



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

Annual report and financial statements

For the year ended 30 June 2022

Registered charity number 261035



The Royal College of Pathologists
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The Royal College of Pathologists
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The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2022

The Trustee Board are pleased to present their report together with the financial statements of the College for the year ended 30 June 2022.

Objectives & activities

The College's mission is to promote excellence in the practice of pathology and maintain 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. 95% of patients will have a pathologist involved in their healthcare journey. (<https://www.england.nhs.uk/wp-content/uploads/2014/02/pathol-dig-first.pdf>)

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.

Much of pathology goes on behind the scenes which may account for the fact that many people are almost unaware of its ongoing and vital contributions to modern medicine. Without the work of pathologists there could be no evidence to support the diagnosis and clinical management of disease, 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, webinars 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.
- Making our case to parliamentarians through the Health Committee, All Party Health Groups, individual ministers and civil servants to raise awareness of the role pathology plays in providing safe patient care.
- 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 provide information about the range of 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.

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Report of the trustees for the year ended 30 June 2022

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:

- Increase interest in pathology as a career option.
- Raise awareness of pathology and its crucial role in treating and curing disease.
- 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 FRCPath Part 1 and Part 2 examinations in the 17 pathology specialties, as well as the Certificate and Diploma examinations and the Stage A and Stage C BMS 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.
- Management of the review and approval of applications for Fellowship by published works.
- Supporting training and continuing professional development through the provision of the Pathology Portal.
- 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.

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Report of the trustees for the year ended 30 June 2022

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 ongoing oversight of, and governance for, external quality assessment stakeholders.

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 delivering 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.
- Hosting webinars for new guidance documents to support pathologist understanding and apply them in practice.

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.

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Report of the trustees for the year ended 30 June 2022

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.
- Managing grant schemes and awards.

International development

- Providing support for the work of the International Committee, chaired by the Clinical Director of International Activities, and the International Regional Advisors and Country Advisors.
- Supporting current international medical graduates through provision of the College sponsorship scheme and Medical Training Initiative, and the International Trainee Support Scheme.
- Supporting future international pathologists throughout their careers through the provision of the International Pathology School.
- Providing support for examinations and candidates based outside of the UK.
- Providing support for refugee pathologists in the UK.
- Providing resources for members and healthcare workers in regions affected by challenge and conflict.
- Fostering international strategic partnerships, collaborations and alliances through the development of Memorandums of Understanding and delivering the work agreed.
- Delivering International Pathology Day annually.
- Advocating and promoting the role of the College internationally, including through the delivery of projects (e.g. ARISE).
- Supporting the professional development of international members and trainees.
- Raising awareness and understanding about the role and contribution of pathology to global health.

Equality, diversity and inclusion (EDI)

- Hosting regular meetings of the EDI Network to ensure EDI is embedded in all the College does
- Developing an action plan to increase diversity and ensure inclusion.
- Progressing work to initiate a survey of member characteristics and barriers to engagement to better inform the College’s policies and procedures.
- Hosting events to raise awareness of EDI matters and generate discussion.

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.

The Royal College of Pathologists

Report of the trustees for the year ended 30 June 2022

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 2022.

Investment performance

The last 12 months were a tale of two contrasting halves. The second half of 2021 was still cheerful for markets, whereas the first half of 2022 destroyed value almost everywhere. In sterling terms, the first period saw global equities rising 8.5%, whereas the second period witnessed a drop of 12.5%, for a net 12 month return of -5%. UK Government bonds showed something surprisingly similar in direction, but much worse in outcome, with the first period up 0.6% and the second down -14% for a net 12 month return of -13.5%.

Inflation was the main economic (and human) issue throughout the whole period, with the UK CPI jumping from 2.5% to 9.1%. Part of the increase was due to the Ukraine war raising energy and food prices across the world, but the inflationary surge had started well before that. Central banks responded with celerity, announcing plans to increase rates to levels sufficient to tame inflation. A further concern was recently added to investors' worry list: economic growth.

Within equities, the value and growth styles tracked each other during the first half and then growth collapsed during the second half. The energy, commodities and defence sectors have soared in the last 6 months whilst all other sectors fell sharply. Most of that move was due to circa 60% rise in oil and gas prices caused by the Ukraine war. As the investment mandate is to ensure that securities in the portfolio do not contravene the specific ethical requirements regarding direct investment in fossil fuels, mining, tobacco, and armaments, this has affected the overall portfolio, resulting in a fall in value over the last 12 months. However, over the longer term the investments have still delivered good positive returns.

Financial review

The total income of the College amounted to £7.85 million, with expenditure of £7.35 million and a resultant surplus of £499k. The investment portfolio decreased by £1.03 million, resulting in a deficit for the year of £536k

Membership subscriptions continue to be the largest source of income, amounting to £3.97 million. We measure our success by membership numbers, which stood at 12,500 at the beginning of the financial year and 13,000 at the end. Income from postgraduate education and examinations amounted to £2 million compared to £2.2 million last year. The prior year was unusual in terms of income as we were dealing with catch up as a result of Covid-19, effectively running an additional examination sitting. Examination operations have now normalised, with candidate numbers continuing to be strong. The College continued to hold many meetings virtually, this saving on travel and accommodation costs.

Income from the trading activities of the College through the Events @ No 6 conference centre amounted to £901k, a considerable increase over the prior year. Following the relaxation of the restrictions that had to be imposed because of the Covid-19 pandemic, the centre has been able to operate throughout the year, with bookings returning slowly for the second half of 2021 and then more robustly for the first half of 2022. Due to a strong performance in the last 3 months of the financial year, the budget for the whole year has been exceeded, and bookings continue to hold up well going forward. The decision to retain the sales and marketing staff so that we could be on the front foot as the economy opened up was the right one, as we were able to respond quickly to booking enquiries and convert these into firm contracted business. The trading subsidiary currently has a net deficit and the trustees anticipate it will return to surplus within the next 5 years.

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Report of the trustees for the year ended 30 June 2022

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 2022 the level of free reserves of £6.4 million equated to 10.6 months of unrestricted expenditure. The total amount of restricted funds at 30 June 2022 amounted to £1.61 million. Total College funds amounted to £37.96 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. The total of designated funds at 30 June 2022 amounted to £29.56 million.

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 investment in fossil fuel, tobacco, mining or armament companies. The portfolio is managed by an investment management company. The total return approach where income and capital gains are considered in aggregate is adopted, including for those investments relating to restricted funds.

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Report of the trustees for the year ended 30 June 2022

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) IT risks, including breach of security on systems, the failure to update or innovate IT systems, and reliance on the College database; and (c) economic factors including inflation and their impact on the costs of the College and the ability to match these with rising income streams.

The risks associated with Covid-19 are being mitigated by continuing to run committee meetings and other events virtually or on a hybrid basis, ensuring technology is up to date to allow this to happen, 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 increasing marketing activities, and 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 having replaced on-premises IT systems with cloud hosted technologies and conducting regular reviews of equipment and software. A review of the requirements for the College including the database has commenced, and a technology transformation steering group has been established that reports directly to the trustee board to oversee the governance and progress of this significant project.

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 2022**

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.

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Report of the trustees for the year ended 30 June 2022

Structure, Governance & Management (continued)

The honorary officers are elected by the fellows and diplomate members as a whole from amongst the fellows. The chairs of the regional councils are elected by the fellows and diplomate members 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 2022

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 five 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
Dr Bernie Croal	Chair, Scotland regional council
Prof Angharad Davies	Vice President
Ms Jill Gauntlett	Lay Trustee
Dr Anita Hill	Co-opted Trustee (appointed 18 November 2021)
Prof Peter Johnston	Vice President
Dr Jonathan Kell	Chair, Wales regional council
Dr Elijah Matovu	Co-opted Trustee (appointed 18 November 2021)
Dr Gareth McKeeman	Chair, Northern Ireland regional council (appointed 18 November 2021)
Prof Ken Mills	Chair, Northern Ireland regional council (demitted office 18 November 2021)
Dr Stephen Morley	Assistant Registrar (appointed 18 November 2021)
Prof Mike Osborn	President
Dr Lance Sandle	Registrar
Mr Robert Smith	Lay Trustee & Chair of Trustee Board
Mr Vincent Voon	Lay Trustee
Dr Esther Youd	Assistant Registrar (demitted office 13 October 2021)

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Report of the trustees for the year ended 30 June 2022

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

Principal Office

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

Registered charity number 261035 in England & Wales
Company registration number RC000127

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:



Professor Mike Osborn
President
4 August 2022

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 2022 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 2022 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.

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;
- 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

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

- 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.

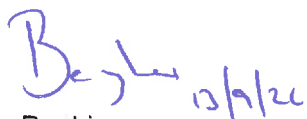
Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by,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

 13/6/22

Begbies
Chartered Accountants
Statutory Auditors

9 Bonhill Street
London
EC2A 4DJ

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 2022

		Unrestricted General Funds	Unrestricted Designated Funds	Restricted Funds	Total Funds 2022	Total Funds 2021
	Note	£	£	£	£	£
Income from:						
Donations & legacies	5	588	-	-	588	1,483
Charitable activities						
Subscriptions		3,974,297	-	-	3,974,297	3,785,867
Postgraduate education & examinations		1,981,094	-	13,500	1,994,594	2,199,501
Pathology portal		-	-	500,000	500,000	175,000
International development		35,218	-	10,021	45,239	14,316
Conferences & academic activities		190,467	-	-	190,467	262,107
Professional standards		57,844	-	-	57,844	52,626
Research		-	-	40,000	40,000	-
Communications & public engagement		115	-	-	115	423
Trading activities		901,377	-	-	901,377	68,324
Investments	4	77,614	-	1,863	79,477	93,946
Other		65,253	-	-	65,253	79,820
Total income		7,283,867	-	565,384	7,849,251	6,733,413
Expenditure on:						
Raising funds						
Trading activities & education centre		1,350,735	1,154	50,297	1,402,186	946,270
Investment management		41,682	-	-	41,682	23,557
Charitable activities						
Postgraduate education & examinations		2,202,566	-	-	2,202,566	1,750,826
Pathology portal		-	-	160,987	160,987	138,871
International development		343,197	-	16,342	359,539	360,670
Conferences & academic activities		390,508	-	24,668	415,176	354,816
Research		-	-	-	-	3,462
Professional standards		361,753	-	-	361,753	269,543
Clinical effectiveness		365,192	7,768	-	372,960	259,300
Workforce		378,239	-	-	378,239	313,000
Communications & public engagement		1,217,789	-	821	1,218,610	1,096,090
Advisory committees		436,080	-	-	436,080	413,749
Total expenditure	8	7,087,741	8,922	253,115	7,349,778	5,930,154
Included in the above expenditure is £121,623 relating to non-recurrent IT costs	11					
Net income / (expenditure) before net gains on investments		196,126	(8,922)	312,269	499,473	803,259
Net (losses) / gains on investments	14	(874,964)	-	(160,984)	(1,035,948)	1,035,623
Net income / (expenditure)		(678,838)	(8,922)	151,285	(536,475)	1,838,882
Transfers between funds	19	(129,753)	128,753	1,000	-	-
Net movement in funds		(808,591)	119,831	152,285	(536,475)	1,838,882
Reconciliation of funds:						
Total funds brought forward		7,596,098	29,436,817	1,458,634	38,491,549	36,652,667
Total funds carried forward	19	6,787,507	29,556,648	1,610,919	37,955,074	38,491,549

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 2022

		Consolidated		College	
	Note	2022 £	2021 £	2022 £	2021 £
Fixed Assets:					
Tangible assets	13	37,777,416	38,403,585	37,777,416	38,403,585
Investments	14	5,233,165	6,294,113	5,233,265	6,294,213
Total fixed assets		43,010,581	44,697,698	43,010,681	44,697,798
Current assets:					
Stocks	15	4,489	4,900	4,489	4,900
Debtors	16	803,693	477,465	1,137,333	844,610
Cash at bank and in hand		7,066,834	6,143,921	6,822,340	6,138,929
Total current assets		7,875,016	6,626,286	7,964,162	6,988,439
Liabilities:					
Creditors: Amounts falling due within one year	17	(4,607,566)	(4,040,079)	(4,277,229)	(3,958,939)
Net current assets		3,267,450	2,586,207	3,686,933	3,029,500
Total assets less current liabilities		46,278,031	47,283,905	46,697,614	47,727,298
Creditors: Amounts falling due after more than one year	17	(8,322,957)	(8,792,356)	(8,322,957)	(8,792,356)
Total net assets		37,955,074	38,491,549	38,374,657	38,934,942
The funds of the College:					
Unrestricted funds - general funds	21	6,787,507	7,596,098	7,207,090	8,039,491
Unrestricted funds - designated funds	21	29,556,648	29,436,817	29,556,648	29,436,817
Restricted funds	21	1,610,919	1,458,634	1,610,919	1,458,634
Total College funds		37,955,074	38,491,549	38,374,657	38,934,942

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

The financial statements were approved by the Trustee Board on 4th August 2022 and signed on behalf of the Trustee Board by



Professor Mike Osborn
President



Dr Andrew Boon
Treasurer

The Royal College of Pathologists
Consolidated statement of cash flows for the year ended 30 June 2022

	2022 £	2021 £
Cash flows from operating activities:		
Net cash provided by / (used in) operating activities (note 1 below)	1,375,059	1,190,575
Cash flows from investing activities:		
Dividends and interest received	79,477	93,946
Purchase of property, plant and equipment	(61,466)	(39,688)
Proceeds from the sale of investments	1,536,205	1,529,147
Purchase of investments	(1,382,352)	(1,680,003)
Net cash provided by / (used in) investing activities	171,864	(96,598)
Cash flows from financing activities		
Repayment of borrowing	(495,979)	(326,503)
Cash inflows from new borrowing	-	-
Net cash provided by / (used in) financing activities	(495,979)	(326,503)
Change in cash and cash equivalents in the year	1,050,942	767,474
Cash and cash equivalents at the beginning of the year	6,148,220	5,380,746
Cash and cash equivalents at the end of the year (note 2 below)	7,199,162	6,148,220

Notes to the statement of cash flows

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

	2022 £	2021 £
Net income/(expenditure) for the year (as per the statement of financial activities)	(536,475)	1,838,882
Adjustments for:		
Depreciation charges	687,635	672,584
(Gains)/losses on investments	1,035,948	(1,035,623)
Dividends and interest	(79,477)	(93,946)
(Increase)/decrease in stocks	(411)	6,331
(Increase)/decrease in debtors	(326,228)	86,745
Increase/(decrease) in creditors	594,067	(284,398)
Net cash provided by / (used in) operating activities	1,375,059	1,190,575

2. Analysis of cash and cash equivalents

	2022 £	2021 £	Change in year £
Cash at bank	7,066,834	6,143,921	922,913
Cash at broker	132,328	4,299	128,029
Total cash and cash equivalents	7,199,162	6,148,220	1,050,942

Analysis of changes in net debt

	2022 £	Cash flows £	2021 £
Cash	7,066,834	922,913	6,143,921
Cash at broker	132,328	128,029	4,299
Loans falling due within one year	(291,250)	26,580	(317,830)
Loans falling due more than one year	(8,322,957)	469,399	(8,792,356)
	(1,415,045)	1,546,921	(2,961,966)

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2022

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 2022

(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 FRS 102. 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 2022

(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 has made some losses to date in its 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:

	2022 £	2021 £
Profit & Loss account		
Turnover	934,310	68,325
Cost of sales and administrative expenses	(910,501)	(274,909)
Net profit / (Loss)	23,809	(206,584)
Payable under gift aid to The Royal College of Pathologists	-	-
Profit / (Loss) retained in RCPATH Trading Limited	23,809	(206,584)
Balance sheet		
	2022 £	2021 £
Debtors	259,550	19,402
Cash at bank	244,495	4,993
	504,045	24,395
Creditors: amounts falling due within one year	(330,337)	(81,139)
Net current assets	173,708	(56,744)
Creditors: amounts falling due after more than one year	(593,190)	(386,547)
Net assets / (liabilities)	(419,482)	(443,291)
Share capital	100	100
Profit and loss account	(419,582)	(443,391)
Capital and reserves at 30 June	(419,482)	(443,291)

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. The loan is for a period of up to 10 years.

The College purchased £32,933 (2021 - £Nil) of services from its wholly owned subsidiary during the year and received a payment of £17,500 (2021 - £Nil) towards the cost of shared overheads. Interest on the loan amounting to £10,419 (2021 - £7,582) was payable by the subsidiary company to the College. 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 2022

3. Detailed comparatives for the statement of financial activities in 2021

	Unrestricted General Funds £	Unrestricted Designated Funds £	Restricted Funds £	Total Funds 30 June 2021 £
Income from:				
Donations & legacies	1,483	-	-	1,483
Charitable activities				
Subscriptions	3,785,867	-	-	3,785,867
Postgraduate education & examinations	2,194,501	-	5,000	2,199,501
Digital education project	-	-	175,000	175,000
International development	14,316	-	-	14,316
Conferences & academic activities	262,107	-	-	262,107
Professional standards	52,626	-	-	52,626
Communications & public engagement	423	-	-	423
Trading activities	68,324	-	-	68,324
Investments	91,757	-	2,189	93,946
Other	79,820	-	-	79,820
Total income	6,551,224	-	182,189	6,733,413
Expenditure on:				
Raising funds				
Trading activities	945,670	600	-	946,270
Investment management fees	23,557	-	-	23,557
Charitable activities				
Postgraduate education & examinations	1,737,826	-	13,000	1,750,826
Digital education project	-	-	138,871	138,871
International development	355,670	-	5,000	360,670
Conferences & academic activities	262,873	-	91,943	354,816
Research	-	-	3,462	3,462
Professional standards	269,543	-	-	269,543
Clinical effectiveness	251,717	7,583	-	259,300
Workforce	313,000	-	-	313,000
Communications & public engagement	1,095,270	-	820	1,096,090
Advisory committees	391,165	22,584	-	413,749
Total expenditure	5,646,291	30,767	253,096	5,930,154
Net income / (expenditure) before net gains on investments	904,933	(30,767)	(70,907)	803,259
Net gains on investments	871,548	-	164,075	1,035,623
Net income / (expenditure)	1,776,481	(30,767)	93,168	1,838,882
Transfers between funds	(604,420)	603,420	1,000	-
Net movement in funds	1,172,061	572,653	94,168	1,838,882
Reconciliation of funds:				
Total funds brought forward	6,424,037	28,864,164	1,364,466	36,652,667
Total funds carried forward	7,596,098	29,436,817	1,458,634	38,491,549

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2022

4. Income from investments

	2022 £	2021 £
Bank deposit interest	5,633	6,164
Income from listed investments	55,209	58,487
Income from investment properties	18,635	29,295
	<u>79,477</u>	<u>93,946</u>

5. Donations & Legacies

	2022 £	2021 £
College members	588	850
Other donations	-	633
	<u>588</u>	<u>1,483</u>

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

	2022 £	2021 £
The total cost of salaries and wages were		
Salaries and wages	2,644,301	2,391,857
Redundancy and termination costs	21,500	-
Social security costs	280,500	238,755
Pension contributions	337,846	328,813
	<u>3,284,147</u>	<u>2,959,425</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:

	2022 No.	2021 No.
£70,001 - £80,000	2	-
£80,001 - £90,000	2	3
£120,001 - £130,000	-	1
£130,001 - £140,000	1	-

Contributions were made to a defined benefit pension scheme amounting to £74,969 (2021 - £57,968) in respect of the staff noted above.

The key management personnel of the charity comprise the trustees, the Chief Executive and the 4 (2021 - 3) other senior managers. The total employee remuneration of the key management personnel amounted to £578,761 (2021 - £465,666).

The charity trustees were not paid or received any other benefits from employment with the charity in the year (2021 - £Nil). No charity trustee received payment for professional or other services supplied to the charity (2021 - £Nil).

Travel, subsistence and accommodation costs incurred amounting to £20,719 (2021 - £209) were reimbursed to 13 (2021 - 2) members of the Trustee Board.

Details of the transactions with the trading subsidiary are included in note 2.

During the year there were no other related party transactions (2021 - £Nil).

