst the specialty advisory committees advise on specialty specific matters such as histopathology and microbiology, etc.
- Establishment of a network of lay advisors to input into specific committees.
- Regional councils for Northern Ireland, Scotland and Wales maintain valuable regional and local influence and insight.
- Committees that report to the Trustee Board include Council, Nominations Committee, Governance Committee and the Remuneration Committee.

The Royal College of Pathologists
Report of the trustees for the year ended 30 June 2021

Activities (continued)

Communications

- Production of the quarterly publication "*The Bulletin*" distributed to members and subscribers.
- Production of a range of publications and guidelines on best practice in pathology.
- Production of the monthly President's e-newsletter for members.
- Development and maintenance of the College's web site, including the members' area.
- Engagement with politicians, civil servants and other key stakeholders across the UK to raise awareness and understanding of the value of pathology and the role of the College.
- Responding to parliamentary questions and consultations.
- Identifying opportunities to promote the work of the College via the media and improve the understanding of pathology.
- Providing a professional point of contact for all media enquiries.
- Delivering the College's public engagement programme, including National Pathology Week and International Pathology Day.
- Managing grant schemes and awards.

International development

- Advocating for quality laboratory medicine training, research and services around the world.
- Establishing international development and exchange programmes between the UK and overseas.
- Administering the College sponsorship scheme, Medical Training Initiative, and International Trainee Support Scheme to support international medical graduates with their pathology training
- Coordinating the efforts of College members and other professionals in pathology in the UK who wish to collaborate with colleagues overseas to create sustainable development.
- Developing and implementing strategies to engage the College UK and international members on global health issues.
- Fostering international strategic partnerships, collaborations and alliances.

Volunteers

Many members give their time freely to help the College achieve its objects by attending committee meetings, sitting on working parties, acting as examiners, commenting on reports, acting in a local liaison capacity, assisting with the public engagement programme, or undertaking some other task or function on behalf of the College. The Trustee Board is greatly indebted to these individuals for their commitment and support.

Achievements & performance

The College produces a full Annual Report, which should be consulted for an analysis of the achievements and performance of the College for the year to 30th June 2021.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

Investment performance

The last 12 months proved eventful for world economies and markets. Thanks to vaccines and a combination of fiscal and monetary policy, we went from massively negative economic growth in the third and fourth quarters of 2020 to one of the sharpest recoveries ever in the second quarter of 2021. The US recovered faster than Europe, which in turn did better than the UK, but China, amazingly, avoided any GDP drop in the second half of 2020, albeit with a more limited recovery since. Unemployment was still a large lingering problem in the US, with underemployment falling from 18% at the beginning of the period to 10.2% at the end. The UK and European countries relied on furloughs and other schemes to keep workers from being laid off and hence the job movements were less brutal in both directions. In the second quarter of 2021, inflation surged as the comparison with 2020 and its mostly negative inflation data, plus the reopening bottlenecks and skills mismatches, created massive price pressures. Nowhere was this more visible than in the hospitality and retail sectors, but the most damaging sector for the global economy was semi-conductors due to a large chip shortage.

Equity and other risk markets have performed well against this backdrop, with financials, industrials and materials challenging technology returns for the first time in decades, their rally being prompted by the vaccine news in November. Unsurprisingly, given the strong economic upturn, defensive sectors like utilities and consumer staples, lagged at the bottom.

The College's portfolio has seen a good return of +24.5% in the 12 months to 30th June 2021. Over the longer term, the portfolio has delivered +40.5% and +74% on a three-year and five-year timeframe respectively

Financial review

The income of the College amounted to £6.7 million, with expenditure of £5.9 million, and a resultant surplus of £803k.

During the previous financial year, the College was unable to run the spring 2020 diet of examinations due to the Covid-19 pandemic which were deferred until this financial year. The fees payable by candidates, although received in the bank account of the College, could not be brought into the accounts until the point in time that examinations had actually taken place, hence the reason why income from postgraduate education and examinations has increased to £2.2 million compared with £895k last year.

Income from the trading activities of the College through the Events@No6 conference centre had to cease operation in March 2020 and have operated on an extremely limited basis for allowable educational events as and when permitted to do so. Some staff from the commercial arm of the College, unfortunately, had to be made redundant because of the severe reduction in income.

Some other staff for this activity and generally across the College were furloughed under the Coronavirus Job Retention Scheme. All such staff have returned from furlough at the 30th June. Costs for the trading area of activity were reduced and managed wherever possible, with a conscious decision to retain the sales and marketing function in place to ensure that the College is on the front foot as this activity recommences. Further savings have been made against the salaries budget due to vacant positions which were not filled during the year, or which were delayed before being recruited to.

The College has been holding virtual committee meetings rather than face to face meetings throughout the year, so there have been savings on travel and related costs and the provision of refreshments at meetings. Most meetings will continue virtually for the ensuing financial year. Savings in building related costs (including cleaning, energy consumption, building maintenance) have been identified as a result of closing the building on 24th March 2020. All staff have been working remotely since that date. The date for reopening the office will be the 13th September 2021, with the conference centre opening fully from 19th July.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

Reserves

The Trustee Board has established a reserves policy, whereby the unrestricted funds not committed or invested in tangible fixed assets, or designated for specific purposes (the 'free reserves') held by the College, should normally be sufficient to allow the College to operate without income for up to 15 months. This level of reserves is essential, because our income is not guaranteed and can be subject to significant fluctuations year on year.

The College's reserves ensure that short term changes in revenue will not materially affect the College's activities, secures the long term funding of the College and enables the College to meet its duties under statute and its Royal Charter to promote standards of education and practice of pathology. This level of reserves would also enable the College to address any unforeseeable ad-hoc expenditure arising from topical issues in pathology, which the College feels should be addressed. At 30th June 2021 the level of free reserves of £7.0 million equated to 14.75 months of unrestricted expenditure. The total amount of restricted funds at 30 June 2021 amounted to £1.45 Million.

Going concern

The trustees have reviewed the financial position and financial forecasts, taking into account the levels of investment reserves and cash, and the systems of financial control and risk management. As a result of this review, the trustees believe that they are well placed to manage operational and financial risks successfully.

Accordingly, the trustees consider that the College has adequate resources to continue in operational existence for the foreseeable future. They continue to support the going concern basis in accounting and in preparing the annual financial accounts.

Designated funds

Designated funds are funds set aside by the Trustee Board out of unrestricted general funds for specific future purposes or projects, and are excluded from the value of the College's free reserves. An explanation of the College's designated funds is given in note 20 to these accounts.

Investment policy and objectives

The Trustee Board's investment policy is to maximise the return on investments taking the medium to long-term view with a moderate level of risk. The capital value of the portfolio should be protected in line with the objective of generating an annual rate of return of inflation, as defined by the Consumer Price Index (CPI), plus 4% over a 5-year basis after expenses.

The Trustee Board may invest funds of the College in such stocks, funds, shares, or securities and other investments within the United Kingdom or elsewhere as the Board sees fit, provided that the Board is satisfied that such investment is not speculative, and will not expose such monies and other investments to undue risk. The Trustee Board has adopted an ethical investment policy precluding direct investment in fossil fuel, tobacco or armament companies. The total return approach is adopted, including for those investments relating to restricted funds.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

Risk management

The principal risks faced by the College relate to: (a) Covid-19, as this has affected most areas of operation of the College and the finances substantially, including the loss of revenue from the conference centre and how this will develop as the economy opens up as the Covid-19 restrictions are lifted; (b) examination risks, including errors in the processing of examinations and whether or not the face to face sittings can run during periods of the pandemic and (c) IT risks, including breach of security on systems, the failure to update or innovate IT systems, and reliance on the College database.

The risks associated with Covid-19 are being mitigated by continuing to deliver services to the membership, examination candidates and trainees whilst working remotely, continuing to run committee meetings and other events virtually, regular review by the trustee board, and by monitoring actual financial performance closely against the budget.

The risks associated with the conference centre are being mitigated by regular meetings with the contract caterers who are responsible for the sales and marketing of the space. The directors of the trading subsidiary company are meeting with them monthly, and the operational staff meet weekly. This will highlight any issues as they occur.

