



LSTM
FINANCIAL STATEMENTS
2021-2022

125
YEARS
1898 - 2023

LSTM
LIVERPOOL SCHOOL
OF TROPICAL MEDICINE

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Report to the Members of the Board of Trustees

1. Constitution and Organisation

The Liverpool School of Tropical Medicine (LSTM) was formally inaugurated on 22 April 1898 and incorporated on 30 January 1905 as the Incorporated Liverpool School of Tropical Medicine. LSTM was registered as a charity on 11 October 1963. LSTM is a company limited by guarantee and holds no share capital and is governed by a Board of Trustees.

The Incorporated Liverpool School of Tropical Medicine changed its name on 30 November 1992 to Liverpool School of Tropical Medicine.

The Secretary of State for Business, Innovation and Skills, by an Order of Parliament, under section 129 of the Education Reform Act 1988, designated LSTM as a Higher Education Institute (HEI) on 19 July 2013. LSTM receives direct funding from the Office for Students (OfS) and UK Research and Innovation (including Research England).

2. Memorandum of Association

LSTM's Memorandum and Articles of Association was amended by special resolution and adopted at the AGM on 24 November 2017. Its main objects are:

To engage in, promote and encourage research, study and instruction in connection with the origin, character, alleviation, prevention and cure of every or any type of tropical disease which is now or may hereafter become known in any part of the world where such disease either manifests itself or has effects; and to advance and encourage learning and the practice of all sciences and arts allied with or which may be usefully studied in connection with the matters aforesaid, and to collect and circulate information with regard to such diseases, sciences and arts.

3. Statement of Public Benefit

LSTM is a registered charity subject to regulation by the OfS and the Charity Commission under the Charities Act 2016. LSTM reports annually on the ways in which it has delivered charitable purposes for public benefit.

The Board of Trustees, in reviewing LSTM's activities in this regard, has taken into account the Charity Commission's guidance on public benefit. The Board is satisfied that the activities of LSTM as described in these Reports and Financial Statements, and detailed in the Annual Report, fully meet the public benefit requirements.

4. Vision and Mission

VISION: Healthy lives across the world.

MISSION: Improving health outcomes in disadvantaged populations globally through partnership in research and education.

5. Objectives

The year ending 31 July 2022 completes the fifth year of the LSTM strategic plan 2017-2023. This 6-year plan has led to ongoing transformation and growth and LSTM has remained highly competitive and successful in a challenging environment. The strategy development process for the next strategic plan 2023-2028 will be completed in the near future and will be launched at the beginning of our 125th anniversary year in 2023.

Our major strategic goals for the 2017-2023 period are:

- *Strengthen the translational impact of our activities*
- *Expand our teaching portfolio*
- *Plan for growth*

These 3 goals are expanded into 10 actions throughout this strategic cycle. We will:

1. *Expand significantly our teaching portfolio in line with market demand*
2. *Identify, attract, retain and develop internationally competitive leaders in translational research*
3. *Align our research portfolio with global infection priorities*
4. *Ensure that our research focus covers the T1-T4 translational continuum*
5. *Ensure that our learning and teaching developments and research activities are aligned and integrated*
6. *Accelerate transition of research outputs into health impact*
7. *Enable genuine interdisciplinary activity*
8. *Enable effective global partnerships with multiple stakeholders in teaching and research*
9. *Consolidate and enhance our relationships with major funders*
10. *Provide the environment that supports the above*

LSTM management undertakes regular monitoring and evaluation under the supervision of the Board of Trustees to ensure that the items are contemporary and are followed up each year. All three of the key objectives have been achieved over the current strategic cycle. This success is best illustrated by LSTM being ranked 2nd for impact in the recent UK wide Research Excellence Framework (REF) assessment and ranked 6th nationally for overall research quality in clinical medicine.

Operating and Financial Review

6. The Nature, Objectives and Strategies of the Charity

LSTM is a Higher Education Institution with a focus on translational research and education relevant to the disadvantaged populations globally, particularly in Low and Middle Income Countries. As an internationally recognised

centre of excellence in research and postgraduate teaching, our multidisciplinary approach to global health research allows us to translate innovative approaches from the laboratory into effective interventions for those most in need, working in partnership with researchers, policy makers and communities in over 70 countries. Supporting the Sustainable Development Goals remains central to LSTM's mission. The strength and reach of our partnership working in the UK and overseas has allowed our group turnover to reach £196m in 2021/22 (£150m excluding gifts in kind) and our combined research portfolio now stands at £561m. Staff numbers and the estate continue to grow, without currently accessing any borrowing.

Although the COVID-19 pandemic posed real challenges to the organisation, it also highlighted the importance of global public health organisations such as ours and enabled LSTM's strength as a world leader in managing infectious diseases to come to the fore. LSTM's COVID-19 multi-faceted response brought researchers together from across all disciplines, such as pharmacologists, immunologists, clinicians and health systems researchers to work in partnership with multiple institutions and industrial organisations. This success across the whole research pipeline demonstrated the ability of the organisation to work flexibly and rapidly to changing circumstances which remains critical to its success. It also highlighted LSTM's key role within the Liverpool Life Sciences economy and helped to strengthen multi-sectoral partnerships with a wide range of organisations across the city, including the Knowledge Quarter, the Liverpool University Hospitals NHS Foundation Trust, Liverpool City and the Liverpool City Region Combined Authority.

The recent REF results illustrate the quality of LSTM's research and current efforts focus on continuing our success by undertaking critical strategic appointments to expand the cohort of senior academic and administrative staff and to ensure ongoing and sustainable growth. We will continue to ensure that translational research, relevant to the most disadvantaged populations and spanning the whole spectrum from discovery to implementation, is at the heart of what we do. We are ideally placed to work with partners to support the implementation of effective knowledge innovations across a broad range of disease areas. We have particular strengths in a co-ordinated and multi-disciplinary approach to strengthen capacity for delivering large scale operational and translational research and adjusting to changing population and disease dynamics as we address the challenge of a rapidly expanding non-communicable diseases burden overlapping with endemic and emerging infectious diseases.

Education is equally important too and we have invested in the development of Pembroke House to provide a cutting edge educational facility that will help us achieve our aims of educating the next generation of researchers, health leaders and policy makers and of providing unrivalled, relevant, learning opportunities to students within the UK and across the world.

The culture of an organisation underpins its achievements and we will only achieve all of our aims by ensuring that equity and inclusion are at the heart of what we do. We aim to become an actively anti-racist organisation but acknowledge that we have a long way to go. Work on creating an inclusive environment, acknowledging our history and implementing

our racial equity action plan is crucial. We also continue to work on our role in safeguarding and protecting beneficiaries, research participants, patients and communities. We endorse and support the principles of the Universal Declaration of Human Rights, (UN, 1948); the UN Convention on the Rights of The Child, (UNICEF, 1989); the Declaration on the Elimination of Violence Against Women, (UN, 1993) and the UN Global Compact (UN, 1997).

7. Financial Performance

Principal Risks and Uncertainties

The full scope of principal risks is monitored and mitigated within the institution's risk register and include measured and mitigated risk around sources of income, particularly : Financial growth targets, student numbers/income, grant income overhead contribution and over dependency on specific funders/major clients.

Other key financial risks include the following:

- **Liability to finance the deficit on the University Superannuation Scheme (USS):** On 1st October 2021 the latest valuation of the scheme (the 2020 valuation) was signed and approved. Using the HEI sector mandated calculation the adjustment reflected in the 2021/22 financial statements is a £12.2m increase in the provision to £21.4m. It is anticipated there will continue to be considerable discussion in the sector about the ability of HEIs to manage these increased liabilities. This increase is offset by the requirement to repay the deficit over 16 years. As a result of LSTM's strong balance sheet and its significant cash and investments reserves, there is no immediate concern over LSTM's ability to fund increased repayments as a result of the latest valuation.
- **Inflationary pressures:** Regarding research grants, each grant has been reviewed for any inflationary risks and no significant exposures have been identified. The other area of concern is the rise in energy prices, but in mitigation, prices are fixed for LSTM until April 2023 and in addition energy saving measures are being pursued.
- **Exposure to foreign exchange fluctuations on US\$ or Euro denominated grant income:** this is mitigated through hedging receipts in US\$ and Euros through forward exchange contracts.
- **Failure to maintain the pipeline of research grants and consultancy:** Research grants and consultancy income of £120.1m (excluding gifts in kind, see notes 7 and 8) is 13.1% higher than in 2020/21, reflecting a continued recovery following a small decline in 2019/20 primarily due to the pandemic. This income represents 80.0% of the total LSTM Group income (excluding gifts in kind) of £150.1m. The principal risk to research income growth is the accessibility and success of research grant applications and this is mitigated through risk monitoring. Brexit has not had the feared impact of accessibility to EU grants and LSTM has been able to apply for EU funding. LSTM demonstrated success in applying for COVID-19 grants early on in the pandemic and continues to increase involvement in this field, and this can only help in increasing LSTM's prominence and reputation in this field. The unexpended

balance of live grants and applications at 31 July 2022 was £183m and the application pipeline was £232m, compared to £250m and £105m respectively at 31 July 2021.

- **Research turnover growth:** This is fundamental to the organisation with a target to increase income by over 30% (excluding subsidiary companies) within the strategic plan period ending in 2022/23.

Sensitivity analysis shows that a reduction of 20% on the turnover from major funders has little effect on the bottom line of LSTM if sensibly managed due to a related reduction in expenses. However, any significant change in funding policy from LSTM's major donors could have a major effect in the longer term. Following a small drop in 2019/20 due to COVID-19, research turnover growth continued to grow during 2020/21 and 2021/22.

- **Improvement to the research infrastructure:** This is perceived as a direct contributor to the quality and timescale for achieving high quality scientific results and attracting additional funding to LSTM. In fact, quality of facilities separates LSTM from other UK institutions and contextualises LSTM as a global player. LSTM is also a contributing investor into a new research building in Malawi. All this investment is enabled by the generation of surpluses and capital funding from Research England/ Office for Students, the Wolfson Foundation and others.

Financial Performance in the year

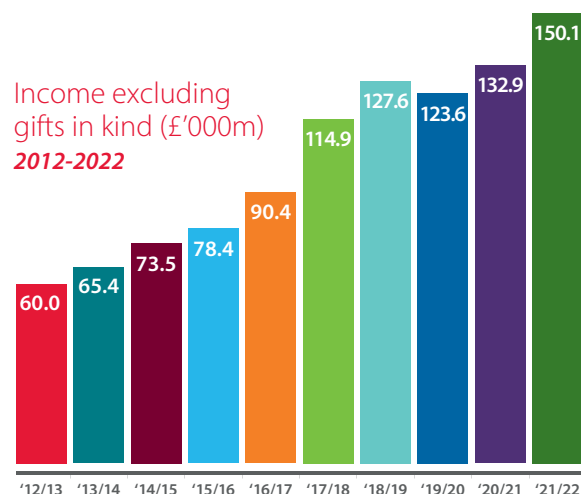
LSTM Group has reported total comprehensive expenditure of £7.5m (2021 : £6.7m surplus). The deficit in the year is largely due to an expense of £12.2m to increase the Universities Superannuation Scheme (USS) pension deficit provision based on the 2020 scheme valuation. Excluding this specific cost there is a surplus of £4.7m.

These financial statements report the results of LSTM's activities for the year ended 31 July 2022 and have been produced in accordance with the Statement of Recommended Practice: Accounting for Further and Higher Education 2019 (2019 SORP) and in accordance with Financial Reporting Standards (FRS102). The results for the year include a number of accounting entries which influence the final comprehensive expense of £7.5m in 2021/22. Stripping out these adjustments LSTM made an underlying operating surplus of £5.5m in the year, and the Group an operating surplus of £6.4m in the year, as shown in the table below.

	LSTM £'000	Group £'000
Total comprehensive expenditure for the year	(9,165)	(7,467)
USS pension deficit funding expense	12,177	12,177
Unrealised loss on revaluation of investments and endowments	1,745	805
Foreign exchange movements in relation to hedged currencies	754	938
Underlying operating surplus for the year	5,511	6,453

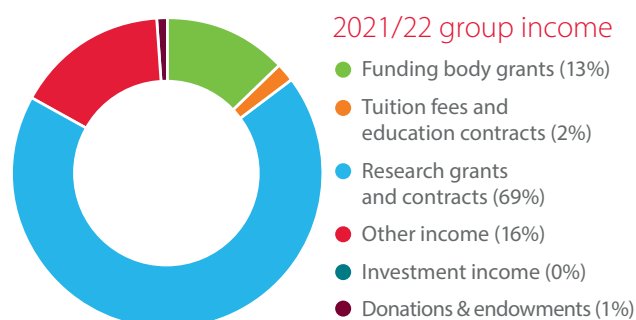
Income

LSTM's reported Group income decreased by 1.7% in the year but excluding gift in kind income (which decreased by 23% mostly due to lower MDA gifts) income actually increased by 12.9%.



The main contributing factors to the increase in income are:

- An increase in income from research grants and contracts, excluding gifts in kind (6% and 13% higher in LSTM and Group respectively). This is partly due to a catch up from the prior year due to the impact of COVID-19, which had an impact on activity in both the last 2 years.
- A 16% increase in funding body grants, primarily related to an additional strengthening university capacity grant of £3.4m from Research England.
- These significant increases more than offset a reduction in tuition and investment/endowment income.



Operating expenditure

LSTM's and the Group's reported total operating expenditure decreased by 8% and 1% respectively (excluding gifts in kind and USS pension provision costs, expenditure rose by 4% and 13% respectively), a continued "bounce back" after the COVID-19 impact in 2019/20 and 2020/21. The underlying increase in expenditure reflects the increase in research activity and income.

Capital expenditure

Capital investment expenditure for the year was £5.4m (2021: £2.4m). Of this total, the largest components were building projects, IT capital projects and research equipment. The significant increase this year is largely due to spend on Pembroke House redevelopment.

LSTM is currently investing in 2 large building projects – in Liverpool the development of Pembroke House as a capacity development centre and teaching hub was completed in October 2022. In Malawi, construction is well underway on the Creator building, a new research building, with completion expected early in 2024. LSTM is working in partnership with Wellcome Trust and the University of Liverpool to fund and develop this new facility which will be owned locally and managed and operated by the Malawi Liverpool Wellcome partnership (MLW) under a long lease.

These investments have been funded through capital grants from Research England, OfS, the Liverpool Combined Authority and internal funding.

Cash flow, financing and balance sheet

During the year LSTM generated net cash outflows from operating activities of £1.5m (2021: £13.0m inflow). These net outflows reflect mainly a £5.4m increase in debtors, reflecting timing of research activity. A £5.4m increase in debtors, reflecting timing of research activity.

The net overall change in cash for LSTM for the year was an outflow of £2.8m (2021: £19.0m inflow).

Group net cash outflows from operating activities was £14.4m (2021: £19.2m inflow). The outflow is primarily a result of working capital movements, particularly a large decrease in creditors in IVCC and the increase in debtors in LSTM. The inflow from investing activities of £6.7m (2021: £13.0m outflow) reflects receipts from sales of investments and endowments, and higher than normal receipts of deferred capital grants, more than offsetting the reinvestment of surplus cash in investments and capital.

The net overall change in cash for the year for the Group was an outflow of £8.1m (2021: £5.9m inflow).

Cash and cash equivalents at the year end were £44.0m, representing 4 months of total operating expenditure (excluding pension provision movement, depreciation and gifts in kind expense). A large proportion of this cash represents research project working capital and is therefore not available for non-research operational or capital investment purposes.

Total Group net assets decreased by £7.4m from £55.3m to £47.9m. This decrease was principally driven by the large pension deficit expense in the year and unrealised losses on investments and endowments.

Group investments and endowments decreased by £4.2m in the year due to some sales of investments to realise working capital and also the unrealised losses at year end.

Key Performance Indicators

To measure performance and progress against the 6-year strategic plan LSTM uses a range of key performance indicators (KPIs), some of which are also part of LSTM's statutory reporting to Office for Students (OfS).

Underlying operating surplus/(deficit) in the year

£'000	2021/22	2020/21	2019/20	2018/19	2017/18
Underlying operating surplus/(deficit)	6,453	4,351	(428)	3,882	4,392

LSTM monitors the underlying operating surplus or deficit after excluding accounting entries, as calculated earlier. Having achieved surpluses the previous few years, 2019/20's results were negatively impacted by COVID-19. However, in 2020/21 and 2021/22 activity has largely been able to resume and LSTM has also benefited from exceptional funding from Research England the last 2 years.

Overall financial health

%	2021/22	2020/21	2019/20	2018/19	2017/18
General reserves as a % of income (excluding gifts in kind)	12.7%	20.8%	20.4%	12.6%	26.7%

In recent years general reserves have been impacted by movements on the USS pension provision in particular. However, general reserves have remained strong the last few years, under-pinned by a strong balance sheet.

Research income growth

£'m/%	2021/22	2020/21	2019/20	2018/19	2017/18
Research & consultancy income £'m (excluding gifts in kind)	120.1	106.2	96.9	100.9	93.2
% change	13.1%	9.6%	-3.9%	8.2%	31.1%

8. Student Numbers

Professional diplomas

The Faculty of Education delivers three professional diplomas, the Diploma in Tropical Medicine and Hygiene (DTM&H), Diploma in Tropical Nursing (DTN), and Diploma in Travel Health (DTH). Whilst these programmes are not credit bearing, DTM&H and DTN do attract Office for Students (OfS) funding. DTM&H and DTN take in two cohorts per year, while DTH, which runs online, takes 3 cohorts.