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2022

7. Staff numbers

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

	2022 No.	2021 No.
Postgraduate education & examinations	19.9	20.0
Conferences & academic activities	5.0	4.9
Professional standards	3.9	4.4
Clinical effectiveness	4.9	2.8
Advisory committees	4.9	4.5
Communications & public relations	15.4	13.4
Workforce	4.5	4.2
Education centre	2.0	1.2
International development	3.4	4.8
	<u>63.9</u>	<u>60.2</u>
The average number of full time equivalent employees during the year was	<u>58.8</u>	<u>54.8</u>

8. Total expenditure
(Current year)

	Direct Costs £	Staff Costs £	Support Costs £	Total 2022 £	Total 2021 £
Trading activities & education centre	777,538	116,626	508,022	1,402,186	946,270
Investment management fee	41,682	-	-	41,682	23,557
Postgraduate education & examinations	541,110	981,890	679,566	2,202,566	1,750,826
Pathology Portal	124,248	36,739	-	160,987	138,871
International development	16,346	179,417	163,776	359,539	360,670
Conferences & academic activities	8,350	258,415	148,411	415,176	354,816
Research	-	-	-	-	3,462
Professional standards	5,116	222,895	133,742	361,753	269,543
Clinical Effectiveness	20,257	256,692	96,011	372,960	259,300
Workforce	(20)	242,108	136,151	378,239	313,000
Communications & public engagement	104,024	749,401	365,185	1,218,610	1,096,090
Advisory committees	17,559	239,964	178,557	436,080	413,749
Total for the year ended 30 June 2020	<u>1,656,210</u>	<u>3,284,147</u>	<u>2,409,421</u>	<u>7,349,778</u>	<u>5,930,154</u>

8. Total expenditure
(Prior year)

	Direct Costs £	Staff Costs £	Support Costs £	Total 2021 £
Trading activities & education centre	210,623	65,194	670,453	946,270
Investment management fee	23,557	-	-	23,557
Postgraduate education & examinations	402,381	908,043	440,402	1,750,826
Pathology Portal	64,099	74,772	-	138,871
International development	10,211	213,985	136,474	360,670
Conferences & academic activities	(7,101)	246,775	115,142	354,816
Research	3,462	-	-	3,462
Professional standards	3,713	155,596	110,234	269,543
Clinical Effectiveness	10,248	176,257	72,795	259,300
Workforce	888	203,570	108,542	313,000
Communications & public engagement	128,893	687,045	280,152	1,096,090
Advisory committees	55,626	228,188	129,935	413,749
Total for the year ended 30 June 2019	<u>906,600</u>	<u>2,959,425</u>	<u>2,064,129</u>	<u>5,930,154</u>

Governance costs are contained within support costs and are not shown separately. They comprise the expenditure in relation to the trustee board of £12,437 (2021 - £Nil), trustee recruitment costs of £Nil (2021 - £8,617), legal costs of £21,453 (2021 - £20,832) and the auditors remuneration as detailed in note 9.

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2022

9. Net incoming resources for the year

	2022	2021
	£	£
This is stated after charging:		
Depreciation	687,635	672,584
Auditor's remuneration - external audit	9,243	9,500
Auditor's remuneration - payroll bureau services	5,912	5,429
Trustee liability indemnity insurance	752	831

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 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 2022

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	164,891	70,617	34,846	409,212	679,566
International development	50,210	21,503	10,611	81,452	163,776
Conferences & academic activities	43,080	18,449	9,104	77,778	148,411
Professional standards	41,891	17,941	8,853	65,057	133,742
Clinical effectiveness	27,630	11,833	5,839	50,709	96,011
Workforce	38,326	16,414	8,099	73,312	136,151
Communications & public engagement	107,551	46,060	22,728	188,846	365,185
Trading activities & education centre	19,312	8,270	4,081	476,359	508,022
Advisory committees	44,862	19,213	9,481	105,001	178,557
Total support costs year ended 30 June 2022					<u>2,409,421</u>

Included in information technology costs above, as allocated across the various departments, is an amount of £121,623 in relation to non-recurrent IT costs.

(Prior 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					<u>2,064,129</u>

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	659,724	118,107	111,987	72,385	19,687	981,890
Digital education project	36,739	-	-	-	-	36,739
International development	106,112	25,972	25,935	16,825	4,573	179,417
Conferences & academic activities	174,455	30,643	29,261	18,911	5,145	258,415
Professional standards	142,031	29,072	28,399	18,390	5,003	222,895
Clinical effectiveness	200,343	21,978	18,943	12,129	3,299	256,692
Workforce	167,078	27,574	26,056	16,825	4,575	242,108
Communications & public engagement	536,927	79,167	73,254	47,213	12,840	749,401
Trading activities & education centre	89,568	10,441	9,151	5,869	1,597	116,626
Advisory committees	153,332	31,167	30,416	19,694	5,355	239,964
Total salary costs year ended 30 June 2022						<u>3,284,147</u>

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Notes to the Financial Statements as at 30 June 2022

11. Allocation of costs (continued)

(Prior 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						<u>2,959,425</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 2021	38,635,520	1,214,298	917,607	40,767,425
Additions	5,596	55,870	-	61,466
Disposals	-	-	-	-
At 30 June 2022	<u>38,641,116</u>	<u>1,270,168</u>	<u>917,607</u>	<u>40,828,891</u>
Depreciation				
At 1 July 2021	832,593	938,386	592,861	2,363,840
Provided in year	372,824	159,290	155,521	687,635
Disposals	-	-	-	-
At 30 June 2022	<u>1,205,417</u>	<u>1,097,676</u>	<u>748,382</u>	<u>3,051,475</u>
Net book value at 30 June 2022	<u>37,435,699</u>	<u>172,492</u>	<u>169,225</u>	<u>37,777,416</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>

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 2022

14. Investments

	Consolidated		College	
	2022	2021	2022	2021
	£	£	£	£
Market value at 1 July 2021	6,294,112	5,281,517	6,294,212	5,281,617
Additions at cost	1,382,358	1,680,003	1,382,358	1,680,003
Disposals at market value	(1,407,357)	(1,703,030)	(1,407,357)	(1,703,030)
Net gain on revaluation	(1,035,948)	1,035,623	(1,035,948)	1,035,623
Market value at 30 June 2022	5,233,165	6,294,113	5,233,265	6,294,213
Historical cost at 30 June 2022	4,671,934	4,350,188	4,672,034	4,350,288
Investments at market value comprised:				
Fixed interest securities	206,989	233,948	206,989	233,948
Listed equity shares	280,594	2,592,860	280,594	2,592,860
Listed investment trusts and unit trusts	3,915,142	2,764,894	3,915,142	2,764,894
Cash held by investment manager awaiting reinvestment	132,328	4,299	132,328	4,299
Investment property	698,112	698,112	698,112	698,112
Unlisted investments	-	-	100	100
Market value as at 30 June 2022	5,233,165	6,294,113	5,233,265	6,294,213

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 2022.

Unlisted investments at cost comprise:

	2022	2021
	£	£
RCPATH Trading Limited - 100 ordinary shares of £1 each	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.

Further details of the investment policy and objectives are contained in the investment policy section of the report of the Trustees.

15. Stocks

Consolidated and College	2022	2021
	£	£
Memorabilia for resale	4,489	4,900
	4,489	4,900

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Notes to the Financial Statements as at 30 June 2022

16. Debtors

	Consolidated		College	
	2022	2021	2022	2021
	£	£	£	£
Trade debtors	294,458	27,327	34,909	7,925
Prepayments and accrued income	175,928	137,470	175,928	137,470
Other debtors	333,307	312,668	333,307	312,668
Amounts due from subsidiary undertaking	-	-	593,189	386,547
	<u>803,693</u>	<u>477,465</u>	<u>1,137,333</u>	<u>844,610</u>

The amount due from the subsidiary undertaking of £593,189 is due after more than one year.

17. Creditors

	Consolidated		College	
	2022	2021	2022	2021
	£	£	£	£
Amounts falling due within one year				
Deferred income (note 18)	3,378,715	2,777,290	3,244,738	2,746,855
Trade Creditors	319,435	183,253	126,789	138,698
Other creditors	129,804	92,992	129,804	92,992
Taxation and social security	81,780	63,685	81,780	63,685
Accruals	406,582	605,029	402,868	598,879
Bank Loan	291,250	317,830	291,250	317,830
	<u>4,607,566</u>	<u>4,040,079</u>	<u>4,277,229</u>	<u>3,958,939</u>

Amounts falling due after more than one year				
Consolidated and College			2022	2021
			£	£
Bank loan - amount due between 2 and 5 years			1,240,642	1,323,430
Bank loan - amount due after 5 years			7,082,315	7,468,926
			<u>8,322,957</u>	<u>8,792,356</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. Interest is charged at 1.5% above base rate.

18. Deferred income

	Consolidated		College	
	2022	2021	2022	2021
	£	£	£	£
Balance at 1 July 2021	2,777,290	3,129,527	2,746,855	3,129,527
Amount released to incoming resources	(2,765,730)	(3,129,527)	(2,746,855)	(3,129,527)
Amount deferred in the year	3,367,155	2,777,290	3,244,738	2,746,855
Balance as at 30 June 2022	<u>3,378,715</u>	<u>2,777,290</u>	<u>3,244,738</u>	<u>2,746,855</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 £500,000 of statutory funding for the year (2021 - £198,570) by way of grants for specific projects and, in addition, for the prior year 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 2022

19. Movements in Funds (Current year)	Balance at 1 July 2021 £	Incoming Resources £	Outgoing Resources £	Transfers £	Gains and Losses £	Balance at 30 June 2022 £
<i>Restricted funds</i>						
Research Pool Fund	22,278	11	-	-	-	22,289
Oliver Memorial Fund	164,215	543	(621)	-	(42,159)	121,978
Bhagwan Singh Fund	88,486	157	-	-	(25,731)	62,912
Flynn Lecture & Bursary Fund	240,056	643	-	-	(75,044)	165,655
Kohn Memorial Fund	41,290	1	-	-	(11,460)	29,831
Developmental Pathology Fund	26,050	2	-	-	(6,590)	19,462
Medical Examiner Training Fund	24,617	51	(24,668)	-	-	-
E-learning Project Fund	50,271	26	(50,297)	-	-	-
International Challenge Events Fund	22,721	12	-	-	-	22,733
Public Engagement Fund	2,530	1	-	-	-	2,531
Furness Prize Fund	359	-	(200)	-	-	159
Summer School Fund	20,529	13,511	-	1,000	-	35,040
William Tong Memorial Fund	2,688	1	-	-	-	2,689
Pathology Portal Fund	602,560	500,326	(160,987)	-	-	941,899
MTI Fund	50,271	26	-	-	-	50,297
Arise Project Fund	57,682	30	(6,321)	-	-	51,391
Galea Prize Fund	5,003	3	-	-	-	5,006
Undergraduate Pathology Fund	37,028	19	-	-	-	37,047
Covid Portal Fund	-	40,000	-	-	-	40,000
Ghana Project Fund	-	10,021	(10,021)	-	-	-
	1,458,634	565,384	(253,115)	1,000	(160,984)	1,610,919
<i>Unrestricted Funds</i>						
Designated funds						
Property Fund	28,692,741	-	-	128,753	-	28,821,494
Cancer Reporting Fund	39,066	-	(7,768)	-	-	31,298
EQA Fund	50,000	-	-	-	-	50,000
Premises Marketing Fund	37,594	-	(1,154)	-	-	36,440
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	7,416	-	-	-	-	7,416
General unrestricted fund	7,596,098	7,283,867	(7,087,741)	(129,753)	(874,964)	6,787,507
Total Funds	38,491,549	7,849,251	(7,349,778)	-	(1,035,948)	37,955,074

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

The Royal College of Pathologists
Notes to the Financial Statements as at 30 June 2022

19. Movements in Funds (Prior period)	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 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 Property Fund	28,729,321	-	-	(36,580)	-	28,692,741
Designated Cancer Reporting Fund	46,649	-	(7,583)	-	-	39,066
Designated EQA Fund	50,000	-	-	-	-	50,000
Designated 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

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. In the College's 60th anniversary year a Flynn Lecture is being held in each nation of the UK.

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.

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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 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 to create undergraduate and foundation taster events and materials to support recruitment in pathology, and to provide bursaries under the medical elective scheme.

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 Covid Portal Fund was established to fund a research project to interrogate the Covid post-mortem portal to provide learning from the pandemic which will be disseminated by way of learning materials, webinars or scientific papers.

The Ghana Project Fund was established by Grant in Aid from The Tropical Health and Education Trust to produce 24 webinars to support the new pathology curricula of the Faculty of Pathology of the College of Physicians of Ghana.

The designated property fund was established following the disposal of the College's previous functional property to hold the funds that were 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 2022

21. Analysis of group net assets between funds (Current year) - Consolidated	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	341,716	4,836,767	1,609,024	-	6,787,507
Designated	37,435,700	-	443,905	(8,322,957)	29,556,648
Restricted	-	396,398	1,214,521	-	1,610,919
Net assets as at 30 June 2022	37,777,416	5,233,165	3,267,450	(8,322,957)	37,955,074

21. Analysis of group net assets between funds (Current year) - College	Tangible fixed assets £	Investments £	Net current assets £	Long term liabilities £	Total £
General unrestricted	341,716	4,836,867	2,028,507	-	7,207,090
Designated	37,435,700	-	443,905	(8,322,957)	29,556,648
Restricted	-	396,398	1,214,521	-	1,610,919
Net assets as at 30 June 2022	37,777,416	5,233,265	3,686,933	(8,322,957)	38,374,657

21. Analysis of group net assets between funds (Prior 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 (Prior 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

22. Presentational currency

The presentational currency is Sterling.

23. Contingent asset

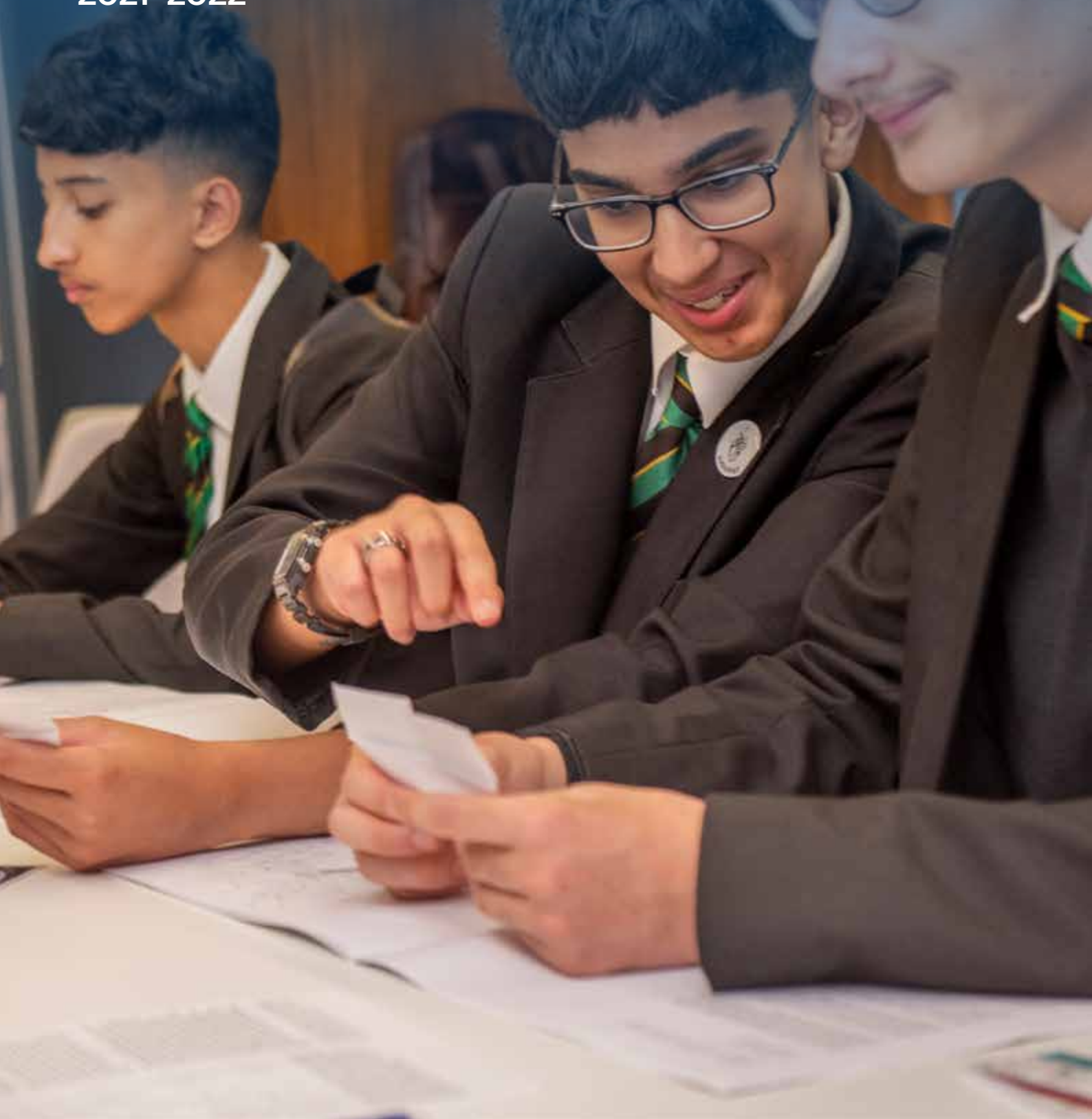
During the year the College incurred non-recurrent IT costs. An insurance claim has been submitted, which, at the balance sheet date has yet to be accepted.



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

Annual report & accounts

2021-2022





Introducing the College

The Royal College of Pathologists is a professional membership organisation with more than 13,000 fellows, affiliates and trainees 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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On the cover: Students from the College's Diamond Jubilee Open Day take part in the Heart of Healthcare origami session.

Welcome from the President Professor Mike Osborn

This Annual Report is a celebration of pathology and pathologists. It highlights our collective mission in providing the best pathology service we can.



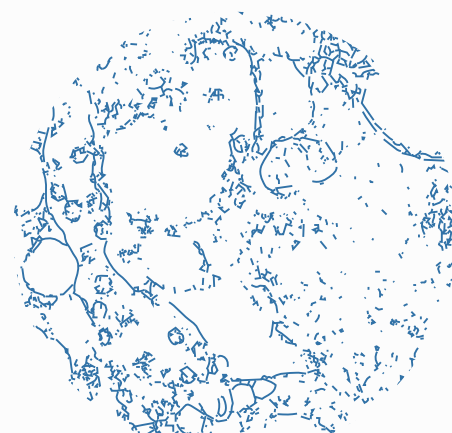
Welcome to the 2021–2022 Royal College of Pathologists' Annual Report. In this year's report we highlight some of the many activities of the College over the last year. We also look forward to the future of the College and how we plan to develop our services to allow us to provide the very best pathology services we can for our patients.

In 2021, we launched our new three-year strategy. Building on our previous strategies, this focuses on putting the needs of our members at the core of all our College functions and activities. Only by supporting and championing the needs of our members and those of pathology as a whole can we continually develop, refine and improve the quality of care we, and our colleagues in other healthcare specialties, provide to patients throughout the UK and worldwide.

The other core focus of our three-year strategy is improving patient safety. Our activities as a College are centred on both members and patients – providing members with the tools and support they need to provide high-quality, dependable and safe healthcare for patients.

2022 marks the 60th anniversary – the Diamond Jubilee – of our College. This is a fantastic landmark and it has provided us with the opportunity to look back and reflect on the amazing contribution pathologists and pathology have made to healthcare in the UK and worldwide since 21 June 1962 when the College was founded. As part of our Diamond Jubilee celebrations, this Annual Report will highlight our activities to showcase these achievements and the people who have been involved with them. We will also report on the wonderful events that have taken place over this year to celebrate this great milestone.

This Annual Report is a celebration of pathology and pathologists. It highlights the College's values, aims and our collective mission to ensure patient safety by supporting the great work of our members in providing the best pathology service we can for all patients. I hope you find it interesting, engaging and informative.



Message from the Registrar Dr Lance Sandle

During 2021–2022, the College responded and adapted to the challenges created by the pandemic.

Although we are still in its slipstream, 2022 has seen a return to some pre-pandemic working practices, such as face-to-face meetings at Alie Street and in-person examinations. More of our interactions and meetings are now of a hybrid nature and this change in our working environment will undoubtedly become embedded practice. This is both owing to the flexibility provided, but also because of economic imperatives, with increased pressure on resources caused by the ongoing conflict in Ukraine and the consequences of the pandemic.

Despite ongoing international health issues, geopolitical uncertainty and domestic industrial unrest, we have still been able to enjoy success stories. The College's Diamond Jubilee has been celebrated with a variety of activities across all four nations of the UK, highlighting the value of pathology to the public.

Traditional events such as scientific meetings, alongside College endowed lectures, showcase the breadth of contribution to a wide range of subspecialties. Meanwhile, exercise-based activities (both real and virtual), including cycling, running and walking, have proved a popular way for members to celebrate our Jubilee and raise funds for worthy causes.

There have been events to raise awareness of the College within the wider community such as a concert at the Royal Liverpool Philharmonic, participation in the Welsh National Eisteddfod and a pet portrait competition, which served to highlight the role of our veterinary fellows.

It is essential that the College reflects its membership at all levels and progress has been made and is reported on within this report. However, there is still a long way to go and over the next year we will be working with members to help us identify and address inequalities. There has been ongoing reappraisal of the staffing structure to ensure that we have the staff needed to deliver on our commitments and mission as a College while managing finances at this difficult time.

Be reassured that thanks to the efforts of staff and officers the College will remain successful and relevant for the next 60 years.



Our strategy & achievements

02

“ We want to be a constant support for our members, whatever their specialty and whatever their stage of career. We’ll always speak up for their interests, to get policies in place that help them to help patients.”