The IT risks are mitigated by conducting regular reviews of equipment and software. A review of the requirements for the College including the database is planned during the ensuing financial year. The examination risks are being mitigated by continuing the use of specialist examinations management software, introducing new examination methodologies and in a review of procedures and controls.

Auditors

A resolution will be proposed at the Annual General Meeting that Begbies be re-appointed as auditors to the College for the ensuing year.

Plans for future periods

Trustees have agreed a new strategy for 2021-24 that has 5 strategic aims.

Strategic aim 1 – to support all members through the delivery of high-quality member services.

This will be achieved by:

- Supporting current members in their continuing education by offering guidance and support.
- Encouraging future members by fostering their interest in a career in pathology and supporting career development.
- Promoting and encouraging inclusivity and diversity throughout our membership, the wider profession and our work.
- Advancing knowledge in pathology through the delivery of a range of resources to support continuing professional development for all our members.
- Implementing the use of technology that widens and improves consistency of access to services for members.

Strategic aim 2 – develop and maintain high standards of education, training and research across all pathology specialties.

This will be achieved by:

- Providing curricula, assessments and examinations for professional groups, ensuring that they meet the future requirements for the profession.
- Optimising the efficiency of the examination process by developing centralised systems and providing enhanced support to examiners.

The Royal College of Pathologists
Report of the trustees for the year ended 30 June 2021

Plans for future periods (continued)

- Increasing international participation in College examinations.
- Encouraging and supporting our members and trainees to undertake and publish high-quality research to advance the practice of pathology.

Strategic aim 3 – promote excellence and advance knowledge in pathology practice across all specialties.

This will be achieved by:

- Advocating for a properly resourced, supported and sustainable pathology workforce.
- Continuing to develop excellent continuous professional development recording and support services.
- Delivering high-quality resources to benefit pathology practice.
- Developing a robust framework for governance and oversight of external quality assurance to ensure high standards.
- Promoting environmental sustainability in pathology and the ways in which we work.
- Supporting future innovation and delivery of digital resources in pathology.

Strategic aim 4 – increase the College's influence through a clear, coherent, professional voice.

This will be achieved by:

- Promoting the College as a vital contributor to health policy and decision making.
- Influencing policy to advance patient care and safety.
- Championing the College as the leading medical royal college in genomics services.
- Promoting pathology to the wider health professionals and the public to enhance our capacity and influence policy.

Strategic aim 5 – resource the future development of the College.

We will achieve this by:

- Increasing and developing new sources of income to support the work of the College.
- Delivering effective management of member services and providing an excellent place to work.
- Building corporate membership that benefits the College and its member partners.

Structure, Governance & Management

The College of Pathologists was founded on 21 June 1962 and was incorporated under Royal Charter on 28 February 1970, and registered as a Charitable Trust on 28 April 1970. The College is governed by its Royal Charter, Ordinances and By-laws, the “governing documents”.

The Trustee Board is responsible for the structure, governance and management of the College, including financial matters. Members of the Board are the trustees of the College. Committees reporting to the Trustee Board include the Council, Governance Committee, Nominations Committee and Remuneration Committee. Council is responsible for the clinical, educational and professional functions of the College. Council has sub committees, including standing advisory committees, examinations and training committees, and regional councils.

The trustees who served during the year are set out below. They comprise the 7 honorary officers, the chairs of each of the regional councils for Northern Ireland, Scotland and Wales, and 3 lay trustees. Trustees are elected or appointed for a three-year term of office after which they may serve again only after a one-year gap, unless elected to another honorary officer role. The Treasurer, Registrar and lay trustees can serve for two consecutive three-year terms of office.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2021

Structure, Governance & Management (continued)

The honorary officers are elected by the fellowship as a whole from amongst the fellows. The chairs of the regional councils are elected by the fellows in that region from amongst the fellows resident within the particular region. The three lay trustees are appointed following a process which includes advertising these positions, completion of an application form, shortlisting against the requirements contained in the role description and person specification, and a panel interview.

Trustees take decisions in the best interests of the College as a whole. They operate in accordance with a code of conduct that makes explicit reference to objectivity in decision-making. A register of interests is maintained in respect of each member of the Trustee Board and Council. On appointment to office trustees receive an induction pack and are invited to attend the annual induction training meeting.

The Trustee Board approves the College's annual budget and forward plan. Once approved, the implementation of the plan is delegated to the staff, who have the authority to work within the parameters set by the Board. Decisions of a strategic nature, or items outwith the agreed budget and plan, must be referred to the Board.

The College wholly owns a subsidiary company, RCPATH Trading Limited, which undertakes certain trading activities. The directors of the company are the College's President, Treasurer, Chief Executive, and an independent director appointed by the College's Trustee Board. The Trustee Board requires that the taxable profits of the company be paid to the College under gift aid.

Responsibilities of the trustees

The trustees are responsible for preparing the report of the trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the College and of the incoming resources and application of resources of the College for that period. In preparing these financial statements, the trustees are required to:

- Select suitable accounting policies and then apply them consistently;
- Observe the methods and principals of the Statement of Recommended Practice (Charities SORP);
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the College will continue in operation.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the College and enable them to ensure that the financial statements comply with the Charities Act 2011, the Charities SORP (FRS 102) and the provisions of the Royal Charter, Ordinances and By-Laws. They are also responsible for safeguarding the assets of the College and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The trustees are responsible for the maintenance and integrity of the College and financial information included on the College's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Royal College of Pathologists
Report of the trustees for the year ended 30 June 2021

Structure, Governance & Management (continued)

Key management personnel remuneration

The trustees consider the Trustee Board and the senior management team comprise the key management personnel of the charity in charge of directing and controlling, running and operating the College on a day to day basis. All trustees give of their time freely and no trustee received remuneration in the year. Details of trustees' expenses are disclosed in note 6 to the accounts.

The pay of all staff, including the senior staff, is reviewed annually by the remuneration committee. Pay is benchmarked against the median of the range for similar roles in similar sized organisations in the London not for profit sector. Remuneration is based upon eight pay bands each with six pay points. Staff progress up the pay scale on successful completion of an annual performance review. The senior management team meet annually to review and agree performance review summaries for all staff, and the remuneration committee reviews and ratifies this decision. The remuneration committee reviews the performance reviews for all of the members of the senior management team and agrees their progression up the pay scale. No employee of the College or of its contractors is paid below the London living wage.

Statement of disclosure to auditor

So far as the trustees are aware, there is no relevant audit information of which the College's auditors are unaware. Additionally, the trustees have taken all the steps they ought to have taken as trustees in order to make themselves aware of any relevant audit information and to establish that the College's auditors are aware of that information.

Reference & administrative details

Trustees

Those who served as trustees during the year were as follows:

Dr Andy Boon	Treasurer
Prof Sarah Coupland	Vice President (appointed 26 November 2020)
Dr Bernie Croal	Chair Scotland regional council (appointed 26 November 2020)
Dr Angharad Davies	Vice President (appointed 26 November 2020)
Ms Jill Gauntlett	Lay Trustee
Prof Shelley Heard	Vice President (demitted office 26 November 2020)
Prof Peter Johnston	Chair Scotland regional council (demitted office 26 November 2020)
	Vice President (appointed 26 November 2020)
Dr Jonathan Kell	Chair Wales regional council
Dr Rachael Liebmann	Vice President (demitted office 26 November 2020)
Dr Tim Littlewood	Vice President (demitted office 26 November 2020)
Prof Jo Martin	President & Chair of Trustee Board (demitted office 26 November 2020)
Prof Ken Mills	Chair Northern Ireland regional council
Dr Mike Osborn	President (appointed 26 November 2020)
	President Elect (to 26 November 2020)
Dr Lance Sandle	Registrar
Mr Robert Smith	Lay Trustee & from 26 November 2020 Chair of Trustee Board
Mr Vincent Voon	Lay Trustee (appointed 13 May 2021)
Dr Esther Youd	Assistant Registrar

The Royal College of Pathologists
Report of the trustees for the year ended 30 June 2021

Reference & administrative details (continued)

Senior Staff

Daniel Ross	Chief Executive
Joanne Brinklow	Director of Learning
Diane Gaston	Director of Communications
Nigel Pollard	Director of Corporate Services
Katherine Timms	Director of Professionalism (from 7 July 2021)

Principal Office

The Royal College of Pathologists, 6 Alie Street, London E1 8QT.
Telephone: 020 7451 6700
E-mail: info@rcpath.org
Website: www.rcpath.org
Registered charity number 261035 in England & Wales

Professional advisors to the College

Auditors:	Begbies, 9 Bonhill Street, London EC2A 4DJ.
Taxation advisors:	Crowe, 55 Ludgate Hill, London EC4M 7JW.
Property advisors:	CBRE, Henrietta House, Henrietta Place, London W1G 0NB.
Solicitors:	Womble Bond Dickinson, 4 More London Riverside, London SE1 2AU.
Investment managers:	Canaccord Genuity, 41 Lothbury, London EC2R 7AE.
Bankers:	HSBC, 69 Pall Mall, St. James's, London SW1Y 5EY.