In 2021/22 there were 88 Students on the DTM&H. DTM&H has 45 registered students for the September 2022/23 cohort. Due to COVID-19 we did not run two cohorts of the DTN in May 2020 (2019/20) or November 2020 (2020/21) Numbers rose again in 2021/22 to 70 from 27 in 2020/21.

Masters programmes

We deliver an online MSc in Global Health which has both full time and part time versions and students can opt to do the smaller postgraduate diploma or postgraduate certificate.

The online numbers are looking strong with 44 new entrants.

It is the young domestic market that has been hit hardest, with overseas numbers improving. Our MSc numbers (onsite and online) had been on a trajectory of growth, before being heavily impacted by several external and unpredictable factors over the past two years:

- *Change in a regulation removing points for educational achievements from the Foundation Programme for intercalating medics.*
- *Impact of COVID-19 in reducing admissions last year with slow recovery into 2022-23.*
- *The current cost-of-living crisis and buoyant job market; we are seeing students ask to defer study for next year for both reasons.*

Short courses

LSTM also delivers a portfolio of non-credit bearing short CPD courses which do not attract OfS funding. We have also previously opened Masters modules as short courses with credit. Due to the COVID-19 pandemic and space limitations on our campus, we were largely unable to offer these programmes. We had a total of 11 students on these types of programmes in 2020/21 which rose to 40 in 2021/22. In 2022/23 we will be re-opening several of these courses and developing several new ones.

PGRs

In 2021/22 155 students were enrolled on postgraduate research degrees (PhD, MPhil and MD) with 71 students registered off site. This is up from 136 students last year enrolled on postgraduate research degrees with 69 students registered off site. LSTM's track record in supporting PGR candidates has translated into success in the latest competition for MRC DTP/CASE studentships and has supported the award of other funded programmes with embedded PGR studentships (ARISE, LIGHT, NIHR HPRU, AMETHIST).

9. Curriculum Developments

In response to these challenges, we are currently refocusing our education portfolio to prepare for a more diverse market, to adapt to changing work patterns post-Covid, and to draw better on specialist professional educational expertise. We are preparing to develop a suite of short credit-bearing professional courses that can be accredited to build to larger qualifications. Simultaneously we are also making existing professional short courses credit-bearing as this incentivises students to use that credit to transfer to larger subsequent qualifications.

The new Masters curriculum places emphasis on scenario and simulation-led approaches that use real-world data and more immersive experiences that create more authentic contexts for learning. These help students to learn how to deal with pressure, cope with complexity and change, and make difficult decisions in the context of ethical or moral challenges. In support of the new educational approaches a specialist "Immersive Learning Environment" has been designed into one of the learning spaces in Pembroke House. This learning space will not only enable students to experience the sights and sounds of real-world situations but also interact with the environment which can be targeted to develop key skills such as high-pressure decision making.

Pembroke House has been designed as a future-proofed, flexible and innovative teaching and training space to be shared between LSTM and iiCON.

10. Staff and Student Involvement

A new Dean of Education started on 1st August 2022.

Learning and Teaching Committee has undergone a change in how it operates to improve communication and reporting.

The Faculty of Education has developed a regular e-newsletter which is distributed both within the Faculty and wider to staff via the staff newsletter. Faculty staff meetings are held regularly so that the Education management team can report and teams from within the Department can present on current projects.

Our Student Representation system is thriving. There are two elected student representatives for each Masters and Diploma programme, who are trained at the start of their role to run regular focus groups with the students, lead on the Staff Student Liaison Committee and sit on the Boards of Studies. Separately, two student representatives sit on the Quality Management Committee and the main Board. More widely, we have student representation on the Equality and Inclusion Committee.

11. Fundraising

Approach to fundraising

Our fundraising efforts are predominantly focused on relationship-based fundraising with trusts, foundations, corporates, high net worth and ultra-high net worth individuals. However, following the success of the public fundraising initiative, Bump It Forward, which was run via JustGiving, we are now planning to integrate more mass participation campaigns into our activity which will predominantly focus on renewing Bump It Forward donors and converting new donors from our existing stakeholders. These efforts will be run using CAF Online (provided by the Charities Aid Foundation).

For major donors, we undertake detailed due diligence which is overseen by the Management Committee and the Trustees. High risk or high value donations are referred to the Trustees for a decision, ensuring that we manage risk as much as possible. External due diligence is commissioned in the cases of any significantly high value or contentious approaches.

We undertake thorough research (in line with GDPR) and manage all donor records on a secure, dedicated database. Alumni and friends who have been asked for funding this year had all opted in to receiving fundraising communications. Public donors via the Bump It Forward campaign were able to select communication preferences via JustGiving and so only those who had opted in to receiving contact from LSTM have been added to the database. The option to opt out is included on all communications to external stakeholders.

A new CRM system has been implemented to enable better management of supporter and stakeholder relationships across LSTM. Donor data has protected viewing rights restricted to the Fundraising team and a Data Protection Impact Assessment has been completed. All data subjects are informed before their data is moved onto the new system and have the option to change their personal preferences or be removed.

LSTM is undertaking a major fundraising campaign in the lead up to, and including, its 125th Anniversary in 2023.

This is targeting the public and the major donor categories highlighted above with income strategically aligned to LSTM's vision for growth, ensuring consistency in approaches to all donors. The campaign aims to raise £25m in philanthropic funding over the next 5-7 years. An external Campaign Board has been established to help support and oversee the fundraising strategy, Chaired by The Lord Trees, and the launch of the campaign will take place on 13 October 2022.

Work with, and oversight of, any commercial participators/ professional fundraisers

We have retained the support of a consultancy firm to support the implementation of the fundraising strategy and approaches to major gift prospects. The consultant reports to the Director of Fundraising on a regular basis and works to pre-agreed Terms of Reference and specific aims, under the guidance of LSTM's Ethical Fundraising Policy.

Fundraising conforming to recognised standards

All members of the fundraising team are members of the Chartered Institute of Fundraising. The Director of Fundraising holds the Advanced Diploma in Fundraising, the highest qualification awarded by the Institute, and the Fundraising Manager has recently completed the IOF Future Leaders Programme and is a Trustee of the IOF Conference. LSTM has also signed up and paid the levy to the Fundraising Regulator, by virtue of which we also sign up to their Fundraising Code of Practice.

Monitoring of fundraising carried out on our behalf

We don't currently actively encourage volunteer fundraising on behalf of LSTM but do occasionally have a number of individuals who wish to undertake sponsorship events on our behalf. Several of the Trustees have been very supportive in engaging their contacts on behalf of LSTM and it is anticipated that this will expand to involve the new Campaign Board, when appointed. In all these cases, the leads are passed on to the Fundraising team and we liaise with the individuals involved and ensure that donations can be collected in a secure and compliant way.

Fundraising complaints

Any complaints received by the Fundraising Regulator, or directly to LSTM, will be immediately referred to the Director and the Chair of the Board of Trustees, and an action plan promptly developed in responding to them. Safeguarding issues will be referred to LSTM's Safeguarding Lead.

Protection of the public, including vulnerable people, from unreasonably intrusive or persistent fundraising approaches, and undue pressure to donate

LSTM does not currently undertake any public (cold/non-opt-in) campaigns utilising telephone, door-to-door or 'chugging' (street fundraising). Any mass-participation fundraising campaigns are marketed through reputable platforms such as JustGiving and Crowdfunder.co.uk or via direct communication with individuals who have opted in to receive such communications. Contacts who have opted in to receive fundraising communications may be included in email or direct mail campaigns, based on their communications preferences.

All donors on the database have opted in to receiving our communications and their data is stored in line with GDPR 2018.

12. Taxation

LSTM's activities are not subject to corporation tax, given that income and gains are applied for and used exclusively for charitable purposes. LSTM's subsidiaries fall under the scope of corporation tax, except for IVCC, which has charity status. Due to the continued growth of LSTM, a tax strategy is updated and issued annually (available on the website). HMRC have changed their method of operations and LSTM no longer have an appointed customer compliance manager within HMRC. However, LSTM continue to comply with all relevant regulations and to contact HMRC as relevant on specific issues.

13. Employment of Disabled Persons

LSTM welcomes applications for employment from disabled persons and appoints on the basis of merit alone. The organisation works to the social model of disability and provides adjustments and additional support in the workplace so that all staff can operate effectively in their roles. We work to ensure all staff have opportunities for progression and development. Where an existing employee becomes disabled, every effort is made to ensure that the necessary support mechanisms are put in place to assist continued employment. Over the last year we have explored interest in establishing a Staff with Disabilities Network and plan to progress this in the coming months.

14. Disability Statement

In accordance with the Equality Act 2010 and Public-Sector Equality Duty, LSTM is committed to creating an inclusive and accessible environment. This includes making improvements to physical environment such as installing lifts, ramps, wheelchair-accessible toilets and clear signage, as well as providing mandatory training on disability awareness. In addition, we take care to ensure that internal and external communications are inclusive and accessible.

We have committed to accepting the accessibility regulations as good practice, and as part of our commitment to the Public Sector Equality Duty. We are working on ensuring that our external pages are all accessible and are building capacity to ensure that internal documents are all checked for accessibility before publication, including mandating that all policies are accessibility-checked prior to publication.

15. Equality at LSTM

LSTM's vision is based on fostering an inclusive culture for staff and students which goes above and beyond the specific legal responsibilities we have towards those employees with protected characteristics. We are changing our philosophy and language from discussion of 'equality and diversity' to 'equity and inclusion', to shift the focus towards differentiating support. We have reviewed our approach to and use of equality impact assessments as part of our policy and practice development. We are improving our data collection to provide greater insight into our diversity demographic:

We have updated ethnicity and gender categories and included social mobility as a new category.

Following the successful launch of a new series of active bystander and microaggression training, we are further extending our equity and inclusion training programme, which will include awareness raising and leadership training for race equity as well as broader inclusion principles.

Our most recent published data on gender pay gap shows a gap of 8.7%. We are committed to reducing this and seeking to eliminate the gap by 2028. We have published an ethnicity pay gap, which shows a varied picture, when comparing different ethnicity categories against a non-BAME group. The underlying picture is one of relatively low levels of representation of colleagues of colour, which we are working to overcome. In addition to the gender pay gap, in 2022, we completed an equal pay audit, which found no action was required. We will continue to review and make improvements to our reward and performance practices.

Equitable engagement with external partners is at the heart of our research activity. At last year's staff conference, the results from a survey and series of interviews with some of our key international research partners were presented and a draft set of 8 principles, with associated actions/discussed. Feedback is being incorporated and, once finalised dissemination and communication activities will be initiated to embed and promote these principles. In addition, an international team, including LSTM researchers is promoting equitable authorship and has developed a consensus statement, published in a landmark paper to address 'parachute research', where researchers, typically from high income countries, conduct research in low- or middle-income countries (LMIC) without adequate recognition of the contribution of authors in these countries. The statement calls for measures to demonstrate how equitable partnership is promoted throughout the design, conduct and publication of research to ensure more equitable practice. This work has been shortlisted for the Times Higher Education EDI award.

Gender Equity

Athena SWAN is a charter mark for Higher Education Institutions, aimed at progressing gender equality within academia and academic institutions. We have an active Athena SWAN Self-Assessment team, representative of a diverse range of roles and seniority from across LSTM, who are responsible for looking at barriers to gender equality at LSTM; we currently hold a bronze award and have recently received a silver award. The assessment looks at the intersectionality of gender with other protected characteristics, such as ethnicity, and provide an action plan that LSTM will look to progress over the next few years.

Race Equity

Since the publication of our Race Review in February 2022, commissioned by REAP, written by Professor Jason Arday, we have held stakeholder engagement sessions with colleagues from across the school to develop a high-level Race Equity Action Plan. This action plan is based on Professor Jason Arday's original framework of recommendations. Since April 2022 colleagues across LSTM have been involved in identifying priorities for action in support of our vision to become a leading anti-racist Higher Education Institution.

The Race Action Plan is now being finalised. The Race Equity Action Group will be setup from October 2022, with the Chair being appointed through an open process. The Chair will be responsible for coordinating the development and implementation of the action plan and LSTM's bronze Race Equality Charter application.

Management Committee will be accountable for the delivery of the plan, liaising with action owners to deliver key priorities, refine actions and develop KPIs. Dr Charles Ameh will be the overall Management Committee Race Equity Sponsor. The Race Equity Action Group will provide regular updates to staff and students, Management Committee and the Board of Trustees.

LGBTQ+ Equity

There is a thriving LGBTQ+ network, which is also represented at the Equity and Inclusion Committee. LSTM has continued to work with the Stonewall Diversity Champions initiative on areas such as updating our guidance for LGBTQ+ staff who travel overseas and in developing our Trans Equality policy and support for colleagues who are transitioning. We are also preparing an application for the Stonewall Workplace Equality Index which we expect to complete within the next three years.

In the year ahead we will establish an overarching equity and inclusion strategy which brings together the action plans and initiatives of the different threads of work in a single framework under the governance of the Equity and Inclusion Committee.

16. Transparency Arrangements

The Board of Trustees conducts its business through a number of committees. Each committee has terms of reference, which have been approved by the Board. Minutes of all meetings are available from the Secretary to the Board at: Liverpool School of Tropical Medicine, Pembroke Place, Liverpool, L3 5QA.

The Secretary to the Board maintains a register of financial and personal interests of the Board members. The register is available for inspection at the above address.

17. Planned Maintenance Programme

LSTM's management, through the Building Steering Group, review the funding available for maintenance and identify an appropriate budget to deliver a prioritised planned maintenance programme for the year. All buildings are maintained to a high standard and LSTM scores highly in the sector in this regard.

18. Endowments

LSTM holds endowment funds from the following:

Andrew Campbell Prize, Corlett Prize, David Haddock Prize, John Hay Prize, Jephcott Prize, Jervis Prize, Toosey Prize, White Waller Prize, W. Glynn Williams Prize, Blacklock Medal, Holt Medal, Milne Medal, Cicely Williams Medal, Yorke Medal, William Hesketh Leverhulme Scholarship, Joseph P. Caplan Bursary, Jean Clayton Fellowship, Mildred Ellerker Award, Gatsby, Sir Eric Griffith-Jones Memorial Fellowship Fund, Thomas Mark Fund, Kenneth Newell Bursary, Rhodes-Gilles Fund, Gwendolen Clayton Memorial Scholarships, David Smith Fund, A. M. Browne Bursary, Katherine Elliot Fund, Annie Evans Fund, Mamco Selab Scholarship Fund, Professorial Fund.

19. Post balance sheet events

There are no post balance sheet events to report.

20. Professional Advisers

LSTM's current professional advisers are:

Financial Statement & Funding Auditors:

Grant Thornton UK LLP

Royal Liver Building, Liverpool, L3 1PS

Bankers:

The Royal Bank of Scotland plc

1, Dale Street, Liverpool, L2 2PP

Internal Auditors:

RSM Risk Assurance Services LLP

3, Hardman Street, Manchester, M3 3HF

Solicitors:

Brabners LLP

Exchange Flags, Liverpool, L2 3YL

21. Members

The Board of Trustees are also the nominated directors under the Companies Act 2006 and their term of office is for three years. The members who served on the Board during the year were as follows:

Name	Date of appointment retirement* re-appointment **	Status of appointment	Capacity and Committees Served
Jim McKenna	February 2021	Elected	Chair of the Board of Trustees Nominations & Governance Remuneration Finance & Investment
John O'Brien, B.Comm, FCA	November 2020**	Elected	Hon Treasurer Chair of Finance & Investment Nominations & Governance Remuneration
Professor David Laloo MB, BS, MD, FRCP, FFTM, RCPS (Glasg)	January 2019	Ex Officio/staff	Director of LSTM Nominations & Governance Finance & Investment
Mark Allanson	November 2019**	Elected	Remuneration Champion for PREVENT
Joanne Dodd BA ACA	August 2019	Elected	Deputy Treasurer Finance & Investment Champion for Environment and Sustainability
Lynne Elliott MPhil MBA PGCE BSc (Hons)	November 2021*	Elected	Student Trustee
Ingrid Etoke	February 2022	Elected	Trustee
Jeremy Lefroy, DL, MA, FCA	November 2021**	Elected	Joint Vice Chair of the Board of Trustees IVCC Board Member Nominations & Governance Remuneration Audit Committee
Dr Julian Lob-Levyt CBE	July 2022*	Elected	Remuneration
Prof Nyovani Madise, PhD, DSc	August 2019	Elected	Champion for Equality and Inclusion
Sue Russell LLB (Hons)	November 2019**	Elected	Joint Vice Chair of the Board of Trustees Chair of Audit Nominations & Governance Remuneration Champion for GDPR
Dr Helen Savage, MBChB, MRes, MRCP, DTMH	November 2021	Elected	Student Trustee
Prof Neil Squires, MBCh, MPH, DTMH, FFPH	March 2022	Elected	Trustee
Eileen Thornton, CBE, MEd, BA, FCSP, DipTP	April 2022*	Elected	Audit Committee
Professor Stephen Ward BSc, PhD	November 2021**	Ex Officio/staff	Deputy Director of LSTM
Andrew Wright, BSc, MSc	March 2019	Elected	Audit Committee Champion for Safeguarding
Robert Einion Holland FCCA, MBA	June 2001	Non-member	Secretary to the Board

22. Statement of Corporate Governance and Internal Controls

The Liverpool School of Tropical Medicine is a company limited by guarantee and currently has 62 members, 13 of whom make up the Board of Trustees. Members meet at the Annual General Meeting where they elect the Board of Trustees, effectively the company board of directors. It is the Board's responsibility to bring independent judgement to bear on issues of strategy, performance, resources and standards of conduct.