Our strategic vision and aims

Developing and supporting excellence in pathology for healthcare across the world.

Our mission

Advance the science and practice of pathology.

Further public education in the field of pathology.

Promote study, research and innovation in pathology and disseminate results.

Our 2021–2024 strategy

In 2021, we published our new three-year strategy, which was developed with all of our members, and with patient care and safety at its core. It highlights the College's values, aims and our collective mission to shape the future of pathology.

Strategic aim 1

- Support all members through the delivery of high-quality member services

We're committed to delivering member services that promote diversity and inclusion and support continued career development.

Strategic aim 2

- Develop and maintain high standards of education, training and research across all pathology specialties

We're committed to setting high standards for pathology education, training and research, to improve patient care and safety.

Strategic aim 3

- Promote excellence and advance knowledge in pathology practice across all specialties

We work with members to improve the services they deliver to patients in disease prevention, diagnosis and treatment.

Strategic aim 4

- Increase the College's influence through a clear, coherent, professional voice

By communicating the central role that pathology plays in patient care, outcomes and safety, we'll strengthen our position as an expert body, extending our influence and affecting national and international policy for the benefit of patients and pathologists.

Strategic aim 5

- Resource the future development of the College

We'll make best use of the College's resources and improve financial stability to achieve our strategic aims and charitable objectives.



Supporting pathologists and future pathologists throughout their careers

We support our members through a range of initiatives and digital platforms that help drive their careers and pathology forward. Our continuing professional development accredited programme is always evolving to reflect changes in pathology education and practice. We're committed to delivering inclusive member services and providing support and guidance around areas such as wellbeing and mental health. We are working with our members to further our work in these areas.

15

successful
Certificates of
Eligibility for Specialist
Registration (CESR)
recommended to
the General Medical
Council

131

Certificates of
Completion of
Training (CCT)
recommended
to the General
Medical Council

Wellbeing and mental health

The COVID-19 pandemic and the extra pressure and stress experienced by all healthcare professionals brought wellbeing, burnout and mental health into the spotlight. Although these have long been issues affecting our members, there has been a renewed opportunity to highlight to policymakers how the issues our members are facing can affect their physical and mental health. Providing exceptional patient care becomes more difficult for a workforce not properly cared for themselves.

The College is committed to opening up conversations and providing support for our members at all stages of their career.

The need for responsive pathology training programmes

The College's Trainees' Advisory Committee launched the COVID-19 impact trainee survey in summer 2021. This assessed the effect of the pandemic on trainees' wellbeing and

their ability to progress through their training programmes. Although there was a strong desire within pathology departments to reboot training as soon as possible, it was essential that there was a clear understanding of any issues this may involve.

The survey results showed that wellbeing had been significantly affected, with trainees experiencing burnout and higher levels of stress. With workload increasing in response to the backlog of cases and tests, the College is acutely aware that this could be further exacerbated, with trainees leaving the specialty. We've been lobbying policymakers and NHS training bodies, highlighting the issues around training caused by the pandemic, but also reiterating that there were issues in pathology before COVID-19.

We'll keep using the data gathered to highlight what support and resources pathology trainees need; for example, investment in digital pathology equipment, equality in access, and recognition that greater case exposure will be required for some trainees.

Starting the conversation

Our professional development blog series by Dr Chris Tiplady started in January 2020. It touches on subjects from stress, coaching and mentoring and burnout, to grief. The blogs offer advice and the opportunity for self-reflection. They've resonated strongly with our members and healthcare colleagues, particularly over the last year, being shared widely across social media. 'The Empty Chair' blog, which was viewed over 18,000 times, recognises the importance of unpaid carers and reflects on the COVID-19 pandemic, when empty chairs became a very common sight. We'll continue to develop this series as part of our efforts to build a supportive culture for our members.

Members have been given the opportunity to share their experiences with each other in our evolving *Bulletin*, which now covers a wider collection of topics. Our April issue featured articles on mental health and wellbeing, discussing the importance of reflecting on our mental health and the need for better support for healthcare professionals.

Supporting new consultants and trainees

With the NHS under increasing pressure, we recognise the impact this has on pathologists and all healthcare workers. Working in a system under extreme pressure is likely to increase burnout and decrease retention. For those taking on new roles, the pressure can be even greater as they face new challenges and responsibilities.

To support recently appointed consultants or those shortly taking up a consultant post, we launched

"We've been lobbying policymakers and NHS training bodies, highlighting the issues around training caused by the pandemic, but also reiterating that there were issues in pathology before COVID-19."

a new event in April 2022 – New Consultants' Day. The event was open to new consultants of all pathology specialties, and both medical consultants and consultant clinical scientists. Attendees heard the experiences of others who'd already made the transition from trainee to consultant and could offer tips and advice. They spoke about the reality of the first few weeks and months in a new consultant post, as well as specific areas such as revalidation and appraisal, handling complaints, and obtaining resources.

Our annual New Trainee Welcome Day introduces new trainee pathologists to the College and provides them with a clearer picture of our role, pathology training programmes and examinations, and what support is on offer. We had more than 145 trainees join us for our 2021 event.

Alongside presentations covering general pathology information, there were also tailored specialty breakout sessions to delve deeper into new curricula and assessment and examination requirements for each specialty. To increase interaction during this virtual event, we used an audience interaction platform. Trainees could submit their questions as well as upvote the questions of other participants.

132

new specialty
registrars registered
with the College



"The College is committed to opening up conversations and providing support for our members at all stages of their career."

191

events approved
for continuing
professional
development

All the sessions were recorded and these resources alongside the Q&As are available on our website.

Equality, diversity and inclusion

Equality, diversity and inclusion (EDI) are central to the work of our trustees, Council and leadership team. Over the past year we've made good progress in establishing the framework to support improvements in these areas. Our EDI Network, established by Esther Youd, former Assistant Registrar, brings together those with expertise, interest and lived experience in EDI matters to discuss key areas and emerging issues.

The Network has delivered some great work so far. For example, in April 2022 some of the members held a panel discussion on disability adjustments in pathology. It was a fantastic opportunity to celebrate how inclusive pathology is and the value diversity brings.

Our 2021–2022 action plan sets out how we're addressing issues relating to access, fairness and openness. It also outlines the work we'll do to better support people in assessing impact, ensuring appropriate language is used, and making reasonable adjustments. There are also a range of actions we'll take to ensure inclusivity and promote and support diversity.

Identifying and addressing barriers to engagement

It's important that we build the data to help us understand our

members' characteristics and any barriers they face in engaging with us. Collecting this information, along with other data, will help us identify and address inequalities, improve diversity and assure inclusion.

Working with members of the EDI Network and staff at the College, we've now developed two surveys. The first of these seeks to better understand our members and asks for information relating to: protected characteristics; socioeconomic indicators; work patterns and caring responsibilities; and work settings and plans.

This survey is voluntary, and all questions will have a 'prefer not to say' option, but the data we collect has the power to drive significant improvements that will benefit all our members. The second survey seeks feedback on any barriers members face in engaging with the College and will be used to help remove these barriers wherever possible.

Continuing professional development

A key commitment we've made to our members is to provide excellent continuing professional development (CPD) support services. In response to the demands placed on our members by the pandemic, we again extended the deadline for CPD returns giving participating members an extra three months to submit. This gave them some much-needed breathing space.

The pandemic changed the CPD landscape and it's likely that this change will be permanent. We see this as an opportunity to support increased accessibility to a more varied programme of

CPD activities. As our members navigate change, we've offered regular tips and advice via our social media channels on various aspects of CPD, including how to participate in various activities. We've developed our CPD programme to cover volunteering activities, with College accessors sitting on Advisory Appointment Committees and job description reviewers now able to obtain CPD points. We'll also extend our guidance on CPD to cover reflective learning, self-accreditation and volunteering.

We want to ensure that our CPD portfolio meets our members' needs and we're continuously looking for ways to further improve this service. We recently asked CPD participants for their views on topics such as our online portfolio and retention times for supporting information uploaded when entering activities. It was encouraging that 77% of participants stated that they were happy with the current online CPD portfolio, but we know there's more we can offer members to support their growth and it's an area we'll work on as part of our three-year strategy.

"The pandemic changed the professional development landscape... We see this as an opportunity to increase accessibility to a more varied programme of activities for our members."

Access to learning

We're always evaluating our member services, looking for ways to improve user experience and consistent access to learning, whether by bringing in new functionality or developing new technologies and platforms.

"Our Equality, diversity and inclusion (EDI) network brings together those with expertise, interest and lived experience in EDI matters to discuss key areas and emerging issues."

The new LEPT system

In September 2021, a new Learning Environment for Pathology Trainees (LEPT) system was launched, initially for trainees who started Integrated Cellular Pathology Training (ICPT) and Chemical Pathology training from August 2021. The new platform was developed to support changes to curricula published in 2021 and is the culmination of a two-year project. It offers more defined functionality and a user-friendly experience.

Brand new functionality embedded in the new LEPT system includes the Annual Review of Competence Progression (ARCP) form, which deanery and Local Education Training Boards (LETBs) staff are able to initiate for the ARCP panel meetings. This allows trainees' ePortfolios to be automatically populated with their ARCP outcomes, as members of the panel meetings will be able to complete the forms directly on the LEPT system.

Workplace-based assessments in the form of supervised learning events (SLEs) are also embedded.

680

trainees used both LEPT systems to create Annual Review of Competence Progression (ARCPs) up to June 2022

9,197

workplace-based assessments were used in those ARCPs



Pathology Portal



The SLEs are strictly formative assessments, aimed at reinforcing learning. Their primary role is to give feedback on performance as they offer the opportunity to monitor progress continuously.

We held three virtual bite-size sessions during autumn 2021 to demonstrate the new functionality to trainees and provide tips for using the new system. The old LEPT system will be phased out during the latter part of 2023 as all trainees, except for those in their final year of training, will effectively be transferred to the new system together with their training items; this process started in spring 2022. This also applies to Certificate of Eligibility for Specialist Registration (CESR) doctors using the old LEPT system. We'll continue to support trainees during their transfer to the new system.

The Pathology Portal

The Pathology Portal officially launched in August 2022. An innovative adaptive learning platform designed to support trainees and practicing pathologists in digital learning, it has been in development since 2019 in collaboration with Health Education England (HEE) (it was previously known as Digital Now). It is hosted within the HEE Learning Hub and will be accessible via the College's website through a single sign-on process as part of ongoing development work.

Using technology to enhance learning, the Portal incorporates the ability to host a range of learning materials, including virtual microscopy whole slide imaging, to enable pathology tissue samples to be annotated and viewed as part of learning sets.

The Portal supports not only digital morphological learning, but also clinical and macroscopic learning. It includes the upload of material already scanned as part of previous deanery/LETB projects, to reduce duplication and provide broader access.

■ The Pathology Portal is a fantastic, innovative training and educational resource that trainees and practicing pathologists will be able to access throughout their career."

Professor Mike Osborn
President

Members of the Pathology Portal Editorial Board have worked tirelessly in loading a range of learning materials and teaching cases to the Portal covering areas such as allergy, blood transfusion, cellular pathology, clinical biochemistry, genetics, haematology, histocompatibility and immunogenetics, immunology, infection, metabolic medicine, reproductive science and toxicology. Materials and teaching cases for these and other specialties will be loaded on a continuous basis as the Portal evolves.

Celebrating pathology

RCPATH Achievement Awards

The College's annual Achievement Awards were launched in 2019 and celebrate excellence in pathology practice. They promote high standards in pathology education, training and research to deliver the best patient care.

Nominations were invited for teams and individuals of all professional backgrounds and disciplines. The winners were presented with their awards virtually as part of the College Council meeting on Thursday 18 November 2021 with College President Professor Mike Osborn congratulating them.

Patient safety

Dr Laura Green won this award for her vision and expertise in integrating research into clinical service, driving changes that optimise NHS resources, reduce national variability and improve the standard of care for patients.

Innovation in pathology practice

Dr Maria O'Donovan won this award as co-inventor of Cytosponge, which aids the early detection of Barrett's oesophagus, dysplasia and oesophageal cancers.

Contribution to education

Professor Shivayogi Bhusnurmath was recognised for his contribution to education. Professor Bhusnurmath has been actively involved in enhancing pathology education for medical undergraduates and postgraduate trainees around the world for over 45 years.

4,254

continuing professional
development returns
processed

■ The RCPATH Achievement Award winners exemplify the best of pathology practice through their work in furthering pathology education, improving patient safety and the innovation of new diagnostics and treatments – all for the benefit of patients. To achieve this throughout a global pandemic is truly inspiring."

Professor Mike Osborn
President

Contribution to specialty

Dr Benjamin Brown was recognised for his contribution to medical microbiology. This included the development of the dried blood spot (DBS) testing service in Manchester, providing outreach training on DBS testing and supporting Public Health England's response to the Ebola outbreak through his work in Sierra Leone.

Lise Estcourt, Dave Roberts, Sheila MacLennan and Heli Harvala were also acknowledged in this category for their research during the pandemic, which shaped the use of antibody therapy in the treatment of COVID-19.

Trainee research medals

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

Gold medal

William Hamilton

Medical Microbiology (dual training with Infectious Diseases)

William won the gold medal with a paper on the use of rapid SARS-CoV-2 sequencing and detailed epidemiological analysis to investigate healthcare-associated SARS-CoV-2 infections and inform infection control measures.

Silver medals

Lyn Ferguson

Chemical Pathology and Metabolic Medicine

Mark Ponsford

Clinical Immunology

Meng Wang

Haematology

Caroline Young

Cellular Pathology

Sheila Lumley

Infectious Diseases and Microbiology

Muge Cevik

Infectious Diseases and Medical Virology

Hugh Platt

Foundation

Essay Prize

– Maeve

McLaughlin

The winner for 2021, Maeve McLaughlin, discussed testing strategies for managing COVID-19, exploring the utility of the different tests available, the benefits of sewage analysis and highlighting the issues around the rapid emergence of private antigen tests.

Maeve is in her second year of training at the Severn Foundation School. Here's what she had to say about winning the competition.

"I am delighted, I really enjoyed learning about the subject and found it extremely relevant in the current climate."

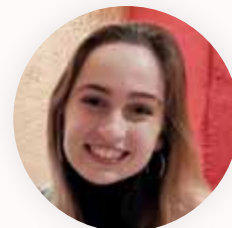
Paola Domizio

Undergraduate

Essay Prize –

Rebecca Sarsam

Medical, biological science and veterinary undergraduates wrote about the role of pathology in managing COVID-19. Rebecca's essay highlighted the vital work of virologists in genome sequencing and the production of diagnostic tests, as well as the role of immunologists in the development of vaccines. Rebecca is studying medicine at King's College London and currently undertaking an intercalated MSc in Immunology of Infectious Diseases at the London School of Hygiene and Tropical Medicine.



"...the competition was a good way to practice essay-writing skills and explore areas of pathology that were only touched upon in my medical course, such as the roles of virologists and immunologists."

Furness Prize for Science Communication – Dr Phillip (Pip) Nicolson

The Furness Prize for Science Communication celebrates and recognises trainees and undergraduates who have undertaken science communication activities to inspire awareness and understanding of pathology in others. This year's winner was Dr Pip Nicolson, a Clinical Lecturer and Registrar in Haematology. Pip co-founded and chairs HaemSTAR – a network facilitating communication and promoting research among haematology trainees.



"I feel honoured and surprised to be selected as the winner of the Furness Prize. I am a strong believer in collaborative work, both in medicine and in science, and effective and efficient communication is key to achieving this. [My] passion has been to facilitate communication among budding haematologists to enable the brilliant research and audit projects performed at local level to be upscaled nationally."

Key achievements

- Launching the Pathology Portal – an adaptive learning platform hosting resources and materials that will support trainees and practicing pathologists.
- Launching a new LEPT (Learning Environment for Pathology Trainees) platform to support changes implemented in the development of new curricula.
- Celebrating and supporting research and excellent pathology practice through our awards and competition programme.

Improving patient care

Patient care and safety drives our work for excellence and innovation in pathology. We work directly with our members, kindred organisations and healthcare stakeholders to promote a strong safety culture within pathology. We're driving changes to ensure a consistent and standardised quality assurance framework, developing high-quality resources and audits to raise international standards. This requires investment to achieve, and we're advocating for the funding needed to keep delivering the best possible services to patients.

601

people attended our first three guideline implementation webinars

6

NICE-accredited guidelines were published

Supporting service improvement

Patient safety

To mark World Patient Safety Day on 17 September 2021, our Professional Standards and Clinical Effectiveness teams launched Patient Safety Awareness Week, running from 17 to 23 September. The week encourages participation in patient safety activities and discussions in the workplace, and raises awareness of how we can support our members to improve safety in their workplaces.

During the week we shared new resources on our website, including an infographic highlighting how high-quality laboratory medicine underpins patient safety, and relaunched resources from previous patient safety campaigns. The resources are available all year round for members and we publish new patient safety bulletins every month to encourage shared learning and help create a strong safety culture.

Improving external quality assurance

We're leading a review of the oversight and governance of technical external quality assurance

(EQA). Our aim is to work with stakeholders to support the development of a robust systems governance and assurance framework for EQA for laboratories in the UK. We've made progress, producing policies and standard operating procedures within the EQA improvement programme. These will help to identify and manage poor practice. They clearly set out the steps for escalation between EQA providers, National Quality Assurance Advisory Panels (NQAAPs) and the Quality Assurance in Pathology Committee.

Our role in external consultations

This year the College has responded to external consultations from a wide range of organisations, agencies and societies, providing invaluable input to improve patient care and safety. We've had direct involvement in the National Institute for Health and Care Excellence (NICE) objectives and work programme and represented the professional interests of our members by contributing expert advice. Our Specialty Advisory Committees (SACs) are integral to this process, providing us with evidence and advice.

Our members helped us to successfully highlight pressures on NHS teams. We worked alongside other medical royal colleges and the Academy of Medical Royal Colleges to raise awareness of current workforce shortages. And we're pushing for an honest conversation about the future of NHS healthcare with policymakers. We want to ensure that the expectations of government, staff and patients are realistic and there are adequate resources to meet targets.

We contributed to the NHS England and NHS Improvement consultation to support best practice around blood test requesting. The intention of this consultation was to both provide support during the current shortage of blood testing equipment, and to support recovery.

Setting standards

Consistency through collaboration

The pandemic shone a spotlight on the essential role of infection services in healthcare and highlighted disparity in the provision of infection services. Infection services are configured in a way that means there are differing amounts of infection expertise in different trusts and hospitals. As demand on these services continues to rise, so will the challenges, particularly around workforce. A one size fits all infection service provision is not appropriate, but standards are needed to ensure parity. Although standards exist for diagnostic laboratories and some aspects of patient care, to date, there hasn't been a single set of standards looking at the requirements of an infection service.

In collaboration with the British Infection Association and the Royal College of Physicians, we created a single set of standards for delivering infection services. These draw on published guidance and evidence where they exist as well as extensive experience in delivering infection services in hospitals across the NHS. They incorporate laboratory and clinical practice standards, and allow for flexibility, acknowledging the disparity in the provision of infection expertise within the NHS.

Members in infection specialties contributed to these standards through our consultation process and the College's Medical Microbiology/Medical Virology SAC approved the final version for publication. The standards represent a baseline for infection services to benchmark themselves against and to provide an indication of the resource needed to provide a high-quality service.

Quality improvement

Our NICE-accredited clinical guideline programme currently consists of cancer datasets, tissue pathways, autopsy guidelines and cross-specialty guidelines. We're always expanding to cover different aspects of cellular pathology and are working to increase the number of guidelines we produce in other specialties. Over the last year we've been working to improve our guideline processes.

"We're pushing for an honest conversation about the future of NHS healthcare with policymakers. We want to ensure the expectations... are realistic and there are adequate resources."

92

NICE and 8 external consultations were responded to





We're also building relationships with key organisations to share resources that will aid the development of our cancer datasets and tissue pathways. As a result, we've formalised an agreement with the International Collaboration on Cancer Reporting (ICCR) and International Agency for Research on Cancer (IARC) that will benefit the development of UK and international standards in pathology reporting of cancer.

Clinical audits play a vital role in quality improvement in pathology. Our clinical audit templates ensure audit activities are conducted efficiently with maximum benefit to patient care while helping pathologists to meet the requirement of revalidation. These templates are published alongside our clinical guidelines to support guideline implementation. They also assist in promoting participation in work-based learning. The audit certification scheme provides educational value to our members, fostering high-quality audit projects that are selected for publication, and helping pathologists with accreditation schemes such as UKAS.

"We're building relationships with key organisations that will... benefit the development of UK and international standards in pathology reporting of cancer."

A sustainable workforce

Our members work as part of an underfunded and under-resourced workforce. This hugely affects their working lives and the quality of care they can deliver to patients. Significant issues around workforce in pathology remain, and we continue to dedicate resources to advocate for a properly resourced, supported and sustainable pathology.

Member input into our workforce surveys is also vital in providing us with the evidence we need to lobby for changes.