Approved by the Trustee Board and signed on their behalf by:



Dr Mike Osborn
President
5 August 2021

Independent auditor's report to the trustees of The Royal College of Pathologists

Opinion

We have audited the financial statements of The Royal College of Pathologists (the 'charity') for the year ended 30 June 2021 which comprise the Consolidated Statement of Financial Activities, the Consolidated and College Balance Sheets, the Consolidated Statement of Cash Flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- Give a true and fair view of the state of the parent charity and its subsidiary undertaking's affairs as at 30 June 2021 and of their incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice;
- have been prepared in accordance with the requirements of the Charities Act 2011.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further discussed in the auditor's responsibilities for the financial statements section of our report. We are independent of the charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The trustees are responsible for the other information. The other information comprises the report of the trustees. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Independent auditor's report to the trustees of The Royal College of Pathologists

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the charity and its environment obtained in the course of the audit, we have not identified any material misstatements in the report of the trustees.

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 require us to report to you if, in our opinion:

- The information given in the trustees' report is inconsistent in any material respect with the financial statements; or
- Sufficient accounting records have not been kept; or
- The financial statements are not in agreement with the accounting records; or
- We have not received all the information and explanations we require for our audit.

Responsibilities of trustees

As explained more fully in the trustees' responsibilities statement, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charity's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the trustees either intend to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

We have been appointed as auditors under section 151 of the Charities Act 2011 and report in accordance with the Act and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

Extent to which the audit was capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

- Agreement of the financial statement disclosures to underlying supporting documentation;
- Enquiries and confirmation of management and the trustees as to their identification of any non-compliance with laws or regulations, or any actual or potential claims;
- Review of minutes of Board meetings throughout the period;
- Incorporating unpredictability into the nature, timing and/or extent of testing;
- Evaluation of the selection and application of the accounting policies chosen by the charity;

Independent auditor's report to the trustees of The Royal College of Pathologists

- In relation to the risk of management override of internal controls, by undertaking procedures to review journal entries and evaluating whether there was evidence of bias that represented a risk of material misstatement due to fraud; and
- We assessed the susceptibility of the charity's financial statements to material misstatement, including how fraud might occur by considering the key risks impacting the financial statements.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion.

There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the College's trustees, as a body, in accordance with part 4 of the Charities (Accounts and Reports) Regulations 2008. Our audit work has been undertaken so that we might state to the College's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the College and its trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Begbies
Chartered Accountants
Statutory Auditors

9 Bonhill Street
London
EC2A 4DJ
22/9/2021

Begbies is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006.

The Royal College of Pathologists
Consolidated Statement of Financial Activities for the year ended 30 June 2021

		Unrestricted General Funds	Unrestricted Designated Funds	Restricted Funds	Total Funds 2021	Total Funds 2020
	Note	£	£	£	£	£
Income from:						
Donations & legacies	5	1,483	-	-	1,483	3,892
Charitable activities						
Subscriptions		3,785,867	-	-	3,785,867	3,622,145
Postgraduate education & examinations		2,194,501	-	5,000	2,199,501	894,774
Pathology portal		-	-	175,000	175,000	100,127
International development		14,316	-	-	14,316	108,787
Conferences & academic activities		262,107	-	-	262,107	187,950
Professional standards		52,626	-	-	52,626	59,788
Communications & public engagement		423	-	-	423	5,000
Trading activities		68,324	-	-	68,324	743,280
Investments	4	91,757	-	2,189	93,946	147,619
Other		79,820	-	-	79,820	79,751
Total income		6,551,224	-	182,189	6,733,413	5,953,113
Expenditure on:						
Raising funds						
Trading activities & education centre		945,670	600	-	946,270	1,408,765
Investment management fees		23,557	-	-	23,557	14,472
Charitable activities						
Postgraduate education & examinations		1,737,826	-	13,000	1,750,826	1,672,503
Pathology portal		-	-	138,871	138,871	26,153
International development		355,670	-	5,000	360,670	420,827
Conferences & academic activities		262,873	-	91,943	354,816	385,451
Research		-	-	3,462	3,462	3,884
Professional standards		269,543	-	-	269,543	332,372
Clinical effectiveness		251,717	7,583	-	259,300	299,697
Workforce		313,000	-	-	313,000	337,097
Communications & public engagement		1,095,270	-	820	1,096,090	1,235,916
Advisory committees		391,165	22,584	-	413,749	478,274
Total expenditure	8	5,646,291	30,767	253,096	5,930,154	6,615,411
Net income / (expenditure) before net gains on investments		904,933	(30,767)	(70,907)	803,259	(662,298)
Net gains on investments	14	871,548	-	164,075	1,035,623	150,475
Net income / (expenditure)		1,776,481	(30,767)	93,168	1,838,882	(511,823)
Transfers between funds	19	(604,420)	603,420	1,000	-	-
Net movement in funds		1,172,061	572,653	94,168	1,838,882	(511,823)
Reconciliation of funds:						
Total funds brought forward		6,424,037	28,864,164	1,364,466	36,652,667	37,164,490
Total funds carried forward	19	7,596,098	29,436,817	1,458,634	38,491,549	36,652,667

All of the above results are derived from continuing activities. There were no other recognised gains or losses other than those stated above.


The notes on pages 18 to 32 form part of these accounts.


The Royal College of Pathologists
Consolidated and College Balance Sheets as at 30 June 2021

		Consolidated		College	
	Note	2021 £	2020 £	2021 £	2020 £
Fixed Assets:					
Tangible assets	13	38,403,585	39,036,481	38,403,585	39,036,481
Investments	14	6,294,113	5,281,517	6,294,213	5,281,617
Total fixed assets		44,697,698	44,317,998	44,697,798	44,318,098
Current assets:					
Stocks	15	4,900	11,231	4,900	11,231
Debtors	16	477,465	564,210	844,610	837,148
Cash at bank and in hand		6,143,921	5,202,564	6,138,929	5,104,139
Total current assets		6,626,286	5,778,005	6,988,439	5,952,518
Liabilities:					
Creditors: Amounts falling due within one year	17	(4,040,079)	(4,332,997)	(3,958,939)	(4,270,803)
Net current assets		2,586,207	1,445,008	3,029,500	1,681,715
Total assets less current liabilities		47,283,905	45,763,006	47,727,298	45,999,813
Creditors: Amounts falling due after more than one year	17	(8,792,356)	(9,110,339)	(8,792,356)	(9,110,339)
Total net assets		38,491,549	36,652,667	38,934,942	36,889,474
The funds of the College:					
Unrestricted funds - general funds	21	7,596,098	6,424,037	8,039,491	6,660,843
Unrestricted funds - designated funds	21	29,436,817	28,864,164	29,436,817	28,864,164
Restricted funds	21	1,458,634	1,364,466	1,458,634	1,364,467
Total College funds		38,491,549	36,652,667	38,934,942	36,889,474

The notes on pages 18 to 32 form part of these accounts.