LSTM operates under the following principal governance arrangements:

- *LSTM Memorandum and Articles of Association, incorporating the instrument and articles of government.*
- *Committee of University Chairs – The Higher Education Code of Governance September 2020.*
- *UK Charity Legislation.*
- *Equality Challenge Unit – Governing bodies, Equality and Diversity and the Equality Act 2010.*

And with due regard to best practice within - The UK Corporate Governance Code.

The Board of Trustees conducts its business through a number of formal committees, delegating the day-to-day management of LSTM to the Director of LSTM. The Trustees comply with the requirements of the Companies Act and of the Charities Act as to keeping financial records, the audit of accounts and the preparation and transmission to the Register of Companies. The Trustees also ensure that annual reports, annual returns and annual statements of account are completed by LSTM. Proper records of all proceedings at general meetings, meetings of Trustees, committees and all professional advice obtained are kept by the Secretary to the Board for the Chairman of the Board.

The Board is provided with regular and timely information on the overall financial performance of LSTM together with other information such as performance against funding targets, proposed capital expenditure, quality matters and personnel related matters such as health and safety and environmental issues. The Board of Trustees meet, as a minimum, on a termly basis and retain authority to request and conduct extraordinary meetings.

All Board members are able to take independent professional advice in furtherance of their duties at LSTM's expense and have access to the Secretary and Clerk who are responsible to the Board of Trustees for ensuring compliance with all applicable procedures and regulations. The appointment, evaluation and removal of the Secretary are matters for the Board of Trustees as a whole. Formal agendas, papers and reports are supplied to members in a timely manner prior to Board meetings. Briefings are also supplied on an ad-hoc basis.

The Board has a strong and independent non-executive membership and no individual or group dominates its decision-making process. The Board considers that each of its non-executive members is independent of management and free from any business relationships, which could materially interfere with the exercise of the independent judgement

There is a clear division of responsibility in that the roles of the Chair, Deputy Chairs, and Director are separate.

Each committee chair, deputies and members receive delegated responsibility from the Board of Trustees. The Board of Trustees has also approved terms of reference for each committee.

- *Audit Committee*
- *Finance and Investment Committee*
- *Nominations & Governance Committee*
- *Remuneration Committee*

Collectively, these set out governance principles and arrangements for ensuring that LSTM is committed to maintaining the highest standards of corporate governance and are appropriate for the size and complexity of our organisation.

Appointments to the Board of Trustees

Any new appointments to the Board are a matter for consideration of the Board as a whole. The Board of Trustees has a Nominations & Governance Committee comprised of 4 members which is responsible for the selection and nomination of any new member for the Board's consideration. Ahead of, and during appointment, it is incumbent upon LSTM to ensure that "fit and proper persons" checks are in place to notify LSTM and the Chair of the Board of Trustees if there are any declarations that may require intervention.

Members of the Board of Trustees are appointed for a term of office of three years. Retiring Trustees shall be eligible for re-election subject to paragraph 5.5, 5.5.1 and paragraph 5.5.2 of the Articles (November 2017).

The Board of Trustees appoint five members as "Board Champions" who have career experience in Environment and Sustainability, Equality and Inclusion, PREVENT duty, GDPR and Safeguarding and these act as conduits across the organisation and lead on engagement activity. The Board is responsible for ensuring that appropriate training is provided as required to its members.

Members are expected to promote LSTM's values and protect its reputation by discharging their duties and principles as set out in the code of conduct. The code of conduct provides clear guidance on what is expected of staff, students, volunteers, trustees and other representatives, as well as providing examples of conduct that will always be unacceptable.

Patron

LSTM is honoured to have Her Royal Highness The Princess Royal KG KT GCVO as Patron. She succeeded her father, HRH the Duke of Edinburgh, in 1991. LSTM has enjoyed Royal Patronage since 1932 when HM King George VI became LSTM's first Patron.

President & Vice-Presidents

LSTM's President and Vice-Presidents are distinguished individuals drawn from the field of academia, business and politics and are committed to assisting LSTM in fulfilling its mission. They willingly give their help and advice and support in approaches for charitable donations.

Audit Committee

The Audit Committee has a maximum of 7 members and is comprised of at least 2 members of the Board (Chair and Deputy), 1 IVCC Board member and at least 1 co-opted independent member. The Committee operates in accordance with written terms of reference approved by the Board of Trustees. The Committee is comfortable that the Board representation is sufficient given the additional expertise of the co-opted members.

The Audit Committee meets on a termly basis and provides a forum for reporting by LSTM's internal and financial statements auditors who have access to the Committee for independent discussion without the presence of LSTM management.

LSTM's internal auditor team provide LSTM with independent advice and assurance in regard to the adequacy of systems of internal control, risk management controls and governance processes in accordance with an agreed plan of input and report their findings to management and the Audit Committee. Management is responsible for the implementation of the agreed recommendations and internal auditors undertake periodic follow up reviews. LSTM is able to ensure that such recommendations have been implemented. Management actions are reported to Management Committee alongside a summary of all reports received. The Audit Committee also advises the Board of Trustees on the appointment of internal and financial statements auditors and their remuneration for both audit and non-audit work.

Finance and Investment Committee

The Finance and Investment Committee has a maximum of 7 members and is comprised of at least 2 members of the Board. The Committee operates in accordance with written terms of reference approved by the Board of Trustees.

The Finance and Investment Committee advise the Board on financial policy, provide oversight, monitor and approve relevant returns to OfS/UKRI, HESA and other stakeholders and review in depth annual financial statements, management accounts, cashflows, budgets and the performance of the investment portfolio.

Remuneration Committee

Throughout the year ended 31 July 2022, LSTM's Remuneration Committee comprised the Chairman, Treasurer, and 2 other Board members. The Committee's responsibility is to review the remuneration policy for all staff and to make recommendations on the remuneration and benefits of the Director and other senior members of staff in LSTM.

Internal Control

The Board of Trustees is ultimately responsible for LSTM's system of internal control and for reviewing its effectiveness. However, such a system is designed to manage, rather than eliminate, the risk of failure to achieve business objectives & can provide only reasonable, not absolute, assurance against material misstatement or loss.

The Board of Trustees has delegated to the Director of LSTM as Accountable Officer, the day-to-day responsibility

for reviewing the adequacy of the system of internal control and making any appropriate amendments. The Director is also responsible for reporting to the Board any material weaknesses or breakdowns in internal financial control.

The Board of Trustees is of the view that there is a formal on-going process for identifying, evaluating and managing LSTM's significant risks that have been in place and operational for the year ended 31 July 2022. The Board regularly review this risk framework and the approach to internal control is risk-based. The process continues to be embedded with the adoption of a prioritised strategic risk register to include timescales and responsible officers. The process is now embedded within all levels of LSTM and covers business, operational, compliance and financial risk procedures.

Value for Money

LSTM strives to apply value for money considerations to all its processes and activities, and this is supported by strong awareness and vigilance across the senior management team. The Audit Committee receives an annual report on LSTM's value for money activity from a dedicated committee established several years' ago. The committee is made up from a cross section of the organisation. In addition, each internal audit review undertaken and submitted to the Audit Committee makes specific observations and judgements concerning the value for money demonstrated. The report for the year ended 31 July 2022 detailed the progress made against the 7 Value for money objectives for the year and sets out the objectives for the year to 31 July 2023.

Risk Management

A comprehensive risk management framework, defined in LSTM's Risk Management Policy, assists the management of LSTM in the identification of the key risks inherent in the delivery of its strategy. This is overseen by the Audit Committee in order to gain the necessary assurances on the efficacy of the framework and relay them to the Board of Trustees.

The Board of Trustees, through the Audit Committee, evaluates the risks inherent in all major plans and proposals, including the identification of the steps that would be required to mitigate, eliminate and control such risks. The Risk Register is reviewed by the Audit Committee on a routine basis and is presented to the Board of Trustees at each meeting.

During the organisations response to COVID-19, the Board of Trustees gave increased focus upon the areas of business continuity and disruption, seeking extended assurance. The Board has been provided with assurance of enhanced internal management controls around business continuity and recovery through its Management Team, where response and recovery planning provide further assurance to the Board that responsible and timely management of stakeholder funding and investment continues to support sustainable operations.

Statement by the Trustees on performance of their statutory duties in accordance with S172(1) of the Companies Act 2006

The Board of Trustees of LSTM consider, both individually and collectively, that they have acted in ways that they believe in good faith to be most likely to promote the success of the Group for the benefits of its members as a whole (having regard to the stakeholders and other matters set out in s172(1) of the Act) in the decisions they made during the year ended 31 July 2022.

The LSTM Board of Trustees comprises largely non-executive members, with three executive directors and a student representative. There are 3 full board meetings each year plus meetings of several sub-committees, which are also attended by various senior staff. The AGM is open to all staff and students.

Other than the executive members of the Board, trustees are not remunerated, and they join the LSTM Board to contribute their skill and expertise to help LSTM to achieve its vision and mission, as detailed in section 4 of this report. The Board of Trustees has a terms of reference that is reviewed annually, and Board members receive regular external training on the duties of trustees of a charity. There is also a code of conduct and members are required to declare any conflicts of interest at every meeting. The Board's key stakeholders have been identified as the following:

- Members
- Students
- Employees
- Funders
- Local, national and international governments
- Research partners

The Board engage with each of these groups throughout the year through face-to-face meetings, surveys, seminars and written correspondence to promote LSTM's mission.

Key decisions made by the Board this year include:

Approval of the 2022/23 annual budget: This year's budget was approved by the Board following a comprehensive review of our strategic priorities and risks to our business. The Budget was approved, showing a small surplus, but remains prudent with regards to the unknown increase in utility costs particularly around energy consumption. LSTM's REF performance has also contributed to an increase in funding.

Vision, Mission and Values: The Board of Trustees are responsible for the mission, character and reputation of LSTM and therefore sets and approves the values and standards that underpin the LSTM's strategy and operation. In 2021/22, the Board accepted a revised Vision, Mission and values statement that will ensure the organisation is aligned to its stakeholders needs.

Race Equity: LSTM's Board of Trustees welcomed the publication of an independent report into Race Equity by Professor Jason Arday. The report highlighted that some staff of colour had encountered racial discrimination within LSTM, that there was a lack of diversity in LSTM's senior leadership team and a lack of pro-activity in communicating about race-related issues. The Board commented on its major concerns that need to be addressed and committed to ensuring that the Board of Trustees fully support the delivery of an

improvement action plan, which would regularly be reviewed by the Trustees.

Strategic Plan 2023-2028: The Board of Trustees launched the development of the 2023-2028 Strategic Plan, with the Director of LSTM and executive team ahead of its presentation to the Board in early 2022-2023. The Board's role in developing the organisational strategy is key to the success of LSTM and they formally approve or endorse the strategic plan in accordance with its constitution and the expectations of stakeholders, including students and staff.

LSTM's 125th Anniversary: The Board of Trustees received and approved plans for the activity leading up to the celebration of LSTM's 125th anniversary year. Significant activity was noted across all themes and the Board look forward to celebrating this achievement with staff, students and wider stakeholders.

Governance Effectiveness: The Board of Trustees welcomed an independent review report from Advance HE into governance effectiveness. As part of a rolling programme of self-assessment, the Board endorsed an action plan that it would be implementing over the coming months.

Capital approvals: The Board approved the purchase of the Liverpool Life Sciences Accelerator building (LLSA) from the Liverpool University Hospitals Foundation Trust (LUHFT). The opportunity for LSTM to expand its research facilities to accommodate its growth in Human Challenge studies was welcomed as a significant strategic priority.

Employee engagement statement

The Board of Trustees engage with employees using multiple channels, via the Director of LSTM and his senior team, through the work of the management group, ensuring that key messaging is delivered via LSTM-wide communications. Where appropriate, staff are fully engaged in strategic discussion and decision making under the delegated duties of Committees. LSTM welcome the feedback of staff, involvement in focus task groups and wider staff led projects. The Board of Trustees are presented with executive summaries of management committee's agreed actions and are fully briefed by the Director on all activity in relation to staff engagement.

There is also positive engagement by many staff through the various Board committees, where employees often present research activity updates to Board members. The Audit Committee works with HR staff in relation to equality and inclusion and the effectiveness of the HR processes. The Remuneration Committee, in addition to considering the remuneration of senior staff, received information and discusses overall reward policy and strategy including the gender and ethnicity pay gap.

LSTM wide engagement includes a monthly staff forum (SSF), attended by the Director, chaired by the management committee member for SSF and is also open to IVCC and other subsidiary company employees. Staff can also apply to work on a variety of projects/working groups addressing issues of gender equality, LGBTQ+, and as LSTM addresses key strategic issues, staff are frequently engaged through Town Hall events, surveys or focus groups. Board champions engage with Committee chairs in the areas of Equality and Inclusion, Prevent, Safeguarding and GDPR, supporting and engaging with the work of LSTM committees. LSTM regularly runs staff engagement surveys, the results of which are presented to the Board.

Statement on business relationships

The LSTM Board of Trustees and its committees comprise people with a variety of skills and backgrounds. Through their networks Board members are able to foster additional benefit to LSTM through their association with our stakeholders, this brings a greater breadth of knowledge into the organisation, particularly in relation to key decisions made by the Board.

Delivering our strategy requires strong mutually beneficial relationships with all stakeholders. LSTM continuously assesses its priorities related to its major funding partners, and the Board engages on this through regular strategy updates through the committees' structure in place.

LSTM's activity within the External Relations Committee also supports a strategic approach to stakeholder engagement that contributes to objectives of the strategic plan.

Carbon reporting

LSTM is fully committed to operating in an environmentally friendly and sustainable manner and has introduced a new Environmental Policy and established an Environmental Working Group together with a newly formed Environmental and Sustainability Committee. These groups will provide strategic direction, coordination and guidance to LSTM for the integration of sustainability principles and practices throughout core teaching, research and operational activities.

All refurbishment and capital projects incorporate environmental and or energy efficiency improvements whenever practicable such as replacement windows, improved insulation, LED lighting and improvements to the automated Building Management Systems.

Our most recent project, Pembroke House, has been equipped with a photo voltaic system which is estimated to generate 21,353kwh per year, providing circa 9% of energy usage of the building.

LSTM has switched from brown electricity – containing fossil fuels – to certifiable renewable energy and has also divested from companies that have a direct relationship with extraction industries, including fossil fuels.

The Building Management System (BMS) manages and monitors building services and will:

- ensure that an optimal level of efficiency and comfort is achieved by continuously maintaining the correct balance between operating requirements, external and internal environmental conditions and energy usage.
- facilitate the link to our metering systems to measure utility consumption to identify usage patterns, manage these against expected or desired levels and then assist in being able to adjust, control or remove waste.

During 2021/22 LSTM Group has used the following in owned buildings.

SCOPE 1+2 Energy Consumption		2021/22	2020/21
Energy consumption grid electricity (EEGELEC)	kWh	2,784,093	2,671,044
Energy consumption natural gas excluding that used as input for a CHP unit (EECNGSEX)	kWh	3,010,129	3,879,029
Total energy consumption used to calculate emissions	kWh	5,794,222	6,550,073
Total tCO2e for electricity based on above scope 1+2 emissions	kg CO2e	538,388	567,143
Total tCO2e for gas based on above scope 1+2 emissions	kg CO2e	548,415	710,483
Total tCO2e based on above scope 1+2 emissions	kg CO2e	1,086,803	1,277,626

Total kgCO2 per UK FTE	kg CO2e	1.81	2.17
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All calculations are based on National Energy Foundation simple carbon calculation.

23. Going Concern

The Board of Trustees have taken into account all factors addressed in the notes to the accounts section 2ii) in relation to going concern.

As a result of this and the strong balance sheet of the Group and LSTM the Trustees are satisfied that the use of the going concern accounting principle remains applicable.

24. Strategic Reporting

As LSTM is a registered charity, the strategic report is contained in the following sections:

- 4 Vision and Mission
- 5 Objectives
- 6 The Nature, Objectives and Strategies of the Charity
- 7 Principal risks and uncertainties, financial performance in the year & key performance indicators (KPIs)

25. Responsibilities of the Governing Body

In accordance with LSTM's Memorandum and Articles of Association, the Governing Body is responsible for the administration and management of the affairs of LSTM and are required to present audited financial statements for each financial year.

The Governing Body (the Governors, also referred to as the Trustees are also the directors of LSTM for the purposes of company law) is responsible for preparing the Report of the Members of the Board of Trustees including the strategic report and the financial statements in accordance with applicable law and regulations.