Workforce reporting and planning

The College's Workforce team work in partnership with our SACs to analyse data from our workforce surveys. The analysis helps us to understand where current pressures and shortages exist, disparities between roles and locations, and what's needed for the future to meet increasing demands for pathology services.

In July 2021, we published our cytopathology workforce report, which focused on diagnostic cytopathology outside the cervical screening programme. The report highlighted that 83.6% of pathologists reporting on cytopathology samples are general cellular pathologists rather than specialised cytopathologists – only 5.5% of the pathologists who responded identified themselves as cytopathologists. Given the retirement plans of the cellular pathologists who responded, there will be a gap in cytopathology reporting unless trainee pathologists and consultant

pathologists are encouraged to report cytopathology samples. With around 25% of biomedical scientists planning to sit high-level qualifications in cytopathology, this will help fill staffing and service gaps. We're working closely with the Institute of Biomedical Science to ensure that future cytopathology staffing models factor this in. There needs to be sufficient material for training, education and maintaining competence for all staff involved in cytopathology service provision.

Our veterinary pathology workforce report was published in summer 2022, focusing on the issues and barriers to recruitment in the UK. Our survey results highlighted difficulties in recruiting veterinary pathologists, with institutions having to go through multiple rounds of recruitment.

As part of our recommendations, we're looking at how we can improve visibility of veterinary pathology among school students, undergraduates and trainees, and how we can increase access to and funding and support for training. We need to ensure there are the right numbers of trainees to meet demand. An action plan has been published and work is underway.

We launched neuropathology, virology and histopathology surveys and are currently analysing the data. We'll be publishing reports for these specialties over the next year.

We want to ensure members can use our workforce data to understand what's happening in their specialty and region. We have expanded access to workforce data on our website to provide a clearer and more up-to-date picture of the current pathology workforce.

"Significant issues around workforce in pathology remain and we continue to dedicate resources to advocate for a properly resourced, supported and sustainable pathology."

Informing and lobbying

We continue to raise the issue of workforce at every opportunity with government and policymakers. Our message is clear – we need the right number of correctly trained, skilled staff in the right place at the right time to provide the excellent healthcare our patients need.

Our workforce data has been used in responses to consultations by various Health and Social Care committees. We also use the data to engage kindred organisations, associated bodies and charities to widen the reach of our voice and to bring a patient-focused element to the issues we're raising.

We were pleased to see the influential House of Commons Public Accounts Committee report on NHS backlogs and waiting times in England feature College evidence highlighting pre-pandemic pathology workforce shortages. We welcomed the committee's recommendations for an assessment of the number of staff that will be available to deal with the backlog and how staff working under intense and consistent pressure will be supported.

The Health and Social Care Committee expert panel on cancer services used much of our evidence on cancer services and workforce in their evaluation report. Highlighted areas included concerns that certain

7

patient safety bulletins were published

18

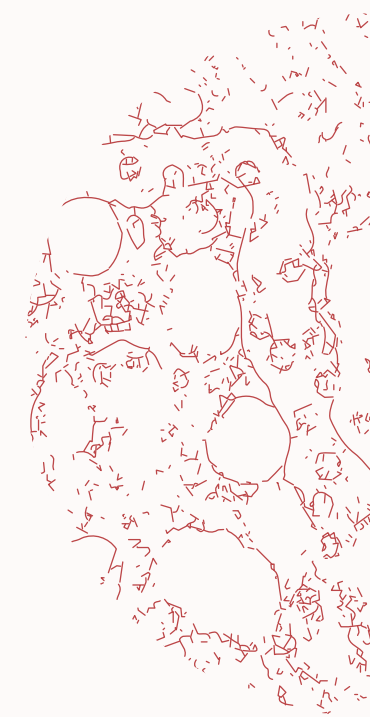
audit templates were published

26

audits were submitted to the audit certification scheme for evaluation

349

job descriptions were reviewed and approved



222

College assessors attended advisory appointment committees in England, Wales and Northern Ireland

specialties don't have enough staff in post to meet patient demand and that there have been workforce shortages for some time. The evaluation also reflected our concerns about how the new Cancer Diagnostic Centres across England would be staffed, and how the capacity of the workforce would expand to match the investment in diagnostic pathways.

We welcomed the commitment in the Queen's Speech of £2.3 billion for diagnostics with plans for over 100 Community Diagnostic Centres over three years. We've also highlighted that the pathology workforce will need to be expanded to manage increased investigative tests from the new centres.

The Health and Social Care Committee report on cancer services used our evidence on the shortage of pathologists. Now more than ever, it's vital that services are sufficiently funded and supported to tackle the diagnostic backlog, particularly in cancer services.

Looking forward: workforce intelligence review

This last year has seen great success with how our workforce data has been used as evidence to promote investment in pathology. We want to reach further. To this end, we are evaluating and remodelling our approach to the collection, analysis and reporting of workforce data. This is a significant project that will overhaul current processes. We will use the data to monitor workforce numbers, identify trends and issues, and highlight gaps in the pathology workforce to lobby for increased training places and resources for pathologists.

Over time, these reports will benchmark how the workforce situation is evolving, identify whether specific issues are being adequately addressed, and provide robust data for internal and external College use. Information and data can be extracted to produce evidence-based briefings for decision-makers and influencers and assist them in advocating for the needs of pathology and pathologists and, ultimately, safe patient care.

"We continue to raise the issue of workforce at every opportunity with government and policymakers. Our message is clear – we need the right number of correctly trained, skilled staff in the right place at the right time to provide the excellent healthcare our patients need."



Image: College Registrar, Dr Lance Sandle, introducing the Dacie–Wilkson lecture at the 62nd Annual Scientific Meeting of the British Society for Haematology. Reproduced with permission from the British Society for Haematology, 2022.

Key achievements

- Inclusion of our workforce data that highlighted pathology workforce shortages in the House of Commons and Health and Social Care Committee reports.
- Delivering Patient Safety Awareness Week to encourage shared learning around patient safety and a strong safety culture.
- Creating policies and standard operating procedures within the EQA improvement programme to provide the consistency and standardisation required to identify and manage poor practice.
- Securing a memorandum of understanding with the International Collaboration on Cancer Reporting (ICCR) and International Agency for Research on Cancer (IARC) that will benefit the development of UK and international standards in pathology reporting of cancer.



Shaping the future of the profession

Together with our members, we're an influential collective voice for pathology. We can make sure governments, health stakeholders, the media and the public understand the expertise and vital role of the pathology workforce. This year, as ever, we've been very active in raising issues that affect the day-to-day lives of our members. Using data-driven evidence we continue to highlight workforce shortages and the impact those can have on patients. And we'll keep calling for the resources needed now and in the future.

Influence and engagement

Investment in pathology

The COVID-19 pandemic has moved onto the next phase – recovery while living with the virus. However, one of the biggest issues in healthcare now is the backlog the pandemic has caused. Although most media coverage about the backlog has focused on cancer treatment, it is affecting all areas of healthcare and all our pathology specialties.

There are various projections as to how long the NHS will be dealing with this backlog but, to make headway, the NHS needs to be adequately resourced and funded. The NHS Recovery plan was launched in February 2022 to tackle the elective care backlog over the next three years. In our response, we highlighted the role of pathologists in tackling the diagnostic backlog.

Our message was clear on this – without targeted investment in pathology services, it will be impossible to achieve this target. The pathology workforce is key to reducing the backlog and crucial to disease prevention and infection control.

Professor Mike Osborn has been taking this message directly to parliamentarians and stakeholders. He met Jeremy Hunt MP, Chair of the Health and Social Care Select Committee, to give a pathology perspective on the workforce issues in healthcare. They discussed how a lack of resources and staff were becoming even more significant and were at risk of derailing any expansion of services that the government or stakeholders might want.

Similarly, Professor Osborn met Feryal Clark MP, Shadow Minister (Health and Social Care), and his local MP Ellie Reeves to discuss pathology issues directly affecting patient care, for example workforce and the impact of COVID-19. We'll continue to work with MPs to raise issues that are important to our members.

Other significant pandemic-related issues affecting pathologists include the training of junior doctors, laboratory staff and other colleagues. There were substantial workforce issues in pathology before the pandemic, as well as issues around technology, such as poor-quality IT and LIMS provision. These issues

have not gone away and have only been intensified by COVID-19 and the associated backlog.

We've been working in all four nations to highlight these issues to policymakers and the relevant NHS, training and other bodies. We want all pathology specialties to have the resources they need to provide the highest possible quality healthcare to our patients.

We highlighted not just funding and training needs, but that future plans must not lead to fragmented pathology services. We're raising the profile of pathology and will continue to do so.

Genomics

Genomics has the potential to radically redefine diagnostics and healthcare. There is hope it will improve cancer survival statistics, as well as service access, equity and efficiency. College members are the driving force in harnessing the opportunities of genomics medicine for faster, accurate diagnosis and tailored treatment for people with cancer, and with inherited diseases.

However, there is no planned resource provision for the significantly increased workload that the Genomic Medicine Service will create for pathology, which will grow over time. Unless this is addressed there will be issues in providing the quality and level of service desired.

The College's Working Group on Cancer Services, and the Cellular Pathology Genomics Focus Group, carried out a survey on genomic and molecular testing, and its effect on members' workloads. The College also wanted a deeper understanding of how testing is implemented and can be improved, as well as overall

service delivery and patient care.

The results of the survey have informed discussions about the resourcing and structure of pathology laboratories as genomic and molecular testing is rolled out. We'll continue to use the results to engage politicians and key organisations, making the case to government for sustained support for the pathology workforce across the UK.

Many College recommendations – such as genomic tests being approved for access via a registered health professional, and support for NHS professionals encountering patients who have used genetic tests – were included in a report from the House of Commons Science and Technology Committee on regulations for direct-to-consumer genetic testing. This followed a consultation where the College provided evidence with the Royal College of Physicians. Our evidence has also been published on the committee's website.



Our message was clear on this – without targeted investment in pathology services, it will be impossible to achieve this target. The pathology workforce is key to reducing the backlog and crucial to disease prevention and infection control.”

“Ensuring the roles of pathology and pathologists are recognised is a priority and we have successfully moved from having almost no voice in genomics to representation on most of the significant committees involved in the roll-out of the Genomic Medicine Service.”

It's a priority for us that the roles of pathology and pathologists are recognised. We've successfully made a voice for ourselves in genomics, with representation on most of the significant committees involved in the roll-out of the Genomic Medicine Service.

Professor Mike Osborn will co-Chair the 'Task and Finish' group along with Dame Sue Hill, Chief Scientific Officer for England. The group will lead the roll-out in England and our presence will allow pathologists to help steer developments and push for the resources needed. Professor Osborn also attended an influential roundtable discussion on tumour agnostic policy and associated genomic issues, hosted by the PHG Foundation. It highlighted issues to policymakers and stakeholders to help improve patient care.

Our work with All-Party Parliamentary Groups

Dr Srinivas Annavarapu, Chair of the College's Prenatal, Perinatal and Paediatric SAC, attended a meeting of the All-Party Parliamentary Group (APPG) on Baby Loss, which was held jointly with the APPG on Maternity. The College recommendations were well received by the panellists, especially the issues relating to the acute national shortage of the perinatal and paediatric pathology workforce.

Following this, Dr Annavarapu was invited to present spoken evidence to a meeting of the APPG on the staffing crisis in maternity services, to give the perspective of pathologists.

College Fellows attended the launch of a joint report from the APPGs on Blood Cancer and Stem Cell Transplantation and Cellular Therapies. The report looks at the impact of the COVID-19 pandemic on blood cancer services. We submitted evidence to this crucial inquiry, which investigated how the diagnosis and management of blood cancer have changed as a result of the pandemic, and what measures are needed for services to recover.

The College and the Transfusion Medicine SAC responded to the APPG on Sickle Cell and Thalassaemia report 'No One's Listening' following their inquiry into avoidable deaths and failures of care for sickle cell patients. We endorsed the recommendations and welcomed the call for urgent action to ensure sickle cell patients receive care at a standard to which they are entitled.

We responded to the APPG for Allergy and the National Allergy Strategy Group report – 'Meeting the Challenges of the National Allergy Crisis'. We welcome the call for urgent improvement in UK allergy services, and support workforce expansion, but this shouldn't come at the expense of clinical immunology and laboratory immunology services, which also require support and expansion. Following this we met Carla Jones, CEO of Allergy UK, who is keen to work more closely with us in the future. We hope to work collaboratively with the National Allergy Strategy Group and will be including them in one of the Immunology SAC meetings.

The importance of visibility

We want to see improved recruitment in pathology, and we want to reduce the growing recruitment gap. We've been campaigning for greater investment in training to increase training posts in pathology, help attract trainees and ensure protected training time for those involved in training. We also have a programme of events that increase the visibility of pathology among school students, undergraduates and foundation doctors, and promote pathology as a career choice.

National Pathology Week

National Pathology Week is our hugely successful annual celebration of pathology. With the 2022 event moving to June to coincide with our 60th anniversary, we've held two National Pathology Weeks within the last eight months. Our Public Engagement team, volunteers and members were integral to the success of both these events.

Our 2021 event had the theme 'All Together Now' inspiring a diverse range of events and activities. We invited our members to highlight how teamwork and collaboration help them to deliver the incredible work they do in our healthcare system, and how the 17 pathology specialties work together to diagnose, prevent and treat diseases.

The College-led programme included an RCPATH Book Club, medical ethics workshops for medical students in collaboration with the Social Mobility Foundation, a veterinary pathology workshop for secondary school students with the Royal Veterinary College, a

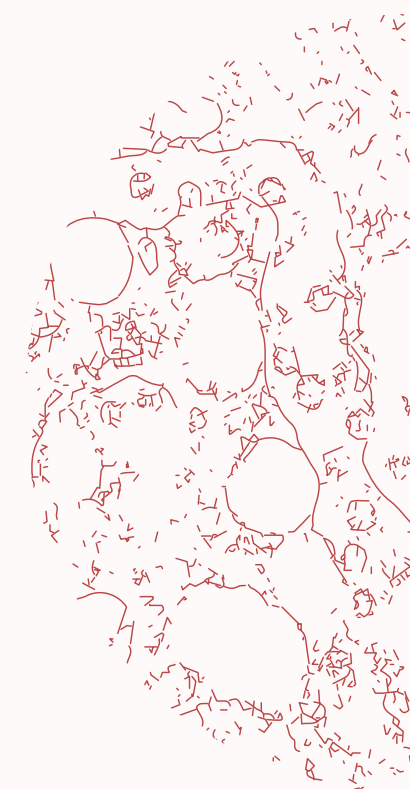
webinar with Malcolm Robinson – the founder of inspirational charity Harvey's Gang, and virtual pub quizzes for undergraduates studying medicine, biomedical science and veterinary medicine.

Our virtual pathology careers talks focused on secondary school students. More than 100 people attended these two events, including schools who were live-streaming the session and individual school students joining from home. The students gained real-life insight into all that a career in pathology has to offer and 95% of attendees said they'd learned something new.

We also supported members and other organisers to run in-person events around the UK. We had great engagement on our social media channels with fantastic photos, videos and posts of support during the week.

The theme of our 2022 event was 'Pathology: Past, Present and Future' with our message focusing on pathology being at the heart of everyone's health. Celebrations started with our virtual panel discussion exploring the history of the College, key milestones for pathology, current practices, hot topics and future advancements. The panel featured experts from different pathology specialties.

Other highlights of the week included the RCPATH Book Club with Professor Heidi Larson, a pathology-based online origami workshop by Dr Lizzie Burns, and two fun and enlightening virtual pub quizzes for undergraduates. With questions gathered from our members who work in different specialty areas, these quizzes gave the students the chance to test their knowledge



of disease prevention, diagnosis and treatment. They were hugely popular with international students and we're looking to develop further quizzes with international students.

Foundation doctors

Safe and effective care is dependent on a sufficiently resourced workforce that can cope with both current and future demands. Our Meeting Pathology Demand workforce reports have highlighted gaps across multiple pathology specialties. Actively promoting and encouraging pathology as a career choice among foundation doctors was one of our longer-term solutions.

It's at the foundation stage that doctors consider their choices for specialty training, yet few foundation rotations contain pathology-related placements. To raise the profile of pathology among foundation doctors, we introduced several new initiatives, including the annual Foundation and Undergraduate Taster event, the Foundation Fellowship scheme and pilots of Longitudinal Integrated Foundation Training (LIFT).

The Foundation Fellowship scheme launched in 2020 and it offers foundation doctors interested in pathology, and whose rotations include a post in a pathology specialty, the opportunity to engage with the College. Benefits of the fellowship include College membership, and the chance to attend College events and educational meetings, and present at events and take part in public engagement events.

Our evaluation at the end of the scheme's first year showed the scheme had been successful in its aim of encouraging foundation doctors to choose a career in

pathology. Of the foundation fellows who responded, 92% intended to apply for specialty training in pathology following their fellowship, with 66% stating that the fellowship had influenced their decision. Following on from this success, 25 new fellowships were launched in 2021.

Following the success of the LIFT model in aiding recruitment into general practice and increasing retainment in hard-to-recruit areas, we started discussions with the UK Foundation Schools Directors Committee and Wales Foundation School to pilot a pathology LIFT programme. As part of the programme, foundation doctors spend time in a pathology department every week (usually one day a week) for a year, gaining hands-on experience.

In August 2021, a pathology LIFT programme was launched in Wales with LIFT posts in histopathology, medical microbiology/infectious diseases, chemical pathology and forensic pathology. The feedback from LIFT doctors and their supervisors has been extremely positive and show the programme has benefits for both the foundation doctor and the department in which they work.

"I was keen to develop this placement in our health board to create bridges between the laboratory and the wards. The unexpected benefit I've seen already is that our F1 doctor discusses her experiences with peers on the wards and has emphasised the importance of quality information on cellular pathology request forms."

Dr Alison Finall, Clinical supervisor of LIFT Foundation Year 1 in histopathology, Swansea

"This experience has improved my understanding of the complexities around death reporting and the role of the coroner's service. This is something that I had only limited teaching on at medical school and I am looking to adopt into my own clinical practice..."

Dr Ed David, LIFT Foundation Year 2 in forensic pathology, Cardiff

Careers events

With pathology specialties under-represented in the medical school curriculum and foundation-year rotations, we funded a virtual pathology careers event through our Public Engagement Innovation Grant Scheme. Working with the University of Buckingham Medical School and Milton Keynes University Hospital, our aim was to inform and inspire students to become the next generation of pathologists. Final year medical students were given a series of presentations by pathologists from various specialties who were at differing points of their careers. The event made an impact, with fantastic feedback from students who felt inspired to further research pathology careers.

"The event was a fantastic learning opportunity, as pathology underpins all of medicine. Pathologists across all pathology specialties play a vital role in patient care."

Catherine McIlroy, Final year medical student, University of Buckingham

Medical electives scheme

We launched a new medical electives scheme to mark the College's Diamond Jubilee. The scheme is joint funded by the College and partner societies from different disciplines, offering grants of up to £1,000 to

help support undergraduate medical and veterinary students who wish to undertake electives in pathology disciplines anywhere in the world. There are six awards covering clinical biochemistry, haematology, immunology, veterinary pathology, microbiology and cellular pathology.



Key achievements

- Delivering two National Pathology Weeks to promote the incredible work of our members and raise awareness of the role of pathology throughout people's lives.
- Successfully campaigning for greater pathology involvement and representation in the roll-out of the Genomic Medicine Service.
- Increasing the visibility of pathology among undergraduates and foundation doctors through initiatives such as the Foundation Fellowship scheme and medical electives scheme, and supporting pathology careers events funded by our Public Engagement Innovation Grant Scheme.
- Increasing engagement with parliamentarians and All-Party Parliamentary Groups to raise the profile of pathology and become the leading voice in important healthcare discussions that affect our members and their patients.

We are regional

We've been actively pursuing the interests of our members and working to prioritise patient care across all four nations of the UK. Many of the challenges our members face are the same across England, Northern Ireland, Scotland and Wales; however, within these challenges are nuances specific to the four nations that require different approaches and solutions. We work alongside our regional councils and representatives to raise the profile of pathology and advocate for health equality, be that equal access to medication and services for patients or training programmes for trainees.

Regional representation

The chairs of our regional councils work with parliamentarians, policymakers, healthcare bodies and organisations to highlight the needs of pathology services, our members and the public. They also provide a crucial link between pathologists in the regions they represent and the College. In November 2021, Dr Gareth McKeeman was elected as Chair of the Northern Ireland Regional Council, succeeding Professor Ken Mills who was in the post for five years.

Regional symposia

The regional symposia are annual College events where members, trainees and healthcare workers have the opportunity to discuss developments in their region and upcoming themes in pathology. They are also an opportunity for policymakers and advisors to hear first-hand the issues pathologists are facing.

Professor Sir Michael McBride, Chief Medical Officer for Northern Ireland, attended the Northern Ireland Regional Symposium in May this year as well as holding a meeting with College President

Professor Mike Osborn. Sir Michael was supportive of the College's work to increase investment in pathology services and its workforce. We'll foster more opportunities to work with Sir Michael in the future.