The financial statements were approved by the Trustee Board on 5th August 2021 and signed on behalf of the Trustee Board by


 Dr Mike Osborn
 President


 Dr Andrew Boon
 Treasurer

The Royal College of Pathologists
Consolidated statement of cash flows for the year ended 30 June 2021

	2021 £	2020 £
Cash flows from operating activities:		
Net cash provided by / (used in) operating activities (note 1 below)	1,190,575	267,188
Cash flows from investing activities:		
Dividends and interest received	93,946	147,619
Purchase of property, plant and equipment	(39,688)	(107,407)
Proceeds from the sale of investments	1,529,147	1,768,666
Purchase of investments	(1,680,003)	(821,936)
Net cash provided by / (used in) investing activities	(96,598)	986,942
Cash flows from financing activities		
Repayment of borrowing	(326,503)	(2,963,311)
Cash inflows from new borrowing	-	172,530
Net cash provided by / (used in) financing activities	(326,503)	(2,790,781)
Change in cash and cash equivalents in the year	767,474	(1,136,650)
Cash and cash equivalents at the beginning of the year	5,380,746	6,517,396
Cash and cash equivalents at the end of the year (note 2 below)	6,148,220	5,380,746

Notes to the statement of cash flows

1. Reconciliation of net income/(expenditure) to net cash flow from operating activities

	2021 £	2020 £
Net income/(expenditure) for the year (as per the statement of financial activities)	1,838,882	(511,823)
Adjustments for:		
Depreciation charges	672,584	675,668
(Gains)/losses on investments	(1,035,623)	(150,475)
Dividends and interest	(93,946)	(147,619)
(Increase)/decrease in stocks	6,331	2,501
(Increase)/decrease in debtors	86,745	120,066
Increase/(decrease) in creditors	(284,398)	278,870
Net cash provided by / (used in) operating activities	1,190,575	267,188

2. Analysis of cash and cash equivalents

	2021 £	2020 £	Change in year £
Cash at bank	6,143,921	5,202,564	941,357
Cash at broker	4,299	178,182	(173,883)
Total cash and cash equivalents	6,148,220	5,380,746	767,474

Analysis of changes in net debt

	2021 £	Cash flows £	2020 £
Cash	6,143,921	941,357	5,202,564
Cash at broker	4,299	(173,883)	178,182
Loans falling due within one year	(317,830)	8,520	(326,350)
Loans falling due more than one year	(8,792,356)	317,983	(9,110,339)
	(2,961,966)	1,093,977	(4,055,943)

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

1. Accounting policies

(a) Basis of preparation

The financial statements have been prepared in accordance with the Statement of Recommended Practice: Accounting and Reporting by Charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) issued on 16 July 2014 and the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Charities Act 2011 and UK Generally Accepted Practice as it applies from 1 January 2019.

(b) Public benefit entity

The College meets the definition of a public benefit entity under FRS 102.

(c) Going concern

The trustees consider that there are no material uncertainties about the College's ability to continue as a going concern.

The trustees do not consider that there are any sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next reporting period.

(d) Group financial statements

The financial statements consolidate the results of the College and its wholly owned subsidiary, RCPATH Trading Limited, on a line by line basis.

(e) Income

Income is included on a receivable basis. Income from subscriptions, trainee registration and fees for participation in the continuing professional development scheme are recognised in the accounting period to which the services covered by those fees relate. Fees received in advance are accounted for as deferred income within creditors.

Income from examinations and conferences & academic activities are included in the accounting period in which the examination or conference takes place.

(f) Expenditure and irrecoverable VAT

Expenditure is recognised once there is a legal or constructive obligation to make a payment to a third party, it is probable that settlement will be required and the amount of the obligation can be measured reliably.

Expenditure on charitable activities includes the costs of delivering examinations, training and educational activities undertaken to further the purposes of the College and their associated support costs.

Irrecoverable VAT is charged as a cost against the activity for which the expenditure was incurred.

(g) Allocation of support costs

Resources expended are allocated to the particular activity where the cost relates directly to that activity. However, the cost of overall direction and administration of each activity, comprising the salary and overhead costs of the central function, is apportioned, based on staff numbers engaged in each activity. Governance costs are apportioned on the same basis.

(h) Foreign currencies

Transactions denominated in foreign currencies are translated into sterling at the rate of exchange prevailing at the time of the transaction.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

(i) Tangible fixed assets and depreciation

Tangible fixed assets costing more than £1,000 are capitalised. Depreciation is charged on fixed assets at rates calculated to write off their cost evenly as follows:

Freehold buildings	over 50 years to residual value
Land	not depreciated
Fixtures, fittings and office equipment	over 3 to 5 years
Computer systems and software	over 2 to 5 years

The College has adopted an accounting policy of capitalising borrowing costs that are directly attributable to the construction of the new building. From the date of occupation of the premises in November 2019 interest has been charged to the Statement of Financial Activities.

As explained in note 14, heritage assets have not been capitalised or depreciated as no reliable value can be attributed.

(j) Operating leases

Instalments under operating lease commitments arising in the year are included in the Statement of Financial Activities for the year in which they arise.

(k) Stocks

These are stated at the lower of cost and net realisable value.

(l) Funds accounting

Funds held by the College are:

Unrestricted general funds - these are funds which can be used in accordance with the charitable objects at the discretion of the Trustee Board.

Unrestricted Designated funds - these are funds set aside by the Trustee Board out of unrestricted general funds for specific future purposes or projects.

Restricted funds - these are funds that can only be used for particular restricted purposes within the objects of the College. Restrictions arise when specified by the donor or where funds are raised for particular restricted purposes.

Further explanation of the nature and purpose of each fund is included in the notes to the accounts.

(m) Pension schemes

The College participates in 2 pension schemes: the defined benefit scheme, operated by SAUL (Superannuation Arrangements of the University of London) and the defined contribution scheme operated by Royal London.

For SAUL, the actuarial valuation applies to SAUL as a whole and does not identify surpluses or deficits applicable to individual employers. As a whole, the market value of SAUL's assets at 31 March 2020 was £3,612 million representing 94% of the liabilities. The market value of SAUL's assets at 30 April 2021 was £4,369 million representing 109% of the estimated liabilities. It is not possible to identify an individual Employer's share of the underlying assets and liabilities of SAUL. The College accounts for its participation in SAUL as if it were a defined contribution scheme and pension costs are based on the amounts actually paid (i.e. cash amounts) in accordance with paragraphs 28.11 of FRS102. Although there was a Technical Provisions deficit at 31 March 2020, allowing for post valuation experience to 30 April 2020, Saul had a Technical Provisions surplus. Therefore no deficit contributions were required following the 2020 valuation and there is no defined benefit liability (i.e. the present value of any deficit contributions due to SAUL) to be recognised by the College.

For the Royal London scheme, the pension charge represents the contributions payable by the College.

(n) Research grants

Grants payable and receivable are recognised in the statement of financial activities in the period to which the grant relates and where conditions relating to the grant have been fulfilled.

(o) Termination payments

Termination payments are recognised in the Statement of Financial Activities when incurred.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

(p) Fixed asset investments

Fixed asset investments are included at their fair values (market value) at the balance sheet date. Any gain or loss on revaluation is taken to the Statement of Financial Activities.

(q) Debtors

Trade and other debtors are recognised at the settlement amount due after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

(r) Cash at bank and in hand

Cash at bank and cash in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or similar account. Cash balances exclude any funds held on behalf of service users.

(s) Creditors and provisions

Creditors and provisions are recognised where the charity has a present obligation resulting from a past event that will probably result in the transfer of funds to a third party and the amount due to settle the obligation can be measured or estimated reliably. Creditors and provisions are normally recognised at their settlement amount after allowing for any trade discounts due.

The charity only has financial assets and financial liabilities of a kind that qualify as basic financial instruments.

