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UNIVERSITY OF  
CAMBRIDGE

**NOTICES****Calendar**

24 January, *Friday*. End of first quarter of Lent Term.

25 January, *Saturday*. Congregation of the Regent House at 2 p.m. (see p. 307).

4 February, *Tuesday*. Discussion at 2 p.m. in the Senate-House (see below).

9 February, *Sunday*. Preacher before the University at 11.15 a.m., Reverend Professor D. A. Wilkinson, *F*, Principal of St John's College in the University of Durham.

13 February, *Thursday*. Lent Term divides.

**Notice of a Discussion on Tuesday, 4 February 2014**

The Vice-Chancellor invites those qualified under the regulations for Discussions (*Statutes and Ordinances*, p. 103) to attend a Discussion in the Senate-House, on Tuesday, 4 February 2014, at 2 p.m., for the discussion of:

1. Report of the General Board, dated 3 January 2014, on the establishment of a Readership in Corporate Law (*Reporter*, 6333, 2013–14, p. 287).

**Notice of benefactions**

The Vice-Chancellor gives notice that he has accepted with gratitude the following benefactions, of which both the capital and the income may be used:

- (i) a benefaction of £50,000 from the Frances and Augustus Newman Foundation to support the research of Dr Tuomas Knowles in the Department of Chemistry, bringing to a total of £650,000 donations made by the Foundation in support of holders of Next Generation Fellowships in the Department;
- (ii) an anonymous benefaction of £50,000 pledged under the Gift Aid Scheme to support the construction and fit-out of squash courts at the University Sports Centre.

**'Scarlet days' and flying of the University Flag from the Old Schools****Scarlet days**

The Vice-Chancellor wishes to remind members of the University of those days in 2014 appointed by regulation for the wearing of festal gowns by Doctors (which are also the days on which the academical dress of other universities may in general be worn). Under this regulation he also wishes to designate 18 June (Congregation for Honorary Degrees) as a 'scarlet day' in 2014.

20 April	Easter Day
29 May	Ascension Day
8 June	Whitsunday
15 June	Trinity Sunday
18 June	Honorary Degree Congregation
25, 26, 27, and 28 June	General Admission to Degrees
1 November	All Saints Day
2 November	Commemoration of Benefactors
25 December	Christmas Day

**Flying of the University Flag from the Old Schools**

Published for information are the days when the University Flag will usually be flown:

6 February	Accession of HM The Queen
21 April	Birthday of HM The Queen
23 April	St George's Day
10 June	Birthday of HRH The Duke of Edinburgh
14 June	Official Birthday of HM The Queen (t.b.c.)
14 November	Birthday of HRH The Prince of Wales

Congregation days, including 18 June (Honorary Degrees), 25, 26, 27, and 28 June (General Admission to Degrees), and 1 October (Address by the Vice-Chancellor and Election and Admission of the Proctors)

**Report of the General Board on the establishment of a Professorship of the History of Art: Notice in response to remarks made in Discussion**

20 January 2014

The Council has received the remarks made at the Discussion on 14 January 2014 (p. 308) concerning the above Report (*Reporter*, 6330, 2013–14, p. 234).

The Council notes Dr Salmon's support for the establishment of the Professorship and is submitting a Grace (Grace 4, p. 307) to the Regent House for the approval of the recommendations of the Report.

## Report of the General Board on the establishment of a Stephen W. Hawking Professorship of Cosmology: Notice in response to remarks made in Discussion

20 January 2014

The Council has received the remarks made at the Discussion on 14 January 2014 (p. 308) concerning the above Report (*Reporter*, 6327, 2013–14, p. 133).

The Council recognizes that the speakers in the Discussions voiced opinions both for and against the Report's proposals, as well as concerns on a significant number of points of detail. The Council has agreed that the appropriate way to proceed is for the Council itself to initiate a ballot on a Grace for the approval of the recommendation of the Report, to enable the Regent House to determine the matter. In doing so, the Council, after consultation with the General Board, has agreed to comment on the following substantive matters which were raised by several speakers:

- (a) It was suggested that the mechanism for payment of the Crown Distribution circumvents the University's salary structure. While this may appear to be the case, the discretion of the Trustees of The Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust is constrained by the requirements of charity law to pay only what is reasonably necessary to recruit or retain the Professor.<sup>1</sup> As elaborated in the remarks of Professor Sanders, speaking on behalf of the Trustees, the Trustees have agreed a mechanism for determining the value of the Crown, in the light of relevant information, that should ... 'not lead to salary levels for the Hawking Professor that are significantly different from those of colleagues of comparable distinction'. This should provide substantial assurance to the Regent House that the payment of the Crown will neither give rise to equal pay issues nor concerns about bestowing a private benefit on the individual as suggested in the Discussion.
- (b) Concern was expressed that the arrangement might set an unfortunate precedent for the introduction of performance review for University officers. The Report in paragraph 5 makes clear that, irrespective of the period for which the Professor holds the title of Stephen W. Hawking Professor, the Professor would hold the office of Professor from the outset until the retiring age. Only the grant of the title is subject to a periodic review process provided for in Regulation 5 for the Professorship.
- (c) Concern was also expressed about the potential financial burden falling on the Department of Applied Mathematics and Theoretical Physics and the School of the Physical Sciences as a consequence of meeting the employment costs of any former holders of the Professorship who revert to holding a single tenure Professorship for the remainder of their employment. This is considered in paragraph 10(b) of the General Board's Report, which makes it clear that the School will be able to manage the extent of that liability by, if necessary, declining to fill a vacancy in the Professorship, or indeed any other vacant post.

The Council is submitting a Grace (Grace 1, p. 306) to the Regent House for the approval of the recommendations of the Report, to be put to a ballot in accordance with the timetable set out below.

<sup>1</sup> <http://www.admin.cam.ac.uk/cam-only/reporter/2013-14/6327/HawkingProfessorship-GuideforTrustees.pdf>

## Report of the General Board on the establishment of a Stephen W. Hawking Professorship of Cosmology: Notice of a ballot

In accordance with Regulation 7 of the regulations for Graces of the Regent House (*Statutes and Ordinances*, p. 103), the Council gives notice that a vote will be taken on Grace 1 (p. 306). The vote will be conducted in accordance with the Single Transferable Vote regulations (*Statutes and Ordinances*, p. 115). The timetable will be as follows:

Friday, 31 January 2014, 4 p.m.	Deadline for amendments to the Grace
Tuesday, 11 February 2014, 1 p.m.	Deadline for fly-sheets
Friday, 14 February 2014, 10 a.m.	Opening of online voting
Monday, 24 February 2014, 5 p.m.	Close of online voting
Wednesday, 26 February 2014	Result of ballot announced in the <i>Reporter</i>

Shortly before voting opens, the web address for online voting will be published on the ballots website at <http://www.ballots.admin.cam.ac.uk> and an email providing that link will be sent to members of the Regent House (unless they have opted not to receive these email alerts). Hard-copy voting papers will be distributed not later than 14 February 2014 to those who opted before 6 November 2013 to continue to receive them; the last date for return of voting papers is 5 p.m. on Monday, 24 February 2014.

In connection with the ballot, the Registry will arrange for the circulation of any fly-sheet, signed by ten or more members of the Regent House, which reaches him at the Old Schools by 1 p.m. on Tuesday, 11 February 2014. Fly-sheets may also be faxed to 01223 332332 or scanned (showing signatures) and sent by email to [registry@admin.cam.ac.uk](mailto:registry@admin.cam.ac.uk). Fly-sheets must bear, in addition to the signatures, the names and initials (in block capitals) of the signatories (*Statutes and Ordinances*, p. 108).

## Annual Report of the Audit Committee for the financial year 2012–13

The Council has received the Annual Report of its Audit Committee for 2012–13. The report is published for the information of the University. Appendices B–E(ii) are available at [http://www.admin.cam.ac.uk/reporter/2013-14/weekly/6334/Audit\\_AnnualReport\\_Appendices\\_2012-13.pdf](http://www.admin.cam.ac.uk/reporter/2013-14/weekly/6334/Audit_AnnualReport_Appendices_2012-13.pdf).

### 1 Introduction

The Audit Committee is required to submit an annual report to Council, the Vice-Chancellor, and subsequently to the Higher Education Funding Council for England ('HEFCE'). The Audit Committee Annual Report is informed by the internal audit annual report (see Appendix A [not published with this report]).

This report follows the guidance set out in Appendix 6 of HEFCE's Handbook for Members of Audit Committees in Higher Education Institutions.

This Audit Committee Annual Report is for the Financial Year 1 August 2012 – 31 July 2013 and includes the opinion of the Audit Committee on the reliance to be placed on the internal control and reporting systems of the University. The opinion is based on the Committee's consideration of the University's Risk Register, the internal auditor's annual report, a draft of the external auditor's Management Letter, other work commissioned by the Committee during the year, and on discussions at its meetings and workshops.

#### 1.1 *Internal auditor*

Deloitte LLP are the University's internal auditors and were appointed in January 2010.

#### 1.2 *Internal audit reports*

This report refers only to those final internal audit reports that have been received and considered by the Audit Committee during the financial year under consideration and up to the date of this report. This will include any reports that were issued in draft during 2011–12, but which had not been finalized for the Committee's consideration until the 2012–13 financial year. This will not include any 2012–13 reports that have been finalized recently by internal audit, but which have not yet been considered by the Audit Committee at one of its meetings.

During 2012–13 and up to the point of writing, the Committee has received and considered 37 internal audit reports. Where a rating was ascribed, 88% of reports were given Satisfactory or Full assurance.<sup>1</sup>

#### 1.3 *External auditor*

PricewaterhouseCoopers LLP were reappointed as the University's external auditors.

### 2 Audit Committee opinion

This section provides the Audit Committee's opinion on the adequacy and effectiveness of institutional arrangements during 2012–13 and up to the date of this report.

#### 2.1 *Opinion – risk management, control, and governance*

The Audit Committee has monitored and considered the effectiveness of the University's risk management, control, and governance throughout 2012–13. These arrangements support the University in fulfilling its policies, aims, and objectives, enabling the University to identify, understand, and manage its principal risks, and to be accountable and transparent in its governance. The Committee has noted that there has been continuous improvement across the University's activities: the University, individual institutions, and subsidiary companies are making clear and sustained efforts to understand, communicate, and incorporate best practice in risk management, governance, and internal controls.

The Committee has agreed that the Statement of Internal Control in the Financial Statements for 2012–13 is an accurate reflection of the risk management, control, and governance arrangements in place. The Committee is satisfied that these arrangements are adequate and effective.

#### 2.2 *Opinion – economy, efficiency, and effectiveness (value for money)*

The Committee has monitored the effectiveness of the University's financial controls, systems, and management structures in place for promoting efficiency, effectiveness, and economy in the use of public funds and other resources.