During each symposium there's a dedicated section for trainees where they can meet with Professor Mike Osborn and raise issues they're facing. This year, trainees highlighted their concerns around exams and the impact of the pandemic on their training, with some giving talks on their personal experiences. We were able to give details of how the College can support them and outline our priorities following the results of the COVID-19 impact trainee survey.

The symposia continue to provide the College with feedback, data and information that informs our policies for promoting and supporting pathology across all four nations.

Regional surgeries

Regional representatives in England organised and hosted regional surgeries before every College Council meeting this year. These surgeries allowed members to raise concerns and discuss relevant issues specific to their regions, which were then highlighted and considered at Council meetings.

Members attending surgeries had useful discussions around workforce and particular problems within certain regions, covering effects of the pandemic, changes to training, impending retirements and an increase in part-time working.

Election priorities in Northern Ireland

In May 2022, the Northern Ireland Assembly election was held and the College launched its priorities for the next government. These focused on investment in workforce, IT and infrastructure, staff wellbeing and learning from the pandemic. We called for increased investment in equipment and transport for specialist laboratories and digital pathology. The roll-out of digital pathology will help address some of the access inequalities faced by people living in rural areas, allowing rapid referral across pathology networks and improving access to expert advice and diagnoses.

As more and more people access pathology services, recruitment and retention of staff is essential to meet demand and improve long-term resilience. More funded training places are needed and we're calling for pay parity for new histopathology trainees in Northern Ireland in line with their counterparts in England.

We must use lessons learned from the pandemic to future-proof pathology services and plan for further outbreaks and pandemics. The pandemic brought the role of microbiology, virology and infection control teams into sharp focus, as well as the need for leadership in areas such as stewardship of antibiotics, vaccination and disease prevention. We're advocating for increased capacity within these

specialty areas and are ideally placed to contribute to discussions around antibiotic resistance and infectious diseases.

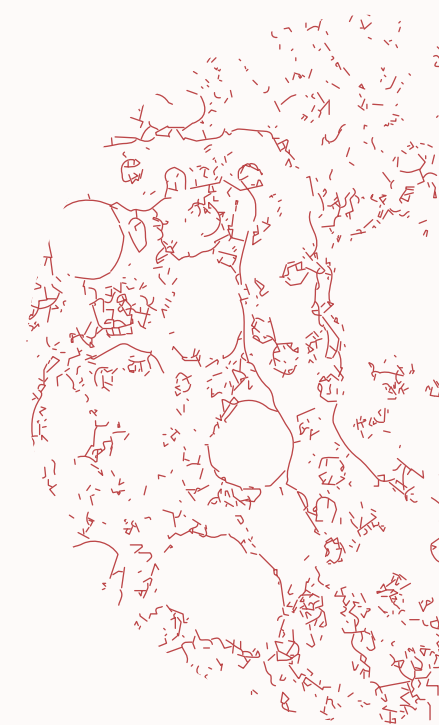
During the earlier phases of the pandemic, there was a drop in the number of patients seeking help and utilising screening programmes. Now we must prioritise equal access to screening for the future, focusing on transport issues and demystifying procedures.

Although the election was inconclusive, we approached the leaders of the main political parties to highlight the priorities in our manifesto. Once a government is formed, we'll engage minsters and Members of the Legislative Assembly around our manifesto and work closely with the new government to prioritise pathology and facilitate high-quality patient care.

Policy and stakeholder engagement

The College and the regional chairs have been working with kindred organisations, other partners and government agencies to push for investment, develop recovery plans and to highlight the role and importance of pathology and pathologists.

■ We lobbied and pressed hard for investment and, although there is still much work to be done to put the investment to work... we feel this is a step toward gaining the proper recognition of pathology informatics."



■ We work alongside our regional councils and representatives to raise the profile of pathology and advocate for health equality, be that equal access to medication and services for patients or training programmes for trainees.”

Dr Bernie Croal, Chair of the College’s Scotland Regional Council, led the response to the petition urging the Scottish government to act on post-mortem activity relating to the human tissue act. We also submitted a detailed response to the target operating model for cellular pathology – a 10- to 15-year plan on how cellular pathology services will be organised and delivered.

The Scottish government’s NHS Recovery Plan failed to mention histopathology or laboratory medicine. Dr Croal wrote to the Cabinet Office secretary pointing out the pivotal importance of laboratory medicine in directing patient flow, outcomes and overall financial efficiency of the wider NHS.

This is important at a time when, typically, new plans to address waiting times and cancer backlogs frequently omit laboratory services. We suggested a concerted plan to ensure adequate laboratory services are in place, especially histopathology capacity, which will be so important for cancer pathways.

Dr Jonathan Kell, Chair of the Wales Regional Council, had a positive meeting with Eluned Morgan MS. They discussed a range of pathology-related issues including workforce challenges, developing scientists into consultants by increasing their access to specialist training, and the need to complete the Digital Cellular Pathology programme.

Dr Kell represents the College at the Academy of Medical Royal Colleges and Faculties in Wales. He met the Chief Medical Officer for Wales, Sir Frank Atherton, to discuss workforce issues and has been raising the profile of pathology and its role in patient care, advocating for the involvement of the College in healthcare policies and strategies.

Following Dr Kell’s contribution to the ‘Priorities for healthcare in Wales forward planning’ event in January 2022, he was contacted by the Care Programme about taking forward some of the ideas that came out of the meeting.

A significant investment of £120 million in LIMS and digital pathology in England was announced for the 2021/2022 financial year. We lobbied and pressed hard for investment and, although there is still much work to be done to put the investment to work – and though more funding will be required in the future – we feel this is a step toward gaining the proper recognition of pathology informatics.

Integrated Care Systems

The England regional representatives continue to work with Integrated Care Systems in their respective regions. We want to be sure every system has established pathology input and are working to establish the links that will make this happen.

Dr Ali Robb, the College’s England Regional Representative for the North of England, attended the first meeting between the Academy of Medical Royal Colleges and NHSE/I on 5 April. This meeting, titled ‘What does effective clinical leadership look like in ICS?’, was organised to support the launch of the new NHSE/I Clinical and Care Professional Leadership Guidance.

There were opportunities to share some of our learning in pathology and the College will continue to contribute to these meetings.

In October 2021, the College published its commentary on the consolidation of pathology services. This paper discusses the issues that must be considered to improve the likelihood of success. It’s based on first-hand experience and feedback from our members, and includes new advice for members based on this peer-to-peer insight. We will continue to promote engagement and collaboration between each system with its pathology services.

Improving access to pathology careers

The College’s partnership with the Social Mobility Foundation (SMF) helps us to reach a greater number of school students across the UK to show that a career in pathology can be for anyone. Breaking down the barriers that prevent people from pursuing a career in pathology is essential, and this is an important aspect of the College’s work.

As part of our regional Diamond Jubilee celebrations, we arranged for the MELISSA bus to visit schools across the North East of England identified by the SMF. MELISSA is a double decker bus that has been designed to deliver healthcare education and training. It was turned into a mock pathology lab to encourage students to take part in interactive experiments to learn more about the different pathology specialties. Dr Ali Robb helped to plan the events and volunteers were on hand to chat to students about their work as pathologists and healthcare scientists. The

visits were a huge success and we had great engagement from the school students who attended.

“I was really excited to visit our Social Mobility Foundation partner schools with MELISSA to give students in the North East and Cumbria a small taste of how much fun pathology can be. [It was] a great way to celebrate the College’s Diamond Jubilee. I hope others may be inspired to run events elsewhere in the North – or indeed across the UK and the world – to engage the public in the important work we do, to understand more about our pivotal role in the journey of their samples, and even to think about joining us in the future.”

Dr Ali Robb, England Regional Representative for the North of England



We are international

The College is committed to raising international standards in pathology, engaging our members around the world, and sharing our knowledge, expertise and services as widely as possible to benefit everyone. This year has been another turbulent and challenging one for our members, with ongoing consequences of the pandemic and conflicts in Ukraine and Myanmar affecting healthcare services around the world. We've introduced new initiatives and have worked closely with global partners and organisations to provide much-needed support.

31

international medical graduates placed into UK training posts under the College's Medical Training Initiative

Supporting our colleagues around the world

Our colleagues in Myanmar and Ukraine continue to provide vital medical services despite living and working in treacherous conditions. We've been liaising with members, colleagues and representatives to find the best ways to help. In Myanmar, there are shortages of not only everyday medical provisions, but also medical books and learning materials. In September 2021, we received the news that our funding application to the British Medical Association (BMA) had been successful. The resources purchased with the funding were donated to medical doctors in Myanmar of all specialties and allied healthcare professionals to assist with their continued professional development.

We have formal links with Ukraine through our country advisors, and a long-standing memorandum of understanding with Shupyk National Medical Academy of Postgraduate Education. Our International team has been

in close contact with the Ukraine country advisors and provided information for them to share with Ukrainian doctors seeking refuge in the UK. This includes details of the Refugee Scheme (UK), which we launched in 2021.

Our refugee scheme

We recognise that doctors seeking refuge in the UK face particular challenges as international medical graduates (IMGs). Our new initiative was developed to support and assist refugee pathologists located in the UK. It's free of charge for doctors who have trained as pathologists in their home country and IMGs who have started their training in pathology but were unable to complete their training. The initiative offers refugee pathologists a free one-year membership of the College and access to a wide range of resources and events, as well as our mentorship programme.

International Pathology Day 2021

International Pathology Day (IPD) celebrates the work of pathologists all over the world and the difference pathology makes to the lives of so many. We use this day as a platform

to share experience, knowledge and ideas and promote collaboration to improve health outcomes. Now in its eighth year, the essence of IPD has never been more important.

IPD 2021 focused on the implementation and benefits of digital pathology and artificial intelligence (AI). The growth in digital pathology and AI allows pathologists to engage and evaluate quickly and remotely with colleagues, and has the potential to aid greater international collaboration.

During the event, the issue of inequality in access to diagnostic services was discussed, with data indicating that almost 50% of the world's population have no access to services. Solutions put forward include innovations in, and the use of, technology. There were presentations on projects assessing the viability of whole-slide imaging scanning technology in primary settings and a look into a healthcare future where informatics play a greater role in cancer care.

The roundtable topic was how digital pathology can break down international borders. The discussion raised thought-provoking information and ideas, and considered how we can achieve sustainable digital practice globally, the future of telepathology and whether digital pathology can tackle inequalities in healthcare provision.

As well as joining us for the live-streamed event on the day, our members celebrated with us across social media and showcased their work, labs and events.

International Pathology Day is an amazing chance to meet up and interact with colleagues from all around the world, to learn from each other and to develop friendships and rekindle old acquaintances, which help develop and further pathology for the benefit of patients everywhere."

Professor Mike Osborn
President

Collaborating with international partners

Cobadging

Over the last reporting year, we've proudly endorsed six different international activities through our cobadging initiative. These include Medlab Middle East in Dubai, Haem Icon Conference in Sri Lanka and the Gynaecological pathology online teaching programme for spring/summer 2022 residents in Moldova.

All year round, we get regular requests from international organisations to enter cobadging arrangements with us. We have a strict internal cobadging policy to ensure the materials we cobadge meet our standards. Cobadging agreements extend our influence and reputation globally, strengthening international relations and support for our overseas members.

Virtual learning resources

Our virtual resources are developed through international collaborations and UK partnerships. They support objectives set out in our international strategy to aid the continued professional development of current and future pathologists worldwide.

36

international medical graduates sponsored for GMC registration

300+

international medical graduates attended three International Pathology School events





over

18,000

page views for our Ghana video lecture series in the first two months since launch

In May 2022, we launched a new series of 24 video lectures in collaboration with the Ghana College of Physicians and Surgeons and in conjunction with the Tropical Health Education Trust (THET) Ghana Workforce Health Partnership. This project was funded through the Building the Future International Workforce Programme (Ghana) by the UK Department of Health and Social Care to benefit the UK and partner country health sectors. The partnership aims to strengthen health services in lower middle-income countries as well as the NHS, and to help achieve healthcare workforce sustainability.

The video series is mapped to recently revised curricula from the Faculty of Laboratory Medicine of the Ghana College of Physicians and Surgeons and supports Ghana Residents in their training and continued professional development. These lectures, delivered by pathologists from the UK and overseas, cover four specialties – chemical pathology, haematology, histopathology and microbiology. They provide learning opportunities that support better practice, patient management and improved outcomes, helping to tackle some of the challenges at the forefront of pathology in Ghana and worldwide.

Key achievements

- Live-streaming International Pathology Day 2021 to a global audience, with more than 95 people joining us from Europe, the Middle East and North Africa, South East Asia, sub-Saharan Africa and Western Pacific.
- Securing £2,000 funding for learning materials for healthcare workers in Myanmar.
- Launching our new refugee scheme to support and assist refugee pathologists in the UK.
- Collaborating with the Ghana College of Physicians and Surgeons to launch a new series of 24 video lectures to support Ghana Residents in their training and continued professional development.

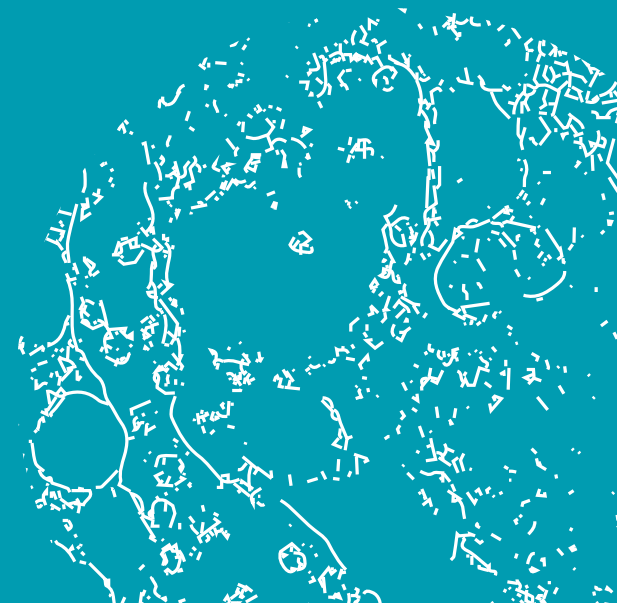


Celebrating 60 years of the College

03

■ 2022 marks the College's Diamond Jubilee. The College owes a debt of gratitude to all the members who have volunteered over the last 60 years, from chairing committees, to becoming FRCPath examiners or helping to raise awareness of pathology. The College could not function without them."

| **Professor Mike Osborn, President**



Your College

Since it was founded in 1962, the Royal College of Pathologists has advocated for its members and for people using pathology services, to ensure the highest quality of care.

The College has continually evolved over the last 60 years to reflect changes in the profession and society. We have grown from 300 members in 1962 to over 13,000 across the world, while our commitment to our members and to the public remains the same.

Many of our activities depend on our members volunteering. Without them, the College couldn't function. We thank all our members who have volunteered for the College over the past 60 years. Your work has been

essential in shaping and guiding our work. We're focused on making the needs of our members our prime directive and, as part of our 2021–2024 strategy, will launch new initiatives that will deepen our insight into what our members want and need.

We will continue to work with you and for you, ensuring that pathology is at the heart of healthcare conversations.



Our Diamond Jubilee

To celebrate the historic milestone of turning 60, we planned year-long celebrations with fantastic events taking place all around the UK. The Diamond Jubilee has been a great opportunity to highlight the importance of pathology in healthcare and the excellent service our members provide for patients, healthcare colleagues and the NHS.

Turning 60

Tuesday 21 June 2022 was the College's official 60th anniversary and College officers and staff had worked hard to host a selection of events on this day, including an Open Day for school students. Unfortunately, rail and tube strikes led to the postponement of the Open Day, but this didn't dampen celebrations.

We were delighted that College Fellow Professor Sir Jonathan Van-Tam was able to present the College's Foundation Lecture virtually. Sir Jonathan discussed his take on the pandemic and the lessons learned. He also gave advice on how to respond to and manage rapidly developing and fast-moving events with limited information, and shared his insight in dealing with media and politicians in these situations. Nearly 300 people joined us on the day, with many more viewing the lecture on our website since then.

We collaborate with organisations and stakeholders across healthcare, and it was fantastic to see such support and so many well wishes on 21 June across social media. Conversations using #RCPPath60 showed great recognition of the dedicated work of our members and pathology colleagues and appreciation of how integral they are to everyone's healthcare.

Pathology for all

We've launched a new Pathologists in Profile podcast series, releasing a new episode every month throughout this special year. This series has showcased the diversity of pathology, featuring pathologists and scientists from different specialties working across the world.



“I was amazed at the variety of pets people have and the love for them which came across really strongly in the pet/owner photos. The value of veterinary pathology in establishing diagnoses and treatments for these important family members shone through.”

Reverend Dr Jenny McKay
RCPPath Pet Portrait Competition judge

We learn more about the paths they've taken and why they chose a career in pathology. To build on this, we've published four special issues of the *Bulletin*, which have celebrated pathologists and scientists and our specialties, underpinning that pathology can be for anyone. We've had great dialogue with the Specialty Advisory Committees who provided us with articles shining spotlights on past achievements in their specialties, as well as looking at future challenges and what's needed to overcome them.

How you got involved

From a classical music concert at the Liverpool Philharmonic Hall, to cycling challenges, a Pet Portrait Competition and 'Living Autopsy' tour, there have been so many celebrations to get involved with. We'd like to say a huge thank you to everyone that organised events and took part in what has been a fantastic year celebrating 60 years of the College and our members.

The RCPet Pet Portrait Competition coincided with National Pet Month and was a creative way of highlighting the value of veterinary pathology, and the breadth of pathology. We received 82 entries across social media, with an amazing array of species, including salamanders, pigeons, rabbits and dogs. There were two winning categories – cutest pet and pet that looks most like its owner.

Past-President Dr Suzy Lishman CBE took her 'Living Autopsy' event on tour to celebrate our Diamond Jubilee. This event has been hugely popular and successful since it was created, with one lecture receiving over 1.7 million views on our YouTube channel. Using a model playing a dead body, attendees learn about the role of pathologists and follow the process of a post-mortem examination with real-life equipment used to explain this. The tour has visited Northern Ireland, Leeds, London, Edinburgh, Newcastle, Cardiff and Worcester. Regional living autopsy events have also been taking place with local pathologists in Derry, Merseyside and Tregaron. Dr Emyr Benbow delivered his living autopsy event in Welsh as part of the National Eisteddfod of Wales.



The Wales Regional Council organised the Wales Coast Path walk as part of our celebrations in Wales. On Saturday 2 July 2022, walks took place around the coast of Wales and President Professor Mike Osborn joined pathology colleagues and their family and friends on the South Wales section. The Mayor of Penarth, Cllr Laura Rochefort, joined Professor Osborn between Penarth and Cardiff Bay, discussing issues facing the pathology workforce in Wales as they walked. Dr James Davies MP also took part in the walk from Prestatyn to Rhyl along with a group from the Betsi Cadwaladr University Health Board, organised by Wales Regional Council member Dr Anu Gunavardhan.

Other events in Wales included a lecture at the Senedd sponsored by Vaughan Gething MS, Minister for the Economy, and given by Professor Meena Upadhyaya OBE – a medical geneticist and honorary professor at Cardiff University. In her lecture, Professor Upadhyaya discussed her life, work and the challenges she has faced. She is dedicated to medicine and genetics and improving opportunities for everyone. Professor Roberto La Ragione, Chair of the RCPet Veterinary Pathology Specialty Advisory Committee, delivered his Diamond Jubilee guest lecture on 'Zoonoses: a global One Health issue' at Swansea University as part of the Microbiology Society's 'What's new in Cryptosporidium?' meeting. Professor La Ragione's lecture highlighted the growing threat of zoonotic pathogens and the impact that climate change and intensive farming is having on transmission.

“It was brilliant to see members across Wales taking part in the College coastal walk to highlight the amazing work pathologists do. We were grateful for the support of Cllr Laura Rochefort, Mayor of Penarth, and Dr James Davies, MP for Vale of Clwyd, and look forward to continuing to work closely on promoting the work of pathologists in Wales.”

Dr Jonathan Kell
Chair of the Wales Regional Council





"I was honoured and privileged to be invited to speak at the Senedd about my challenging but worthwhile journey in medical genetics as part of the College's Diamond Jubilee celebrations."

| Professor Meena Upadhyaya OBE

In September, members of the College joined Professor Sarah Coupland, Vice President for Communications, on the Land's End to John O'Groats bike ride. They covered 1,000 miles across 12 days of cycling. The College teamed up with Cancer Research UK, Cycle Retreats, who organised the event, and Sonic Healthcare UK, who sponsored the event, to raise awareness of the role of pathology in cancer diagnostics and patient care. The funds raised for Cancer Research UK will support research carried out by pathologists and scientists to discover new therapies to treat different types of cancer. Well done to all who took part in this challenge and our virtual cycling and walking challenges earlier in the year.

Open Day celebrations moved to 8 September and we were delighted to be joined by 65 14–18 year olds from schools from around London. We wanted to use the Open Day to inspire and inform local young people about pathology and pathology careers, bringing school students from diverse backgrounds to the College to participate in interactive activities. It was a great opportunity for College members to communicate with young people about their work and its importance to the nation's health.