Company law requires the Trustees to prepare financial statements for each financial year. Under that law, the Trustees are required to prepare the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law) including FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'. In addition, the Trustees are required to prepare the financial statements in accordance with Office for Student's ('OfS') terms and conditions of funding for higher education institutions (issued March 2019) and the terms and conditions of its funding agreement with Research England through its accountable officer. Under company law, the Trustees must not approve the financial statements unless they are satisfied that they give a true & fair view of the state of affairs of LSTM and the Group and of the surplus or deficit, gains & losses, changes in reserves & cash flows of LSTM & the Group for that year.

In preparing the financial statements, the Trustees are required to:

- *select suitable accounting policies and then apply them consistently.*
- *make judgements and accounting estimates that are reasonable and prudent.*
- *state whether applicable UK 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 Group will continue in business.*

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain LSTM's transactions and disclose with reasonable accuracy at any time the financial position of LSTM and enable it to ensure that the financial statements comply with the Statement of Recommended Practice - Accounting for Further and Higher Education, OfS terms and conditions of funding for higher education institutions (issued March 2019), the Office for Students Accounts Direction (issued October 2019) and the Companies Act 2006. They are also responsible for safeguarding the assets of LSTM and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Trustees have taken reasonable steps to:

- *ensure that funds from OfS, Research England and other funding bodies are used only for the purposes for which they have been given and seek to achieve value for money in accordance with OfS' terms and conditions of funding for higher education institutions (issued March 2019) and the funding agreement with Research England and any other conditions which the funding body may from time to time prescribe;*
- *ensure that LSTM has a robust and comprehensive system of risk management, control and corporate governance, which includes the prevention and detection of corruption, fraud, bribery and irregularities;*
- *ensure that there is regular, reliable, timely and*

adequate information to monitor performance and track the use of public funds;

- *plan and manage LSTM's activities to remain sustainable and financially viable;*
- *ensure that it informs the OfS of any material change in its circumstances, including any significant developments that could impact on the mutual interests of LSTM and OfS;*
- *ensure there are adequate and effective arrangements for the management and quality assurance of data submitted to HESA, the Student Loans Company, the OfS, Research England and other funding or regulatory bodies;*
- *ensure an effective framework – overseen by LSTM's academic board or equivalent – to manage the quality of learning and teaching and to maintain academic standards; and*
- *consider and act on the OfS' assessment of LSTM's risks specifically in relation to these funding purposes.*

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

The Trustees confirm that:

- *so far as each Trustee is aware, there is no relevant audit information of which LSTM's auditor is unaware; and*
- *the Trustees have taken all the steps that they ought to have taken in order to make themselves aware of any relevant audit information and to establish that LSTM's auditor is aware of that information.*

A resolution to reappoint Grant Thornton UK LLP will be proposed at the Annual General Meeting, under the heading "Independent Auditors".

Signed on behalf of the Board of Trustees

Jim McKenna
Chair
3 November 2022

Statement on the System of Internal Financial Control to 31 July 2022

As HEI Accountable Officer, I acknowledge my responsibility for ensuring that an effective system of internal financial control is maintained and operated by LSTM.

The system can provide only reasonable and not absolute, assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or would be detected within a timely period.

The system of internal financial control is based on a framework of regular management information, administrative procedures including the segregation of duties and a system of delegation and accountability. In particular, it includes:

- *comprehensive budgeting systems with an annual budget which is reviewed and agreed by the Board of Trustees;*
- *regular reviews by the Board of periodic and annual financial reports which indicate financial performance against forecasts;*
- *setting targets to measure financial and other performance;*
- *clearly defined capital investment control guidelines; and*
- *the adoption of formal project management disciplines, where appropriate.*

LSTM has a subcontracted internal audit service, which operates in accordance with the requirements of the Audit Code of Practice. The work of the internal audit service is informed by an analysis of the risks to which LSTM is exposed and annual internal audit plans are based on this analysis. The analysis of risks and the internal audit plans are endorsed by the Board of Trustees on the recommendation of the Audit Committee. The Chair of the Audit Committee provides the Board with a report on internal audit activity in LSTM at a minimum annually. The report includes the financial statement, grant and internal auditors' independent opinions on the adequacy and effectiveness of LSTM's system of internal control, risk management controls and governance processes, including internal financial control. The role of the external auditors is specifically to audit the year end financial statements, but they also report on the control environment and on any control issues identified during the annual audit, and report to the Finance and Investment Committee and the Audit Committee in that regard. No significant control weaknesses or failures were reported in relation to the year ended 31 July 2022.

My review of the effectiveness of the system of internal financial control is informed by the work of the internal auditors, the Audit Committee which oversees the work of the internal auditors, the executive managers within LSTM who have responsibility for the development and maintenance of the financial control framework and comments made by LSTM's financial statement and grant auditors in their management letters and other reports. The audit committee report annually to the Board in November regarding any control weaknesses or failures during the past financial year; there have been no significant control weaknesses or failures in the year ended 31 July 2022.

Professor David Lalloo
MB, BS, MD, FRCP, FFCM, RCPS (Glasg)
Director
3 November 2022

Independent auditor's report to the governing body of Liverpool School of Tropical Medicine

Opinion

We have audited the financial statements of Liverpool School of Tropical Medicine ('LSTM') and its subsidiaries (the 'group') for the year ended 31 July 2022, which comprise the group and LSTM's Statement of comprehensive income, the group and LSTM's Statement of changes in reserves, the group and LSTM's Balance sheet, the group and LSTM's 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 group's and LSTM's affairs as at 31 July 2022 and of the group's and LSTM's deficit, income and expenditure, gains and losses, changes in reserves and of the group's and LSTM's cash flows for the year then ended;*
- *have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice and the Statement of Recommended Practice: Accounting for Further and Higher Education published in October 2018; and*
- *have been prepared in accordance with the requirements of the Companies Act 2006.*

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 described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report. We are independent of the group and LSTM 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

We are responsible for concluding on the appropriateness of the Governing's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's and LSTM's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify the auditor's opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the group and LSTM to cease to continue as a going concern.

In our evaluation of the Governing body's conclusions, we considered the inherent risks associated with the group's and LSTM's business model including effects arising from macro-economic uncertainties such as Brexit and COVID-19, we assessed and challenged the reasonableness of estimates made by the Governing body and the related disclosures and analysed how those risks might affect the group's and LSTM's financial resources or ability to continue operations over the going concern period.

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 group's and LSTM'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.

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

The responsibilities of the Governing body with respect to going concern are described in the 'Responsibilities of the Governing body for the financial statements' section of this report.

Other information

The Governing body are responsible for the other information. The other information comprises the information included in the annual report set out on pages 4-17, other than the financial statements and our auditor's report thereon. 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.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- *the information given in the strategic report and the directors' report, prepared for the purposes of company law, included in Report of the Members of the Board of Trustees for the financial year for which the financial statements are prepared is consistent with the financial statements; and*

- *the strategic report and the directors' report included in the Report of the Members of the Board of Trustees have been prepared in accordance with applicable legal requirements.*

Matter on which we are required to report under the Companies Act 2006

In the light of the knowledge and understanding of the group and LSTM and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report included in the Report of the Members of the Board of Trustees.

Opinion on other matters prescribed by the Office for Student's ('OfS') accounts direction (issued October 2019)

In our opinion, in all material respects:

- *funds from whatever source administered by LSTM for specific purposes have been properly applied to those purposes and managed in accordance with the relevant legislation;*
- *funds provided by the OfS, UK Research and Innovation (including Research England have been applied in accordance with the relevant terms and conditions; and*
- *the requirements of the OfS's accounts direction (issued October 2019) have been met.*

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- *adequate accounting records have not been kept by LSTM, or returns adequate for our audit have not been received from branches not visited by us; or*
- *LSTM's financial statements are not in agreement with the accounting records and returns; or*
- *certain disclosures of the Governing body's remuneration specified by law are not made; or*
- *we have not received all the information and explanations we require for our audit.*

We have nothing to report in respect of the following matters where the OfS accounts direction (issued October 2019) requires us to report to you where:

- *LSTM's grant and fee income, as disclosed in the note to the accounts, has been materially misstated.*

Responsibilities of Governing Body for the financial statements

As explained more fully in the Statement of responsibilities of the Governing body set out on pages 16-17, the Governing body (who are also the directors of the charitable company for the purposes of company law) 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 Governing body 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 Governing body are responsible for assessing the group's and LSTM's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Governing body either intend to liquidate the group or LSTM or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

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.

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.

Explanation as to what extent the audit was considered 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. Owing to the inherent limitations of an audit, there is an unavoidable risk that material misstatements in the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs (UK).

The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below:

- *We obtained an understanding of the legal and regulatory frameworks applicable to the group and LSTM, and the industry in which it operates and determined which may influence the financial statements. Given the nature of its operating activities, the group and LSTM is subject to several laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements.*
- *We determined that the following laws and regulations are the most significant which are directly relevant to specific assertions in the financial statements.*
- *Those that relate to reporting frameworks being FRS102 and the Statement of Recommended Practice: Accounting for Further and Higher Education published in October 2018, the OfS accounts direction (issued October 2019), the Companies Act 2006 and the relevant tax compliance regulations.*
- *Those that relate to the operational activities of the group and LSTM as a higher education institution and research*

organisation being the regulatory framework for higher education in England, data protection and bribery and corruption practices.

We assessed the susceptibility of the charitable company's financial statements to material misstatements, including how fraud might occur. We performed the following audit procedures to address the risks related to irregularities and fraud:

- *evaluation of the processes and controls in place to address the risks related to irregularities and fraud;*
- *challenge of the assumptions and judgements made by management in its significant accounting estimates;*
- *review of performance targets and conditions to research funding received and their propensity to influence efforts made by management to manage earnings;*
- *review and testing of journal entries, in particular manual journal entries, relating to management estimates and journal entries impacting the reported result for the year;*
- *consideration of the potential for fraud in revenue recognition through the manipulation of revenue from research grant funding;*
- *identifying related parties and through our data interrogation tools performed a review for any related party transactions during the year.*
- *We enquired of management, the Audit Committee and the internal auditors whether there was any awareness of instances of non-compliance with laws and regulations or whether they had any knowledge of actual or suspected fraud. We corroborated the results of our enquiries to supporting documentation such as board minute reviews.*
- *In assessing the potential risks of material misstatement, we obtained an understanding of the group's and LSTM's operations, the applicable statutory provisions and business risks that may result in risk of material misstatement, and the group's and LSTM's control environment, including the adequacy of procedures for authorisation of transactions.*
- *These audit procedures were designed to provide reasonable assurance that the financial statements were free from fraud or error. The risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error and detecting irregularities that result from fraud is inherently more difficult than detecting those that result from error, as fraud may involve collusion, deliberate concealment, forgery or intentional misrepresentations. Also, the further removed non-compliance with laws and regulations is from events and transactions reflected in the financial statements, the less likely we would become aware of it.*
- *The engagement team's experience with similar engagements, their understanding and knowledge of the group's and LSTM's industry and their understanding of the industry and regulatory requirements were considered in assessing the appropriateness of the collective competence and capabilities of the engagement team.*

Use of our report

This report is made solely to the university's members, as a body, in accordance with Chapter 3 of Part 16 of the

Companies Act 2006. Our audit work has been undertaken so that we might state to the university's members 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 university and the university's members as a body, for our audit work, for this report, or for the opinions we have formed.

Carl Williams FCCA
Senior Statutory Auditor
for and on behalf of Grant Thornton UK LLP
Statutory Auditor, Chartered Accountants
Liverpool

Statement of Comprehensive Income

Income	Notes	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Funding body grants	5	19,721	19,721	16,951	16,951
Tuition fees and education contracts	6	3,040	3,040	3,737	3,737
Research grants and contracts	7	104,500	66,333	99,174	72,740
Other income	8	68,409	54,141	71,570	57,423
Investment income	9	284	155	751	525
Donations and endowment income	10	698	698	1,255	1,255
Total income		196,652	144,088	193,438	152,631
Staff costs	11	38,796	33,156	37,623	32,390
Pension deficit funding costs	23	12,177	12,177	(52)	(52)
Other operating expenses	13	150,181	104,213	149,102	114,530
(Surplus)/deficit on disposal of investments		(26)	(210)	(196)	385
Depreciation	17	2,186	2,172	2,041	2,022
Interest payable	14	-	-	129	129
Total expenditure		203,314	151,508	188,647	149,404
(Deficit)/surplus on continuing operations before other gains/(losses)		(6,662)	(7,420)	4,791	3,227
Unrealised (deficit)/surplus on revaluation of investments and endowments		(805)	(1,745)	1,857	2,438
(Deficit)/surplus on continuing operations before taxation		(7,467)	(9,165)	6,648	5,665
Taxation	15	-	-	(39)	-
(Deficit)/surplus for the year	16	(7,467)	(9,165)	6,609	5,665
Other comprehensive (expenditure)/income:					
Change in fair value of hedging financial instruments		-	-	109	-
Total Comprehensive (Expenditure)/income for the year		(7,467)	(9,165)	6,718	5,665
Represented by:					
Restricted endowment comprehensive (expenditure)/income for the year		(400)	(400)	638	638
Unrestricted endowment comprehensive (expenditure)/income for the year		(539)	(539)	2,150	2,150
Expendable restricted endowment comprehensive (expenditure)/income for the year		(15)	(15)	114	114
Unrestricted comprehensive (expenditure)/income for the year		(8,561)	(8,366)	2,479	2,730
Restricted comprehensive income for the year		2,048	155	1,228	33
Unrestricted hedging reserve comprehensive income for the year		-	-	109	-
Total Comprehensive (Expenditure)/income in the year		(7,467)	(9,165)	6,718	5,665

The income and expenditure account is in respect of continuing activities and there were no operations that were acquired or discontinued by the Liverpool School of Tropical Medicine Group during the year or in the previous year.

The deficit for the year and total comprehensive (expenditure)/income for the year is attributable to the Liverpool School of Tropical Medicine. There are no non-controlling interests.

Statement of Changes in Reserves

GROUP	Unrestricted General Reserve £'000	Restricted General Reserve £'000	Unrestricted Hedging Reserve £'000	Permanent Unrestricted Endowments £'000	Permanent Restricted Endowments £'000	Expendable Restricted Endowments £'000	TOTAL £'000
Balance at 31 July 2020	25,153	7,327	(109)	8,030	7,712	495	48,608
Surplus for the year	2,512	1,195	109	2,150	638	114	6,718
Movement between reserves	(36)	33	-	-	-	-	(3)
Surplus from statement of comprehensive income	2,476	1,228	109	2,150	638	114	6,715
Balance at 31 July 2021	27,629	8,555	-	10,180	8,350	609	55,323
(Deficit)/surplus for the year	(8,405)	1,892	-	(539)	(400)	(15)	(7,467)
Movement between reserves	(149)	156	-	-	-	-	7
(Deficit)/surplus from statement of comprehensive income	(8,554)	2,048	-	(539)	(400)	(15)	(7,460)
Balance at 31 July 2022	19,075	10,603	-	9,641	7,950	594	47,863

LSTM	Unrestricted General Reserve £'000	Restricted General Reserve £'000	Unrestricted Hedging Reserve £'000	Permanent Unrestricted Endowments £'000	Permanent Restricted Endowments £'000	Expendable Restricted Endowments £'000	TOTAL £'000
Balance at 31 July 2020	24,883	454	-	8,030	7,712	495	41,574
Surplus for the year	2,763	-	-	2,150	638	114	5,665
Movement between reserves	(36)	33	-	-	-	-	(3)
Surplus from statement of comprehensive income	2,727	33	-	2,150	638	114	5,662
Balance at 31 July 2021	27,610	487	-	10,180	8,350	609	47,236
(Deficit)/surplus for the year	(8,211)	-	-	(539)	(400)	(15)	(9,165)
Movement between reserves	(155)	156	-	-	-	-	1
(Deficit)/surplus from statement of comprehensive income	(8,366)	156	-	(539)	(400)	(15)	(9,164)
Balance at 31 July 2022	19,244	643	-	9,641	7,950	594	38,072

Company registration number: 00083405

Balance Sheets as at 31 July

		Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
	Notes				
Fixed Assets					
Tangible fixed assets	17	62,310	62,035	59,094	58,807
Investments in subsidiaries	18	-	126	-	80
		<u>62,310</u>	<u>62,161</u>	<u>59,094</u>	<u>58,887</u>
Current Assets					
Stock		159	75	81	36
Debtors	19	21,881	21,246	17,235	15,834
Investments and endowments	20	43,602	30,712	47,848	28,231
Cash at bank and in hand	29	44,038	22,978	52,154	25,797
		<u>109,680</u>	<u>75,011</u>	<u>117,318</u>	<u>69,898</u>
Creditors: amounts falling due within 1 year	21	59,349	34,322	73,242	33,702
Net Current Assets		<u>50,331</u>	<u>40,689</u>	<u>44,076</u>	<u>36,196</u>
Total Assets less Current Liabilities		<u>112,641</u>	<u>102,850</u>	<u>103,170</u>	<u>95,083</u>
Creditors: amounts falling due after 1 year	22	39,454	39,454	34,944	34,944
Provisions: pension provisions	23	21,383	21,383	9,206	9,206
Provisions: other provisions	24	3,941	3,941	3,697	3,697
NET ASSETS		<u>47,863</u>	<u>38,072</u>	<u>55,323</u>	<u>47,236</u>
Endowment Reserves					
Permanent restricted endowments	26	7,950	7,950	8,350	8,350
Permanent unrestricted endowments	26	9,641	9,641	10,180	10,180
Expendable restricted endowments	26	594	594	609	609
		<u>18,185</u>	<u>18,185</u>	<u>19,139</u>	<u>19,139</u>
Restricted general reserve	27	10,603	643	8,555	487
Unrestricted Reserves					
Unrestricted general reserve		19,075	19,244	27,629	27,610
		<u>19,075</u>	<u>19,244</u>	<u>27,629</u>	<u>27,610</u>
TOTAL FUNDS		<u>47,863</u>	<u>38,072</u>	<u>55,323</u>	<u>47,236</u>