The Committee has noted the continuing adoption of and improvement in financial procedures and management practices designed to support the achievement of value for money and institutional effectiveness. The Committee is satisfied that these arrangements are appropriate and effective.

#### 2.3 *Opinion – data integrity*

The Audit Committee has monitored the effectiveness of the University's management and quality assurance of data submitted to HESA, to HEFCE, and to other funding bodies. Internal audit reviews of various aspects of data management have been conducted in the year for which substantial assurance was given. The Committee is satisfied that the management control and quality assurance of data submitted are adequate and effective.

### 3 Audit Committee membership

#### 3.1 *Constitution of the Audit Committee*

The Constitution of the Audit Committee is set out in the *Statutes and Ordinances of the University of Cambridge* (see Appendix B).

### 3.2 Membership 2012–13

Chair:	Mr John Shakeshaft
Secretary:	Dr Jonathan Nicholls, Registry
Assistant Secretary:	Dr Rachel Coupe

There were a number of membership changes over the course of the year and these are summarized in the table below.

**Table 1: Membership of the Committee, 2012–13**

<i>Class of membership*</i>	<i>Name of member</i>	<i>Limit of tenure</i>
(a)	Mr John Shakeshaft	31 December 2014
(b)	Mr Robert Dowling	31 December 2012
	Mr Mark Lewisohn ( <i>from 1 January 2013</i> )	31 December 2015
(c)	Dr David Good	31 December 2015
	Mr Nicholas Martin	31 December 2012
	Mr Peter Doyle ( <i>from 1 January 2013</i> )	31 December 2015
	Dr Andrew Cates ( <i>resigned from 31 August 2013</i> )	31 December 2013
	Mr Mike Starkie	31 December 2012
	Ms Janet Legrand ( <i>from 1 July 2013</i> )	31 December 2015
(d)	Mr John Dix	31 December 2013
	Professor Nigel Slater	31 December 2013
	Dr Thomas Keith Carne	31 December 2013
	<i>vacancy</i>	

\* Class (a) Chair and external member of the Council; Class (b) members of the Council; Class (c) external members; Class (d) co-opted members.

### 3.3 Process of appointment

Members are appointed to the Audit Committee by the Council of the University of Cambridge. Membership nominations are made to the University Council's Advisory Committee on Committee Membership and External Nominations.

### 3.4 University officers and auditors

The Audit Committee invites certain senior University officers and the University's external and internal auditors to attend unreserved meetings. On occasion it may also invite other colleagues to attend for a specific agenda item. The Audit Committee also invites the Chair of each of the audit committees of Cambridge Assessment and Cambridge University Press to attend all meetings and to make biannual reports.

The Vice-Chancellor is invited to meet with and answer questions from the Audit Committee annually.

**Table 2: Senior officers, auditors, and other colleagues invited to attend meetings during 2012–13**

<i>Position</i>	<i>Name</i>
Director of Finance	Mr Andrew Reid
Senior Pro-Vice-Chancellor (Planning and Resources)	Professor Steve Young
Internal Auditor – Deloitte LLP	Mr Mike Barber ( <i>October 2012 to March 2013</i> ) Ms Kirsty Searles ( <i>from May 2013</i> ) Mr Richard Evans Mr Richard Neal
External Auditor – PricewaterhouseCoopers LLP	Mr Clive Everest Mr John Minards Mr Simon Ormiston Mr Stephen Wyborn
Chief Executive Officer, Cambridge University Press	Mr Peter Phillips
Chief Finance Officer, Cambridge University Press	Mr Andrew Chandler
Chair of the Press Syndicate ( <i>to 1 November 2012</i> )	Professor Anthony Minson
Chair of the Audit Committee of Cambridge Assessment	Mr Bruce Picking
Chair of the Audit Committee of Cambridge University Press	Professor Sarah Worthington
Joint Head of the Legal Services Office	Mrs Joanna Cheffins
Chair of the Overseas Trust / Cambridge Commonwealth Trust Audit Committee	Mr Peter Davison
Independent co-opted member of Cambridge Assessment's Audit Committee	Mr Robert Ferguson

#### 4 Meetings

The table below provides information on meeting dates and attendance.

**Table 3: Attendance at meetings, 2012–13**

Date	Members and associate Class				Senior officers and guests	Auditors	Apologies	Quorate
	(a)	(b)	(c)	(d)				
11/10/12	1	2	3	1	3	Internal: 2	3	Yes
15/11/12	0	2	3	2	7	Internal: 2 External: 3	2	Yes
17/01/13 <sup>2</sup>	1	1	3	2	3	Internal: 3	4	Yes
07/03/13	1	2	2	2	4	Internal: 3 External: 3	2	Yes
09/05/13	1	2	2	2	4	Internal: 3	2	Yes
04/07/13 <sup>3</sup>	0	2	1	2	3	Internal: 2	3	No

#### 5 Terms of reference

The Audit Committee's terms of reference are set out in the *Statutes and Ordinances of the University of Cambridge*. It is the duty of the Audit Committee:

- (a) to keep under review the effectiveness of the University's internal systems of financial and other control;
- (b) to advise the Council on matters relating to the external and internal auditors including their appointment, the provision by the auditors of any additional services outside the scope of their regular responsibilities, the remuneration of the auditors, and any questions relating to the resignation or dismissal of auditors;
- (c) to ensure that sufficient resources are made available for internal audit;
- (d) to approve proposals for internal audit put forward by the internal auditors;
- (e) to review annually with the external auditors the nature and scope of the external audit;
- (f) to consider any reports submitted by the auditors, both external and internal;
- (g) to monitor the implementation of any recommendations made by the internal auditors;
- (h) to satisfy themselves that satisfactory arrangements are adopted throughout the University for promoting economy, efficiency, effectiveness, and risk management;
- (i) to establish appropriate performance measures and to monitor annually the performance and effectiveness of the external and internal auditors;
- (j) to consider, in consultation with the external auditors, (i) any financial statements annexed to the abstract of accounts, including the auditors' report, and (ii) any statement provided by the Council on the governance of the University;
- (k) to ensure that all significant losses are properly investigated and that the internal and external auditors, and where appropriate the Higher Education Funding Council for England, are informed;
- (l) to oversee the University's policy on fraud and irregularity, and to ensure that they are informed of any action taken under that policy;
- (m) to make an annual report to the Council, the Vice-Chancellor, and the Higher Education Funding Council for England;
- (n) to receive reports from the National Audit Office and the Higher Education Funding Council for England, and to advise the Council thereon;
- (o) to forward minutes of their meetings to the Council.

#### 6 Internal audit

##### 6.1 Provider

Deloitte LLP were appointed as internal auditors for the University with effect from 1 January 2010 until 31 December 2014, subject to satisfactory contractual arrangements.

##### 6.2 Review of appointment

The performance of the internal auditors and their lead partner is considered annually by the Committee. Market testing of the internal audit contract took place in Michaelmas Term 2013. Deloitte are to undertake a separate service quality review over the same period.

##### 6.3 Review of internal audit annual report

The annual report for the period 1 August 2012 to 31 July 2013 was received by the Audit Committee at its meeting of 3 October 2013 (see Appendix A). Subject to the limitations of the work described in Deloitte LLP's report, the internal audit opinion given was as follows:

<sup>1</sup> This % figure differs from that given in the Internal Audit Annual Report for the reasons outlined in paragraph 1.2.

<sup>2</sup> The Vice-Chancellor attended this meeting to give his annual report to the Audit Committee.

<sup>3</sup> The Committee was not quorate. It was agreed that the minutes of the meeting, including details of decisions proposed, would be circulated for subsequent endorsement at the next meeting.

“We provide reasonable assurance that the University has an adequate and effective system of governance, internal control, risk management and value for money for the year ended 31 July 2013. The control issues identified during our work do not materially impact upon the assurance statement provided.”

#### 6.4. *Review of audit risk assessment and strategy*

Internal audit plans are planned annually by department and function on the basis of the weighted risks and ownership identified in the University’s key risk register.

#### 6.5 *Review of audit reports*

The Committee considers all reports submitted by the internal auditor. Each internal audit report is assigned to a member of the Committee for detailed consideration. The member then presents the findings to the Committee, highlighting any key points and/or concerns.

Deloitte LLP provide an assessment of the adequacy and effectiveness of systems using the following definitions:

Full	There is a sound system of internal control designed to achieve the University’s objectives. The control processes tested are being consistently applied.
Substantial	While there is a basically sound system of internal control, there are weaknesses which put some of the University’s objectives at risk. There is evidence that the level of non-compliance with some of the control processes may put some of the University’s objectives at risk.
Limited	Weaknesses in the system of internal controls are such as to put the University’s objectives at risk. The level of non-compliance puts the University’s objectives at risk.
Nil	Control processes are generally weak leaving the processes/systems open to significant error of abuse. Significant non-compliance with basic control processes leaves the processes/systems open to error or abuse.

Deloitte LLP classify their recommendations as follows:

Priority 1	Issues that are fundamental to the University, for the attention of senior management and the audit committee.
Priority 2	Issues that are fundamental to the area subject to internal audit, for the attention of senior management and the audit committee.
Priority 3	Important issues to be addressed by management in their areas of responsibility.
Priority 4	Housekeeping issues or good practice suggestions.

#### 6.6 *Fees*

Fees paid for work completed in FY2012–13 are shown in Appendix C.

### 7 **External audit**

#### 7.1 *Provider*

PricewaterhouseCoopers LLP were re-appointed as external auditors for the University for the financial year 2012–13.

#### 7.2 *Review of appointment*

In accordance with HEFCE’s Financial Memorandum an external auditor is appointed or re-appointed annually. The *Statutes and Ordinances of the University of Cambridge* also require that the accounts of the University are audited annually by qualified accountants appointed by Grace on the nomination of the Council.<sup>4</sup>

A Grace submitted to the Regent House on 20 February 2013 recommending the reappointment of PricewaterhouseCoopers LLP was approved on 1 March 2013.

#### 7.3 *Details of non-audit services*

During 2012–13 the external auditor carried out work in the following areas for the University:

- (a) Tax compliance and advisory services at Cambridge University Press (CUP).
- (b) Audit of special purpose financial statements for CUP India.
- (c) Review of award of qualification process for Cambridge Assessment (CA).
- (d) External project for Cambridge Programme for Sustainability Leadership.

#### 7.4 *Review of the management letter*

The external audit management letter 2012–13 submitted by PricewaterhouseCoopers LLP was received by the Audit Committee at its meeting on 14 November 2013.

The Audit Committee considered the report and was satisfied with the remarks on auditing and accounting matters, detailed control observations, and other observations from around the University group.

#### 7.5 *Fees*

Fees paid for work completed in 2012–13 are shown in Appendix D.

<sup>4</sup> *Statutes and Ordinances of the University of Cambridge*, 2013, p. 55.