Proceedings started with the arrival of Her Royal Highness, Birgitte Eva van Deurs Henriksen, Duchess of Gloucester, and Mr Leslie Morgan OBE, Deputy Lord Lieutenant for Tower Hamlets. We were delighted that they were able to join us for our celebrations. Professor Mike Osborn invited The Duchess of Gloucester to unveil a plaque to mark the 60th anniversary of the College and to sign the College's visitors' book.



The Duchess of Gloucester and school students attended a 'Living Autopsy' session with Dr Suzy Lishman. With the aid of a living model, Dr Lishman talked through the step-by-step process of a post-mortem examination, showing instruments used during a real autopsy. School students and their teachers enjoyed the opportunity to meet The Duchess of Gloucester before the session.

In the afternoon, students took part in nine hands-on pathology-related activities. Each student received a bag full of pathology-themed resources, including activity sheets and a bingo card, which students filled in as they went around the activities. Completed cards were collected at the end of the final round and a prize was given to two lucky students from each school.

The afternoon activities were delivered by members from different specialties, including neuropathology, haematology, chemical pathology, histocompatibility and immunogenetics, and

“Very detailed, informative and jam-packed. I would recommend for science lovers.”



veterinary pathology. The activities offered different ways for students to learn more about pathology – interactive quizzes, roleplay, using microscopes and 3D printers, and producing science-themed art. We are grateful to all members who volunteered their time and expertise to deliver these activities. The students had a fantastic day learning more about pathology and we've since received excellent feedback.

In the evening of the Open Day, we welcomed sponsors and key partners who showcased their work to guests at the President's Annual Dinner. Thank you to our sponsors Sonic Healthcare UK, Aiforia, Sectra, Smart in Media, Agilent and the Pathological Society, and to our partners 3D LifePrints and LabTests Online.

Further events will be taking place across the UK until the end of year. In November, the College's Scotland Regional Council will host a special Diamond Jubilee symposium at the Royal College of Surgeons Edinburgh. The symposium will highlight the vital role of laboratory services in healthcare, discussing new research and innovations, cutting-edge cardiac markers and advances in artificial intelligence. We're delighted that we'll be joined by Professor Sir Gregor Smith, Chief Medical Officer for Scotland, Catherine Ross, Chief Healthcare Science Officer for Scotland, and Professor Dame Anna Dominiczak, Chief Scientist (Health) for the Scottish Government.

“A really inspiring day that showed the wide variety of professions in pathology. Thank you!”



Our specialties and case studies

04

“Founded in 1962 to develop and support the evolving specialties of pathology, the College has flourished since then owing to the hard work and professionalism of you, our members. The College continues to champion the role of all our 17 specialties and our members who work to help us deliver and develop excellence in patient care.”

| **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 coroners' 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

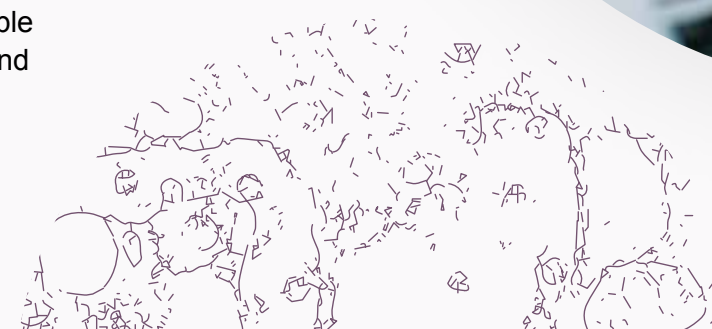
Immunologists deal with the study, diagnosis and management of people with disordered immune systems and immune deficiency. They advise on conditions in which immunological

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 on-site 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, newborns 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

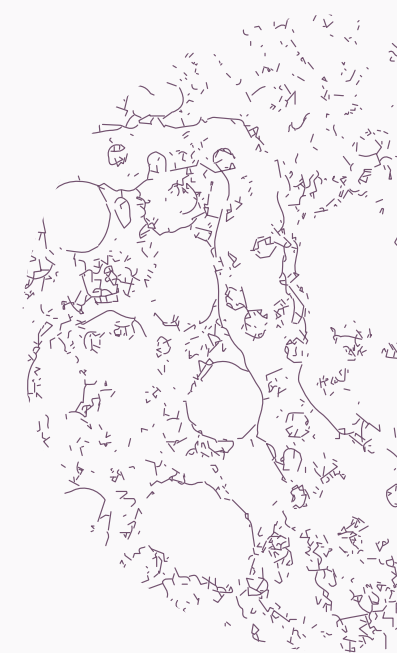
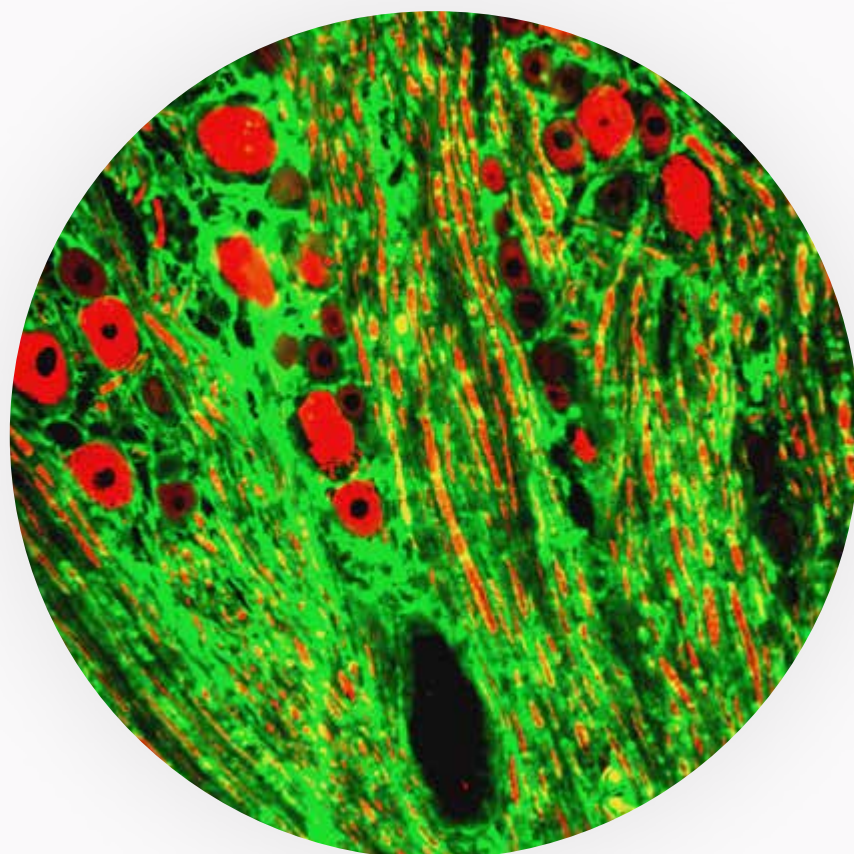
Veterinary pathologists work in animal disease surveillance, prevention, diagnosis and treatment. They play a key role in the development of safe and effective medicines and vaccines for animals



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

Implementing a newborn screening programme: our experience in Kaduna State, Nigeria

Newborn screening programmes for sickle cell disorder ensure early diagnosis, allowing preventative measures to be established early in childhood and reducing the likelihood of major health complications. Here, Dr Ifeoma Ijei-Enesi, Dr Livingstone Dogara and Dr Psalm Baba Inusa describe how their screening programme has overcome challenges to improve diagnostic and treatment services for patients with sickle cell disorder.

Sub-Saharan Africa accounts for more than 80% of the over 400,000 sickle cell disorder (SCD) annual births globally, with Nigeria having the most cases. Despite the significant public health implications, no African country has implemented universal newborn screening (NBS) similar to national childhood immunisation programmes.¹ NBS is essential for early diagnosis and the initiation of basic health intervention strategies and steps to prevent diseases like malaria, to reduce illness and death.²

Experts in Africa have identified a complexity of factors contributing to the challenges faced in initiating, operating and expanding NBS programmes. There is consensus that the government's role in the design, implementation, funding and integration of NBS programmes for SCD into public health systems can influence the sustainability.

The north-western state of Kaduna has a population and density of 8 million and 183.1/km², respectively (as at 2016).³ It is here that our young NBS programme exists at a sub-governmental level in a small network of rural and urban facilities offering tiered healthcare.

The African Research and Innovative Initiative for Sickle Cell Education (ARISE), an EU-funded project (www.ariseinitiative.org), is working with state, local and international partners to increase research, diagnostic and clinical management capacity throughout the healthcare system. The aim is to bridge the screening gap by screening 10,000 infants annually.

Amina's story

Amina's* parents drove 11.2 km across the Kaduna metropolis to our facility, a tertiary hospital in the heart of the city. They had been referred for specialist care for their son aged almost four. Amina, his three-month-old sister, was offered screening as she was an at-risk infant.

Amina underwent dried blood spot sampling, whereby a small volume of blood was collected from Amina onto a piece of absorbent paper called a Guthrie card. The blood dried on the paper before being packaged and sent to a screening laboratory in Kafanchan, a town about three hours away from the metropolis. The lab uses isoelectric focusing, which is a cost-effective technology that separates

proteins, to identify abnormal types of haemoglobin associated with SCD.^{4,5}

Unfortunately, in a country facing the challenges of incessant power outages, supply chain interruptions, difficult travel terrain and insecurity, the testing platform was experiencing equipment downtime. It was six months before Amina's results were received on-site. The parents were contacted by phone within 24 hours of receipt, but they were unable to make a physical appointment until three weeks later due to paternal schedule conflicts.

Amina was now one year old. She had developed symptoms at four months and the results showed she had SCD like her older brother. Despite the delay in obtaining her results, the parents' concerns were allayed by education about how her disorder could be managed and were both relieved and delighted to hear about our care plan for her going forward. She is currently enrolled at our facility receiving malaria and pneumococcal prophylaxis, folic acid, vaccinations and health checks.

We have since secured increased government commitment and American Society of Hematology-Consortium on Newborn Screening in Africa (ASH-CONSA) laboratory support for resources

for tests and equipment. We have been able to provide service and training to primary healthcare centers to help improve the services provided and set standards. To further reduce delays and promptly identify and address challenges along the screening pathway, we established an additional NBS laboratory, implemented regular twice-monthly meetings and facilitated a review process. We have reduced our turn-around-time and babies are now enrolled into clinical care within four to six weeks of the blood spot being taken.

Amina's story depicts the myriad of challenges faced in providing diagnostic and therapeutic treatments for people with SCD in low- and middle-income countries and some strategies to overcome such barriers. With her parents eager to partner with us to provide the best possible care for her, I know we haven't seen the last of that little girl and I'm privileged to have been a small part of her story.

Acknowledgements to Monica Shuaibu and Janet Yakubu.

**The child's name has been changed to maintain confidentiality.*

Sickle cell disorder affects the nature of haemoglobin (a special protein that carries oxygen and is found in red blood cells). Normal red blood cells are doughnut-shaped – red blood cells affected by sickle cell disorder become sticky and rigid when they lose their oxygen and become sickle-shaped, like a crescent moon. This causes them to block blood vessels, leading to symptoms that are often painful, or be destroyed too early sometimes requiring a blood transfusion. It's a lifelong condition and early diagnosis means treatment can start promptly. There are treatments to manage sickle cell disease, but a cure is not widely available.



References: References can be found online: www.rcpath.org/profession/publications/annual-reports.html



CASE STUDY

Improving blood matching for transfusions in patients with sickle cell disorder

The transfusion of red blood cells may be a one-off event, or it may be required every few weeks over many years, for example for people with an inherited anaemia such as sickle cell disorder. Here Dr Sara Trompeter, a consultant haematologist, discusses the challenges in matching blood for transfusions and advances in red cell genotyping through the Haem-Match project.

Matching blood

Red blood cells – the cells that carry oxygen around the body – have labels on their surfaces, known as antigens or blood groups, which we inherit genetically from our parents. Blood is selected for transfusion according to the blood groups of the donor and the blood group of the recipient – we call this ‘matching’. There are over 2 million units of blood donated a year in the UK. There are over 200 blood groups so matching for everything every time is not feasible. Currently, we routinely provide blood matched for the ABO blood groups and also for RhD (a protein found on the surface of red blood cells; previously also referred to as Rhesus).

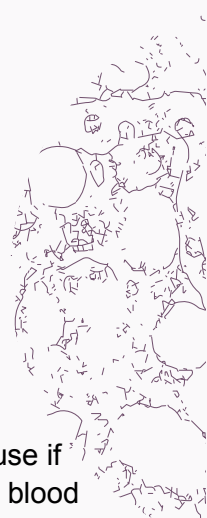
The consequences of unmatched blood groups

For most people undergoing a blood transfusion, provided they are ABO and RhD matched, there are no complications. However, a patient may form an antibody against a blood group if the red cells of the donor have an antigen that is ‘foreign’ to the patient (i.e. if the red cells of the donor have a blood group that the red cells of the recipient do not). This is known as alloimmunisation.

Alloimmunisation can be dangerous, because if the patient is transfused subsequently with blood containing the antigen that caused the antibody to form, there is a risk that the immune system of the patient will attack the transfused cells, causing a haemolytic reaction that can be fatal. We know that some people who receive transfusions (such as those with sickle cell disorder and thalassaemia) are more likely to form antibodies than patients with a condition requiring a one-off transfusion.

“When [Ama] was pregnant ... there were only two units of blood available for her nationally. If she were to have had a serious sickle-related complication, she would have likely needed at least eight units of blood to treat her.”

To reduce the risk of antibody formation, blood for regularly transfused patients is matched at present by considering other Rh antigens, for example C, c, E, e and the K blood groups in addition to the A, B, O and D blood groups. Despite this, around 17% of



such people do make antibodies to the other blood groups that we do not match and many will have severe transfusion reactions. This can result in real difficulty in getting blood for them.

Ama's story

Ama has sickle cell disorder and developed antibodies following transfusion. When she was pregnant in 2018 there were only two units of blood available for her nationally. If she were to have had a serious sickle-related complication such as a chest syndrome, she would have likely needed at least eight units of blood to treat her. We met with Ama and had a conversation about the impact of alloimmunisation on her. She spoke candidly about the anxiety that she experienced during her pregnancy. She discussed the enormous lengths the clinical and laboratory staff in the hospital and NHS Blood and Transplant (NHSBT) – the national blood service for England – went to ensure that suitable blood was made available for her should she have needed it.

“Ama spoke about her hopes ... for her children who also have sickle cell disorder. Ama is hopeful that they might not form antibodies and be in such a vulnerable position as herself. This is a major aim of Haem-Match.”

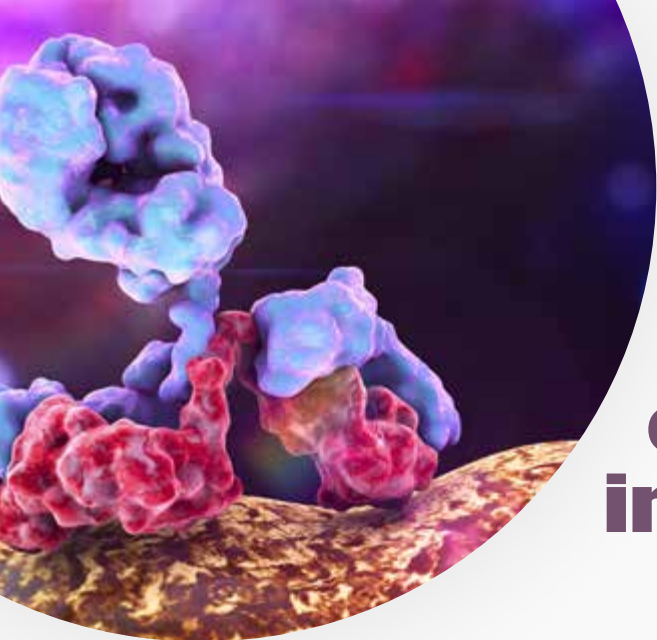
We spoke about the rare donor panel – a group of donors with rare blood groups who are supported by NHSBT to donate, sometimes in an emergency – whose selflessness she was particularly touched by. The National Frozen Blood Bank in Liverpool and teams in NHSBT such as the red cell immunohaematology (RCI) teams and the International Blood Group Reference Laboratory (IBGRL) undertake testing and research to support those who are difficult to transfuse. Ama spoke about her hopes for the future, particularly for her children who also have sickle cell disorder. Ama is hopeful that they might not form antibodies and be in such a vulnerable position as herself. This is a major aim of our research project Haem-Match.

What is Haem-Match?

Haem-Match aims to provide blood for transfusion that is more precisely matched to patients' blood groups, known as extended (red cell antigen) matching. In doing so, we can reduce the risk of harm caused by transfusion (for example antibody formation, alloimmunisation and transfusion reactions), streamline the allocation of precisely genetically matched units to patients with complicated transfusion needs, and reduce waste and improve efficiency in the collection and allocation of blood units.

Although the project initially focuses on reducing the risk of blood transfusion treatment for people with sickle cell disorder, we hope to expand this to people with other transfusion-dependent anaemias such as thalassaemia and myelodysplastic syndrome. You can read more about Haem-Match here: www.haemmatch.co.uk.





Finding a novel cause of primary immunodeficiency

Clinical immunologists specialise in diagnosing and treating patients with inherited or acquired failures of the immune systems that lead to infections and autoimmune complications. When the cause of an immune system disorder is unknown, clinical trials and research can be vital in providing answers. Here, Dr Sinisa Savic describes how a novel cause of primary immunodeficiency was discovered.

Maurice was well as a child but began suffering with frequent chest infections from his mid-teens. At 15 years old, he recalled being treated for pneumonia. It was not until he was 19 years old that he came to the attention of the clinical immunology department at St James's University Hospital in Leeds. His referral was triggered by a finding of very low levels of immunoglobulins (antibodies) in his blood, following routine investigations for chronic diarrhoea.

"As medical science continues to advance, the technology for correcting genetic conditions will become more readily available."

Once he was under the care of the clinical immunology team, detailed investigations of his immune system were arranged. This included studying particular types of white blood cells, mainly lymphocytes, to determine more precisely the type of immunodeficiency Maurice was suffering from. These tests showed that his immune system was not producing enough immunoglobulin or a specific type of lymphocyte called a CD4 T cell. In addition, when his lymphocytes were activated by signals mimicking natural infection,

they did not respond properly. Maurice had no family history of immunodeficiency to suggest a genetic cause for his condition, but neither did his condition fit with one of the genetic types of primary immunodeficiency known about at time, since his disease onset was so late. Therefore, he was given a diagnosis of common variable immunodeficiency – a diagnostic label used for some primary immunodeficiencies of unknown cause. He was started on immunoglobulin replacement therapy and has remained on this treatment ever since.

In 2014, Maurice was invited to take part in a local study that aimed to improve the diagnosis of primary immunodeficiencies through the use of advanced genetic testing. Maurice was found to have unique changes within his genetic code, in a gene called *CRACR2A*. Changes in this gene had not previously been linked to any specific health conditions, but studies in mice had shown that when this gene was deleted, it resulted in abnormal function of the immune system. In particular, it led to the reduced capacity of CD4 T cells to respond to infection, similar to what was seen when testing Maurice's lymphocytes.