The Financial Statements were approved by the Board of Trustees on 3 November 2022 and were signed on behalf of the Directors by:

J O'Brien
Honorary Treasurer

Professor D Lalloo
Director

Statement of Cash Flows

		Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
	Notes				
(Deficit)/surplus for the year		(7,467)	(9,165)	6,609	5,665
Adjustment for non-cash items :					
Depreciation	17	2,186	2,172	2,041	2,022
Deferred capital grants released to income	25	(3,048)	(3,048)	(1,622)	(1,622)
(Surplus)/deficit on disposal of investments & endowments		(26)	(210)	(196)	385
Movement on hedging reserve		-	-	109	-
Decrease/(increase) in stock		(78)	(39)	13	(4)
Decrease/(increase) in debtors		(4,646)	(5,412)	6,518	1,507
Increase/(decrease) in creditors		(14,013)	495	7,256	6,830
Increase in other provisions		244	244	1,870	1,890
Increase/(decrease) in USS pension provision	23	12,177	12,177	(52)	(52)
Unrealised revaluation (gains)/losses on investments and endowments	20	805	1,745	(1,857)	(2,438)
Unwinding of interest on finance lease	14	-	-	129	129
Interest receivable		(561)	(432)	(1,556)	(1,330)
Taxation	15	-	-	39	-
		<u>(6,960)</u>	<u>7,692</u>	<u>12,692</u>	<u>7,317</u>
Cash flow from operating activities		<u>(14,427)</u>	<u>(1,473)</u>	<u>19,301</u>	<u>12,982</u>
Taxation paid		-	-	(5)	-
Net cash (utilised)/generated from operating activities		<u>(14,427)</u>	<u>(1,473)</u>	<u>19,296</u>	<u>12,982</u>
Cash flows from investing activities :					
Income from long term investments and unrestricted permanent endowments		544	415	1,552	1,326
Other interest received	9	17	17	4	4
(Increase) in investments in subsidiaries		-	(46)	-	(26)
Purchase of tangible fixed assets	17	(5,402)	(5,400)	(2,444)	(2,444)
Payments to acquire investment & endowment assets	20	(6,089)	(6,089)	(17,344)	(5,158)
Receipt from sale of investments and endowments		9,557	2,073	2,649	10,080
Deferred capital grants received	25	8,095	8,095	2,628	2,628
Net cash generated from/(used in) investing activities		<u>6,722</u>	<u>(935)</u>	<u>(12,955)</u>	<u>6,410</u>
Cashflows from financing activities :					
Interest element of finance lease rental payment		-	-	(129)	(129)
Capital element of finance lease rental payment		(411)	(411)	(308)	(308)
Net cash used in financing activities		<u>(411)</u>	<u>(411)</u>	<u>(437)</u>	<u>(437)</u>
(Decrease)/increase in cash in the year		<u><u>(8,116)</u></u>	<u><u>(2,819)</u></u>	<u><u>5,904</u></u>	<u><u>18,955</u></u>

Notes to the Accounts

1. Company Information

The Liverpool School of Tropical Medicine (LSTM) was formally inaugurated on 22 April 1898 and incorporated on 30 January 1905 as the Incorporated Liverpool School of Tropical Medicine. LSTM was registered as a charity on 11 October 1963. LSTM is a company limited by guarantee and holds no share capital and is governed by a Board of Trustees.

The Incorporated Liverpool School of Tropical Medicine changed its name on 30 November 1992 to Liverpool School of Tropical Medicine. The registered office is at Pembroke Place, Liverpool, L3 5QA, UK.

The Secretary of State for Business, Innovation and Skills, by an Order of Parliament, under section 129 of the Education Reform Act 1988, designated LSTM as a Higher Education Institute (HEI) on 19 July 2013. LSTM receives direct funding from the Office for Students (OfS) and UK Research and Innovation (including Research England).

2. Basis of Preparation

i) Basis of Preparation

These financial statements have been prepared in accordance with the Statements of Recommended Practice (SORP): Accounting for Further and Higher Education 2019, and in accordance with applicable United Kingdom accounting standards including Financial Reporting Standard 102 (FRS 102), 'the Financial Reporting Standard applicable to the United Kingdom and the Republic of Ireland' and the Companies Act 2006. LSTM is a public benefit entity and therefore has applied the relevant public benefit requirement of FRS 102. The financial statements are prepared in accordance with the historical cost convention (modified by the revaluation of current asset investments and derivative financial instruments).

The financial statements are presented in Sterling (£).

ii) Going Concern

These financial statements have been prepared on a going concern basis. In the 2020/21 financial year, it was possible to return to much of the activity that was delayed in 2019/20 due to the pandemic, albeit with still limited international travel possible, and ensuring LSTM premises in Liverpool and around the world were covid-secure. Therefore LSTM has returned to monthly management of and reporting of cashflow, updated forecasts from budget and termly reporting of the research pipeline to the Finance and Investment Committee, and monthly management reporting. As the world emerges from the pandemic the research pipeline continues to look strong. There are new emerging macro economic risks including inflation and rising energy costs. All research grants have been reviewed for inflationary risks and no significant exposures have been found. With regard to energy prices, LSTM's prices are fixed until April 2023 and in addition energy saving measures are being pursued.

In assessing going concern management analysed the 2022/23 budget, extrapolated the additional period to

November 2023 and produced related cash flow forecasts. On the basis of this the Board of Trustees consider that it continues to be appropriate to account for the group and LSTM as a going concern.

The Board of Trustees considers that the group and LSTM have sufficient financial resources and is confident that its future income streams will maintain these resources.

The Board of Trustees have also taken account of the exceptional expense in relation to the USS pension deficit provision (disclosed in note 23) and have no immediate concern over LSTM's ability to fund increased repayments as a result of the latest valuation.

The Board of Trustees has a reasonable expectation that the group and LSTM has adequate resources to continue in operation for the foreseeable future. Therefore it continues to adopt the going concern basis in preparing the financial statements.

iii) Basis of Consolidation

The Consolidated financial statements include LSTM and entities controlled, both unilaterally and jointly, by LSTM, for the financial year to 31 July 2022. Where LSTM does not exercise control over an entity and is not in a position to extract economic benefits, the results of that entity are not consolidated. A full list of subsidiaries and NGOs in which LSTM has an interest is shown in note 18.

3. Significant Judgements and Estimates

Preparation of the Financial statements requires management to make significant judgements and estimates. The items in the Financial statements where these judgements and estimates have been made include:

Judgements

i) Deferral of balances

Due to the nature of research grants, which in the majority of cases span over several years, judgement is exercised in the decision over deferral of these balances to ensure income and expenditure are accounted for in the appropriate and matching period or when performance conditions have been met. Research debtors for the group were £18,162,000 (2021 : £13,022,000) and research creditors for the group were £39,926,000 (2021 : £58,521,000).

ii) Accounting for the Liverpool Life Science Accelerator (LLSA) building

LSTM signed a lease for occupation of research space in autumn 2017 and took occupation in September 2017. The lease is for 25 years, at £400,000 a year (excluding inflationary increases) and would ordinarily be considered as an operating lease. However, LSTM has an option to purchase its share of the building within 10 years of the start of the lease, which it intends to exercise and given this option LSTM has treated the building as a finance lease since the start of this lease. The value of the finance lease liability at 31 July 2022 was £9,075,000 (2021 : £9,486,000).

iii) Accounting for the Malawi Liverpool Wellcome Organisation

LSTM works closely with the Malawi Liverpool Wellcome Organisation (MLW). MLW is funded by the UK Wellcome Trust and all funding is directed via LSTM UK. Management analysed the organisational structure to determine the level of influence and whether MLW should be considered a subsidiary, an associate or a jointly controlled entity. Local management of MLW rests with the local Executive Committee, made up of representatives of five organisations including LSTM. LSTM holds only 3 of 21 seats (14%) and Kamuzu University of Health Sciences holds the position of chair. Therefore in the judgement of LSTM management, due to the independent local management and operations, LSTM does not exercise sufficient control to consider this entity as a subsidiary, associate or joint venture.

Estimates

iv) Provisions

Provisions have been set up in relation to operational receipts: Provisions have been made where cash receipts have a possibility that an element may have to be repaid or where a liability has been incurred prior to 31 July 2022 and where the amount can be reasonably calculated or estimated.

Provisions have also been set up in relation to onerous research grants where activity on some research grants has been impacted. Provisions are ascertained through the forecasting and monitoring process that the research management services team undertake on a quarterly basis with delivery teams. This process monitors progress and highlights any issues within projects which may impact receipt of income or overrun of costs, which are reflected in the financial statements as a provision where the amount can be reliably calculated or estimated.

Provisions at 31 July 2022 were £3,941,000 (2021 : £3,697,000)

v) Gifts in Kind

Gifts in kind include 3 material items where significant estimates have been made:

(a) pharmaceutical drugs gifted for mass drug administration (MDA) in several countries in Africa of £44,949,000 (2021: £47,856,000). Given the nature of the activity this has been treated as implementation consultancy income. The valuation of the gifts is based on an estimate of the purchase cost of the drugs had LSTM had to purchase the drugs directly for the MDA programme multiplied by an estimate of the number of drugs required to treat patients. Income and expense are recorded at the point at which reliable figures are available for the number of patients treated, which is on the publication of the annual report to the funder. This work has now finished and therefore this is the last year this gift in kind will be reported.

(b) Gifts contributed towards 2 projects which form part of the iiCon collaboration of £1,497,000 (2021 : £Nil). Two companies have provided primarily staff time along with some consumables, materials and space, as part of a 5 year research project which falls under the iiCon collaboration. The project started in LSTM's 2020/21 financial year but the first two years gifts in kind are included in these financial statements following confirmation from both donors of the actual costs

for these first 2 years of the project. The value of the gift is based on actual costs incurred by both donors.

(c) Mosquito nets gifted for an effectiveness study in Uganda of £ Nil (2021 : £12,632,000). The valuation of the gifts is based on the purchase cost of the nets had LSTM had to purchase the nets directly for the study. The quantification of the number of nets included at the purchase cost as a gift in kind was based on the number of nets distributed during the financial year under the control and direction of LSTM.

vi) Accounting for the USS pension deficit

FRS 102 makes the distinction between a group plan and a multi-employer scheme. A group plan consists of a collection of entities under common control typically with a sponsoring employer. A multi-employer scheme is a scheme for entities not under common control and represents (typically) an industry-wide scheme such as the Universities Superannuation Scheme. The accounting for a multi-employer scheme where the employer has entered into an agreement with the scheme that determines how the employer will fund a deficit results in the recognition of a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and the resulting expense in the Statement of comprehensive income in accordance with section 28 of FRS 102. The trustees are satisfied that Universities Superannuation Scheme meets the definition of a multi-employer scheme and LSTM has therefore recognised the discounted fair value of the contractual contributions under the recovery plan in existence at the date of approving the financial statements.

The USS provision is calculated using an approved consistent methodology used by all members, based on the 2020 valuation, with estimates made regarding discount rate, growth of staff numbers and increase in staff salaries. The provision at 31 July 2022 is £21,383,000 (2021 : £9,206,000). LSTM's discount rate is based on advice to the USS members from Mercer. Estimates regarding growth in staff numbers and salaries reflect the LSTM 6 year strategic plan which runs from 2017 to 2023, updated for current economic conditions and analysis as part of planning for the next strategic plan.

Estimates made in the year are as follows:

Discount rate: 3.09% based on Mercer HEI sector analysis

Salary growth: 3% in Yrs 1-2, 2% thereafter

Staff numbers growth: 3% Yrs 1-2, 2% Yrs 3-5, 1% Yrs 6-12, 0% thereafter

The recovery plan following the 2020 actuarial valuation requires employers to contribute 2.4% of salaries for the first year, and 6.2% of salaries the next 2 years, 6.3% of salaries the next 13 years and 4.7% in the final year, towards repaying the deficit over a period of 16 years. The current total contribution rate, including this element, is 21.6% (from 1 April 2022, previously 21.1%). Details of this provision are included in note 23 to the financial statements.

4. Statement of Principal Accounting Policies

i) Income Recognition

Student fee income is stated gross of any expenditure which is not a discount and credited to the Statement of comprehensive income over the period in which students are

studying. Where the amount of the tuition fee is reduced by a discount for prompt payment, income receivable is shown net of the discount. Bursaries and scholarships are accounted for gross as expenditure and not deducted from income.

Income from contracts and other services rendered is credited to the Statement of comprehensive income when the goods or services are supplied to the external customers or the terms of the contract, including performance related conditions, have been satisfied. This is generally equivalent to the sum of the relevant expenditure incurred during the year and any related contributions to overhead costs. Any payments received in advance of such performance are recognised on the balance sheet as liabilities.

Investment income is credited to the Statement of comprehensive income on a receivable basis.

Funds LSTM receives and disburses as paying agent on behalf of a funding body are excluded from the income and expenditure of LSTM where it is exposed to minimal risk or enjoys minimal economic benefit related to the transaction.

Interest on funds held on deposit is included when receivable and the amount can be measured reliably by LSTM; this is normally upon notification of the interest paid or payable by the Bank.

ii) Grant Funding

Government revenue grants including recurrent teaching and research grants from Office for Students (OfS) and UK Research and Innovation (UKRI), including Research England, are recognised in income over the periods in which LSTM recognises the related costs for which the grant is intended to compensate. Where part of a government grant is deferred it is recognised as deferred income within creditors and allocated between creditors due within one year and due after more than one year as appropriate.

Government capital grants are recognised in income over the expected useful life of the asset. Other capital grants are recognised in income when LSTM is entitled to the funds subject to any performance related conditions being met.

Grants (including research grants) from non-government sources are recognised in income when LSTM is entitled to the income and performance related conditions have been met. Income received in advance of performance related conditions being met is recognised as deferred income within creditors on the balance sheet and released to income as the conditions are met.

iii) Expenditure and Irrecoverable VAT

All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to that category. Where costs cannot be directly attributed to particular headings they have been allocated to activities on a basis consistent with use of resources. Grants are reflected in the Balance sheet when a constructive obligation exists, notwithstanding that they may be paid in future accounting periods.

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

iv) Donations and Endowments

Non exchange transactions without performance related conditions are donations and endowments. Donations and endowments with donor imposed restrictions are recognised in income when LSTM is entitled to the funds. Income is retained within the restricted reserve until such time that it is utilised in line with such restrictions at which point the income is released to general reserves through a reserve transfer.

Donations with no restrictions are recognised in income when LSTM is entitled to the funds.

Investment income and appreciation of endowments is recorded in income in the year in which it arises and as either restricted or unrestricted income according to the terms or other restrictions applied to the individual endowment fund.

There are four main types of donations and endowments identified within reserves:

1. *Restricted donations - the donor has specified that the donation must be used for a particular objective.*
2. *Unrestricted permanent endowments - the donor has specified that the fund is to be permanently invested to generate an income stream for the general benefit of LSTM.*
3. *Restricted expendable endowments - the donor has specified a particular objective other than the purchase or construction of tangible fixed assets and LSTM has the power to use the capital.*
4. *Restricted permanent endowments - the donor has specified that the fund is to be permanently invested to generate an income stream to be applied to a particular objective.*

v) Gifts in Kind

Gifts in kind are recognised within research grant income and other income, and within operating expenses, where performance conditions have been met and when a value to the entity can be reasonably estimated. The value to the entity is estimated using market values at the date of the gift but where the date of the gift cannot be accurately determined it is estimated when information has been collected and verified.

vi) Accounting for Retirement Benefits

The two principal pension schemes for LSTM's staff are the Universities Superannuation Scheme (USS) and the University of Liverpool Pension Fund (ULPF). ULPF is a defined benefit scheme and USS changed from a defined benefit scheme to a hybrid scheme on 1 October 2016, providing defined benefits (for all members) as well as contribution benefits. LSTM also participates in the National Health Service Pension Fund, which is a defined benefit scheme. All three schemes are externally funded and contracted out of the State Second Pension (S2P). Each fund is valued every three years by professionally qualified independent actuaries.

Both the USS and ULPF are multi-employer schemes for which it is not possible to identify the assets and liabilities related to LSTM's members due to the mutual nature of the scheme and therefore these schemes are accounted for as defined contribution retirement benefit schemes.