## 8. Other work undertaken

### 8.1 *Statement of internal control*

The Council is responsible for reviewing the effectiveness of the system of internal control. The Audit Committee supports the Council in this role through the following processes:

- (a) The Council receives periodic reports from the Chair of the Audit Committee concerning internal control and receives the minutes of all meetings of the Audit Committee;
- (b) The Audit Committee receives regular reports from the internal auditor, which include the internal auditor's independent opinion on the adequacy and effectiveness of the University's system of internal control and risk management, together with recommendations for improvement;
- (c) The Council's review of the effectiveness of the system of internal control is informed by the work of the internal auditor. They operate to the standards defined in Accountability and Audit: HEFCE Code of Practice;
- (d) The Audit Committee reviews and reports on the implementation of recommendations made and agreed in the regular audit cycle and other investigations.

Through the consideration of reports from the internal auditor and other investigations the Audit Committee is assured that the University's system of internal control is currently effective and is able to report its reassurance to the Council for the year 2012–13.

### 8.2 *Review of assurances received*

Deloitte LLP has confirmed its reasonable assurance that the University has an adequate and effective system of internal controls for the year ending 31 July 2013. The control issues identified during their work do not materially impact the opinion to be provided in respect of the University's arrangements for corporate governance, risk management, internal control, and value for money.

### 8.3 *Review of institution's risk management strategy*

#### (a) *The University's approach to risk management*

The University of Cambridge pursues good practice in Risk Management as given in the Turnbull Committee guidance, and endeavours to comply fully with HEFCE and other statutory requirements. The University's view of acceptable risk is derived from a balanced view of all the risks in its operating environment. Risks are prioritized and assessed according to qualitative and quantitative measures. The strategy is as follows:

- i. A Risk Steering Committee (RSC) oversees the risk management process as a whole, on behalf of Council. The Chair of the Risk Steering Committee is the Senior Pro-Vice-Chancellor who attends Audit Committee meetings. The Chair of the Audit Committee is one of three Council representatives on the Risk Steering Committee. This strengthens the link between audit and risk management;
- ii. A Risk Policy is reviewed and revised annually;
- iii. The identification of the fundamental risks affecting the University and its Departments, Faculties, and central bodies. These are reviewed biannually to ensure that the full scope of the University's activities is covered;
- iv. Determining the appropriate risk appetite and level of exposure for the University as a whole;
- v. Implementation of arrangements to manage fundamental risks and examination of the effectiveness of those arrangements. Where risk management is judged weak, poorly understood, or limited in effect, controls have been and will be enhanced;
- vi. Allocating responsibility for the management of risks to senior University officers;
- vii. A review of risks and their management at least once a year.

#### (b) *Risk management – the role of the Audit Committee and its auditors*

##### i. *Audit Committee*

The Audit Committee provides advice to the Council on the effectiveness of the Risk Steering Committee and on the internal control system, including the University's system for the management of risk. The Audit Committee received the Risk Steering Committee's annual report and annual review of the University's key risk register at its second meeting of the year. The interim revised key risk register was received at the meeting on 13 March 2013.

Members of the Audit Committee are invited to bring their copies of the key risk register to all meetings to help inform discussions of audit reports and the impact on risk management, and also to plan the audit cycle.

##### ii. *Internal audit programme*

The internal audit programme is responsible for providing independent and objective assurance on the University's operations in order to evaluate and improve the effectiveness of the University's internal control systems. The internal audit strategy is developed around the University's objectives and assessment of the fundamental risks including an evaluation of the effectiveness of the University's risk management process. Risk management arrangements are a standard and continuing aspect of all departmental audits.

##### iii. *External audit*

External audit informs the Audit Committee on the operation of the internal financial controls reviewed as part of the annual audit.

### 8.4 *Other work*

The Audit Committee has a number of standing agenda items: Value for Money (VFM), Fraud, Risk Management, and HEFCE. For each of these items it asks for updates from senior university officers and also seeks assurance from the internal auditors.

*(a) Value for money*

The University's Resource Management Committee (RMC) oversees VFM reporting for the University. The Chair of RMC, the Senior Pro-Vice-Chancellor, attends Audit Committee meetings and provides statements on behalf of the RMC. The internal auditors consider VFM as a standard item in institution or system audits as well as conducting specific VFM audits as part of the annual plan.

Following the annual assurance meeting on the Colleges' use of HEFCE funds (see section 8.4(d)iii below), an informal workshop was held in September 2013 with representatives from the Colleges' Bursars' Business Committee. The workshop focused on exploring opportunities for collaboration between the University and the Colleges in the context of potential shared services and initiatives designed to provide better value for money for both.

The Resource Management Committee is overseeing a project to develop value-for-money reporting indicators alongside the project on sustainability metrics, with the aim of supporting the annual value-for-money report and facilitating internal and external benchmarking in key areas. The focus of the indicators is at the strategic level and relates to the overall performance of the University as a provider of higher education through its activities in teaching and research and their related support structures. The project is still in development; once approved by the Resource Management Committee the indicators will be provided to Audit Committee as part of the annual value-for-money report.

*(b) Fraud*

Under the Financial Regulations, any member of staff must report immediately to the Registry and the Director of Finance any suspicion of bribery, fraud, or other irregularity. Instances of bribery and fraud that involve sums of over £25,000 must be reported to HEFCE under the terms of the Financial Memorandum.

- Over the 2012–13 academic year there have been two instances of fraud in excess of £25,000: one concerning the ESOL division of Cambridge Assessment, Turkey, resulting in a loss of £37,000, and the other regarding the inappropriate use of grant monies, resulting in a loss of £31,000. HEFCE and the Audit Committee have been informed.

*(c) Risk management*

At the interim review of the University's Key Risk Register in March 2013, the Risk Steering Committee agreed with the recommendation from the Responsible Officer that the risk 'Strategy' should be removed from the Register. Although the University had several 'lower-level' strategies, it did not have a single overarching strategy and to imply otherwise was misleading.

A risk management training seminar targeted at Departmental Administrators was launched in Michaelmas Term 2013. The seminar explored what risk management is in generic terms before explaining how it was implemented, measured, and monitored in the University, making clear what was required of administrators and those responsible for risk management in Departments, Faculties, and Schools. The seminar included a speaker from the Faculty of English who champions the benefits of risk management and helps promote best practice and a consistent approach.

*(d) HEFCE**i. HEFCE's Assessment of institutional risk*

The Committee received a copy of the letter from HEFCE stating its opinion that the University is 'not at higher risk'.

*ii. Governance arrangements*

The HEFCE, in August 2011, asked the University to commit to review its governance arrangements in the light of changes in Higher Education by the end of the 2013–14 academic year and to inform the HEFCE of its conclusions. The Audit Committee has asked the Council to consider how such a review might best be conducted and has suggested that it might follow the model of self-reflection adopted for preparation for the quinquennial visit by HEFCE in 2008.

*iii. Assurance on Colleges' use of HEFCE funds*

The Committee has agreed a protocol enabling the Director of Finance, on an annual basis, to provide assurance to the Audit Committee that the funding transferred to the Colleges was being used for the intended educational purposes. The calculation for 2011–12 was considered by the Audit Committee at meetings in November 2012 and January 2013 and included endowment income restricted for educational purposes. The findings demonstrated that there was still adequate headroom between each College's expenditure on undergraduate education and the funding transferred (see Appendix E(i)).

In support of the mechanism described above, an annual meeting takes place between the Chair of the Audit Committee, the Chair of the Colleges' Committee, the Registry, and the Chair of the Bursars' Committee. An agreed note of the meeting is submitted to the Audit Committee. The annual report of the Resources Sub-Committee of the Bursars' Committee on Value for Money is also submitted to the Audit Committee. The third such meeting took place in March 2013 (see Appendix E(ii)).

*(e) Non-standard items*

In addition to the standing agenda items, the Audit Committee has considered the following items as part of its business during the 2012–13 financial year:

*i. Review of Woolf Inquiry Report recommendations*

The Audit Committee was asked by Council to consider the recommendations of the Woolf Inquiry report concerning certain matters at the London School of Economics against the University's own processes for the solicitation and acceptance of donations. A working group was set up for this purpose, chaired by the Chair of the

Audit Committee. The Group's report was submitted to the Audit Committee in March 2013. The Working Group had asked key representatives of the offices and committees in the University to review procedures in the four key areas covered by the Woolf Inquiry, namely ethics, graduate admissions, donations, and 'incidental links'. In each case, representatives had commented on the relevance of the Woolf recommendations for Cambridge. In conclusion, the Working Group was substantially reassured that the University's policies and procedures were effective and fit for purpose. The Audit Committee endorsed the Group's recommendations and commended them to Council.

ii. *Cambridge University Press*

In November 2012, senior officers of Cambridge University Press attended the Audit Committee for a discussion of the Press strategy and its implementation. The Committee was informed of improvements in the provision of digital services and the development of the Press's relationship with Cambridge Assessment with the aim of identifying opportunities for collaboration in international markets. Short-term financial progress had been achieved through staffing changes; longer-term progress relied on the implementation of SAP and the development of a global approach to the finance function. The Committee noted that one of the most significant challenges for the Press would be to maintain the right balance between implementing new systems to improve the internal operation of the organisation and responding to the changing external environment so as to pursue the appropriate business strategy for the Press.

The Audit Committee was reassured that satisfactory internal controls were in place and it recommended that the Joint Oversight Group, which had been set up to oversee and report on the changes taking place in the Press, be disbanded with effect from March 2013. 'Cambridge University Press' has been added as a new standing agenda item and business is brought forward as necessary by the Chair of Cambridge University Press Audit Committee, Professor Worthington.

iii. *Penningtons audit*

Specialist lawyers had been appointed to carry out an assessment of the University's systems for ensuring compliance with Tier 2 and 5, and Tier 4 sponsor licences. Deloitte had agreed the terms of reference with Penningtons. The assessment for Tier 2 (General) and Tier 5 (Temporary Worker Government Authorized Exchange) licences covered employees of the University only. Colleges had their own sponsor licences in each case. Although there were several recommendations, the responses by the University's Human Resources Division were reassuring and indicated that the issues could be addressed, and that procedural changes were already underway as a result.

The findings concerning the Tier 4 (students) sponsor licence posed more complications due to the complex relationship between the University and the Colleges which involved distinct as well as shared responsibilities in relation to students. The Committee observed that the University was actively engaged with UKBA to find ways of making licence requirements more appropriate for the Collegiate University.

iv. *Bribery and corruption*

The Committee received an annual review of the University's Policy against Bribery and Corruption. The review summarized the actions that had been taken to implement the Policy across the University including details of reported bribery and fraud. Work is set to continue over 2013–14 to encourage subsidiaries to adopt the University's Policy and to develop more specialized training for staff in the International Office and Development and Alumni Relations.