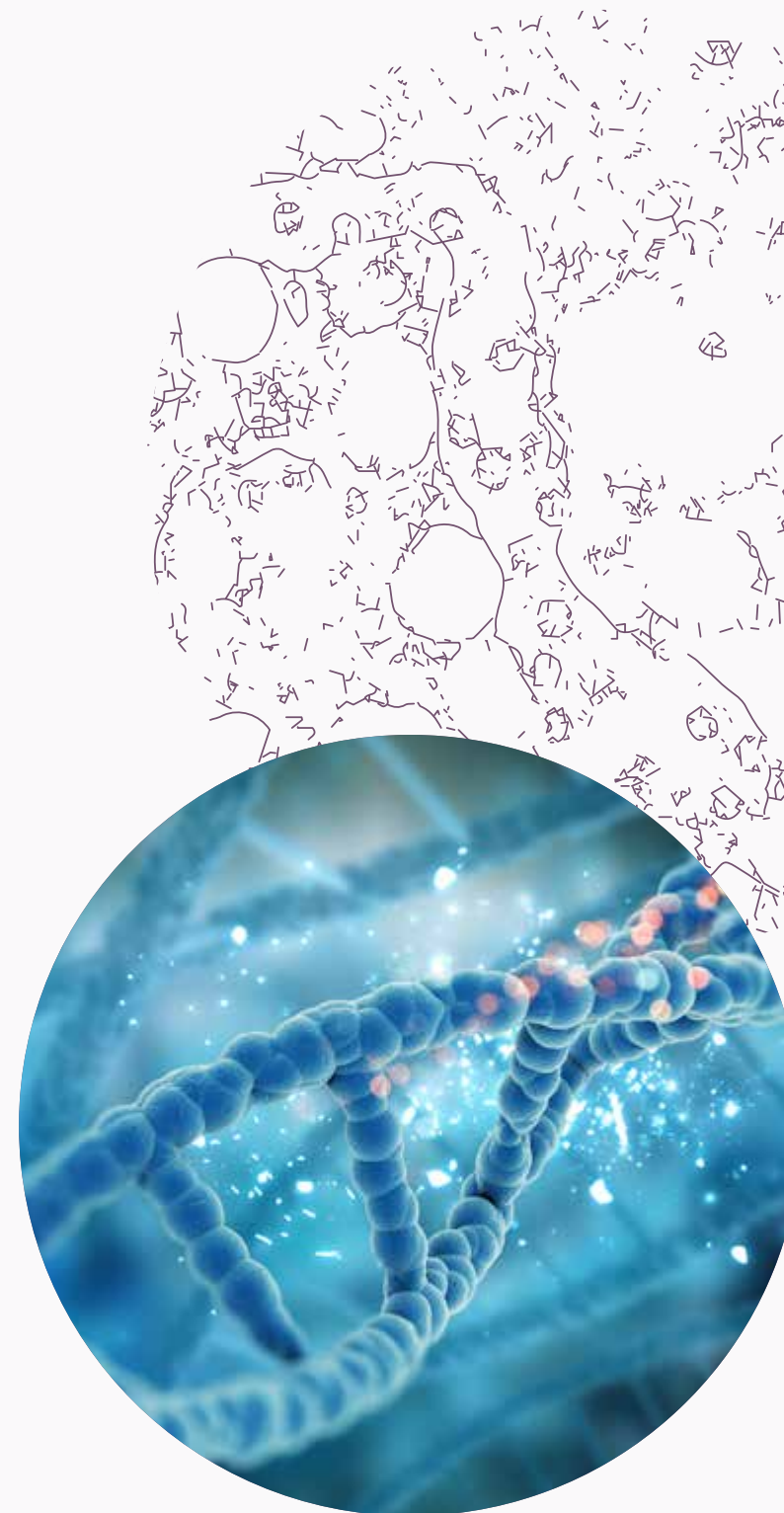
Following this initial genetic discovery, it took several years to complete the testing required to provide definitive proof that the changes

in Maurice's genetic code were the cause of his immunodeficiency. In part, this is because Maurice is the only person in the world where these specific genetic changes have been associated with immunodeficiency. It has been almost 20 years from the onset of symptoms to the point where we were able to establish a precise diagnosis for Maurice's condition. Over this period of time, many new immunodeficiency conditions have been identified and genetic testing is now part of the routine diagnostic work-up for patients presenting with suspected immunodeficiency. We have more sophisticated ways in which to study the immune system and the length of time from becoming ill to getting a precise diagnosis is ever shorter for our patients.

"None of this research would be possible without Maurice and others like him volunteering to take part in studies and help advance medical science."

The discovery of a genetic cause for Maurice's immunodeficiency did not result in any immediate change to his treatment. However, simply having an explanation helps him to cope with this long-term condition and he is now better able to make informed decisions about his career and family plans. As medical science continues to advance, the technology for correcting genetic conditions will become more readily available. Since this will only be relevant in patients with a precise genetic diagnosis, the importance of such diagnoses cannot be overemphasised.

None of this research would be possible without Maurice and others like him volunteering to take part in studies and help advance medical science. The practice of clinical immunology has always been closely linked to basic translational research. This is probably why the recent update (2022) from the International Union of Immunological Societies can list 485 separate human inborn errors of immunity, with 50 of these identified in the last two years.





Combining dentistry and pathology to diagnose and treat oral cancer

Oral and maxillofacial pathologists are dentists by degree qualification and take a further training programme and FRCPath examination that is similar to their medically qualified colleagues. Their dentistry background provides them with in-depth knowledge of the complex processes that are involved in the development of teeth. Here, Dr Gillian Hall describes an unusual case of a tumour arising from the lining of a dental cyst.

I am sure that most people will be aware of the troubles that teeth can cause, but may not know that cellular remnants and clusters of residual cells from tooth formation lay dormant in our jaws, and have the ability to wake up, proliferate and form lesions in later life. These include common cysts, which occur around unerupted/partially erupted wisdom teeth and inflammatory cysts that appear around the roots of teeth that have been traumatised or are decayed. These lesions form much of the daily work of an oral and maxillofacial pathologist and are resolved when the tooth causing the problem is removed or if tooth-saving dental procedures are performed.

In some cases, a sample of tissue is taken and sent to us for diagnosis. Occasionally, the clinical and radiological appearances may not be entirely typical or explainable as one of these common cysts, and pathological examination of the tissue is essential. Whatever the scenario, we examine the tissue cells using a microscope, searching for evidence that might signify a more worrying diagnosis, namely one of the rare types of tumours that these cells have the capability to form.

"In more than a dozen years as a consultant, this is the first time that I have seen a carcinoma arising in [a dental cyst] (and likely the last)."

Considering that these cluster of residual cells are present within the jaws and the soft tissues of the gums as scattered groups of rarely more than ten cells, the diversity of appearances of the lesions that they can become is astonishing. The most recent 2022 WHO publication lists 11 types of cyst, 16 benign and seven malignant tumours. In the UK population, less than 6% of tumours that develop in the tissues responsible for tooth formation are malignant and the less worrisome cysts are at least five-times more common than all the benign and malignant tumours combined.

In late 2021, tissue was submitted for diagnosis of a white growth that was seen on the gum of a 59-year-old woman, behind her last standing lower molar tooth. She did have a

past history of tobacco use, so she could be considered as at risk from oral cavity cancer.

An urgent biopsy was performed. When I examined the tissue under the microscope, I could see that the squamous epithelial cells (the cell type that forms the lining of the mouth) weren't typical. From this investigation, it wasn't possible to show there was invasive growth, which would have indicated a diagnosis of cancer.

"In the UK population, less than 6% of tumours that develop in the tissues responsible for tooth formation are malignant..."

The clinical appearances were, however, highly suspicious, and there were features of concern in the bone that were visible after examination using radiography. To complicate matters, the scans revealed a buried wisdom tooth immediately below the abnormal area around which was a sizable cyst.

A limited surgical removal of the lesion would be considered the ideal treatment, but the presence of the tooth and cyst meant this was not possible. A full thickness segment of the jaw, to include the lesion, buried tooth and cyst was removed.

The macroscopic appearances after slicing the segment using a bandsaw suggested an inseparable relationship between the proliferative lesion on the gum and the cyst, which encased the unerupted tooth. Examination of slides showed the lesion to be a cancer that had arisen from the lining of the cyst.

"...our job is to provide the precise diagnosis, thus give clarity to the patient and their clinical team and to inform the right course of treatment."

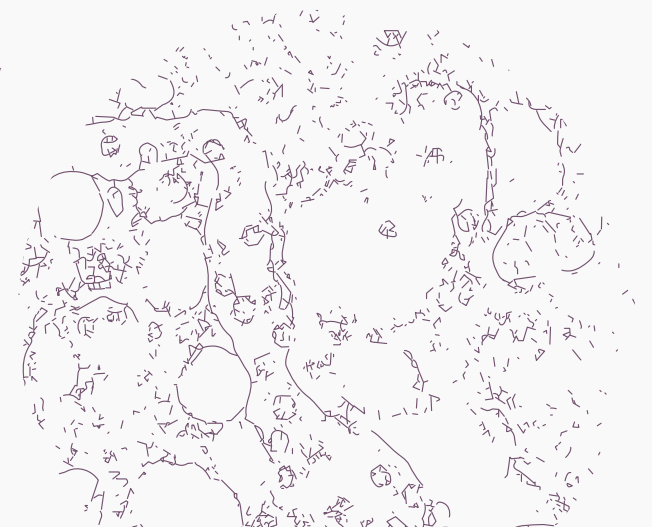
The reported incidence of the tumours that arise from the previously described tooth-forming cell clusters is 0.5 per 100,000, which in the current UK population would be 350 cases per year, and if less than 6% are cancerous, then this would amount to just 21 per year nationally.

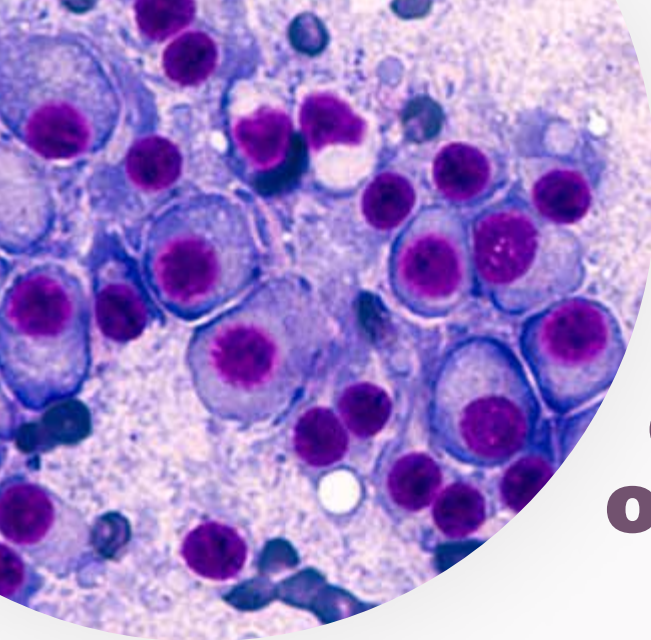
The tumour was low grade and cut out with good margins to ensure no tumorous cells were left. There were no aggressive features and no spread to the lymph nodes of the patient's neck. The prognosis for this patient based on these findings is excellent and no chemotherapy or radiotherapy was needed.

Before the reader dashes for an emergency trip to the dentist to check their wisdom teeth, it should be noted that I probably see a dozen dental cysts or more every week. In more than a dozen years as a consultant, this is the first time that I have seen a carcinoma arising in one (and likely the last).

Dentists are always on the lookout for soft tissue growths and check for abnormalities on X-rays that could indicate the presence of a dental cyst or tumour, and will refer to a specialist when something is amiss.

Likewise, the histopathologist, whatever their background, is forever looking for that once in a career rarity that makes our job so fascinating. But, far more importantly, our job is to provide the precise diagnosis, thus give clarity to the patient and their clinical team and to inform the right course of treatment.





Multiple myeloma: entering a new era of genetics

Patients with multiple myeloma – a type of bone marrow cancer – often have poor outcomes. Professor Guy Pratt, a clinical haematologist, explains how genetic testing can be used to aid decisions around the best treatment for patients, ultimately improving survival rates.

Multiple myeloma is a haematological cancer of plasma cells (a type of white blood cell) that arises in the bone marrow. Patients have symptoms such as pain, infections, anaemia and renal impairment. It affects over 20,000 people in the UK currently, with 5,000 new cases diagnosed each year. Late diagnosis remains a problem since patients often present with non-specific symptoms and it is relatively uncommon.

Over the last 20 years there have been significant improvements in the availability of novel treatment options. This has led to a marked improvement in outcomes. Despite this, multiple myeloma remains an ultimately fatal condition.

“We are entering a new era where the results of genetic testing will increasingly be used in treatment decisions ... for patients with myeloma.”

Patients receive repeated treatments over years before the disease becomes resistant to treatment or patients reach a point where they cannot tolerate further treatment. Traditionally, initial treatment decisions have been based on

the fitness of the patients for intensive treatment and whether severe renal failure is present. For several years it has been recognised that one in four patients with myeloma have a tumour with adverse genetic abnormalities (causing high-risk myeloma). High-risk myeloma is associated with poorer outcomes and a median survival of three years with conventional approaches.

Myeloma management has lagged behind other blood cancers in terms of genetic testing and the use of genetics in treatment decisions and discussions with patients around their outlook. The genetics of myeloma is complex and more heterogeneous (diverse) compared with other haematological cancers. However, it is known that the presence of two or more certain genetic abnormalities is associated with a worse outlook.

Myeloma UK trial 9 was the first molecularly stratified (where patients were grouped according to the molecular characteristics of their cancer) prospective trial that aimed to improve the outcome for patients with high-risk myeloma. Between 2017 and 2019, 472 patients with suspected high-risk myeloma from 39 UK NHS hospitals were screened for genetic abnormalities. Patients found to have high-risk disease genetically were offered participation in the trial.

In this trial, combinations of multiple novel agents were used during induction therapy (the first therapeutic measures taken to treat a disease) and after a stem cell transplant (where a patient receives healthy stem cells from a donor to replace damaged cells). These agents were used for the 18-month consolidation period post-transplant, followed by maintenance with two drugs. This was in contrast to current treatment regimens that use limited novel agents with a very short duration of consolidation and maintenance with just one drug.

“Myeloma UK trial 9 has highlighted that outcomes for patients with high-risk genetics can be significantly improved by maintaining patients on a combination of novel agents indefinitely...”

A total of 117 high-risk patients received intensive therapy with combinations of multiple drugs before, during and after the stem cell transplant. The trial demonstrated that progression-free survival at 18 months was superior for high-risk patients treated in this study compared with patients treated with current treatment strategies. The use of better-tolerated drugs helped to reduce toxicity and the regimen was well tolerated. Myeloma UK trial 9 has highlighted that outcomes for patients with high-risk genetics can be significantly improved by maintaining patients on a combination of novel agents indefinitely and that such an approach is well tolerated with newer drugs.

Sara's story

Sara was 35 years old when she was diagnosed with multiple myeloma in 2018. She'd had back pain for at least a year that had worsened, limiting her mobility and requiring her to be off work. Imaging investigations showed wedge compression fractures in her spine and other bone lesions, her blood showed the presence of a myeloma protein and a bone marrow biopsy confirmed myeloma. Sara agreed to have her bone marrow screened in the Myeloma UK 9 screening trial and it showed high-risk disease.



Sara entered the trial and has tolerated treatment well including a stem cell transplant in June 2019. Four years after starting treatment her myeloma remains in a deep remission. Another feature of the Myeloma UK 9 trial is that a large percentage of patients who achieve complete remission continue in prolonged deep remission when using a combination of lenalidomide and daratumumab (drugs used to treat cancer) as a maintenance treatment.

We are entering a new era where the results of genetic testing will increasingly be used in treatment decisions as we hopefully head towards more effective personalised medicine for patients with myeloma. Indeed, examples are emerging where the genetic results of patients with myeloma have indicated high response rates to specific drugs.



CASE STUDY

Tackling bird flu in the UK

The UK and Europe are currently tackling the longest and largest series of avian influenza outbreaks, posing a serious threat to wild bird populations and people's livelihoods. Here, veterinary virologist Dr Sharon Brookes describes the work of the Animal and Plant Health Agency in response to this outbreak.

Avian flu is causing systemic disease in birds globally. In the UK, threatened bird species like roseate terns, puffins, seal eagles and hen harriers have been affected, as well as poultry farms and wild bird populations.

As a veterinary virologist based at the Animal and Plant Health Agency (APHA; in the Department for Environment Food & Rural Affairs), with a primary interest in how viruses develop and cause disease, my work has encompassed disease pathology of a range of host animal species working closely with our veterinary pathologists. Most of my time at the APHA has involved working with animal influenza A viruses, both swine and bird flu.

Avian influenza viruses (AIV) cause bird flu in poultry and wild birds. The arrival of AIV is normally connected to wild bird migration in the autumn and winter months. The current 2021/22 outbreak of H5N1 (a strain with high pathogenicity [HP], i.e. a high ability to induce disease) started at the end of October 2021. The peak risk period for AI outbreaks is between December and February and case numbers reduce with in-country population control of infected poultry and kept birds (pets and collections) and decline of incoming migratory birds.

At the APHA we are responsible for UK government science expertise on AIV and for providing all the testing and diagnoses. APHA offers the scientific evidence for disease confirmation and undertakes the epidemiological response to the disease in

the field. These activities support decisions to enable fast and effective control of this notifiable disease. Surveillance is also necessary for the UK to become disease free again (in seasons prior to this one) and be able to re-start international trade of poultry products. The APHA have expert virologists, bioinformaticians, epidemiologists, veterinarians, field staff, risk analysts and modellers to coordinate our scientific response to help stop further spread of this important disease.

The last few years have seen an escalation of AIV incursions infecting more poultry, a wider range of wild bird species and even crossing over to mammals, including a single case in humans. As of 15 September 2022, we were at day 321 of the ongoing outbreak with 144 cases declared and over 1,649 detections of AIV in wild birds in 392 locations, involving 57 species in 82 counties, including conservation and predator bird species.¹ This represents a significantly greater detection of HPAIV in poultry and captive birds than previously reported in 2020–2021 (26 cases) and 2016–2017 (13 cases).

Globally, HPAIV H5N1 is widely dispersed, causing outbreaks in Europe, North America, Asia and Africa, affecting people's livelihoods and wildlife conservation. It is important to raise awareness of how to diagnose the disease through an understanding of how it affects the birds' organs and tissues. This will improve investigations, for example realising pathognomonic signs following natural infection. HPAIV H5N1 in poultry species,

such as chickens, turkeys, ducks or geese, or captive or wild birds, including mute swans, tufted ducks, jackdaws or white-tailed eagles, typically causes tissue damage in the pancreas and spleen.² Interestingly, the disease usually appears to be more severe in poultry than wild waterfowl.

The close linkages between the APHA and the Public Health Agency (UK Health Security Agency) have facilitated active surveillance among people exposed to the HPAIV, which enabled the detection of HPAIV H5N1 in an asymptomatic human case during the current avian influenza season.³ Russia reported infection in poultry workers with H5N8 during 2021.⁴ However, it should be noted that, despite extensive global avian–human interaction, cases of H5 AIV detected in people are very rare.

H5 AIVs have also been detected in mammals. HPAI H5N1 virus infections (2021–2022) have been detected in wild red foxes across Europe.⁵ In late 2020, a wildlife rehabilitation centre in the UK reported that there had been deaths of young seals and a red fox. These deaths were associated with HPAI H5N8 infection.⁶ In August 2021, HPAIV H5N8 infection was detected in three adult harbour/common seals found at the German North Sea coast.⁷ Interestingly, neurological signs were reported for several of these mammals and the virus was detected in brain tissue with limited or no detection in the respiratory tract and other organs. For mammals, the most probable route of infection is consumption of contaminated water, faeces or scavenged infected bird carcasses. In North America, the mammals infected with H5 AIV include red fox, coyote, skunks, otters, a lynx and a polecat.

These cases highlight the importance of HPAIV disease investigations and surveillance in poultry and wild birds, and mammals including humans, to monitor the hazard, threat and risks to safeguard animal, environmental and public health.

With thanks to Professor Ian H Brown (avian influenza disease consultant), Dr Alejandro Nuñez and Fabian ZX Lean (veterinary pathologists) and Mr Scott Reid (avian virology lead from APHA).

References: References can be found online: www.rcpath.org/profession/publications/annual-reports.html. For additional information, see <https://aphascience.blog.gov.uk/>

■ The last few years have seen an escalation of [avian influenza virus] incursions infecting more poultry, a wider range of wild bird species and even crossing over to mammals, including a single case in humans."





CASE STUDY

Advances in the management of thrombotic thrombocytopenic purpura

Thrombotic thrombocytopenic purpura is an acute life-threatening condition with a high mortality rate. Here, consultant haematologist Professor Marie Scully MBE explains how recent advances in its treatment and management have improved the outcomes for patients with this condition.

Thrombotic thrombocytopenic purpura (TTP) is life-threatening and a medical emergency. It presents rapidly around 40 years of age and is more common in females. Without treatment, the mortality rate is over 90%. Around 90% of cases are due to patients forming antibodies to the metalloprotease enzyme ADAMTS 13 – this is known as immune TTP. The other 10% of cases have a genetic cause (hereditary deficiency of ADAMTS 13) known as congenital TTP.

“Thrombotic thrombocytopenic purpura is a medical emergency ... Without treatment, the mortality rate is over 90%.”

ADAMTS 13 is a protein that plays an essential role in the regulation of blood clotting by cleavage of von Willebrand factor (VWF) with splitting of ultra-large VWF multimers into smaller VWF multimers. In TTP, there is a deficiency of ADAMTS 13, resulting in the accumulation of ultra-large VWF multimers, which have increased platelet binding. This results in microvascular thrombosis with blockage of small blood vessels and end organ damage.

Clinically, the presentation of TTP may be heterogeneous (diverse) but it is usually associated with low levels of blood platelets (thrombocytopenia) and microangiopathic haemolytic anaemia (a type of anaemia resulting from damage to red blood cells when blood vessels are blocked).

Mark's story

Mark, a 45-year-old male of Afro-Caribbean heritage, presented on a Saturday night with vomiting, confusion and a rapid decrease in his Glasgow Coma Scale (GCS) that measures the level of consciousness in a patient. He required admission to the intensive care unit (ICU) following intubation and ventilation. He was transferred for urgent plasma exchange (PEX) following a presumed diagnosis of TTP. In PEX, diseased plasma is separated and removed from the blood and replaced with donor plasma. A blood film confirmed thrombocytopenia, fragmented red blood cells and polychromasia (the latter indicating a high number of immature red blood cells in the bloodstream seen in haemolytic anaemia). A diagnosis of TTP was confirmed through analysis of ADAMTS 13 activity levels, which were severely reduced, and antibodies to ADAMTS 13, which were very high.