LSTM participates in the Universities Superannuation Scheme. The assets of the scheme are held in a separate trustee-administered fund. Because of the mutual nature of the scheme, the assets are not attributed to individual institutions and a scheme-wide contribution rate is set. LSTM is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. As required by Section 28 of FRS 102 "Employee Benefits" LSTM therefore accounts for the scheme as if it were a defined contribution scheme. As a result, the amount charged to the Statement of comprehensive income represents the contributions payable to the scheme. Since LSTM has entered into an agreement (The Recovery Plan) that determines how each employer within the scheme will fund the overall deficit, LSTM recognises a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) with related expenses being recognised through the Statement of comprehensive income.

vii) Defined Contribution Plan

A defined contribution plan is a post-employment benefit plan under which LSTM pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions in defined contribution pension plans are recognised as an expense in the Statement of comprehensive income in the periods during which services are rendered by employees.

The assets of the three main LSTM pension schemes are held in separate trustee-administered funds. Because of the mutual nature of the scheme, the assets are not attributed to individual institutions and a scheme-wide contribution rate is set. LSTM is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis.

As required by Section 28 of FRS 102 "employee benefits", LSTM therefore accounts for the schemes as if they were a wholly defined contribution scheme. As a result, the amount charged to the Statement of comprehensive income represents the contributions payable to the schemes.

viii) Employment Benefits

Short term employment benefits such as salaries and compensated absences are recognised as an expense in the year in which the employees render service to LSTM and the Group. Any unused benefits are accrued and measured as the additional amount LSTM and the Group expects to pay as a result of the unused entitlement.

ix) Holiday Pay Accrual

The liability for untaken staff holiday entitlement at 31 July 2022 is accrued. The accrual is based on actual hours untaken at 31 July and valued using an estimate made of average salaries within LSTM. A 50% weighting factor is applied to acknowledge the limited probability that such a pay-out would be required for 100% of staff - LSTM is a going concern and 100% pay-out would only likely be required in the event of a wind up of an organisation.

x) Foreign Currency

Transactions in foreign currencies are translated at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate ruling at the balance sheet date. Foreign exchange differences arising on translation are recognised in the Statement of comprehensive income. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are retranslated at the exchange rate ruling at the date the fair value was determined.

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on consolidation, are translated to the Group's presentational currency, Sterling, at foreign exchange rates ruling at the balance sheet date. The revenues and expenses of foreign operations are translated at an average rate for the year where this rate approximates to the foreign exchange rates ruling at the dates of the transactions. Exchange differences arising from this translation of foreign operations are reported as an item of Other comprehensive income. Exchange differences arising from a monetary item receivable from or payable to a foreign operation, the settlement of which is neither planned nor likely in the foreseeable future, are considered to form part of a net investment in a foreign operation and are recognised directly in reserves.

xi) Finance Leases

Leases in which LSTM assumes substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. Leased assets acquired by way of a finance lease and the corresponding lease liabilities are initially recognised at an amount equal to the lower of their fair value and the present value of the minimum lease payments at inception of the lease.

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

xii) Operating Leases

Rentals under operating leases are charged to the Statement of comprehensive income on a straight line basis over the lease term.

xiii) Fixed Assets

Fixed assets are stated at cost less accumulated depreciation and accumulated impairment losses.

Where parts of a fixed asset have different useful lives, they are accounted for as separate items of fixed assets.

Land and Buildings

Costs incurred in relation to land and buildings after initial purchase or construction are capitalised to the extent that they increase the expected future benefits to LSTM.

Freehold land is not depreciated as it is considered to have an indefinite useful life. Freehold buildings are depreciated on a straight line basis over a period of 50 years.

Leasehold buildings are depreciated on a straight line basis over 50 years.

No depreciation is charged on assets in the course of construction.

Fixtures and Equipment

Fixtures and equipment, including computers and software, costing less than the de minimus per individual item is recognised as expenditure. All other equipment is capitalised.

Capitalised equipment (including computer and other equipment) is stated at cost and depreciated over 4 years.

Depreciation methods, useful lives and residual values are reviewed at the date of preparation of each Balance Sheet.

xiv) Investments

Endowment asset investments and current asset investments are included in the Balance sheet at market value. Investments in the subsidiary undertakings are stated at cost, adjusted by any necessary impairment.

LSTM's treasury management policy is for all endowments to be invested in a portfolio of long term investments, while working capital balances and revenue reserves are invested short term with interest received credited to the Statement of comprehensive income. The investment objective is to achieve maximum return with minimum risk.

Non-endowment investments are held as current assets as they are available to be drawn down on demand.

xv) Stock

Stock is held at the lower of cost and net realisable value, and is measured using an average cost formula. Where necessary provision is made for obsolete, slow moving and defective stocks.

xvi) Cash and Cash Equivalents

Cash includes cash in hand, deposits repayable on demand and overdrafts. Deposits are repayable on demand if they are in practice available within 24 hours without penalty.

Cash equivalents are short term, highly liquid investments that are readily convertible to known amounts of cash with insignificant risk of change in value.

xvii) Debtors

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

xviii) Creditors

Creditors are recognised where LSTM 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 are normally recognised at their settlement amount

after allowing for any trade discounts due.

xix) Provisions, Contingent Liabilities and Contingent Assets

Provisions are recognised in the Financial Statements when:

(a) LSTM and the Group has a present obligation (legal or constructive) as a result of a past event;

(b) it is probable that an outflow of economic benefits will be required to settle the obligation; and

(c) a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is determined by discounting the expected future cash flows at a pre-tax rate that reflects risks specific to the liability.

A contingent liability arises from a past event that gives LSTM a possible obligation whose existence will only be confirmed by the occurrence or otherwise of uncertain future events not wholly within the control of LSTM. Contingent liabilities also arise in circumstances where a provision would otherwise be made but either it is not probable that an outflow of resources will be required or the amount of the obligation cannot be measured reliably.

A contingent asset arises where an event has taken place that gives LSTM and the Group a possible asset whose existence will only be confirmed by the occurrence or otherwise of uncertain future events not wholly within the control of LSTM and the Group.

Contingent assets and liabilities are not recognised in the Balance sheet but are disclosed in the notes.

xx) Financial Instruments

Basic financial instruments are initially recognised at transaction value and subsequently measured at their settlement value.

Derivative financial instruments are recognised at fair value using a valuation technique with any gains or losses being reported in the Statement of comprehensive income. Outstanding derivatives at the reporting date are included under the appropriate category depending on the nature of the derivative.

LSTM and the Group hold derivative financial instruments in the form of foreign currency sterling forward currency contracts. Derivatives are initially recognised at fair value on the date the derivative contract is entered into and are subsequently re-measured at their fair value at the balance sheet date. Changes in the fair value of derivatives are recognised in the surplus or deficit as appropriate, unless they are included in a hedging arrangement.

Changes in the fair value of derivatives designated as cash flow hedges, and which are effective, are recognised directly in total funds. Any ineffectiveness in the hedging relationship (being excess of cumulative change in fair value of the hedging instrument since inception of the hedge over the cumulative change in the fair value of the hedged item since inception of the hedge) is recognised in the surplus or deficit.

The gain or loss recognised in Other comprehensive income is reclassified to the Statement of comprehensive income

when the hedge relationship ends. Hedge accounting is discontinued when the hedging instrument expires, no longer meets the hedging criteria, the forecast transaction is no longer highly probable, the hedged debt instrument is derecognised or the hedging instrument is terminated.

xxi) Taxation

LSTM and IVCC are non-exempt charities within the meaning of Part 3 of the Charities Act 2011, therefore are charities within the meaning of Para 1 of schedule 6 to the Finance Act 2010 and accordingly, LSTM is potentially exempt from taxation in respect of income or capital gains received within categories covered by section 478-488 of the Corporation Tax Act 2010 (CTA 2010) or section 256 of the Taxation of Chargeable Gains Act 1992, to the extent that such income or gains are applied to exclusively charitable purposes.

LSTM is registered for VAT. Irrecoverable VAT on inputs is included in the costs of such inputs. Irrecoverable VAT allocated to fixed assets is included in their cost.

Some of LSTM's subsidiary entities are trading companies and are liable to Corporation Tax in the same way as any other commercial organisation.

xxii) Reserves

Reserves are classified as restricted or unrestricted. Restricted endowment reserves include balances which, through endowment to LSTM are held as a permanently restricted fund which LSTM must hold in perpetuity.

Other restricted reserves include balances where the donor has designated a specific purpose and therefore LSTM is restricted in the use of these funds.

The Board of Trustees approved a strategic plan covering a six year period to 31 July 2023. This plan anticipates LSTM's general reserves being augmented by the end of the period. The Board has targeted for cash reserves to represent a minimum of 6 months pay expenditure.

5. Funding Body Grants

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Recurrent teaching grants	1,114	1,114	1,331	1,331
Recurrent research grants	12,695	12,695	10,919	10,919
Specific grants	4,414	4,414	3,606	3,606
Release of deferred capital grants (note 25):				
<i>Buildings</i>	867	867	474	474
<i>Equipment</i>	631	631	621	621
	<u>19,721</u>	<u>19,721</u>	<u>16,951</u>	<u>16,951</u>

6. Tuition Fees and Education Contracts

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Masters fee income	1,097	1,097	1,408	1,408
PhD fee income	249	249	515	515
Fee income from diplomas	703	703	545	545
Fee income from short courses	46	46	7	7
Training and other courses	627	627	929	929
Fee income from University of Liverpool	318	318	333	333
	<u>3,040</u>	<u>3,040</u>	<u>3,737</u>	<u>3,737</u>

Total grant and fee income is also split as shown below:

Grant income from the OfS	1,114	1,114	1,331	1,331
Grant income from other bodies	18,607	18,607	15,620	15,620
	<u>19,721</u>	<u>19,721</u>	<u>16,951</u>	<u>16,951</u>
Fee income for taught awards (exclusive of VAT)	2,150	2,150	2,295	2,295
Fee income for research awards (exclusive of VAT)	844	844	1,435	1,435
Fee income for non-qualifying courses (exclusive of VAT)	46	46	7	7
	<u>3,040</u>	<u>3,040</u>	<u>3,737</u>	<u>3,737</u>
	<u>22,761</u>	<u>22,761</u>	<u>20,688</u>	<u>20,688</u>

7. Research Grants and Contracts

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Research Councils	12,938	12,744	12,684	12,684
UK based charities	19,625	20,001	27,457	27,457
UK Central Government and other bodies	16,186	10,229	20,782	14,174
UK industry and commerce	2,157	2,125	810	810
European Union	5,976	5,871	7,587	7,463
Other overseas bodies	47,611	15,356	29,758	10,122
Other	7	7	96	30
	<u>104,500</u>	<u>66,333</u>	<u>99,174</u>	<u>72,740</u>

Included within LSTM is £2,687,000 (2021 : £3,009,000) allocated to LSTM by IVCC, a UK registered charity under the control of LSTM. This income has been recognised as other overseas bodies income of £2,687,000 (2021 : £1,320,000) and UK central government and other bodies income of £ Nil (2021 : £1,689,000), by being matched against the related charitable expenditure incurred by the Group. IVCC allocates funding to research institutions on a competitive basis as validated by its External Scientific Advisory Committees.

Also included in UK based charities income are amounts relating to gifts of mosquito nets of £ Nil (2021 : £12,632,000), included in UK industry and commerce are amounts relating mainly to donated staff time of £1,513,000 (2021 : £ Nil) and included in UK central government and other bodies are amounts relating mainly to donated staff time of £113,000 (2021 : £ Nil). In accordance with FRS 102 the income has been shown above and offsetting costs are included in Other Operating Expenses (note 13).

Details of the estimates and judgements made in relation to these gifts are given in note 3 v.

8. Other Income

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Restated Group Year ended 31 July 2021 £'000	Restated LSTM Year ended 31 July 2021 £'000
Diagnostic lab	354	354	331	331
Travel health related activities	814	-	523	-
Implementation research consultancy	17,233	4,257	19,695	5,166
Gifts in kind: Pharmaceutical drugs for MDA programme	44,949	44,949	47,856	47,856
Forward currency contracts	-	-	459	459
Health authority contracts	226	226	216	216
Health authority funded posts	399	399	399	399
Non-funding council releases of deferred capital grants (Note 25)	1,551	1,551	528	528
Other	2,883	2,405	1,563	2,468
	68,409	54,141	71,570	57,423

Gifts in kind relate to gifts of pharmaceutical drugs for a mass drug administration programme (MDA) in various countries in Africa. In accordance with FRS 102 the income has been shown above and offsetting costs are included in Other Operating Expenses (note 13).

MDA gifts in kind for 2020/21 have been restated in the year. See note 35.

Details of the estimates and judgements made in relation to these gifts are given in note 3 v.

9. Investment Income

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Dividend income and interest receivable	267	138	747	521
Other interest receivable	17	17	4	4
	284	155	751	525

10. Donations and Endowment Income

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Endowment income	277	277	805	805
Unrestricted donations	45	45	38	38
Restricted donations	376	376	412	412
	698	698	1,255	1,255

11. Staff Costs

	Group Year ended 31 July 2022 Number	LSTM Year ended 31 July 2022 Number	Group Year ended 31 July 2021 Number	LSTM Year ended 31 July 2021 Number
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The number of persons (including senior post holders) employed at 31 July each year, expressed as full-time equivalents, was:

Academic contracts

Teaching staff	11	11	10	10
Research staff	141	141	139	139
Teaching and research staff	60	60	65	65
Clinicians	22	22	18	18

Non-academic contracts

Other	480	333	469	324
	714	567	701	556

The increase in other staff in the Group largely reflects an increase in staff in LSTM and CeSHHAR Zimbabwe.

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
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Staff costs for the above persons were:

Salaries	30,992	26,030	29,916	25,333
Social security costs	2,997	2,725	2,854	2,585
Pension costs	4,943	4,537	4,809	4,429
Restructuring costs	77	77	61	61
Accrued but untaken holiday costs	(213)	(213)	(18)	(18)
Staff costs before adjusting for pension provision costs	38,796	33,156	37,623	32,390
Pension deficit funding costs	12,104	12,104	(210)	(210)
Total staff costs	50,900	45,260	37,413	32,180

The pension provision costs represent the commitment by LSTM to fund the underlying deficit on the USS hybrid pension scheme. Under FRS 102 these amounts need to be provided for. The total provision at 31 July 2022 is £21,383,000 (see note 23).

	Group Year ended 31 July 2022		Restated Group Year ended 31 July 2021	
	Number of Key Management Personnel	Number of Other Staff	Number of Key Management Personnel	Number of Other Staff

Salaries of the higher paid staff, excluding employer's pension contributions were within the following ranges:

£100,000 - £105,000	-	2	1	4
£105,001 - £110,000	1	3	1	3
£110,001 - £115,000	1	9	2	3
£115,001 - £120,000	1	3	-	5
£120,001 - £125,000	-	2	-	5
£125,001 - £130,000	1	1	1	1
£130,001 - £135,000	-	1	-	1
£135,001 - £140,000	1	1	1	1
£140,001 - £145,000	-	1	-	1
£145,001 - £150,000	-	-	-	1
£165,001 - £170,000	-	-	-	1
£170,001 - £175,000	-	1	-	1
£180,001 - £185,000	-	-	-	1
£200,001 - £205,000	-	1	-	-
£205,001 - £210,000	-	-	2	-
£210,001 - £215,000	2	-	-	-
£255,001 - £260,000	-	-	1	-
£260,001 - £265,000	1	-	-	-
£265,001 - £270,000	-	-	-	1
£285,001 - £290,000	-	1	-	-
	8	26	9	29

Key management personnel for 2020/21 were restated to disclose salaries only and to align with 2021/22.

12. Key Management Personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the school. The figures below include compensation paid to key management personnel.

	Group/LSTM Year ended 31 July 2022 Number	Group/LSTM Year ended 31 July 2021 Number
The number of key management personnel including the director was:	8	9

Key management personnel include the Director. In 2021/22 and 2020/21 all key management personnel earned a salary of over £100,000 (see salary bandings note 11).

Key management personnel's total emoluments were made up as follows:

	Group/LSTM Year ended 31 July 2022 £'000	Group/LSTM Year ended 31 July 2021 £'000
Salaries	1,387	1,464
Social security costs	187	191
Pension Contributions	140	160
Total emoluments	1,714	1,815

Remuneration specifically for the Director, Prof David Laloo is as follows :

	Group/LSTM Year ended 31 July 2022 £'000	Group/LSTM Year ended 31 July 2021 £'000
Salaries	260	256
Social security costs	36	34
Pension Contributions	-	4
Total emoluments	296	294

The pension contributions of the Director and key management personnel are in respect of employer's contributions to the USS and NHS pension schemes and are paid at the same rate as for other employees.

The members of the Board other than the Director and the staff members did not receive any payment from LSTM other than the reimbursement of travel and subsistence expenses incurred in the course of their duties.

The total expenses paid to or on behalf of trustees was £3,878 (2021 : £1,704). This represents travel and subsistence expenses incurred in attending meetings and events in their official capacity.

Senior staff pay

LSTM is a world leading research institution. We benchmark our rates of pay and HR practices against the higher education sector in general, and our key comparator group is Russell Group institutions. This reflects where we need to be in order to attract and retain the most talented people in our predominantly research field, particularly against global and national competition.