### 8.5 Workshops

Audit Committee workshops are opportunities to discuss strategic issues in more depth, often based around an expert presentation. These workshops operate in part as professional development opportunities for the Committee's members. During the financial year 2012–13 one workshop was held. The topic was the University's programme of Learning and Teaching Reviews and the speaker was the Pro-Vice-Chancellor (Education), Professor John Rallison. Professor Rallison explained the purpose of Learning and Teaching Reviews and outlined the terms of reference and Committee membership requirements, before concluding with an example of a typical Learning and Teaching Report.

## VACANCIES, APPOINTMENTS, ETC.

### Vacancies in the University

A full list of current vacancies can be found at <http://www.jobs.cam.ac.uk/>.

**Professorship of Medieval and Renaissance English in the Faculty of English;** preference will be given to persons whose work is connected with medieval English literature (1066–1550); tenure: from 1 October 2014 or as soon as possible thereafter; informal enquiries: contact Professor David Trotter, Chair of the Faculty of Board of English (email [chair@english.cam.ac.uk](mailto:chair@english.cam.ac.uk)); further information: <http://www.admin.cam.ac.uk/offices/academic/secretary/professorships/> or contact the Academic Secretary (email: [ibise@admin.cam.ac.uk](mailto:ibise@admin.cam.ac.uk)); closing date: 24 February 2014; quote reference: GG32042

**Senior Assistant Curator in Archaeology in the Museum of Archaeology and Anthropology;** salary: £37,756–£47,787; closing date: 14 February 2014; further particulars: <http://www.jobs.cam.ac.uk/job/2431/>; quote reference: JU02068

*The University values diversity and is committed to equality of opportunity.*

*The University has a responsibility to ensure that all employees are eligible to live and work in the UK.*

## Appointments and reappointments: Correction

Some of the details in the appointments notice of 15 January 2014 (*Reporter*, 6333, 2013–14, p. 285) were incorrect. The notice should have read as follows:

### APPOINTMENTS

#### Deputy Head of Department

*Oncology*. Dr Anna Philpott, *CL*, appointed from 1 January 2014 to 31 December 2014.

### REAPPOINTMENTS

#### Deputy Head of Department

*Medicine*. Professor Edwin Roy Chilvers, *ED*, reappointed from 1 March 2014 to 28 February 2017.

## AWARDS, ETC.

### Seatonian Prize: Notice

The Examiners of the Seatonian Prize for the best English poem on a sacred subject give notice that the subject for 2014 is: 'The Soul in Paraphrase'.

The Prize is open for competition among all members of the Senate, and all persons who are possessors of the status of Master of Arts. Further details are available at <http://www.divinity.cam.ac.uk/admin/seatonian>.

## EVENTS, COURSES, ETC.

### Announcement of lectures, seminars, etc.

The University offers a large number of lectures, seminars, and other events, many of which are free of charge, to members of the University and others who are interested. Details can be found on Faculty and Departmental websites, and in the following resources.

The What's On website (<http://www.admin.cam.ac.uk/whatson/>) carries details of exhibitions, music, theatre and film, courses, and workshops, and is searchable by category and date. Both an RSS feed and a subscription email service are available.

Talks.cam (<http://www.talks.cam.ac.uk/>) is a fully searchable talks listing service, and talks can be subscribed to and details downloaded.

Brief details of upcoming events are given below.

<i>Chemical Engineering and Biotechnology</i>	<i>Adsorption processes on metal-organic frameworks. A combination of experimental techniques and molecular simulation</i> , by Dr David Fairen-Jimenez, at 2 p.m. on 5 February 2014	<a href="http://www.talks.cam.ac.uk/show/index/8214">http://www.talks.cam.ac.uk/show/index/8214</a>
<i>Divinity</i>	Yerushah Lecture 2014: <i>The roots of darkness</i> , by Professor George Steiner, at 5 p.m. on 6 February 2014	<a href="http://www.divinity.cam.ac.uk/events/2014-yerushah-lecture-the-roots-of-darkness-1">http://www.divinity.cam.ac.uk/events/2014-yerushah-lecture-the-roots-of-darkness-1</a>
<i>Divinity</i>	Hulsean Lectures 2013–14: <i>Reading backwards: Israel's scripture through the eyes of the evangelists</i> , by Professor Richard Hays; first lecture: <i>Torah reconfigured: reading scripture with Matthew</i> , at 5 p.m. on 11 February 2014	<a href="http://www.divinity.cam.ac.uk/events/">http://www.divinity.cam.ac.uk/events/</a>

## NOTICES BY THE GENERAL BOARD

### Senior Academic Promotions Committee, 1 October 2014 exercise: Revised Notice

Since publication of the original notice on 20 November 2013 (*Reporter*, 6326, 2013–14, p. 104) a number of changes have been necessary. A revised notice is set out below.

The General Board have appointed the following as members of their Senior Academic Promotions Committee and Sub-Committees for the 1 October 2014 Senior Academic Promotions exercise.

#### General Board's Senior Academic Promotions Committee

The Vice-Chancellor Professor Sir Leszek Borysiewicz (Chair)  
 Professor Graeme William Walter Barker (Arts and Humanities)  
 Professor Christopher Martin Dobson (Biological and Medical Sciences)  
 Professor Robert Patrick Haining (Humanities and Social Sciences)  
 Professor Nigel Kenneth Harry Slater (Physical Sciences)  
 Professor Anthony Kevin Cheetham (Technology)

*Externals:*

Professor Christopher Carey (University College London) (Arts and Humanities)  
 Professor Alan Bernard Rickinson (Birmingham) (Biological and Medical Sciences)  
 Professor Michael Gordon Fulford (Reading) (Humanities and Social Sciences)  
 Professor David Charles Clary (Oxford) (Physical Sciences)  
 Professor James Andrew McLaughlin (Ulster) (Technology)

**General Board's Sub-Committees***Arts and Humanities*

Professor Graeme William Walter Barker (Chair)  
 Professor Sarah Anne Coakley  
 Professor Richard Lawrence Hunter  
 Professor Christopher Howard Page  
 Professor Roel Sterckx  
 Professor Emma Fiona Wilson  
 Professor Christopher Carey (External)

*Biological and Medical Sciences*

Professor Christopher Martin Dobson (Chair)  
 Professor Andrea Hilary Brand  
 Professor Fiona Jane Gilbert  
 Professor Peter Brian Jones  
 Professor Duncan John Maskell  
 Professor Angela Charlotte Roberts  
 Professor Alan Bernard Rickinson (External)

*Humanities and Social Sciences*

Professor Robert Patrick Haining (Chair)  
 Professor Philip Michael Allmendinger  
 Professor Madeleine Mary Arnot  
 Professor James Richard Crawford  
 Professor Martin James Daunton  
 Professor Martin Kenneth Jones  
 Professor Michael Gordon Fulford (External)

*Physical Sciences*

Professor Nigel Kenneth Harry Slater (Chair)  
 Professor Simon Conway Morris  
 Professor Anne Christine Davis  
 Professor Dame Athene Margaret Donald  
 Professor Judith Louise Driscoll  
 Professor Robert Charles Kennicutt  
 Professor David Charles Clary (External)

*Technology*

Professor Anthony Kevin Cheetham (Chair)  
 Professor Jonathon Andrew Crowcroft  
 Professor Dame Sandra June Noble Dawson  
 Professor Elizabeth Ann Howlett Hall  
 Professor Ian Michael Hutchings  
 Professor Richard William Prager  
 Professor James Andrew McLaughlin (External)

**Faculty Promotion Committees**

## 1. SCHOOL OF ARTS AND HUMANITIES

*Faculty or other institution*

**Combined Faculty Promotions Committee One:  
 Architecture and History of Art, English, Music,  
 Philosophy, and Divinity**

*Members appointed*

Professor Elizabeth Helen Cooper (Chair)  
 Professor James Edward Montgomery (GB Member)  
 Professor Steven Kevin Connor  
 Professor Sarah Hawkins  
 Professor Michael David Potter  
 Professor Paul Russell  
 Professor Janet Martin Soskice  
 Professor Koen Alexander Steemers  
 Mrs Felicity Jane Fisher-Hunt (Secretary)

**Combined Faculty Promotions Committee Two:  
Classics, Modern and Medieval Languages, and  
Asian and Middle Eastern Studies**

Professor Michael Moriarty (Chair)  
Professor Judith Margaret Lieu (GB Member)  
Professor Robert Samuel Clive Gordon  
Professor Katarzyna Malgorzata Jaszczolt  
Professor Stephen Phelps Oakley  
Professor David Neil Sedley  
Professor Alison Seaton Sinclair  
Professor Yasir Suleiman  
Professor Johan Jacob van de Ven  
Miss Victoria Louise Aldred (Secretary)

2. SCHOOL OF THE BIOLOGICAL SCIENCES

*Faculty or other institution*

**Biology and Veterinary Medicine**

*Members appointed*

Professor Lorraine Komisarjevsky Tyler (Chair)  
Professor Fiona Eve Karet (GB Member)  
Professor Michael Edwin Akam  
Professor Sir David Charles Baulcombe  
Professor John Michael Edwardson  
Professor Gerard Ian Evan  
Professor William Anthony Harris  
Professor Alfonso Martinez-Arias  
Professor Trevor William Robbins  
Professor Geoffrey Lilley Smith  
Professor James Lionel Norman Wood  
Dr Chad Pillinger (Secretary)

3. SCHOOL OF CLINICAL MEDICINE

*Faculty or other institution*

**Clinical Medicine**

*Members appointed*

Professor Patrick Henry Maxwell (Chair)  
Professor Anne Carla Ferguson-Smith (GB Member)  
Professor John Andrew Bradley  
Professor David Alastair Standish Compston  
Professor John Danesh  
Professor Gillian Griffiths  
Professor Kay-Tee Khaw  
Professor John Paul Luzio  
Professor Eamonn Richard Maher  
Professor Sir Stephen O'Rahilly  
Professor Gordon Campbell Sinclair Smith  
Professor Kenneth George Campbell Smith  
Dr Litsa Maria Biggs (Secretary)

4. SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES

*Faculty or other institution*

**Economics**

*Members appointed*

Professor Richard John Smith (Chair)  
Professor Henrietta Moore (GB member)  
Professor Giancarlo Corsetti  
Professor Sanjeev Goyal  
Professor Christopher John Harris  
Professor Kaivan Dara Munshi  
Miss Marie Ann Butcher (Secretary)

**Education**

Professor John Michael Gray (Chair)  
Professor Loraine Ruth Renata Gelsthorpe (GB member)  
Professor Peter Christian Gronn  
Professor Maria Nikolajeva  
Professor Johannes Dominicus Vermunt  
Professor Anna Frances Vignoles  
Miss Kate Marie-Josephine Allen (Secretary)

**History**

Professor Rosamond Deborah McKitterick (Chair)  
Professor Sarah Elizabeth Worthington (GB Member)  
Professor Sir Christopher Alan Bayly  
Professor Eugenio Federico Biagini  
Professor David James Reynolds  
Professor John Charles Robertson  
Dr Elizabeth Haresnape (Secretary)