2. Trading income and expenditure

RCPATH Trading Limited

The College owns 100% of RCPATH Trading Limited (Company number 04535296). The main activities of the company are to undertake various trading activities of the College. The company supplies consultancy services under the trading name of RCPATH consulting, and operates a commercial conference centre called Events@No6 at the College's Alie Street premises. The latter operation commenced in January 2019 and is currently in a planned loss making start-up situation. It will donate future taxable profits to the College under gift aid. Trading results extracted from its audited accounts are as follows:

	2021	2020
	£	£
Profit & Loss account		
Turnover	68,325	852,289
Cost of sales and administrative expenses	(274,909)	(823,033)
Net profit	(206,584)	29,256
Payable under gift aid to The Royal College of Pathologists	-	-
(Loss) / Profit retained in RCPATH Trading Limited	(206,584)	29,256
Balance sheet		
	2021	2020
	£	£
Debtors	19,402	50,031
Cash at bank	4,993	98,425
	24,395	148,456
Creditors: amounts falling due within one year	(81,139)	(62,193)
Net current assets	(56,744)	86,263
Creditors: amounts falling due after more than one year	(386,547)	(322,970)
Net assets / (liabilities)	(443,291)	(236,707)
Share capital	100	100
Profit and loss account	(443,391)	(236,807)
Capital and reserves at 30 June	(443,291)	(236,707)

The College has agreed a formal loan to financially support its trading subsidiary company's losses during the start-up phase of its conference centre operations, and due to the effects of Covid-19. The loan is for a period of up to 10 years.

The College purchased £Nil (2020 - £109,009) of services from its wholly owned subsidiary during the year and received a payment of £Nil (2020 - £22,500) towards the cost of shared overheads. In accordance with the SORP, these transactions have been removed on consolidation.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

3. Detailed comparatives for the statement of financial activities in 2020

	Unrestricted General Funds £	Unrestricted Designated Funds £	Restricted Funds £	Total Funds 30 June 2020 £
Income from:				
Donations & legacies	3,892	-	-	3,892
Charitable activities				
Subscriptions	3,622,145	-	-	3,622,145
Postgraduate education & examinations	831,274	-	63,500	894,774
Digital education project	-	-	100,127	100,127
International development	50,337	-	58,450	108,787
Conferences & academic activities	100,112	-	87,838	187,950
Professional standards	59,788	-	-	59,788
Communications & public engagement	-	-	5,000	5,000
Trading activities	743,280	-	-	743,280
Investments	139,066	-	8,553	147,619
Other	79,751	-	-	79,751
Total income	5,629,645	-	323,468	5,953,113
Expenditure on:				
Raising funds				
Trading activities	1,396,959	11,806	-	1,408,765
Investment management fees	14,472	-	-	14,472
Charitable activities				
Postgraduate education & examinations	1,661,517	-	10,986	1,672,503
Digital education project	-	-	26,153	26,153
International development	419,748	-	1,079	420,827
Conferences & academic activities	364,815	-	20,636	385,451
Research	-	-	3,884	3,884
Professional standards	330,716	-	1,656	332,372
Clinical effectiveness	291,658	8,039	-	299,697
Workforce	337,097	-	-	337,097
Communications & public engagement	1,232,585	-	3,331	1,235,916
Advisory committees	478,274	-	-	478,274
Total expenditure	6,527,841	19,845	67,725	6,615,411
Net income / (expenditure) before net gains on investments	(898,196)	(19,845)	255,743	(662,298)
Net gains on investments	94,274	-	56,201	150,475
Net income / (expenditure)	(803,922)	(19,845)	311,944	(511,823)
Transfers between funds	466,447	(419,951)	(46,496)	-
Net movement in funds	(337,475)	(439,796)	265,448	(511,823)
Reconciliation of funds:				
Total funds brought forward	6,761,512	29,303,960	1,099,018	37,164,490
Total funds carried forward	6,424,037	28,864,164	1,364,466	36,652,667

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

4. Income from investments

	2021 £	2020 £
Bank deposit interest	6,164	33,873
Income from UK listed investments	51,077	75,618
Income from overseas listed investments	7,410	12,053
Income from investment properties	29,295	26,075
	<u>93,946</u>	<u>147,619</u>

5. Donations & Legacies

	2021 £	2020 £
College members	850	2,648
Other donations	633	1,244
	<u>1,483</u>	<u>3,892</u>

6. Staff costs, trustee remuneration and expenses, and the cost of key management personnel

	2021 £	2020 £
The total cost of salaries and wages were	£	£
Salaries and wages	2,391,857	2,491,341
Redundancy and termination costs	-	32,600
Social security costs	238,755	252,271
Pension contributions	328,813	324,735
	<u>2,959,425</u>	<u>3,100,947</u>

The redundancy and termination costs were settled and paid at the balance sheet date.

The number of employees whose emoluments exceeded £60,000 in the year was as follows:

	2021 No.	2020 No.
£60,001 - £70,000	-	1
£70,001 - £80,000	3	3
£120,001 - £130,000	1	1

Contributions were made to a defined benefit pension scheme amounting to £57,968 (2020 - £65,080) in respect of the staff noted above.

The key management personnel of the charity comprise the trustees, the Chief Executive and the 3 (2020 - 4) other senior managers. The total employee remuneration of the key management personnel amounted to £465,666 (2020 - £577,255).

The charity trustees were not paid or received any other benefits from employment with the charity in the year (2020 - £Nil). No charity trustee received payment for professional or other services supplied to the charity (2020 - £Nil).

Travel, subsistence and accommodation costs incurred amounting to £209 (2020 - £27,179) were reimbursed to 2 (2020 - 13) members of the Trustee Board.

During the year there were no other related party transactions (2020 - £Nil).

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

7. Staff numbers

The average number of employees (head count based on number of staff employed) during the year was as follows:

	2021 No.	2020 No.
Postgraduate education & examinations	20.0	19.5
Conferences & academic activities	4.9	4.6
Professional standards	4.4	4.2
Clinical effectiveness	2.8	3.8
Advisory committees	4.5	4.9
Communications & public relations	13.4	13.6
Workforce	4.2	4.3
Education centre	1.2	1.6
International development	4.8	5.8
	<u>60.2</u>	<u>62.3</u>
The average number of full time equivalent employees during the year was	<u>54.8</u>	<u>56.1</u>

8. Total expenditure
(Current year)

	Direct Costs £	Staff Costs £	Support Costs £	Total 2021 £	Total 2020 £
Trading activities & education centre	210,623	65,194	670,453	946,270	1,408,765
Investment management fee	23,557	-	-	23,557	14,472
Postgraduate education & examinations	402,381	908,043	440,402	1,750,826	1,672,503
Pathology Portal	64,099	74,772	-	138,871	26,153
International development	10,211	213,985	136,474	360,670	420,827
Conferences & academic activities	(7,101)	246,775	115,142	354,816	385,451
Research	3,462	-	-	3,462	3,884
Professional standards	3,713	155,596	110,234	269,543	332,372
Clinical Effectiveness	10,248	176,257	72,795	259,300	299,697
Workforce	888	203,570	108,542	313,000	337,097
Communications & public engagement	128,893	687,045	280,152	1,096,090	1,235,916
Advisory committees	55,626	228,188	129,935	413,749	478,274
Total for the year ended 30 June 2020	<u>906,600</u>	<u>2,959,425</u>	<u>2,064,129</u>	<u>5,930,154</u>	<u>6,615,411</u>

8. Total expenditure
(Prior year)

	Direct Costs £	Staff Costs £	Support Costs £	Total 2020 £
Trading activities & education centre	749,178	79,510	580,077	1,408,765
Investment management fee	14,472	-	-	14,472
Postgraduate education & examinations	213,681	923,346	535,476	1,672,503
Pathology Portal	17,069	9,084	-	26,153
International development	13,720	276,133	130,974	420,827
Conferences & academic activities	58,532	225,820	101,099	385,451
Research	3,884	-	-	3,884
Professional standards	6,444	215,971	109,957	332,372
Clinical Effectiveness	11,343	219,034	69,320	299,697
Workforce	1,086	231,283	104,728	337,097
Communications & public engagement	277,870	682,734	275,312	1,235,916
Advisory committees	64,104	238,032	176,138	478,274
Total for the year ended 30 June 2019	<u>1,431,383</u>	<u>3,100,947</u>	<u>2,083,081</u>	<u>6,615,411</u>

Governance costs are contained within support costs and are not shown separately. They comprise the expenditure in relation to the trustee board of £Nil (2020 - £16,978), trustee recruitment costs of £8,617 (2020 - £Nil), legal costs of £20,832 (2020 - £45,862) and the auditors remuneration as detailed in note 9.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

9. Net incoming resources for the year

	2021	2020
	£	£
This is stated after charging:		
Depreciation	672,584	675,668
Auditor's remuneration - external audit	9,500	9,394
Auditor's remuneration - payroll bureau services	5,429	6,141
Trustee liability indemnity insurance	831	1,024
	<u> </u>	<u> </u>

10. Pensions

The College participates in 2 pension schemes: the defined benefit scheme, operated by SAUL (Superannuation Arrangements of the University of London) and the defined contribution scheme, operated by Royal London.