Average earnings in higher education are higher than the average for both the public and private sector and have grown faster than in the wider economy.

The Director's pay is linked to a pay scale. Incremental progression is not automatic, however any pay awards are based on consideration of an individual's contribution, supported by evidence of exceptional performance. Determinations of pay for senior executive staff are made by the Remuneration Committee, the members of which are Board trustees, and which is chaired by the Chair of the Board; however, the Deputy Chair presides over discussions of the director's pay. The remuneration Committee adopts the CUC's Higher Education Senior Staff Remuneration Code and publishes a separate annual report. The Committee meets in autumn of each year.

There has been little progression in the Director's pay since appointment in January 2019. There was a 0% pay award in 2020 during the pandemic; in 2021 the senior management team opted out of the Remuneration Committee review process. For the coming year, 2022-2023, Remuneration Committee will make recommendations on the basis of external benchmarks and individual performance and

contribution for approval in November 2022.

Median salary info

The FTE salary of David Laloo as Director, expressed as a multiple of the median salary of all LSTM UK staff is 6.93 (2021 : 6.80).

The FTE total remuneration of David Laloo as Director, expressed as a multiple of the median total remuneration of all LSTM UK staff is 5.72 (2021 : 5.87).

The basis of the calculation is as follows:

- All staff costs are grossed up to reflect amounts payable on a full time equivalent basis.
- Total remuneration includes employer pension payments, bonus payments and allowances.
- Salary details for atypical and agency staff have been excluded due to difficulties in obtaining the data from third parties.

Overseas activities

LSTM's business is such that a substantial amount of overseas activities are carried out by all staff, which includes senior post-holders and higher paid staff. It is not believed appropriate to account for this expenditure in a separate note.

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Restated Group Year ended 31 July 2021 £'000	Restated LSTM Year ended 31 July 2021 £'000
13. Other Operating Expenses				
Research grants and contracts	75,170	44,380	62,542	41,211
Implementation research consultancy	15,288	2,444	15,723	3,009
Gifts in kind: Pharmaceutical drugs for MDA programme	44,949	44,949	47,856	47,856
Gifts in kind: Mosquito nets	-	-	12,632	12,632
Gifts in kind : Drugs & test units	16	16	14	14
Gifts in kind : Combined staff time, space and consumables	1,610	1,610	-	-
Forward currency contracts	754	754	110	-
Premises costs	2,798	2,765	3,270	3,270
Academic and related expenditure	3,033	3,032	2,085	2,084
Administrative and central services	6,563	4,263	4,870	4,454
	150,181	104,213	149,102	114,530

MDA gifts in kind for 2020/21 have been restated in the year. See note 35.

Management reviewed and updated the classification of other operating expenditure to better reflect operations. The prior year comparatives have been restated to ensure consistency. There is no change to the totals in the current or prior years.

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Other operating expenses include:				
Financial statements auditor's remuneration				
Financial statements audit	136	74	119	68
Audit related assurance services	-	-	-	-
Taxation compliance services	12	2	9	9
Taxation advisory services	5	5	14	14
Other auditor's remuneration				
Internal audit	27	27	30	30
Research grant audit services	14	14	14	14
Component auditors	10	-	19	-

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
14. Interest Payable				
Finance lease interest for Accelerator Building	-	-	129	129
	<u>-</u>	<u>-</u>	<u>129</u>	<u>129</u>

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
15. Taxation				
Tax charge in year	-	-	39	-
	<u>-</u>	<u>-</u>	<u>39</u>	<u>-</u>

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
16. (Deficit)/surplus on Continuing Operations for the Year				
(Deficit)/surplus for the year before gift aid	(7,467)	(9,165)	6,609	5,665
Surplus generated by subsidiary undertakings and transferred to LSTM under gift aid	-	-	-	-
(Deficit)/surplus for the year	<u>(7,467)</u>	<u>(9,165)</u>	<u>6,609</u>	<u>5,665</u>

	Leasehold Buildings £'000	Freehold land and buildings £'000	Fixtures & Equipment £'000	TOTAL £'000
17. Tangible Fixed Assets				
Group				
Cost or valuation				
At 1 August 2021	14,223	58,254	6,267	78,744
Additions	-	4,820	582	5,402
Disposals	-	-	-	-
At 31 July 2022	<u>14,223</u>	<u>63,074</u>	<u>6,849</u>	<u>84,146</u>
Depreciation				
At 1 August 2021	1,377	13,948	4,325	19,650
Charge for the year	344	1,074	768	2,186
Eliminated in respect of disposals	-	-	-	-
At 31 July 2022	<u>1,721</u>	<u>15,022</u>	<u>5,093</u>	<u>21,836</u>
Net book value at 31 July 2022	<u>12,502</u>	<u>48,052</u>	<u>1,756</u>	<u>62,310</u>
Net book value at 31 July 2021	12,846	44,306	1,942	59,094
Financed by Funding body capital grants	-	8,760	947	9,707
Financed by government capital grants	1,433	17,898	-	19,331
Financed by other grants and LSTM	11,069	21,393	810	33,272
	<u>12,502</u>	<u>48,052</u>	<u>1,757</u>	<u>62,310</u>

The amount for freehold land and buildings includes a value for land of £3,907,000 which is not depreciated. At 31 July 2022 additions to freehold land and buildings include £4,449,000 in respect of assets under construction which have not been depreciated.

The net book value of tangible fixed assets include £9,839,000 (2021:£10,057,000) in respect of assets held under finance lease. Depreciation of the finance lease asset was £218,000 (2021 : £218,000).

	Leasehold Buildings £'000	Freehold land and buildings £'000	Fixtures & Equipment £'000	TOTAL £'000
LSTM				
Cost or valuation				
At 1 August 2021	13,871	58,254	6,177	78,302
Additions	-	4,820	580	5,400
Disposals	-	-	-	-
At 31 July 2022	13,871	63,074	6,757	83,702
Depreciation				
At 1 August 2021	1,291	13,948	4,256	19,495
Charge for the year	337	1,074	761	2,172
Eliminated in respect of disposals	-	-	-	-
At 31 July 2022	1,628	15,022	5,017	21,667
Net book value at 31 July 2022	12,243	48,052	1,740	62,035
Net book value at 31 July 2021	12,580	44,306	1,921	58,807
Financed by Funding body capital grants	-	8,760	947	9,707
Financed by government capital grants	1,433	17,898	-	19,331
Financed by other grants and LSTM	10,810	21,394	793	32,997
	12,243	48,052	1,740	62,035

The amount for freehold land and buildings includes a value for land of £3,907,000 which is not depreciated. At 31 July 2022 additions to freehold land and buildings include £4,449,000 in respect of assets under construction which have not been depreciated.

The net book value of tangible fixed assets include £9,839,000 (2021 : £10,057,000) in respect of assets held under finance lease. Depreciation of the finance lease asset was £218,000 (2021 : £218,000).

18. Investments in Subsidiaries

	LSTM Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2021 £'000
Cost at 1 August 2021/2020	80	54
Additions	46	26
Cost at 31 July 2022/2021	126	80

LSTM owns 100% of the issued ordinary £1 shares of LSTM Consulting Limited, a company incorporated in England and Wales. Its principal business activity is carrying out technical assistance on health issues in tropical countries. LSTM Consulting became dormant effective 31 August 2022. LSTM Consulting Limited has interests in the following companies and NGOs:

- LATH Nigeria (Dormant NGO)
- LATH Umoyo, Malawi (Dormant) - 50%
- LSTM Kenya - 100%: Registered office: Rosami Court, House No. 4, Muringa Road, PO Box 24672-00100, Nairobi, Kenya
- LSTM Consulting USA - 100%: Registered office: 124, Cardinal Ridge Road, Chapel Hill, NC 27516, USA
- LMS (Dormant) - 100%
- LATH South Sudan (NGO)

LSTM owns 100% of the issued ordinary £1 shares of Liverpool International Health Ventures Limited, a company incorporated in England and Wales. Its principal business activity is being a vehicle to remunerate employees of fellow group companies and a holding company for the following:

- Well Travelled Clinics Limited (WTC)
- Liverpool International Health I.P. Limited (LIHIP)

LSTM owns 100% of the issued ordinary £1 shares of iiDiagnostics Limited, a company incorporated in England and Wales. This company was previously dormant, the name was changed from Echitab Study Group (UK) Ltd to iiDiagnostics in December 2021 and it started trading in January 2022. iiDiagnostics Limited's principal activity is research and experimental development.

LSTM is the sole member of IVCC, a company and registered charity incorporated in England and Wales. IVCC is a company limited by guarantee and holds no share capital. Its principal business activity is to carry out research into controlling vector-borne.

The registered office of all UK subsidiaries is: Pembroke Place, Liverpool, L3 5QA.

LSTM owns 99% of the issued ordinary 10 Rupee shares of Liverpool School of Tropical Medicine India Private Limited, a company incorporated in India. Share capital of £46,000 was added during the year in order to fund outstanding liabilities. The company was put into liquidation in January 2022 which is expected to be complete by December 2022.

LSTM also has an interest in the following, which are all NGOs:

- CeSHHAR Zimbabwe (Charity):	Registered office: 4 Bath Road, Belgravia, Harare, Zimbabwe	Consolidated in LSTM Group Financial Statements
- LSTM Malawi		
- LSTM DRC		Not consolidated due to negligible activity
- Liverpool Initiative for Health Development (Nigeria)		
- LSTM Sierra Leone		
- LSTM Uganda:	Registered office: Bakuli-Mengo Road, PO Box 3341, Kampala, Uganda	

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
19. Debtors : Amounts falling due within 1 year				
Trade debtors	1,124	730	1,749	1,328
Amounts owed by subsidiary undertakings	-	631	-	-
Balances due on research grants and contracts	18,162	17,377	13,022	12,310
Prepayments and accrued income	2,483	2,396	1,693	1,628
Forward currency contracts	112	112	771	568
	21,881	21,246	17,235	15,834

A bad debt provision of £399,000 (2021 : £155,000) has been recognised against debtors of LSTM and the Group.

	Group Investments Year ended 31 July 2022 £'000	Group Endowments Year ended 31 July 2022 £'000	Group TOTAL Year ended 31 July 2022 £'000	Group TOTAL Year ended 31 July 2021 £'000
20. Investments and Endowments				
Cost at 1 August 2021/2020	29,320	13,122	42,442	25,887
Additions	4,156	1,933	6,089	17,344
Disposals	(7,786)	(1,745)	(9,531)	(2,453)
Cost at 31 July 2022/2021	25,690	13,310	39,000	40,778
Unrealised revaluation reserve at 1 August 2021/2020	1,344	4,063	5,407	5,213
Unrealised revaluation in the year	788	(1,593)	(805)	1,857
Unrealised revaluation reserve at 31 July 2022/2021	2,132	2,470	4,602	7,070
Market value at 31 July 2022/2021	27,822	15,780	43,602	47,848
<i>Represented by:</i>				
Fixed interest stocks (listed)	6,668	2,175	8,843	14,088
Equities (listed)	3,292	11,410	14,702	15,799
Other	17,862	2,195	20,057	17,961
	27,822	15,780	43,602	47,848
<i>Represented by:</i>				
Fellowships and scholarship funds	-	7,584	7,584	8,061
Prize funds	-	127	127	145
Other funds	27,822	8,069	35,891	39,642
	27,822	15,780	43,602	47,848

Investments include bank deposits of greater than 3 months duration of £16,474,000 (2021 : £14,258,000).

	LSTM Investments Year ended 31 July 2022 £'000	LSTM Endowments Year ended 31 July 2022 £'000	LSTM TOTAL Year ended 31 July 2022 £'000	LSTM TOTAL Year ended 31 July 2021 £'000
Cost at 1 August 2021/2020	9,467	13,122	22,589	25,887
Additions	4,156	1,933	6,089	5,158
Disposals	(118)	(1,745)	(1,863)	(10,120)
Cost at 31 July 2022/2021	13,505	13,310	26,815	20,925
Unrealised revaluation reserve at 1 August 2021/2020	1,579	4,063	5,642	5,213
Unrealised revaluation in the year	(152)	(1,593)	(1,745)	2,093
Unrealised revaluation reserve at 31 July 2022/2021	1,427	2,470	3,897	7,306
Market value at 31 July 2022/2021	14,932	15,780	30,712	28,231
<i>Represented by:</i>				
Fixed interest stocks (listed)	4,179	2,175	6,354	6,657
Equities (listed)	3,292	11,410	14,702	15,799
Other	7,461	2,195	9,656	5,775
	14,932	15,780	30,712	28,231
<i>Represented by:</i>				
Fellowships and scholarship funds	-	7,584	7,584	8,061
Prize funds	-	127	127	145
Other funds	14,932	8,069	23,001	20,025
	14,932	15,780	30,712	28,231

Investments include bank deposits of greater than 3 months duration of £6,073,000 (2021 : £2,072,000).

21. Creditors: Amounts falling due within 1 year

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Unexpended balances of research grants and contracts	39,926	27,421	58,521	26,906
Trade creditors	1,310	1,010	882	700
Amounts owed to subsidiary undertakings	-	-	-	96
Other taxation and social security	834	818	867	856
Holiday accrual	448	448	672	672
Accruals and deferred income	15,112	3,039	10,986	3,310
Forward currency contracts	551	418	272	120
Short term element of finance lease liability (note 32)	467	467	453	453
Short term element of deferred capital grants (note 25)	701	701	589	589
	59,349	34,322	73,242	33,702

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
22. Creditors: Amounts falling due after 1 year				
Long term element of deferred capital grants (note 25)	30,846	30,846	25,911	25,911
Long term element of finance lease liability (note 32)	8,608	8,608	9,033	9,033
	<u>39,454</u>	<u>39,454</u>	<u>34,944</u>	<u>34,944</u>

	Group/LSTM USS Year ended 31 July 2022 £'000
23. Pension Deficit Provision	
At 31 July 2020	9,258
Decrease in provision during the year (staff costs, see note 11)	(210)
Increase in provision during the year (interest costs)	158
Total decrease in provision during the year	<u>(52)</u>
At 31 July 2021	9,206
Increase in provision during the year (staff costs, see note 11)	12,104
Increase in provision during the year (interest costs)	73
Total increase in provision during the year	<u>12,177</u>
At 31 July 2022	<u>21,383</u>

The obligation to fund the past deficit on the Universities Superannuation Scheme (USS) arises from the contractual obligation with the USS to fund deficit payments in accordance with the deficit recovery plan. In calculating this provision, management have estimated future staff levels within the USS scheme for the duration of the contractual obligation and salary inflation. Key assumptions are set out below.

The provision at 31 July 2022 is based on the sector-mandated model which reflects the latest valuation at 31 March 2020.

Management has assessed future employees within the scheme and salary payment over the period of the contracted obligations to calculate the value of the provision, and has made the following assumptions.

	Group/LSTM Year ended 31 July 2022 £'000	Group/LSTM Year ended 31 July 2021 £'000
Discount rate	3.09%	0.79%
Salary growth	3% Yrs 1-2, 2% thereafter	1.5% 1st 6 years, then 2.5%
Staff numbers growth	3% Yrs 1-2, 2% Yrs 3-5, 1% Yrs 6-12, 0% thereafter	3% 1st 6 years, then 5%

As the world emerges from the pandemic and as LSTM starts planning as part of the next strategic plan cycle, parameters with regard to salary growth and staff numbers growth have been reassessed.

Sensitivity analysis

As set out in the accounting policies, there are some critical judgements made in estimating the obligation to fund the USS deficit. The sensitivity of the principal assumptions used to measure the USS deficit provision are set out below:

Change in assumptions at 31 July 2022	Approximate impact £'000
0.5% pa decrease in discount rate	896 Increase in provision
0.5% pa increase in discount rate	(838) decrease in provision
0.5% pa increase in salary inflation over duration	906 Increase in provision
0.5% pa increase in salary inflation year 1 only	111 Increase in provision
0.5% increase in staff changes over duration	847 Increase in provision
0.5% increase in staff changes year 1 only	111 Increase in provision

24. Other Provisions

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000
At 31 July 2020	1,827	1,807
Net movement of provisions in the year	1,870	1,890
At 31 July 2021	3,697	3,697
Net movement of provisions in the year	244	244
At 31 July 2022	3,941	3,941

Other provisions comprise primarily provisions for issues in meeting project deliverables on research grants of £2,586,000, partly due to COVID-19 (2021 : £1,859,000), provisions for costs relating to the Liverpool Life Sciences Accelerator (LLSA) research space of £468,000 (2021 : £927,000) and a provision for the negative assets for the subsidiary intellectual property company and Well Travelled Company of £437,000 (2021 : £335,000).

Information regarding settlement of the amounts provided for is anticipated in the next year.