**Human, Social, and Political Sciences and the  
Department of History and Philosophy of Science**

Professor Christopher Guy Nicholas Mascie-Taylor (Chair)  
Professor Loraine Ruth Renata Gelsthorpe (GB Member)  
Professor Sarah Brooks Franklin  
Professor Charles Andrew Ivey French  
Professor Christopher John Hill  
Professor Henrietta Moore  
Professor James Andrew Secord  
Professor Marc Weller  
Dr Gerald McLaren (Secretary)

**Land Economy and Law**

Professor Ronald Leonard Martin (Chair and GB Member)  
Professor Trevor Robert Seaward Allan  
Professor Eilis Veronica Ferran  
Professor David John Ibbetson  
Professor Colin Martyn Lizieri  
Professor John Stuart Landreth McCombie  
Professor Paul Gerard McHugh  
Professor Lawrence William Sherman  
Professor Graham John Virgo  
Miss Laura Clare Smethurst (Secretary)

5. SCHOOL OF THE PHYSICAL SCIENCES

*Faculty or other institution*

**Earth Sciences and Geography**

*Members appointed*

Professor James Anthony Jackson (Chair)  
Professor Henrietta Miriam Ottoline Leyser (GB Member)  
Professor William Mark Adams  
Professor Ash Hariprasad Amin  
Professor Michael James Bickle  
Professor Philip Leonard Gibbard  
Professor Marian Barbara Holness  
Professor Simon Anthony Turner Redfern  
Professor Susan Smith  
Mrs Andrea Turrell (Secretary)

**Mathematics**

Professor Edward John Hinch (Chair)  
Professor Serena Michelle Best (GB Member)  
Professor Nicholas Dorey  
Professor Raymond Ethan Goldstein  
Professor Peter Howard Haynes  
Professor James Ritchie Norris  
Professor Gabriel Pedro Paternain  
Professor David John Spiegelhalter  
Professor Paul Kingsley Townsend  
Professor Pelham Mark Hedley Wilson  
Mrs Ann Mobbs (Secretary)

**Physics and Chemistry**

Professor Gerard Francis Gilmore (Chair)  
Professor Alison Gail Smith (GB member)  
Professor Serena Michelle Best  
Professor Mark Giffard Blamire  
Professor Catherine Jane Clarke  
Professor Neil Wyn Evans  
Professor Daniel Frenkel  
Professor Christopher Allim Haniff  
Professor Michael Andrew Parker  
Professor Henning Sirringhaus  
Professor David John Wales  
Professor Dominic Simon Wright  
Mrs Virginia Rosemary Bennett (Secretary)

6. SCHOOL OF TECHNOLOGY

*Faculty or other institution*

**Business and Management**

*Members appointed*

Professor Daniel Ralph (Chair)  
Professor Eilis Veronica Ferran (GB Member)  
Professor Michael Ian Barrett  
Professor Christoph Hubert Loch  
Professor Raghavendra Rau  
Professor Stefan Scholtes  
Mrs Julie Brown (Secretary)

**Computer Science and Technology**

Professor Ross John Anderson (Chair)  
 Professor Ruth Elizabeth Cameron (GB Member)  
 Professor Ann Alicia Copestake  
 Professor John Gustav Daugman  
 Professor Andrew Hopper  
 Professor Lawrence Charles Paulson  
 Mrs Caroline Anne Stewart (Secretary)

**Engineering and Chemical Engineering and Biotechnology**

Professor Dame Ann Patricia Dowling (Chair)  
 Professor Jane Clarke (GB Member)  
 Professor John Stephen Dennis  
 Professor Vikram Sudhir Deshpande  
 Professor Nicholas Collings  
 Professor Lynn Faith Gladden  
 Professor Sir Michael John Gregory  
 Professor Jan Marian Maciejowski  
 Professor Robert James Mair  
 Professor William Ireland Milne  
 Mrs Sally Dorothy Winton Collins-Taylor (Secretary)

**Amendment to the composition of the Faculty Board of Modern and Medieval Languages**

20 January 2014

**With immediate effect**

The General Board, on the recommendation of the Faculty Board of Modern and Medieval Languages, have approved amendments to Schedules I and III of the regulations for the Constitution of the Faculty Boards (*Statutes and Ordinances*, p. 590), as set out below.

By amending the entry for the Faculty Board of Modern and Medieval Languages in Schedule I so that the number of members in class (d) (members co-opted by the Faculty Board) reduces by one to 3 and the number of members in class (e) increases by one to 3 and in Schedule III by adding under the representatives of cognate studies one person appointed by the Faculty Board of Asian and Middle Eastern Studies.

**REGULATIONS FOR EXAMINATIONS****Examinations for the degree of Master of Research in the School of Technology****With effect from 1 October 2014**

On the recommendation of the Council of the School of Technology, the General Board have approved Graphene Technology, Future Infrastructure and Built Environment, and Gas Turbine Aerodynamics as subjects for training in research for the M.Res. Degree as one-year courses of study. Special regulations for the examination in each of the subjects have been approved as follows:

## GRAPHENE TECHNOLOGY

1. The scheme of examination for the one-year course of study in Graphene Technology for the degree of Master of Research shall consist of:

- (a) at least five modules selected from a list of mandatory and optional modules published by the Degree Committee for the Faculty of Engineering not later than the end of the Easter Term of the academical year preceding that in which the examination is to be held; and
- (b) two reports, each of not more than 12,000 words in length, including diagrams and footnotes but excluding bibliography and appendices, on projects approved by the Degree Committee.

2. In publishing the list of modules and additional modules the Degree Committee shall announce the form of examination for each module, which shall be either a written paper, or one or more pieces of course-work or other exercises, or a combination of these, and shall specify the duration of any written paper and the limit to be placed on the length of any piece of course-work or other exercise. The Degree Committee shall have the power to give notice of additional optional modules not later than the end of the Michaelmas Term of the academical year of the examination.

3. The examination may include, at the discretion of the Examiners, an oral examination on the reports and on the general field of knowledge within which they fall, and on the other work submitted by the candidate under Regulation 1.

## FUTURE INFRASTRUCTURE AND BUILT ENVIRONMENT

1. The scheme of examination for the one-year course of study in Future Infrastructure and Built Environment for the degree of Master of Research shall consist of:

- (a) at least five modules selected from a list of mandatory and optional modules published by the Degree Committee for the Faculty of Engineering not later than the end of the Easter Term of the academical year preceding that in which the examination is to be held; and
- (b) a report of not more than 12,000 words in length, including diagrams and footnotes but excluding bibliography and appendices, on a project approved by the Degree Committee.

2. In publishing the list of modules and additional modules the Degree Committee shall announce the form of examination for each module, which shall be either a written paper, or one or more pieces of course-work or other exercises, or a combination of these, and shall specify the duration of any written paper and the limit to be placed on the length of any piece of course-work or other exercise. The Degree Committee shall have the power to give notice of additional optional modules not later than the end of the Michaelmas Term of the academical year of the examination.

3. The examination may include, at the discretion of the Examiners, an oral examination on the reports and on the general field of knowledge within which they fall, and on the other work submitted by the candidate under Regulation 1.

## GAS TURBINE AERODYNAMICS

1. The scheme of examination for the one-year course of study in Gas Turbine Aerodynamics for the degree of Master of Research shall consist of:

- (a) at least five modules selected from a list of mandatory and optional modules published by the Degree Committee for the Faculty of Engineering not later than the end of the Easter Term of the academical year preceding that in which the examination is to be held; and
- (b) a report of not more than 12,000 words in length, including diagrams and footnotes but excluding bibliography and appendices, on a project approved by the Degree Committee.

2. In publishing the list of modules and additional modules the Degree Committee shall announce the form of examination for each module, which shall be either a written paper, or one or more pieces of course-work or other exercises, or a combination of these, and shall specify the duration of any written paper and the limit to be placed on the length of any piece of course-work or other exercise. The Degree Committee shall have the power to give notice of additional optional modules not later than the end of the Michaelmas Term of the academical year of the examination.

3. The examination may include, at the discretion of the Examiners, an oral examination on the reports and on the general field of knowledge within which they fall, and on the other work submitted by the candidate under Regulation 1.

## GRACES

**Graces submitted to the Regent House on 22 January 2014**

The Council submits the following Graces to the Regent House. Grace 1 will be subject to approval by ballot according to the timetable set out in the Council's Notice (see p. 293). Graces 2, 3, 4, and 5, unless they are withdrawn or a ballot is requested in accordance with the regulations for Graces of the Regent House (*Statutes and Ordinances*, p. 103), will be deemed to have been approved at 4 p.m. on Friday, 31 January 2014.

1. That the recommendations in paragraph 13 of the Report of the General Board, dated 25 November 2013, on the establishment of a Stephen W. Hawking Professorship of Cosmology (*Reporter*, 6327, 2013–14, p. 133), be approved.<sup>1</sup>

2. That the recommendations in paragraph 10 of the Second-stage Report of the Council, dated 6 December 2013, on the restructuring of space and refurbishment of the basement, ground, and first floors of the Department of Genetics on the Downing site (*Reporter*, 6330, 2013–14, p. 233), be approved.

<sup>1</sup> See the Council's Notices on p. 293.

3. That the recommendations in paragraph 9 of the Second-stage Report of the Council, dated 16 December 2013, on the construction of the Maxwell Centre on the West Cambridge site (*Reporter*, 6331, 2013–14, p. 246), be approved.

4. That the recommendations in paragraph 5 of the Report of the General Board, dated 4 December 2013, on the establishment of a Professorship of History of Art (*Reporter*, 6330, 2013–14, p. 234), be approved.<sup>2</sup>

5. That the recommendations in paragraph 5 of the Report of the General Board, dated 4 December 2013, on the re-establishment of a Professorship of Respiratory Biology (*Reporter*, 6330, 2013–14, p. 234), be approved.

<sup>2</sup> See the Council's Notice on p. 292.

### **Graces to be submitted to the Regent House at a Congregation on 25 January 2014**

The Council has sanctioned the submission of the following Graces to the Regent House at a Congregation to be held on 25 January 2014:

That the following person be admitted to the degree of Master of Science by incorporation:

2. Matthias Holweg, Reader in Judge Business School, Master of Science of the University of Oxford (2010).

That the following persons be admitted to the degree of Master of Arts under the provisions of Statute B, III, 6:

3. Mete Atatüre, Fellow of St John's College and Reader in Physics in the Department of Physics.

4. Zoubin Ghahramani, Fellow of St John's College and Professor of Information Engineering in the Department of Engineering.