SAUL scheme

The College participates in the Superannuation Arrangements of the University of London ("SAUL"), which is a centralised defined benefit scheme within the United Kingdom and was contracted-out of the Second State Pension (prior to April 2016).

SAUL is an independently-managed pension scheme for the non-academic staff of over 50 colleges and institutions with links to higher education.

Pension benefits accrued within SAUL currently build up on a Career Average Revalued Earnings ("CARE") basis.

The College is not expected to be liable to SAUL for any other current participating employer's obligations under the Rules of SAUL, but in the event of an insolvency of any participating employer within SAUL, an amount of any pension shortfall (which cannot otherwise be recovered) in respect of that employer, may be spread across the remaining participating employers and reflected in the next actuarial valuation.

Funding Policy

SAUL's statutory funding objective is to have sufficient and appropriate assets to meet the costs incurred by the Trustee in paying SAUL's benefits as they fall due (the "Technical Provisions"). The Trustee adopts assumptions which, taken as a whole, are intended to be sufficiently prudent for pensions and benefits already in payment to continue to be paid and for the commitments which arise from Members' accrued pension rights to be met.

The Technical Provisions assumptions include appropriate margins to allow for the possibility of events turning out worse than expected. However, the funding method and assumptions do not completely remove the risk that the Technical Provisions could be insufficient to provide benefits in the future.

A formal actuarial valuation of SAUL is carried out every three years by a professionally qualified and independent actuary. The last actuarial valuation was carried out with an effective date of 31 March 2020. Informal reviews of SAUL's position, reflecting changes in market conditions, cash flow information and new accrual of benefits, are carried out between formal valuations.

The funding principles were agreed by the Trustee and Employers in June 2021 and are due to be reviewed again at SAUL's next formal valuation in 2023.

At the 31 March 2020 valuation SAUL was 94% funded on its Technical Provisions basis. However, market movements following the valuation date were positive and the Trustees and the Employers agreed to allow for post-valuation experience up to 30 April 2021. As SAUL was in surplus on its Technical Provisions basis at that date, no deficit contributions were required. However, the Trustee and Employers have agreed that the ongoing Employers' contributions will increase from a rate of 16% of CARE salaries to 19% of CARE salaries from 1 April 2022 and to 21% of CARE salaries from 1 January 2023.

Royal London scheme

The College operates a defined contribution scheme for staff other than senior managers who joined the College after 1 April 2021. The assets of the scheme are held separately from those of the College in an independently administered fund with Royal London. The pension cost charged represents the contributions payable under the scheme by the College to the fund. The College has no liability under the scheme other than for payment of these contributions.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2020

11. Allocation of costs

Support costs as per note 8 above, can be broken down by activity, as follows:

(Current year)	Information technology £	Finance £	Secretariat £	Premises £	Total £
Postgraduate education & examinations	166,005	99,942	25,943	148,512	440,402
International development	54,509	32,796	8,513	40,656	136,474
Conferences & academic activities	46,183	28,139	7,304	33,516	115,142
Professional standards	45,477	27,363	7,103	30,291	110,234
Clinical effectiveness	29,996	18,048	4,685	20,066	72,795
Workforce	41,607	25,034	6,498	35,403	108,542
Communications & public engagement	136,046	70,250	18,236	55,620	280,152
Trading activities & education centre	20,959	12,614	3,274	633,606	670,453
Advisory committees	48,702	29,303	7,607	44,323	129,935
Total support costs year ended 30 June 2021					2,064,129

(Prior year)	Information technology £	Finance £	Secretariat £	Premises £	Total £
Postgraduate education & examinations	106,696	128,090	33,179	267,511	535,476
International development	31,989	38,404	9,948	50,633	130,974
Conferences & academic activities	17,814	21,387	5,540	56,358	101,099
Professional standards	27,009	32,425	8,399	42,124	109,957
Clinical effectiveness	17,814	21,387	5,540	24,579	69,320
Workforce	24,711	29,665	7,684	42,668	104,728
Communications & public engagement	69,343	83,247	21,563	101,159	275,312
Trading activities & education centre	11,684	14,028	3,186	551,179	580,077
Advisory committees	36,587	43,923	9,974	85,654	176,138
Total support costs year ended 30 June 2020					2,083,081

The basis of allocation of support costs is as follows:

Information technology costs have been allocated on the basis of the number of computers used by each department.

Finance costs and secretariat costs have been allocated on the basis of the headcount.

Premises costs have been allocated on the basis of the usage of floor areas.

Salary costs as per note 8 above can be further analysed as follows:

(Current year)	Directly Attributable £	HR, Payroll & IT £	Finance £	Secretariat £	Premises £	Total £
Postgraduate education & examinations	632,280	78,602	95,604	61,542	40,015	908,043
Digital education project	74,772	-	-	-	-	74,772
International development	130,554	23,529	28,977	18,740	12,185	213,985
Conferences & academic activities	174,648	20,595	24,999	16,079	10,454	246,775
Professional standards	86,088	19,524	24,183	15,635	10,166	155,596
Clinical effectiveness	129,944	13,282	16,013	10,313	6,705	176,257
Workforce	139,519	18,228	22,218	14,304	9,301	203,570
Communications & public engagement	506,657	51,752	62,395	40,141	26,100	687,045
Trading activities & education centre	33,208	8,953	11,139	7,208	4,686	65,194
Advisory committees	152,839	21,454	26,264	16,744	10,887	228,188
Total salary costs year ended 30 June 2021						2,959,425

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

11. Allocation of costs (continued)

(Prior year)	Directly Attributable £	HR, Payroll & IT £	Finance £	Secretariat £	Premises £	Total £
Postgraduate education & examination	626,979	98,472	100,990	55,792	41,113	923,346
Digital education project	9,084	-	-	-	-	9,084
International development	186,035	29,867	30,723	16,989	12,519	276,133
Conferences & academic activities	168,251	19,836	19,400	10,555	7,778	225,820
Professional standards	141,224	24,578	25,550	14,174	10,445	215,971
Clinical effectiveness	167,486	18,018	17,292	9,349	6,889	219,034
Workforce	161,909	23,281	23,569	12,968	9,556	231,283
Communications & public engagement	487,067	66,128	66,333	36,390	26,816	682,734
Trading activities & education centre	55,344	8,094	8,215	4,524	3,333	79,510
Advisory committees	157,786	26,480	27,401	15,179	11,186	238,032
Total salary costs year ended 30 June 2020						<u>3,100,947</u>

The basis of allocation of salary costs is as follows:

Information technology costs have been allocated on the basis of the number of computers used by each department.

Finance costs, secretariat costs, premises costs and HR & payroll costs have been allocated on the basis of the headcount.

12. Taxation

As a registered charity the College is exempt from corporation tax since all income is applied for charitable purposes.