25. Deferred Capital Grants

	Group/LSTM Funding Council Year ended 31 July 2022 £'000	Group/LSTM Other Funding Year ended 31 July 2022 £'000	Group/LSTM TOTAL Year ended 31 July 2022 £'000
At 1 August 2021			
Buildings	6,429	18,883	25,312
Equipment	1,188	-	1,188
Cash received			
Buildings	3,198	4,507	7,705
Equipment	390	-	390
Released to Statement of comprehensive income			
Buildings	(867)	(1,550)	(2,417)
Equipment	(631)	-	(631)
At 31 July 2022	9,707	21,840	31,547

Deferred capital grants are shown in Creditors and are split between Creditors : < 1 year and Creditors : > 1 year as follows:

Creditors < 1 year	701
Creditors > 1 year	30,846
	31,547

At 1 August 2020			
Buildings	5,605	19,411	25,016
Equipment	478	-	478
Cash received			
Buildings	1,297	-	1,297
Equipment	1,332	-	1,332
Released to Statement of comprehensive income			
Buildings	(474)	(528)	(1,002)
Equipment	(621)	-	(621)
At 31 July 2021	7,617	18,883	26,500

Deferred capital grants are shown in Creditors and are split between Creditors : < 1 year and Creditors : > 1 year as follows :

Creditors < 1 year	589
Creditors > 1 year	25,911
	26,500

26. Endowment Reserves

	Group/LSTM Permanent Endowment Restricted Year ended 31 July 2022 £'000	Group/LSTM Permanent Endowment Unrestricted Year ended 31 July 2022 £'000	Group/LSTM Expendable Restricted Year ended 31 July 2022 £'000	Group/LSTM TOTAL Year ended 31 July 2022 £'000
At 1 August 2021				
- Capital value	7,955	8,275	597	16,827
- Accumulated income	145	202	12	359
- TOTAL	8,100	8,477	609	17,185
Reclassification between restricted and unrestricted	105	(105)	-	-
Appreciation of endowment assets investments (realised)	29	158	-	187
Appreciation of endowment assets investments (unrealised)	(745)	(829)	(20)	(1,594)
Income for the year	153	157	13	323
Transferred to statement of comprehensive income	(113)	(157)	(7)	(277)
Retained in reserves	(46)	-	-	(46)
At 31 July 2022				
- Capital value	7,412	7,499	576	15,487
- Accumulated income	73	202	18	293
- TOTAL	7,485	7,701	594	15,780
<i>Representing:</i>				
Fellowship and scholarship funds	6,989	-	594	7,583
Prize funds	128	-	-	128
Other funds	368	7,701	-	8,069
Investments	7,485	7,701	594	15,780
Cash relating to endowments	465	1,940	-	2,405
Reserves	7,950	9,641	594	18,185
	Year ended 31 July 2021	Year ended 31 July 2021	Year ended 31 July 2021	Year ended 31 July 2021
At 1 August 2020				
- Capital value	7,383	6,527	543	14,453
- Accumulated income	272	202	(49)	425
- TOTAL	7,655	6,729	494	14,878
Reclassification between restricted and unrestricted	(559)	559	-	-
Drawdown of endowment capital	-	-	(48)	(48)
Appreciation of endowment assets investments (realised)	255	367	48	670
Appreciation of endowment assets investments (unrealised)	760	822	103	1,685
Income for the year	185	123	12	320
Transferred to statement of comprehensive income	(196)	(123)	-	(319)
At 31 July 2021				
- Capital value	7,955	8,275	597	16,827
- Accumulated income	145	202	12	359
- TOTAL	8,100	8,477	609	17,185
<i>Representing:</i>				
Fellowship and scholarship funds	7,452	-	609	8,061
Prize funds	145	-	-	145
Other funds	503	8,477	-	8,980
Investments	8,100	8,477	609	17,185
Cash relating to endowments	250	1,703	-	1,954
Reserves	8,350	10,180	609	19,139

27. Restricted General Reserve

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000
At 31 July 2020	7,327	454
Surplus from Statement of comprehensive income	1,228	33
At 31 July 2021	8,555	487
Surplus from Statement of comprehensive income	2,048	156
At 31 July 2022	10,603	643

The reserves of IVCC and CeSHHAR Zimbabwe are considered to be restricted due to their status as charities/Private voluntary organisations (PVOs) and their objects being narrower than those of the group. In addition, at 31 July 2022 donations where there is a restriction over how they are used were transferred to this reserve from the general reserve.

28. Financial Instruments

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
The carrying value of the Group and LSTM's financial assets and liabilities are summarised by category below:				
Financial assets				
<i>Financial assets at fair value through surplus or deficit:</i>				
Listed investments and endowments	43,602	30,712	47,848	28,231
<i>Financial assets that are debt instruments measured at amortised cost:</i>				
Trade, research and other receivables	20,916	20,322	15,646	14,454
Cash and cash equivalents	44,038	22,978	52,154	25,797
<i>Financial assets measured at fair value through surplus or deficit</i>				
Forward currency contracts	112	112	771	568
	<u>108,668</u>	<u>74,124</u>	<u>116,419</u>	<u>69,050</u>
Financial liabilities				
<i>Financial liabilities measured at amortised cost</i>				
Trade, research and other payables and accruals	55,409	30,811	69,718	30,353
Finance lease liability	9,075	9,075	9,486	9,486
<i>Financial liabilities measured at fair value through surplus or deficit</i>				
Forward currency contracts	551	418	272	120
	<u>65,035</u>	<u>40,304</u>	<u>79,476</u>	<u>39,959</u>

Cash flows on both the US dollar and Euro research income and the foreign currency forward contracts are at regular intervals, and are based on predicted project related cash flows. The forward contracts had a mark to market valuation as at 31 July 2022 amounting to a liability of £439,000 (2021 : £499,000 asset). During 2021/22 a loss of £938,000 was recognised in expenditure for the year (2021 : a gain of £349,000).

The foreign currency forward contracts are not traded in active markets. These have been fair valued using observable forward exchange rates corresponding to the maturity of the contracts.

The Group's income, expense, gains and losses in respect of financial instruments are summarised below:

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Financial assets				
Total interest income for financial assets at amortised cost	17	17	4	4
Fair value gains and (losses)				
On financial assets measured at fair value through income and expenditure	(754)	(754)	349	459
On financial assets measured at fair value through the hedging reserve	-	-	109	-

29. Cash and Cash Equivalents

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000
At 1 August 2021	52,154	25,797
Cashflows	(8,116)	(2,819)
At 31 July 2022	44,038	22,978

30. Pension and similar obligations

LSTM and the Group's employees belong to two principal pension schemes, the Universities Superannuation Scheme (USS) and University of Liverpool Pension Fund (ULPF) although a small number of staff belong to the National Health Service Superannuation Scheme (NHSSS) and WTC Pension scheme. All schemes apart from the WTC scheme are defined benefit schemes, which are externally funded and contracted out of the State Earnings-Related Pension Scheme.

The defined benefit funds are normally valued every three years by a professionally qualified independent actuary using the projected unit method, the rates of contribution payable being determined by each fund's trustee on the advice of the actuary. In the intervening years the actuary reviews the progress of the scheme. Pension costs are assessed in accordance with the advice of the actuary, based on the latest actuarial valuation of the scheme, and are accounted for on the basis of charging the cost of providing pensions over the period during which the institution benefits from the employee's services. The total group pension cost for the year was £4,943,000 (2021 : £4,809,000).

Universities Superannuation Scheme (USS)

LSTM participates in the Universities Superannuation Scheme. The scheme is a hybrid pension scheme, providing defined benefits (for all members), as well as defined contribution benefits. The assets of the scheme are held in a separate trustee-administered fund. Because of the mutual nature of the scheme, the assets are not attributed to individual institutions and a scheme-wide contribution rate is set. LSTM is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. As required by Section 28 of FRS 102 "Employee benefits", LSTM therefore accounts for the scheme as if it were a wholly defined contribution scheme. As a result, the amount charged to the statement of comprehensive income represents the contributions payable to the scheme. Since LSTM has entered into an agreement (the recovery plan) that determines how each employer within the scheme will fund the overall deficit, LSTM recognises a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and therefore an expense is recognised.

The total contributions charged to the Statement of comprehensive income is £4,358,000 (2021 : £3,911,000).

Deficit recovery contributions due within one year are £1,299,000 (2021 : £1,125,000).

The latest available completed actuarial valuation of the USS Retirement Income Builder (defined benefit) is at 31 March 2020 (the valuation date), which was carried out using the projected unit method.

Since the institution cannot identify its share of USS Retirement Income Builder (defined benefit) assets and liabilities, the following disclosures reflect those relevant for those assets and liabilities as a whole.

The 2020 valuation was the sixth valuation for the scheme under the scheme-specific funding regime introduced by the Pensions Act 2004, which requires schemes to have sufficient and appropriate assets to cover their technical provisions. At the valuation date, the value of the assets of the scheme was £66.5 billion, and the value of the scheme's technical provisions was £80.6 billion indicating a shortfall of £14.1 billion and a funding ratio of 83%.

The key financial assumptions used in the 2020 valuation are described below. More detail is set out in the Statement of Funding Principals.

CPI assumption	Term dependent rates in line with the difference between the Fixed Interest and Index Linked yield curves, less 1.1% p.a to 2030, reducing linearly by 0.1% p.a to a long term difference of 0.1% from 2040.
Pension increases (Subject to a floor of 0%)	CPI assumption +0.05%
Discount rate (forward rates)	Fixed interest gilt yield curve plus : Pre-retirement : 2.75% Post-retirement : 1.00%

The main demographic assumption used relates to the mortality assumptions. These assumptions are based on analysis of the scheme's experience carried out as part of the 2020 actuarial valuation. The mortality assumptions used in these figures are as follows:

2020 Valuation

Mortality base table	101% of S2PMA "light" for males and 95% of S3PFA for females
Future improvements to mortality	CMI_2019 with a smoothing parameter of 7.5, an initial addition of 0.5% p.a and a long term improvement rate of 1.8% p.a for males and 1.6% p.a. for females

The current life expectancies on retirement at age 65 are :

	2022	2021
Males currently aged 65 (years)	23.9	24.7
Females currently aged 65 (years)	25.5	26.1
Males currently aged 45 (years)	25.9	26.7
Females currently aged 45 (years)	27.3	27.9

A new deficit recovery plan was put in place as part of the 2020 valuation, which requires payment of 6.2% of salaries over the period 1 April 2022 to 31 March 2024 at which point the rate will increase to 6.3%. The 2020 deficit recovery liability reflects this plan. The liability figures have been produced using the following assumptions:

	2022	2021
Discount rate	3.09%	0.79%
Pensionable salary growth	3% Yrs 1-2, 2% thereafter	1.5% 1st 6 years, then 2.5%

University of Liverpool Pension Fund (ULPF)

LSTM participates in the University of Liverpool Pension Fund (ULPF), a defined benefit scheme in the UK. The final salary section of the Fund is closed to new entrants with effect from 31 July 2011 and from 1 August 2011 new members are eligible to join the CARE section of the Fund. A full actuarial valuation was carried out at 31 July 2018, the triennial valuation at 31 July 2021 has not yet been signed off.

The contributions made by the employer over the period have been £186,000 (2021 : £199,000). The employer currently pays contributions at the rate of 16% of pensionable pay. Member contributions are payable in addition at the rate of 7.5% of pensionable pay for Final Salary members and 6.5% of pensionable pay for CARE members.

The assumptions which have the most significant effect on the result of the valuation are those relating to the rate of return on investments (i.e. the valuation rate of interest) and the rates of increase in salary and pensions. In relation to the past service liabilities the financial assumptions were derived from market yields prevailing at the valuation date. It was assumed that the discount rate would be 3.5% per annum (2021 : 1.7%) and salary increases would be 2.85% per annum (2021 : 2.85%). The valuation was carried out using the projected unit method.

At the valuation date the market value of the assets of the scheme was £568.7m (2021 : £620.1m) and the value of the past service liabilities was £397.1m (2021 : £517.3m) leaving a surplus of £171.6m (2021 : £102.5m).

There was a total of 40 LSTM active members in this scheme at 31 July 2022.

National Health Service Superannuation Scheme (NHSSS)

LSTM participates in the National Health Service Superannuation Scheme (NHSSS), a defined benefit scheme which is a statutory, unfunded, multi employer, defined benefit scheme in which LSTM is unable to identify its share of the underlying liabilities and assets and is accounted for on a contributions basis.

The contributions made by the employer over the financial year have been £346,000 (2021 : £318,000), equivalent to 14.38% of pensionable salaries.

There were a total of 49 LSTM active members in this scheme at 31 July 2022.

31. Contingent Liability

A composite cross guarantee structure exists between Liverpool School of Tropical Medicine, Well Travelled Clinics Limited, Liverpool International Health Ventures Limited, Liverpool International Health I.P. Limited, IVCC, LSTM Consulting Limited and iiDiagnostics Limited. The aggregate amount outstanding under this agreement at the balance sheet date was £712,358 (2021 : £609,352).

32. Finance Lease Commitments

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Amounts due in less than one year	467	467	453	453
Amounts due between one and five years	2,011	2,011	1,953	1,953
Amounts due in more than five years	6,597	6,597	7,080	7,080
	<u>9,075</u>	<u>9,075</u>	<u>9,486</u>	<u>9,486</u>

LSTM signed a lease for occupation of 2 floors of research space in the LLSA in autumn 2017 and took occupation in September 2017. The lease is for 25 years, at £400,000 a year. LSTM has an option to purchase its share of the building within 10 years of the start of the lease, and given this option LSTM has treated the building as a finance lease since 2017/18.

33. Operating Lease Commitments

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Amounts due in less than one year	76	39	105	45
Amounts due between one and five years	48	46	83	81
	<u>124</u>	<u>85</u>	<u>188</u>	<u>126</u>

34. Capital Commitments

	Group/LSTM Year ended 31 July 2022 £'000	Group/LSTM Year ended 31 July 2021 £'000
Building capital works	10	-
	<u>10</u>	<u>0</u>

35. Prior Year Adjustments

LSTM has included gifts in kind of pharmaceutical drugs for the years to 31 July 2021 and 2022, relating to drugs donated for mass drug administration in various countries in Africa. The value of the drugs donated relies on reported numbers of patients treated. During the year ended 31 July 2022 an error was discovered in the number of patients used for the calculation in the prior year. This was a spreadsheet error and did not reflect any underlying errors in the data. Therefore the prior year value has been restated. There is no impact on the reported surplus for the year ended 31 July 2021. The impact on income and expenditure for these entries in the prior year is shown below.

	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2021 £'000
Other income (note 8) - reduction of	(16,901)	(16,901)
Other operating expenditure (note 13) - reduction of	(16,901)	(16,901)

36. Related Party Transactions

The Group has taken advantage of the exemptions included in FRS 102 section 33 in not disclosing the transactions with other group companies as all such transactions have been eliminated on consolidating the group results for the year.

Due to the nature of LSTM's operations and the composition of the Board of Trustees (being drawn from local public and private sector organisations), it is inevitable that transactions will take place with organisations in which a member of the Board may have an interest. All transactions involving an organisation in which a member of the Board may have an interest are conducted at arm's length and in accordance with LSTM's financial regulations and normal procurement procedures.

37. Foreign, Commonwealth and Development Office (FCDO) Funding (Formerly DFID)

Included within UK central government and other bodies income (note 7) and implementation research consultancy income (note 8) are the following DFID funded research projects, together with their income for the year:

	Group Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000
Sustainable Insecticides for Public Health	-	8,297
CNTD Global Programmes including Ascend	85	3,474
CouNTDown	370	1,220
READ-It	789	914
Next generation snakebite therapies	312	793
ReBuild	807	669
Reducing Maternal and Neonatal Deaths in Kenya	530	663
LIGHT RPC	1,375	620
FIEBRE	59	330
TDDAP	207	198
Stronger Health Partnerships for Stronger Health Systems	22	135
Monitoring/evaluation services Royal Society-DFID Capacity Building Africa Initiative	91	106
LQAS Survey South Sudan 2	122	88
K4D	33	56
Implementation/evaluation of novel tools in malaria control programmes	-	20
Integrated control of schistosomiasis and intestinal helminths	-	5
Other smaller funding	-	64
ACRC Foundation	3	-
Healthsite Emergency health data validation	3	-
	4,807	17,652

38. Consolidated Reconciliation of Net Funds

	Group Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2022 £'000
Net funds 1 August 2021	43,167	16,759
Movement in cash and cash equivalents	(8,116)	(2,819)
Other non-cash changes	(527)	(343)
Net funds 31 July 2022	34,524	13,597
Change in net funds	(8,643)	(3,162)

Analysis of net funds:	Group Year ended 31 July 2022 £'000	Group Year ended 31 July 2021 £'000	LSTM Year ended 31 July 2022 £'000	LSTM Year ended 31 July 2021 £'000
Cash and cash equivalents	44,038	52,154	22,978	25,797
Borrowings: amounts falling due within one year				
Obligations under finance leases	467	453	467	453
Forward contracts	439	(499)	306	(448)
	906	(46)	773	5
Borrowings: amounts falling due after more than one year				
Obligations under finance lease	8,608	9,033	8,608	9,033
	8,608	9,033	8,608	9,033
Net funds	34,524	43,167	13,597	16,759

Contact us:

Liverpool School of Tropical Medicine
Pembroke Place
Liverpool, L3 5QA, UK

t. +44(0)151 705 3100

f. +44 (0)151 705 3370

e. info@lstmed.ac.uk

Company registration number: 83405
VAT registration number: 887125885
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LSTM
LIVERPOOL SCHOOL
OF TROPICAL MEDICINE

A stylized graphic element consisting of two overlapping curved shapes, one dark red and one white, forming a partial circle or 'S' shape.