5. Benn Lawson, University Senior Lecturer in Judge Business School.

6. Brett Alistair Mickelburgh, Assistant Director in the Local Examinations Syndicate.

7. Janet Rosemary Morris, Director in the Local Examinations Syndicate.

8. Matthew David Neivens, Senior Manager in the Local Examinations Syndicate.

9. Daniel Haskell Weiss, Fellow of Murray Edwards College and University Lecturer in the Faculty of Divinity.

10. Ronald Bryan Zeronis, Senior Manager in the Local Examinations Syndicate.

J. W. NICHOLLS, *Registrar*

**END OF THE OFFICIAL PART OF THE 'REPORTER'**

## REPORT OF DISCUSSION

**Tuesday, 14 January 2014**

A Discussion was held in the Senate-House. Pro-Vice-Chancellor Professor John Rallison was presiding, with the Registrary, the Senior Proctor, the Junior Proctor, and 27 other persons present.

The following Reports were discussed:

***Report of the General Board, dated 25 November 2013, on the establishment of a Stephen W. Hawking Professorship of Cosmology (Reporter, 6327, 2013–14, p. 133)***

Professor J. K. M. SANDERS (Pro-Vice-Chancellor for Institutional Affairs):

Deputy Vice-Chancellor, as Pro-Vice-Chancellor for Institutional Affairs I am *ex-officio* a Trustee of the Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust ('the Charity') and I speak on behalf of all the Trustees who met yesterday. I am also Chair of the Human Resources Committee, and in that role I am responsible for overseeing Pay and Reward arrangements across the University.

Under the oversight of the late Dennis Avery, The Avery-Tsui Foundation has generously donated \$6m to create and support the Stephen W. Hawking Professorship of Cosmology. \$2m will be used to create an endowment, controlled by the University, which will contribute to the costs of the Hawking Professorship. The remaining \$4m will be controlled by the Charity. The objects of the Charity are to advance education and promote research in the science of cosmology at the University of Cambridge for the public benefit, and in particular to support the University in securing the best possible candidate as the Stephen W. Hawking Professor of Cosmology. The Chair of the Charity is the Chair of the University's Audit Committee, and the other Trustees are the Registrary, Miss Natasha Wong, who is the daughter of Dennis Avery, and the Pro-Vice-Chancellor for Institutional Affairs. Neither the Trustees nor the Foundation have any role whatsoever in the selection of the Hawking Professor.

The Trustees are required by the Trust Deed Agreement to invest the \$4m in the Cambridge University Endowment Fund (CUEF). The Trust Deed Agreement provides for the Trustees annually to make a payment to the Hawking Professor of such an amount (termed the Crown Distribution by the donor) as may be necessary in their judgement to secure or retain the best possible candidate, up to a limit of 2.6% of the balance of the endowment (a maximum annual gross amount of £67,000 at current values) and provided that the University stipend is 'equal to or greater than the average salary and benefits received by other Professors of similar years of service, or rank who hold appointments in the Department of Applied Mathematics and Theoretical Physics'. Any income remaining after this payment to the Professor will be transferred to the Department to be used for the advancement of the subject.

How will the Trustees know what is an appropriate contribution? It is worth rehearsing how Professorial salaries are generally determined since the approval by Grace 2 of 22 May 2013 of the recommendations in the Joint Report of the Council and the General Board on amendments to the pay and grading scheme for non-clinical staff implemented following the Second Joint

Report of 25 July 2005. On appointment, Professors negotiate a remuneration package that reflects the University's current practices, its perception of the contribution that the individual is likely to make in future years, and the requirements of the individual. Professorial pay is generally independent of the source of funding in order to give equality of pay practices; the salary of an individual Professor might include a component of Advanced Contribution Supplement (ACS) and/or of Market Pay. The salaries of Professors are reviewed in the biennial Professorial Pay Review, with a possibility of one or more 3% contribution increments being awarded according to published criteria.

The intention and expectation of Dennis Avery and the Avery-Tsui Foundation is that the Hawking Professor will be truly outstanding. It is therefore axiomatic that on recruitment the Professor will expect to be paid at a level equal to or greater than the average salary of other Professors in the Department. An appropriate market level might be identified by comparison with the average of the current holders of the most senior and distinguished permanently established Chairs in the School of Physical Sciences, together with the other most distinguished holders of personal Professorships in the School. The Pro-Vice-Chancellor for Institutional Affairs will be able to supply the Trustees with this averaged income data without revealing any information concerning identifiable individuals. Although the Crown Distribution is determined by the Trustees, it is simply a continuing contribution to the overall salary of the Professor.

It is proposed that, once in post, the Hawking Professor would be eligible to apply biennially for contribution increments and be assessed by the Vice-Chancellor's Advisory Committee in the same way as other Professors. The recommendation of the Committee will then be considered by the Trustees, who will also be supplied with up-to-date salary information as described earlier.

This proposed mechanism should, therefore, not lead to salary levels for the Hawking Professor that are significantly different from those of colleagues of comparable distinction in Cambridge. The route to a decision may be unusual for Cambridge, but the outcome should not be. Together with the other Trustees, I believe that this donation will indeed further the science of cosmology in Cambridge and will rightly honour the name of Stephen Hawking. I therefore commend this Report to the Regent House.

Professor R. C. KENNICUTT (Institute of Astronomy, School of the Physical Sciences (Head), General Board, and Churchill College):

Deputy Vice-Chancellor, I address the Regent House as the Head of the School of the Physical Sciences. My remarks reflect discussions of the Avery bequest that were undertaken last term by the Needs Committee and Council of the School, but as the discussion of this topic has evolved considerably over recent weeks the personal views expressed are my own. I also hold one of the other prestigious Chairs in the University (the Plumian Professor of Astronomy and Experimental Philosophy in the Institute of Astronomy), so some of my remarks are informed by my own experience and by my personal knowledge and interactions with Professor Hawking.

First stepping back from the details of the bequest, above all this generous gift would allow the University to establish a prestigious Professorship in honour of Emeritus Professor Stephen Hawking. In a University with so many

remarkable academics Professor Hawking's career and contributions to Cambridge stand above nearly all others. His contributions to astrophysics, relativity, and particle cosmology have transformed their respective subjects, and this work and his extraordinary life have inspired a generation of scientists and millions of non-scientists alike. Simply stated, he is one of the most remarkable people I have ever met. This admiration is shared by his colleagues throughout the School of Physical Sciences, and is a prime reason for why both his host Department and the School have offered their strong support for the establishment of this Chair.

I participated in the early discussions with Dennis Avery about the possibility of this bequest, and in the course of those discussions I gained a keen understanding of the motivations behind his gift. Mr Avery shared this admiration I have spoken of for Professor Hawking, and he wished above all to establish a Professorship that would have sufficient financial support to attract the very best cosmologists in the world to Cambridge to take up the post. We believe that the gift achieves this objective. Although the terms of the gift agreement (which were still under discussion when Mr Avery passed away unexpectedly) are technically different from those governing most other endowed Chairs, the arrangements for administering the funds agreed with the Trustees will ensure that the holders of the Hawking Professorship will be appointed following the same rigorous procedures as any Professorship in the University, and will be compensated according to the same procedures applied to any other Professor in the University. In particular, the School together with the Academic Secretary of the University will oversee the election and appointment processes. The generous terms of the Avery bequest will allow only individuals of exceptional standing to be appointed, and that standard will be applied rigorously; should none of the candidates meet the standard the position will remain unfilled until suitable candidates emerge. Likewise the salary of the holder will be set by the normal process via the Academic Secretary, and future salary increments will be set by the normal University review process. We – in a sense, the School – interpret the 'requirement' that the individual be paid above the average of Professors in the Department to set a quality threshold for the appointment, and anyone appointed to the post would draw an above-average salary even if they did not hold the Hawking Chair. In summary all matters relating to appointment and compensation will be handled using existing procedures in the School and the University. We can readily fulfil the terms of the bequest without compromising established University procedures in any way.

During earlier discussions of the bequest within the School, questions were raised by some about any possible financial burdens that this bequest would impose on the School or the University. I want to be completely clear on this point. There is no net loss of funding whatsoever to the University from this gift; there is a net increase in funding. The annual income on a \$2m endowment will directly support the cost of the appointment to the University, and additional income on an endowment of \$4m p.a. will help to support the salary of the Hawking Professor, with remaining income also coming back to the University. It is conceivable that a holder of the Hawking Chair could complete their limited term of appointment as Hawking Professor before reaching the retirement age. In any such case, the School and the Department have already agreed to underwrite any residual costs, using precisely the same sorts of arrangements that apply today, for example, to former holders of Royal Society Professorships and other prize appointments. In

practice these costs are not expected to be great, and can always be mitigated by holding the Hawking Professorship vacant, to avoid multiple calls on the funds. The fact that in our discussions, all eight Departments in the School collectively agreed to provide matching support to the Department in such instances underscores their support and commitment to honouring Professor Hawking in this way. One should also not lose sight of the fact that Professors of this calibre in our School usually attract generous funding to the University from grants and otherwise that dwarfs their payroll cost, to say nothing of the indirect benefits that accrue from their prestige and the other individuals who they attract to the University.

In summary, the establishment of the Stephen Hawking Professorship has the strong support of the School of Physical Sciences. It would serve as a fitting legacy to one of our most successful and remarkable academics, and will ensure that Professor Hawking's intellectual legacy endures and thrives in the future.

Professor P. H. HAYNES (Department of Applied Mathematics and Theoretical Physics (Head), and Queens' College):

Deputy Vice-Chancellor, I speak as Head of the Department of Applied Mathematics and Theoretical Physics. My views expressed here are formulated after discussion with many of my colleagues over the last several months.

My message today is that I strongly believe that the proposed Stephen Hawking Professorship of Cosmology offers an exciting future opportunity for the Department, particularly in theoretical physics, as well as a very fitting way to mark in perpetuity the contribution of our remarkable colleague Stephen Hawking.

Stephen Hawking has been associated with the Department since 1962 when he started as a Ph.D. student. He has made some truly remarkable scientific contributions both before and after his appointment at the age of 37 to the Lucasian Professorship in 1979. These contributions and his success, in the face of great adversity, as a communicator and promoter of science have made him internationally famous, more so than anyone in our Department and indeed in the University as a whole. His contribution to the Department's reputation and visibility over the last 50 years is absolutely without equal.

The establishment of the Professorship is possible because of the enormously generous \$6m donation by Dennis and Sally Avery. The late Dennis Avery has been a very long-standing supporter of the University and in particular a loyal supporter and personal friend of Stephen Hawking. In offering this donation Dennis Avery sought no explicit credit for himself in the naming of the Professorship but simply took the view that Stephen Hawking is an extraordinary scientist and person and that anything established in his name should reflect that.