13. Tangible fixed assets

Consolidated and College	Freehold Property £	Computer Systems & Software £	Fixtures, Fittings & Equipment £	Total £
Cost or valuation				
At 1 July 2020	38,625,892	1,199,696	902,149	40,727,737
Additions	9,628	14,602	15,458	39,688
Disposals	-	-	-	-
At 30 June 2021	<u>38,635,520</u>	<u>1,214,298</u>	<u>917,607</u>	<u>40,767,425</u>
Depreciation				
At 1 July 2020	459,883	795,322	436,051	1,691,256
Provided in year	372,710	143,064	156,810	672,584
Disposals	-	-	-	-
At 30 June 2021	<u>832,593</u>	<u>938,386</u>	<u>592,861</u>	<u>2,363,840</u>
Net book value at 30 June 2021	<u>37,802,927</u>	<u>275,912</u>	<u>324,746</u>	<u>38,403,585</u>
Net book value at 30 June 2020	<u>38,166,009</u>	<u>404,374</u>	<u>466,098</u>	<u>39,036,481</u>

In addition to the capitalised fixed assets held for the Charity's own use, the College also has a number of assets on trust for retention in perpetuity as a permanent record of the College's history. These comprise a unique collection of paintings depicting the College's 19 Presidents since its founding in 1962, together with a library collection and other artefacts whose intrinsic value is also bound up with the College's history. These are irreplaceable originals to which no reliable cost or value can be attributed and accordingly these assets have not been capitalised in the financial statements.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

14. Investments

	Consolidated		College	
	2021	2020	2021	2020
	£	£	£	£
Market value at 1 July 2020	5,281,517	5,164,735	5,281,617	5,164,835
Additions at cost	1,680,003	1,000,118	1,680,003	1,000,118
Reclassification from Tangible Fixed Assets	-	734,855	-	734,855
Disposals at market value	(1,703,030)	(1,768,666)	(1,703,030)	(1,768,666)
Net gain on revaluation	1,035,623	150,475	1,035,623	150,475
Market value at 30 June 2021	6,294,113	5,281,517	6,294,213	5,281,617
Historical cost at 30 June 2021	4,350,188	3,698,133	4,350,288	3,698,233
Investments at market value comprised:				
UK listed fixed interest securities	126,488	131,565	126,488	131,565
UK listed equity shares	1,294,232	553,856	1,294,232	553,856
UK listed investment trusts and unit trusts	1,718,912	1,381,856	1,718,912	1,381,856
Overseas listed fixed interest securities	107,460	100,430	107,460	100,430
Overseas listed investment trusts and unit trusts	1,298,628	2,194,538	1,298,628	2,194,538
Cash held by investment manager awaiting reinvestment	4,299	184,417	4,299	184,417
Investment property	698,112	734,855	698,112	734,855
Unlisted investments	-	-	100	100
Market value as at 30 June 2021	6,294,113	5,281,517	6,294,213	5,281,617

The investment property is valued by reference to the market value of similar properties in the development, which, in the opinion of the Trustees, is the fair value at 30 June 2021.

Unlisted investments at cost comprise:

RCPATH Trading Limited - 100 ordinary shares of £1 each

	2021	2020
	£	£
	100	100
	100	100

The College owns 100% of the ordinary share capital of RCPATH Trading Limited, company number 4535296, which has been consolidated as a subsidiary undertaking throughout. The registered address of the company is 6 Alie Street, London E1 8QT.

15. Stocks

Consolidated and College

Memorabilia for resale
Wines

	2021	2020
	£	£
	4,900	10,381
	-	850
	4,900	11,231

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

16. Debtors

	Consolidated		College	
	2021	2020	2021	2020
	£	£	£	£
Trade debtors	27,327	68,798	7,925	18,766
Prepayments and accrued income	137,470	187,956	137,470	187,956
Other debtors	312,668	307,456	312,668	307,456
Amounts due from subsidiary undertaking	-	-	386,547	322,970
	<u>477,465</u>	<u>564,210</u>	<u>844,610</u>	<u>837,148</u>

The amount due from the subsidiary undertaking of £386,547 is due after more than one year.

17. Creditors

	Consolidated		College	
	2021	2020	2021	2020
	£	£	£	£
Amounts falling due within one year				
Deferred income (note 18)	2,777,290	3,129,527	2,746,855	3,129,527
Trade Creditors	183,253	217,182	138,698	190,262
Bank loan	317,830	326,350	317,830	326,350
Other creditors	92,992	131,123	92,992	98,249
Taxation and social security	63,685	61,595	63,685	61,595
Accruals	605,029	467,220	598,879	464,820
	<u>4,040,079</u>	<u>4,332,997</u>	<u>3,958,939</u>	<u>4,270,803</u>

Amounts falling due after more than one year
Consolidated and College

	2021	2020
	£	£
Bank loan - amount due between 2 and 5 years	1,323,430	1,302,329
Bank loan - amount due after 5 years	7,468,926	7,808,010
	<u>8,792,356</u>	<u>9,110,339</u>

The loan is a commercial mortgage loan secured by a first legal charge over the land and building owned by the College at 6 Alie Street. The original total loan amount was £12 million. Of this, £2.5 million of capital was repaid in January 2020. Interest is charged at 1.5% above base rate.

18. Deferred income

	Consolidated		College	
	2021	2020	2021	2020
	£	£	£	£
Balance at 1 July 2020	3,129,527	2,286,976	3,129,527	2,225,506
Amount released to incoming resources	(3,129,527)	(2,286,976)	(3,129,527)	(2,225,506)
Amount deferred in the year	2,777,290	3,129,527	2,746,855	3,129,527
Balance as at 30 June 2021	<u>2,777,290</u>	<u>3,129,527</u>	<u>2,746,855</u>	<u>3,129,527</u>

Deferred income comprises income from subscriptions, trainee registration, examinations, conferences and continuing professional development, received in advance, that will form part of incoming resources during the following financial year.

The College was in receipt of £198,570 of statutory funding for the year (2020 - £139,522) by way of grants for specific projects and the Coronavirus Job Retention Scheme. All conditions relating to these grants have been met in full.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

19. Movements in Funds (Current year)	Balance at 1 July 2020 £	Incoming Resources £	Outgoing Resources £	Transfers £	Gains and Losses £	Balance at 30 June 2021 £
<i>Restricted funds</i>						
Research Pool Fund	25,725	15	(3,462)	-	-	22,278
Oliver Memorial Fund	145,895	596	(15,621)	-	33,345	164,215
Bhagwan Singh Fund	62,853	212	-	-	25,421	88,486
Flynn Lecture & Bursary Fund	153,733	829	-	-	85,494	240,056
Kohn Memorial Fund	28,707	2	-	-	12,581	41,290
Developmental Pathology Fund	18,814	2	-	-	7,234	26,050
Medical Examiner Training Fund	101,491	68	(76,942)	-	-	24,617
E-learning Project Fund	50,243	28	-	-	-	50,271
International Challenge Events Fund	27,705	16	(5,000)	-	-	22,721
Public Engagement Fund	2,529	1	-	-	-	2,530
Furness Prize Fund	559	-	(200)	-	-	359
Summer School Fund	14,521	5,008	-	1,000	-	20,529
William Tong Memorial Fund	2,686	2	-	-	-	2,688
Pathology Portal Fund	566,112	175,319	(138,871)	-	-	602,560
MTI Fund	50,243	28	-	-	-	50,271
Arise Project Fund	57,650	32	-	-	-	57,682
Galea Prize Fund	5,000	3	-	-	-	5,003
Undergraduate Pathology Fund	50,000	28	(13,000)	-	-	37,028
	1,364,466	182,189	(253,096)	1,000	164,075	1,458,634
<i>Unrestricted Funds</i>						
Designated funds						
Property Fund	28,729,321	-	-	(36,580)	-	28,692,741
Cancer Reporting Fund	46,649	-	(7,583)	-	-	39,066
EQA Fund	50,000	-	-	-	-	50,000
Premises Marketing Fund	38,194	-	(600)	-	-	37,594
60th Anniversary Fund	-	-	-	10,000	-	10,000
Examinations Development Fund	-	-	-	100,000	-	100,000
Technology Replacement Fund	-	-	-	400,000	-	400,000
Major Repairs Fund	-	-	-	100,000	-	100,000
Corporate Membership Fund	-	-	(22,584)	30,000	-	7,416
General unrestricted fund	6,424,037	6,551,224	(5,646,291)	(604,420)	871,548	7,596,098
Total Funds	36,652,667	6,733,413	(5,930,154)	-	1,035,623	38,491,549

The transfer to the summer schools fund represents the College's share of funding for this activity to match that made by other individual pathology associations who jointly run this event.

The transfer from the designated property fund is so as to maintain the balance on the fund being equal to the net book value of the land and buildings less the capital outstanding on the mortgage loan.

The transfer to the designated 60th anniversary fund is to set aside monies to support the 60th anniversary of the College which will be on 21 June 2022, and for events to commemorate this occasion.

The transfer to the examinations development fund is to set aside money in support of the digitisation of examinations.

The transfer to the major repairs fund is to establish a sinking fund for replacement of plant and equipment at Alie Street.