Mark's presentation was severe and his prognosis was poor even with treatment. He had neurological involvement with confusion and reduced GCS on admission and raised levels of troponin – a protein released into the bloodstream when the heart muscle is damaged.

Mark received PEX immediately on transfer and intravenous methylprednisolone, a drug used to treat inflammation and immune reactions in various organs. Before his second PEX on the day of admission and following confirmation of severe ADAMTS 13 deficiency, Mark was started on caplacizumab (an antibody fragment that targets VWF, preventing it from binding to platelets and causing blockages), which he then received daily. As well as receiving daily PEX until his platelet count had increased, Mark started rituximab on day 2 of admission and oral prednisolone. Both rituximab and prednisolone inhibit the production of anti-ADAMTS 13 antibodies, thus increasing ADAMTS 13 activity. Mark was extubated within 48 hours and discharged with continued treatment as an out-patient on day 8.

“The identification of the immune basis of thrombotic thrombocytopenic purpura has resulted in the introduction of appropriate immunosuppressive treatment that reduces the time patients spend in hospital receiving treatment.”

Advances in TTP care

Mark's case highlights several achievements in TTP care. Firstly, prompt diagnosis using blood film analysis and the testing of LDH levels as useful tools allowing rapid initiation of treatment.

Secondly, the identification of the immune basis of TTP has resulted in the introduction of appropriate immunosuppressive treatment that reduces the time patients spend in hospital. For example, rituximab shortens the time to remission and in-

patient care to a median of 14 days or 21 days if admitted to ICU. Finally, the introduction of the novel anti-VWF antibody caplacizumab into the patient treatment pathway results in quicker normalisation of the platelet count and reduces the number of PEX procedures required and days in hospital.¹ Mark's case exemplifies this.

What is the future for Mark?

TTP is a chronic condition that requires lifelong follow up. There is a 30–50% risk of relapse, which can be averted by monitoring ADAMTS 13 activity levels in an out-patient setting. When the levels drop from normal (complete remission) to 15–20% (ADAMTS 13 relapse), despite normal routine laboratory parameters, further treatment with rituximab is given to normalise ADAMTS 13 activity levels and re-achieve complete remission.

The treatment pathway in acute TTP and the long-term monitoring of this condition have resulted in a significant decrease in mortality, preventing the likelihood of the condition worsening, failing to respond to treatment and relapse. The recent commissioning of regional TTP centres in England will enable equity of care and improve national outcomes in this rare but devastating condition.

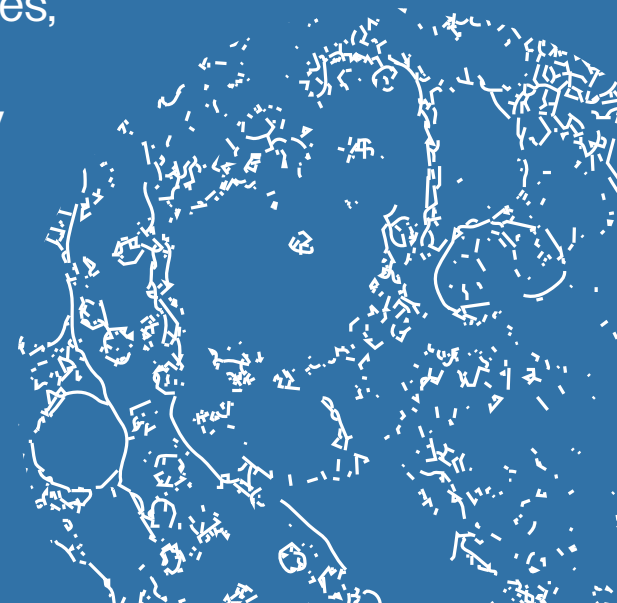
1. Scully M, Cataland SR, Peyvandi F et al. Caplacizumab Treatment for Acquired Thrombotic Thrombocytopenic Purpura. *N Engl J Med* 2019;380:335–346.



Our governance

05

" This year the College has responded to external consultations from a wide range of organisations, agencies and societies, providing invaluable input to improve patient care and safety. Our Specialty Advisory Committees are integral to this process, providing us with evidence and advice."



Governance of the College

Council and Trustee Board (as at 30 June 2022)

Trustee Board

- Mr Robert Smith, Chair and Lay Trustee
- Professor Michael 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 Stephen Morley, Assistant Registrar
- Dr Gareth McKeeman, Chair, Northern Ireland Regional Council
- Dr Bernard Croal, Chair, Scotland Regional Council
- Dr Jonathan Kell, Chair, Wales Regional Council
- Dr Anita Hill, Co-opted Trustee
- Dr Elijah Matovu, Co-opted Trustee
- Ms Jill Gauntlett, Lay Trustee
- Mr Vincent Voon, Lay Trustee

Council Members

- Professor Michael Osborn, President (Chair)
- 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 Stephen Morley, Assistant Registrar

- Dr Gareth McKeeman, Chair, Northern Ireland Regional Council
- Dr Bernard Croal, Chair, Scotland Regional Council
- Dr Jonathan Kell, Chair, Wales Regional Council
- Mr Robert Smith, Chair, Trustee Board
- Professor Ismail Matalaka, Chair, International Committee

Nationally Elected Council Members

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

Regionally Elected Council Members

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

Co-opted Council Members

- Dr Lisa Ayers, Chair, Healthcare Science Committee
- Dr John Ashcroft, Chair, Intercollegiate Committee on Haematology
- Professor Neil Anderson, Chair, Clinical Biochemistry Specialty Advisory Committee (SAC)
- Dr Louise Jones, Chair, Genomics and Reproductive Science SAC
- Dr Darren Treanor, Chair, Digital Pathology Committee

Observers to Council By Invitation

- Dr Shubha Allard, Clinical Director of Publishing and Engagement
- Dr Srinivas Annavarapu, Chair, Prenatal, Perinatal and Paediatric Pathology SAC
- Dr David Bailey, Chair, Death Investigations Committee
- Dr Adrian Bateman, Chair, Cellular Pathology SAC
- Ms Joanne Brinklow, Director of Learning
- Dr Matthew Clarke, Chair, Trainees' Advisory Committee
- Professor Nicki Cohen, Clinical Director of Training & Assessment
- Dr Nigel Cooper, Chair, Forensic Pathology SAC
- Dr Paul Craig, Chair, Dermatopathology Sub-Committee
- Professor Paul Cross, Chair, Cytopathology Sub-Committee
- Ms Diane Gaston, Director of Communications
- Ms Jill Gauntlett, Lay Trustee
- Dr Anita Hill, Co-opted Trustee
- Lt Col Dr Emma Hutley, Military Observer
- Professor Mary Keogan, Dean, Faculty of Pathology RCPI
- Professor Roberto La Ragione, Chair, Veterinary Pathology SAC
- Dr Suzy Lishman, Chair, Medical Examiners Committee
- Dr Berenice Lopez, Clinical Director for Safety and Quality and Chair, Quality Assurance in Pathology Committee
- Dr Sanjiv Manek, Clinical Director of Examinations
- Professor Jo Martin, National Specialty Advisor for Pathology, NHS England/Improvement
- Dr Elijah Matovu, Co-opted Trustee
- Dr Stephen Morley, Chair, Toxicology SAC
- Dr Shruthi Narayan, Chair, Transfusion Medicine SAC
- Ms Debra Padgett, IBMS Representative
- Mr Nigel Pollard, Director of Corporate Services
- Dr Natasha Ratnaraja, Interim Chair, Joint Medical Microbiology and Medical Virology SAC
- Professor David Roberts, Chair, Research Committee
- Mr Daniel Ross, Chief Executive
- Appointment process in place, Chair, Neuropathology SAC
- Ms Katherine Timms, Director of Professionalism
- Dr David Turner, Chair, Histocompatibility and Immunogenetics SAC
- Vincent Voon, Lay Trustee
- Dr Patrick Yong, Chair, Immunology SAC

Financial report

The total income of the College amounted to £7.85 million, with expenditure of £7.35 million and a resultant surplus of £499k.

The investment portfolio decreased by £1.03 million, resulting in a deficit for the year of £536k. Membership subscriptions continue to be the largest source of income, amounting to £3.97 million. We measure our success by membership numbers, which stood at 12,500 at the beginning of the financial year and 13,000 at the end. Income from postgraduate education and examinations amounted to £2 million compared with £2.2 million last year. The prior year was unusual in terms of income as we were dealing with catch up as a result of COVID-19, effectively running an additional examination sitting. Examination operations have now normalised, with candidate numbers continuing to be strong. The College continued to hold many meetings virtually, thus saving on travel and accommodation costs.

Income from the trading activities of the College through the Events @ No 6 conference centre amounted to £901k, a considerable increase over the prior year. Following the relaxation of the restrictions that had to be imposed because of the COVID-19 pandemic, the centre has been able to operate throughout the year, with bookings returning slowly for the second half of 2021 and then more robustly for the first half of 2022. Due to a strong performance in the last three months of the financial year, the budget for the whole year has been exceeded, and bookings continue to hold up well going forward. The decision to retain the sales and marketing staff so that we could be on the front foot as the economy opened up was the right one, as we were able to respond quickly to booking enquiries and convert these into firm contracted business. The trading subsidiary currently has a net deficit and the trustees anticipate it will return to surplus within the next five years.

On investment markets, the last 12 months were a tale of two contrasting halves. The second half of 2021 was still cheerful for markets, whereas

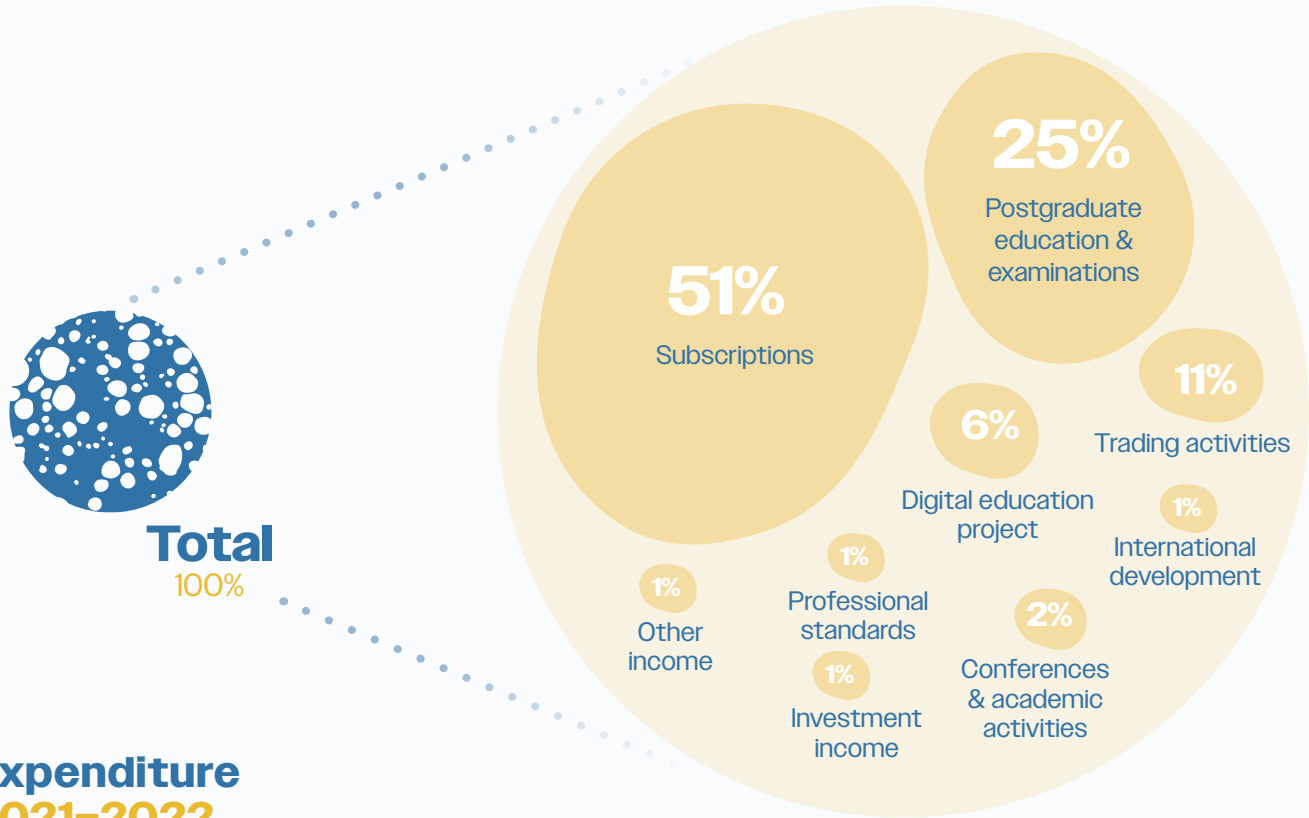
the first half of 2022 destroyed value almost everywhere. In sterling terms, the first period saw global equities rising 8.5%, whereas the second period witnessed a drop of 12.5%, for a net 12-month return of -5%. UK government bonds showed something surprisingly similar in direction, but much worse in outcome, with the first period up 0.6% and the second down -14% for a net 12-month return of -13.5%.

As the investment mandate is to ensure that securities in the portfolio do not contravene the specific ethical requirements regarding direct investment in fossil fuels, mining, tobacco and armaments, this has affected the overall portfolio, resulting in a fall in value over the last 12 months. However, over the longer term, the investments have still delivered good positive returns.

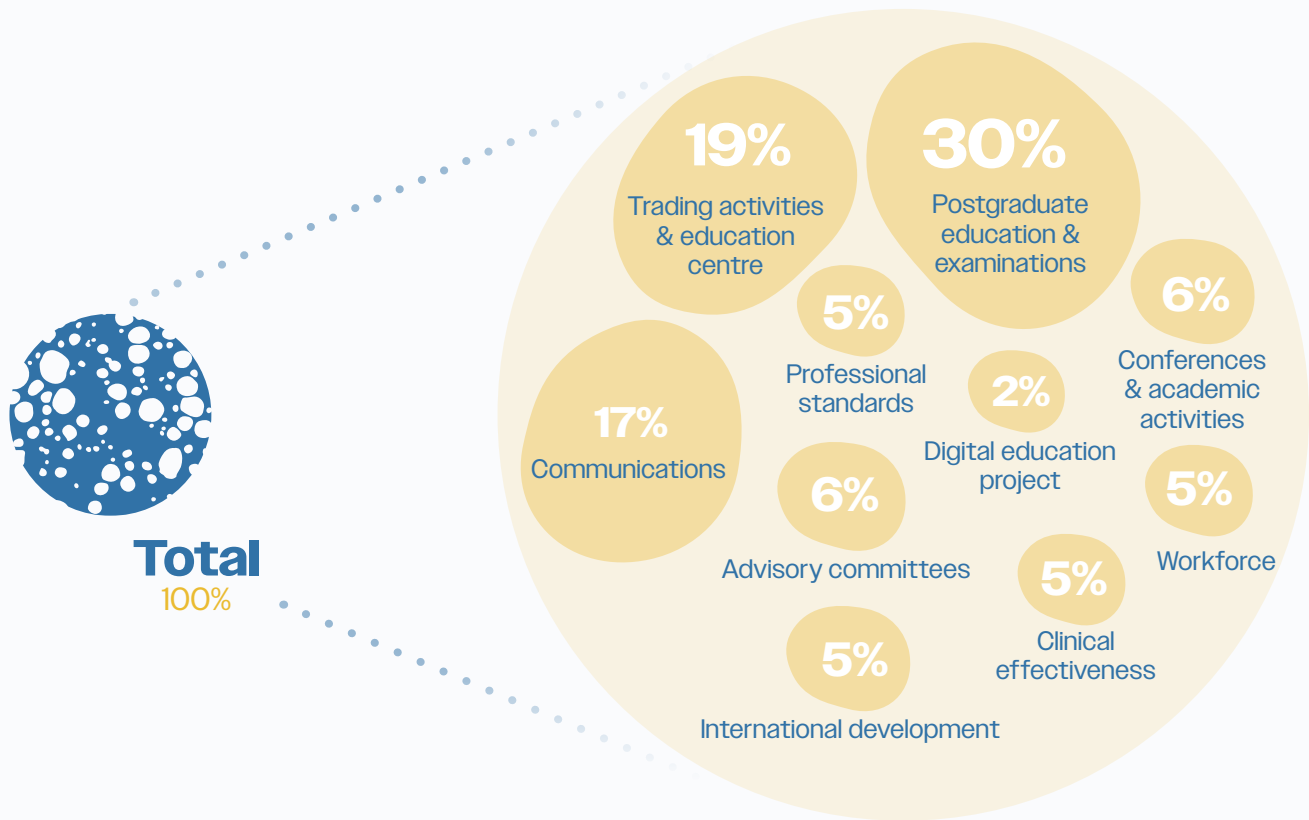
The accounts published overleaf are not the statutory accounts, but a summary of information relating to both the statement of financial activities and the balance sheet. The full financial statements have been audited and contain an unqualified audit report. They were approved by the Trustee Board on 4 August 2022 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 2021-2022



Expenditure 2021-2022



Consolidated Statement of Financial Activities for the year ended 30 June 2022

	Unrestricted General Funds	Unrestricted Designated Funds	Restricted Funds	Total Funds 30 June 2022	Total Funds 30 June 2021
	£	£	£	£	£
Income from:					
Donations & legacies	588	-	-	588	1,483
Charitable activities					
Subscriptions	3,974,297	-	-	3,974,297	3,785,867
Postgraduate education & examinations	1,981,094	-	13,500	1,994,594	2,199,501
Pathology Portal	-	-	500,000	500,000	175,000
International development	35,218	-	10,021	45,239	14,316
Conferences & academic activities	190,467	-	-	190,467	262,107
Professional standards	57,844	-	-	57,844	52,626
Research	-	-	40,000	40,000	-
Communications	115	-	-	115	423
Trading activities	901,377	-	-	901,377	68,324
Investments	77,614	-	1,863	79,477	93,946
Other	65,253	-	-	65,253	79,820
Total income	7,283,867	-	565,384	7,849,251	6,733,413
Expenditure on:					
Raising funds					
Trading activities	1,350,735	1,154	50,297	1,402,186	946,270
Investment management fees	41,682	-	-	41,682	23,557
Charitable activities					
Postgraduate education & examinations	2,202,566	-	-	2,202,566	1,750,826
Pathology Portal	-	-	160,987	160,987	138,871
International development	343,197	-	16,342	359,539	360,670
Conferences & academic activities	390,508	-	24,668	415,176	354,816
Research	-	-	-	-	3,462
Professional standards	361,753	-	-	361,753	269,543
Clinical effectiveness	365,192	7,768	-	372,960	259,300
Workforce	378,239	-	-	378,239	313,000
Communications	1,217,789	-	821	1,218,610	1,096,090
Advisory committees	436,080	-	-	436,080	413,749
Total expenditure	7,087,741	8,922	253,115	7,349,778	5,930,154
Included in the above expenditure is £121,623 relating to non-recurrent IT costs					
Net income / (expenditure) before net gains on investments	196,126	(8,922)	312,269	499,473	803,259
Net (losses) / gains on investments	(874,964)	-	(160,984)	(1,035,948)	1,035,62
Net income / (expenditure)	(678,838)	(8,922)	151,285	(536,475)	1,838,882
Transfers between funds	(129,753)	128,753	1,000	-	-
Net movement in funds	(808,591)	119,831	152,285	(536,475)	1,838,882
Reconciliation of funds:					
Total funds brought forward	7,596,098	29,436,817	1,458,634	38,491,549	36,652,667
Total funds carried forward	6,787,507	29,556,648	1,610,919	37,955,074	38,491,549

Consolidated Balance Sheet as at 30 June 2022

	2022	2021
	£	£
Fixed assets:		
Tangible assets	37,777,416	38,403,585
Investments	5,233,165	6,294,113
Total fixed assets	43,010,581	44,697,698
Current assets:		
Stocks	4,489	4,900
Debtors	803,693	477,465
Cash at bank and in hand	7,066,834	6,143,921
Total current assets	7,875,016	6,626,286
Liabilities:		
Creditors: Amounts falling due within one year	(4,607,566)	(4,040,079)
Net current assets	3,267,450	2,586,207
Total assets less current liabilities	46,278,031	47,283,905
Creditors: Amounts falling due after more than one year	(8,322,957)	(8,792,356)
Total net assets	37,955,074	38,491,549
The funds of the College:		
Unrestricted funds – general funds	6,787,507	7,596,098
Unrestricted funds – designated funds	29,556,648	29,436,817
Restricted funds	1,610,919	1,458,634
Total College funds	37,955,074	38,491,549

The financial statements were approved by the Trustee Board on 4 August 2022 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 4 August
2022 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



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

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