In the Department of Applied Mathematics and Theoretical Physics, as in many Departments across the University, we are proud of our academic tradition and reputation. Much of this has resulted from our appointment, at various stages of their careers, of individuals who are, or who have later become, genuine leaders in their subject. The academic world, and theoretical physics in particular, is now truly international and it is increasingly difficult to recruit or retain such leaders in the face of competition from our peer Departments in North America, Europe, and elsewhere. We cannot be assured that our long-term academic distinction will be so clear in 50 or 100 years' time. The association of this new Professorship with

Stephen Hawking's name and the significant resources provided by the endowments, which we expect not only to contribute to the Professor's personal remuneration but also to significant research resources, will make a real difference in this respect. In due course we expect that this Professorship will achieve the distinguished history and long-term status of other prestigious Professorships in the Department and the University.

The unusual detailed arrangements surrounding this Professorship have rightly triggered significant debate amongst my Departmental colleagues and they have required detailed and robust discussion between Department, School, and the University. During this process there has been significant clarification. I am personally confident that this Professor would be appointed and rewarded according to the objective and demanding criteria that apply to Professorships across the University. As with any endowed Professorship, recruitment and support in the long-term will require persuasive negotiation with candidates, maintenance of the strong academic environment provided by the Department, and also commitment of significant resources from both Department and School. I am very confident that under the proposed arrangements, the Professorship will be a very significant net gain to the Department as a whole.

My firm view is that the Averys' generous gift and the establishment of a Stephen Hawking Professorship is an absolutely fitting way to mark the career of a truly remarkable colleague and that it will be exceptionally valuable in the Department's future efforts to maintain its world-leading reputation, particularly in theoretical physics, which Stephen Hawking has personally done so much to build, in the decades to come.

Professor R. E. GOLDSTEIN (Department of Applied Mathematics and Theoretical Physics, and Churchill College):

Deputy Vice-Chancellor, I am the Schlumberger Professor of Complex Physical Systems in the Department of Applied Mathematics and Theoretical Physics, the very Department in which the Stephen Hawking Professorship will be established if approved. As a member of the Departmental Strategy Committee, I have known of the details of the proposed position since September, at which time I first raised serious concerns about a number of aspects of the position, and my purpose today is to make those concerns known to the Regent House.

I should say at the outset that I have the utmost respect and admiration for Professor Hawking and his accomplishments, and I see every day the very positive effects that the various extremely generous donations by Denis Avery and his family have had on cosmology and theoretical physics in Cambridge. So please do not misinterpret the criticisms I shall describe below in any way as criticisms of Professor Hawking or the Avery family. In fact, I have decided to voice my concerns precisely because I believe that the proposed Professorship is so wrongly structured that it is not a proper permanent tribute to Professor Hawking, whose scientific and popular identities are so closely intertwined with that of Cambridge itself.

You will undoubtedly hear from many of my colleagues today who strongly disagree with me, and that is fine with me – after all, for there to be democracy there must be dissent. One of the great features of this University, which was so attractive to me when I moved here nearly eight years ago, was the fact that it was self-governed and appeared to be far more democratic and fair than the

various US universities I had experienced. And I have always felt that it was particularly gratifying that, as large and diverse as DAMTP is, there is a great sense of collegiality among the staff.

I will describe nine distinct aspects of the proposed Professorship that I view as problematic, and conclude with some general comments.

1. *Circumvention of the University-wide salary structures.* When I first read the documents associated with the Professorship (the deed and guidance notes for Trustees) I was struck by page after page of what I can only describe as financial, legal, and semantic gymnastics associated with the partitioning of the donation into the \$2 million endowment and the separate \$4 million fund for the additional payment to the Chair holder. I kept asking myself why this was being done – why not a single endowment as in most established Chairs (my own being an example)? Was this a consequence of some quirk in US tax laws? Then I realized that the purpose was to circumvent the normal salary structures of the University (the salary spine, contribution points, market supplements, and committees) in order to guarantee a specific and outsized benefit to the Chair holder. The guidance notes point out all sorts of issues that would be raised by channelling the extra payment through the University, and suggest that these would somehow be avoided if the extra payment is given directly to the Chairholder, as if the ethical issues would somehow disappear.

In the field of thermodynamics there is the concept of a 'state function', a quantity that is independent of the path by which a system is brought to a given point. This is one of those. It does not matter whether the payment goes through the University payroll or not if the University itself is signing off on the agreement and the funds are in its endowment. The choice of path certainly does not matter in the court of public opinion. How can the University contemplate an arrangement whose purpose is to circumvent its own rules?

I would also like to point out a curious feature of the proposed added payment. As the Report in the *Reporter* states, the maximum Crown payment would currently be about £67,000, which is in round numbers the base salary of a Professor on the Cambridge salary spine. Twice this is almost exactly the maximum Professorial salary at the top of Band 4 on our previous spine. This is a striking coincidence, and it leads me to ask: has this proposal been engineered to create a Chair with the specific purpose of being one of the highest paid Professors in the University?

Let me note that having sat on various Boards of Electors and search committees in Cambridge, I fully appreciate the difficulties in recruiting to Professorial positions and I have no issue with the existence of market supplements and other inducements. I do have issues with subverting our own rules on such instruments.

2. *Reputational risk.* I am sure that you will recall that there have been two recent strike actions taken to demand across the board salary increases for staff in the University. How will we look if we agree to ignore the existing rules of the University to enrich someone at the top of the academic ladder when the vast majority of others have not had a decent pay rise in years? I should add that there have been scandals at other universities (for example, New York University) when the existence of two classes of Professors was established: the ordinary and the gilded. I urge you to read the recent stories in the press about these revelations and ask if we really want such attention focused on Cambridge.

3. *Burden on the Department and the School.* The total donation for this Professorship is \$6 million, which is about £3.7 million. Under ordinary circumstances this would be a sufficient amount to endow a Professorship in this University with a salary falling within the existing salary spine. But because only one third of the sum is assigned to the University position *per se*, it is insufficient. Thus, our Department must suppress a lectureship to be able to afford this position. As noted in the lengthy description in the *Reporter*, in order to deal with the need to accommodate the Hawking Professor (or Professors) who cease to hold the Chair, our Department would also have to create for each a Professorial position lasting until retirement age. It is certainly in the realm of possibilities that one, two, or even more former holders would be in DAMTP concurrently, putting a severe drain on our finances and fundamentally curtailing our freedom to make future appointments without constraint. What assurances can be given that this will not happen? The Report notes that this burden will fall on the School, as if that somehow fixes the problem. It does not. One could argue that cosmology and theoretical physics are important subjects (I certainly believe so) and such positions are desirable, but that is a decision that should be fully in the hands of DAMTP and the School, not a donor (unless he wishes to pay for it all).

4. *Expectations of former Hawking Professors.* It is acknowledged in the Report that a Professor who ceases to be in the Hawking Chair could well expect a salary comparable to that he or she earned in the Chair (base + extra payment), but this could somehow be dealt with when structuring the initial contract. This is a naïve view of the world. I would expect a candidate of the calibre envisaged to demand assurances that his salary would remain essentially unchanged. After all, who do you know who would agree to a 40% reduction in salary after seven, twelve, or seventeen years? And if a large Crown payment is needed for retention during the time the Professor is in the Chair I fail to see why it would not be needed afterwards. Indeed, one could imagine it would be needed even more. The burdens outlined in point 3 would then be even larger – each Professor might cost the equivalent of the average salary of a DAMTP Professor plus the Crown payment, the latter roughly comparable to the base salary of a Professor. It is said that the School of Physical Sciences will bear the burden of dealing with that and if necessary can choose to delay filling the Hawking Chair until those burdens are gone. But how will that look? We leave the Chair vacant because there is not enough money, but yet we were given \$6 million.

5. *Linkage with salaries of other Professors.* I am almost speechless at Paragraph 9 of the deed, which asserts that the Department must certify each year to the Trustees that the base salary of the Hawking Professor is at least the average of other Professors in the Department. First, the requirement itself indicates a profound level of distrust of the Department's operations. But second, how can it possibly be fair to tie one Professor's salary to that of others? All their hard work over their career to date is used to define a starting point for his salary, independent of his qualifications. Moreover, if the Department chose to pay that minimum (which it might in light of other financial burdens), then the Stephen Hawking Professor would automatically get a raise if any other Professor did. This cannot be fair. I thought we strove to have a meritocracy in this University.

6. *Unfairness to the Hawking Professor.* In my previous comments I have focused on the privileged position that the Professor would occupy relative to others in the Department (and the University). Now let me address the inherent unfairness of this position to the holder due to the finite term of appointment. As far as I know, the reviews after seven and twelve years in the Chair would constitute the only example of a post-tenure review of Professors in this University (I am putting aside positions such as Royal Society Research Professors, whose tenure in that position is decided by an external body). Of course, I realize that his or her tenure *per se* is not in jeopardy, for if not renewed the holder moves to a tenured ordinary Professorship. But for a person of such alleged high international standing to be the only Professor in the University subject to such humiliating judgement is unacceptable.

7. *A precedent along the path towards post-tenure review.* This precedent for post-tenure review might well be an opening to post-tenure review of all Chairholders, or perhaps everyone. I believe there were hints of this a few years ago, so it could happen. I urge my colleagues in the University to contemplate the implications of allowing this to be approved!

8. *Determination of the extra payment.* A second highly problematic feature of the arrangement is that the determination of the size of the so-called Crown payment will be made every year. By what process? I am trying to imagine a meeting of the Trustees in which they arrive at the precise amount necessary to retain the Professor. Will they ask if he or she has outside offers? Might he or she be tempted to seek offers solely for the purpose of keeping the payment maximized? If this is not a recipe for exploitation I do not know what is. I spent the first half of my academic career at universities in the United States and I can tell you that such offer-seeking is a matter of course in many places, so much so that people who legitimately wish to move often find themselves not taken seriously, under the assumption they are simply trying to increase their salary. I would add that while the comments in the *Reporter* argue that those setting the extra payment would be guided by general rules in the University, that statement has no legal standing, for the deed makes it clear that the deed itself is the only document of record.

9. *Precedent for future donors.* Finally, I would note that agreeing to the proposed arrangements for this Chair opens the door to giving donors unprecedented ability to ignore existing rules in the University and to seek their own special arrangements.

I will close by repeating what I think must be the fundamental message on this issue: the proposed Professorship is not structured in a way that is worthy of the great man whose name graces it. We must not go down the path of letting the ends justify the means. We can do better, much better. We must.

Professor G. R. EVANS (Emeritus Professor of Medieval Theology and Intellectual History):

Deputy Vice-Chancellor, it is proposed to establish a Stephen W. Hawking Professorship of Cosmology, with a donation from The Avery-Tsui Foundation through Cambridge in America. The death of Denis Avery during the period of negotiation is stated to make it impossible to revise the proposed terms of the donation. If accepted, they will set a precedent other donors are likely to wish to follow. It is a rare donor who does not seek to impose

conditions or define the terms of a gift. It is for that reason that over a decade ago, Cambridge created its 'ethical guidelines'.<sup>1</sup>

A question must hang in the air about the Council's wisdom in seeking to take forward this proposal, which a previous speaker has declared to be 'unusual'. If the Regent House does not agree to the terms proposed the offer will be withdrawn. If it does, other donors are going to seek to make exceptional requirements a condition of the offer. It is hard to see how the University can fail to lose, either way. So it is important for the Regent House to be very clear what it is agreeing to, in this important precedent-setting instance where the decision is for the Regent House because the establishment of a Professorship is involved.