The transfer to the corporate membership fund is to pump prime the project to attract a number of corporates into membership of the College.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

19. Movements in Funds (Prior period)	Balance at 1 July 2019 £	Incoming Resources £	Outgoing Resources £	Transfers £	Gains and Losses £	Balance at 30 June 2020 £
<i>Restricted funds</i>						
Research Pool Fund	29,468	141	(3,884)	-	-	25,725
Oliver Memorial Fund	130,540	1,792	(1,115)	-	14,678	145,895
Bhagwan Singh Fund	55,222	597	-	-	7,034	62,853
Flynn Lecture Fund	103,938	805	(600)	-	49,590	153,733
Kohn Memorial Fund	39,472	1,080	(1,000)	-	(10,845)	28,707
Developmental Pathology Fund	22,449	621	-	-	(4,256)	18,814
Medical Examiner Training Fund	80,366	88,257	(20,636)	(46,496)	-	101,491
Quality in Pathology Fund	1,656	-	(1,656)	-	-	-
E-learning Project Fund	50,000	243	-	-	-	50,243
International Challenge Events Fund	27,567	138	-	-	-	27,705
Public Engagement Fund	2,931	14	(416)	-	-	2,529
Furness Prize Fund	755	4	(200)	-	-	559
Neera Patel Fund	-	-	-	-	-	-
Summer School Fund	11,981	13,526	(10,986)	-	-	14,521
William Tong Memorial Fund	2,673	13	-	-	-	2,686
Digital Now Fund	490,000	102,265	(26,153)	-	-	566,112
MTI Fund	50,000	243	-	-	-	50,243
Arise Project Fund	-	58,729	(1,079)	-	-	57,650
Galea Prize Fund	-	5,000	-	-	-	5,000
Undergraduate Pathology Fund	-	50,000	-	-	-	50,000
	1,099,018	323,468	(67,725)	(46,496)	56,201	1,364,466
<i>Unrestricted Funds</i>						
Designated Property Fund	29,149,272	-	-	(419,951)	-	28,729,321
Designated Cancer Reporting Fund	54,688	-	(8,039)	-	-	46,649
Designated EQA Fund	50,000	-	-	-	-	50,000
Designated Premises Marketing Fund	50,000	-	(11,806)	-	-	38,194
General unrestricted fund	6,761,512	5,629,645	(6,527,841)	466,447	94,274	6,424,037
Total Funds	37,164,490	5,953,113	(6,615,411)	-	150,475	36,652,667

20. Restricted and designated funds

The Research Pool Fund was established in 1995 to promote research in pathology.

The Oliver Memorial Fund was established to perpetuate the name of Percy Lane Oliver, by providing an annual national award for service to blood transfusion, and for the furtherance of knowledge relating to the principles and practices of blood transfusion.

The Bhagwan Singh Fund was established in 1982 to sponsor occasional visits between the UK and Malaysia, to promote Malaysian pathology.

The Flynn Lecture Fund was established in 1998 to fund an annual lecture in clinical biochemistry. Additionally, a number of bursaries are awarded to trainees to attend the scientific meeting where the lecture is delivered.

The Kohn Memorial Fund was established in 1987 to fund an annual lecture mainly in clinical biochemistry.

The Developmental Pathology Fund was established in July 2004 as a gift from the Developmental Pathology Society to fund an occasional named "Emery" lecture in paediatric pathology.

The Medical Examiner Training Fund was established by grant in aid from the Department of Health (England) to support the development of e-learning materials and face to face training for medical examiners of the cause of death.

The E-learning Project Fund was established to fund the provision of electronic learning for pathology consultants and trainees, and is supported by grant in aid from e-Learning for Healthcare, part of Health Education England.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

20. Restricted and designated funds (continued)

The Pathology Portal Fund was established by grant in aid from Health Education England to develop and implement a competence based model of learning support on a digital platform for pathology which would include digitisation of examinations.

The International Challenge Events Fund was established to raise funds for the College's international development projects.

The Public Engagement fund was established by way of a prize awarded by The Royal Society to Dr Suzy Lishman for her work on behalf of the College on public engagement and is available for the College's public engagement work.

The Furness Prize fund was established in 2010 to fund an annual prize in science communication in relation to pathology.

The Neera Patel Memorial Fund was established by way of gift from the family of the late Neera Patel to provide funds to support a named College lecture in Neera's name and also a travelling bursary award for trainees in head, neck or breast pathology.

The Summer School Fund was established to collect and administer the funds to run the annual pathology summer school, which is funded and run in association with a number of pathology specialist societies.

The William Tong Memorial Fund was established by way of donations from the family and friends of the late William Tong to provide an annual prize to a trainee in virology on the basis of a piece of work submitted as a poster.

The MTI Fund was established by grant in aid from the West London Cancer Alliance to deliver training opportunities across London for international medical graduates in histopathology as part of the medical training initiative.

The Arise Project Fund was established by Grant in Aid from the European Union to fund the College's involvement in a multi-partner research project to share and spread best practice in newborn screening, diagnosis and treatment of Sickle Cell Disease, leading to improvements in overall disease outcome.

The undergraduate pathology fund was established by Grant in Aid from Health Education England to create undergraduate and foundation taster events and materials to support recruitment in pathology.

The Galea Prize Fund was established by way of gift from Metabolic Support UK to fund an annual prize to encourage research into a therapy that will ameliorate and in future help find a cure for metabolic disorders and inherited rare conditions.

The designated property fund was established following the disposal of the College's previous functional property to hold the funds that will be required (excluding the amount to be borrowed by way of mortgage loan) for the acquisition and redevelopment of the Alie Street premises.

The designated cancer reporting fund was established to fund the College's share of the commitment to the International Collaboration on Cancer Reporting, whose aims are to pursue global harmonisation of cancer datasets for pathology reporting. The ICCR has been incorporated as a not for profit organisation and the College is a foundation member.

The designated EQA fund was established to fund initial expenditure on interpretive EQA and technical EQA monitoring systems.

The designated premises marketing fund was established for expenditure on the marketing of the facilities at Alie Street that will generate revenue for the College in subsequent years.

The designated 60th anniversary fund was established to fund activities associated with the 60th anniversary of the founding of the College, which will be on 21st June 2022.

The designated examinations development fund was established to fund the development of the digitisation of College examinations.

The designated technology replacement fund was established to fund the replacement of the College's central database system, which is an enterprise wide system incorporating membership, finance, examinations, training, CPD, academic symposia, and a dynamic link that integrates to the College website.

The designated major repairs fund was established to create a sinking fund for the repair and replacement of major pieces of plant and equipment within the College's premises at Alie Street.

The designated corporate membership fund was established to fund the development and expansion of the College's corporate membership scheme.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2021

21. Analysis of group net assets between funds (Current year) - Consolidated	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	600,658	5,736,776	1,258,664	-	7,596,098
Designated	37,802,927	-	426,246	(8,792,356)	29,436,817
Restricted	-	557,337	901,297	-	1,458,634
Net assets as at 30 June 2021	38,403,585	6,294,113	2,586,207	(8,792,356)	38,491,549

21. Analysis of group net assets between funds (Current year) - College	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	600,658	5,736,876	1,701,957	-	8,039,491
Designated	37,802,927	-	426,246	(8,792,356)	29,436,817
Restricted	-	557,337	901,297	-	1,458,634
Net assets as at 30 June 2021	38,403,585	6,294,213	3,029,500	(8,792,356)	38,934,942

21. Analysis of group net assets between funds (Prior year) - Consolidated	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	870,472	4,888,255	665,310	0	6,424,037
Designated	38,166,009	-	(191,506)	(9,110,339)	28,864,164
Restricted	-	393,262	971,204	-	1,364,466
Net assets as at 30 June 2020	39,036,481	5,281,517	1,445,008	(9,110,339)	36,652,667

21. Analysis of group net assets between funds (Prior year) - College	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	870,472	4,888,355	902,016	0	6,660,843
Designated	38,166,009	-	(191,506)	(9,110,339)	28,864,164
Restricted	-	393,262	971,205	-	1,364,467
Net assets as at 30 June 2020	39,036,481	5,281,617	1,681,715	(9,110,339)	36,889,474

22. Presentational currency

The presentational currency is Sterling.