\$2m is offered as the 'core endowment' for the Professorship, to pay a normal Professorial salary. In Cambridge Professors are always appointed to the retirement age. The agreement to limit the tenure of the Professor to seven years, renewable for five and exceptionally for a further five, would leave the holder potentially jobless at the end of this time which would be a disincentive to a candidate unless there is a guarantee of continuing employment. If the holder of this Professorship is not already in an established post in Cambridge (that is, holding an 'underlying office'), the costs of paying his or her salary (presumably the special enhanced salary?) until retirement age once the donor-funded years have elapsed will fall wholly on the Department. It will in any case have to top it up if the underlying office is not a Professorship. The cost of the salary of an appointee from outside would in years to come fall entirely on the Department. This seems highly likely to damage the prospects of promotion for holders of ordinary University Offices. So there is the potential for harm to the personal interests of members of the Regent House.

This is a new episode in a story which began with the introduction of the so-called 'Research Professorships' (not a proper term in Cambridge) in the 1990s.<sup>2</sup> These, funded for fixed periods by outside awarding bodies such as the Royal Society and the Leverhulme Trust, were then being held as unestablished posts. The practice of appointing to unestablished 'research' Professorships without reference to the Regent House, for which a procedure was set out by the General Board in May 1999<sup>3</sup> was the subject of 'a formal representation to the Vice-Chancellor' by Professor A. W. F. Edwards under Statute K, 5. His argument was that the General Board's practice of making appointments to unestablished Research Professorships was in contravention of the University's Statutes. A legal opinion on this representation was accordingly sought, which confirmed that the practice was *ultra vires*.<sup>4</sup> There was no requirement for Regent House approval and the holders would apparently not be subject to the Statutes and Ordinances as University Officers because they would hold no University Office.

In Cambridge a proposed Professorial appointment to an established post (including those which arise by personal promotion) must still be the subject of a Report and approved by the Regent House, which should be presumed to have an eye on the implications for the careers of others. This rule and expectation was reinforced by a Discussion on a Topic of Concern called in October 1999, on:

*The publication of a Notice by the General Board (Reporter, 1998-99, p. 587) making proposals for the promotion of University officers and short-term contract staff to unestablished posts at Professorial level, without opportunity for the Regent House to discuss the implications for career-structures in the University.*<sup>5</sup>

Established 'research' Professorships with external funding either directly or by endowment have now become a routine type of appointment in the University. So the question is how this one will differ, whether this proposal will set a precedent for a new stage in the evolution of academic offices in Cambridge and whether this is a trend the Regent House should favour.

In connection with the Hawking Professorship, it is proposed that a further \$4m be placed in a Trust. This Trust has already come into being. The Trustees, who we are told met yesterday, are three *ex officio* senior officers of the University, from one of whom we have just heard, and a nominee of the donating Foundation (a potentially controversial fourth in its own right). This extra \$4m is to be used to supplement the Professor's salary to about £67,000 'at current values', a payment to be made directly to the Professor by the Trustees, so falling outside the University's normal pay and grading and 'merit top-up' arrangements. The Professor will not need to demonstrate his or her entitlement to 'merit pay' against other applicants. The additional salary is guaranteed by the terms of the Trust. It will be instructive to read the Pro-Vice-Chancellor's remarks today with the closeness they deserve.

As to the question of supplementing salary from another source, the Professorship of Cosmology and Astrophysics, held as a Royal Society Research Professorship by Sir Martin Rees from 1992, was the subject of a Report in February 2003. Professor Rees was to take up the Mastership of Trinity College and consequently give up the Royal Society Professorship. The proposal was that Trinity College should provide funding for a 'Professorship of Cosmology and Astrophysics to be established from 15 January 2004, for the tenure of Professor Sir Martin Rees, placed in Schedule B of the Statutes, and assigned to the Institute of Astronomy'.<sup>6</sup> This was an exceptional instance and it did not throw upon the University or a Department or Faculty the cost of paying a Professorial salary to retirement age out of funds which could otherwise have gone to other uses.

So opening the doors to allowing outside bodies or donors to fund Professorships has led to the opening of further doors and only those with long constitutional memories may remember how it all began. I speak today just to put a reminder into the record, for this proposal has a constitutional context and if it is accepted, it will undoubtedly have constitutional consequences.

<sup>1</sup> <http://www.campaign.cam.ac.uk/giving-opportunities/ethical-guidelines>

<sup>2</sup> That this is not a constitutionally valid term was accepted by the General Board in a recent exchange with Professor A. W. F. Edwards. 'Research' in this context should therefore properly have a lower case 'r'; <http://www.admin.cam.ac.uk/reporter/2011-12/weekly/6258/section1.shtml#heading2-5>

<sup>3</sup> <http://www.admin.cam.ac.uk/reporter/1998-99/weekly/5773/4.html>

<sup>4</sup> <http://www.admin.cam.ac.uk/reporter/2000-01/weekly/5842/7.html>

<sup>5</sup> <http://www.admin.cam.ac.uk/reporter/1999-2000/weekly/5791/19.html>

<sup>6</sup> <http://www.admin.cam.ac.uk/reporter/2003-04/weekly/5945/15.html>

Dr J. SCOTT-WARREN (Faculty of English, and Gonville and Caius College) read by Dr A. I. PESCI:

Deputy Vice-Chancellor, this is a generous donation, but a problematic one. Even if you believe that vast pay differentials are the lifeblood of an academic community, there must be doubts about whether the proposed time-

limited Professorship will succeed in its aims, and about its long-term financial viability.

According to the statement published in the *Reporter*, ‘the General Board recognize that the structure of this donation is unusual and exceptional’. Whether or not these plans go forward, I hope that they will not be allowed to set a precedent for the future donations or for employment practices within the University.

Dr A. I. PESCI (Department of Applied Mathematics and Theoretical Physics, and Downing College):

Deputy Vice-Chancellor, my objections to this donation have nothing to do with Professor Hawking, and everything to do with the future of this new Chair.

This Chair looks to me like that pair of shoes at the Christmas sale. They looked beautiful and were half price. They were also two sizes too small and buying the matching dress would lead to bankruptcy. Hence, if one buys them, they would have to be left vacant, for if one wears them, they would cause enormous irreversible long-term damage.

To start with, the maximum salary provided by this Chair will be insufficient to attract people who satisfy the minimum requirements because it is obvious that the sights are set on American candidates. Otherwise, it would not be necessary to have such a complicated scheme. UK Professors have agreed to the salary spine – it is not necessary to subvert it to attract them – and there is a perfectly legal and agreed upon procedure to award additional pay when necessary. Given this fact, one should understand that a typical top tier American Professor has a nine month salary higher than the total maximum allowed by the Chair, to be clear, three quarters of the salary is higher than what this Chair would offer. That alone would be a deterrent. However, there are more issues a prospective Professor needs to consider. The University must fulfil the requirement of periodic evaluations of the occupant of the Chair because of the binding clauses in the deed. After seven years, it is possible that the Professor would not be renewed as Chair holder and would be moved to a lesser Professorial position with, potentially, a much lower salary. There are many reasons for people to move their families away from friends and relatives to live in a foreign culture: abandoning tenure for a temporary post with a possible demotion and salary cut does not seem to be one of them. This does not even consider the damage to the reputation of this Professor if renewal is denied after the seven years. How will this Professor look after the demotion? Moreover, is it not a risk to the University’s reputation to be seen as willing to humiliate its distinguished members by singling them out for a post-tenure review, and then proceeding to demote them and cut their salaries just for the sake of a donation equivalent to ten days of a typical fund-raising year?

It defies logic to think that somebody at the top of the profession would agree to such indignities. And when nobody can be found to occupy this Chair, there will be only two choices left, either to (a) leave it vacant or (b) promote somebody from within.

Option (a) sounds terrifying. Vacant Chairs give the impression of failure to the outside world. This vacancy could create a very negative impression and turn what seemed to be positive into a public relations nightmare by giving DAMTP the feeling of being intellectually dead. Who would want to go to a place where it appears that nobody else wants to go? Outsiders will not know the details of the deed so the most natural assumption will be that this is an institution past its peak. Is this not a reputation risk? Can the Council explain what will the University do to avoid giving the perception of failure?

As for option (b), it has already happened that Theoretical Physics has had trouble to fill its Chairs before. Thankfully, after a few failures some outstanding people from within were promoted to the positions. Can the Council explain how many more people from within they think can be found if more new Chairs that do not attract people because of their unfair rules continue to be created?

There is also the issue of the post-tenure review. If it is done properly, this Chair holder will have to ask colleagues, at the top of the field from around the world, to produce letters of recommendation so that Trustees who are not in the field and people who are below in the hierarchy can form a judgement over the renewal. Do we really want our star Professors to humiliate themselves by having to prepare a portfolio for a post-tenure review while any other Professor after seven years has a right to a sabbatical and continuation to retirement age? To make the point more clear: how would it be explained to the rest of the world that someone with a similar stature as Professor Hawking’s is being subjected to a review as it is done with a lecturer, and when no other Professor in this University has to go through the same indignity? Moreover, this could become the precedent necessary to justify instituting post-tenure review for everyone. Does the Council want to risk starting the process of eliminating tenure?

If the review were just a formality it would be a violation of the deed. How does the Council propose to make the post-tenure review meaningful and at the same time avoid the risk of both insulting the Chair holder and jeopardizing the reputation of the University?

As for outside candidates: if mere mortals like myself can see these issues, somebody at the top of her or his field will be able to see through all this too. It would be natural for any candidate to ask for unambiguous written assurance of renewal: a promise of continuation before the seven years will violate the terms of the deed. Without this promise, candidates will not come. How does the Council propose to satisfy these contradictory needs?

There are also serious issues with the payment rules in Paragraph 9 of the deed. What would happen if the new occupant of the Chair has the minimum necessary stature with the consequence that other members of the same Department, or a neighbouring one, have an even higher stature but a lower pay? Even more egregious is the clause requiring that the salary of the new Professor, before the Crown, must be at least the average salary in the Department where the Chair sits. Then, if the average increases by virtue of another Professor’s efforts, the occupant of the Chair may get a pay raise regardless of his or her achievements, thus, unfairly benefiting from the labour of colleagues. Let me also point out that ‘considerably lowering the risk of infringement of equal pay legislation’ as the minutes of the Council state is not the same as ‘no risk’. I did not know that the University was in the business of finding potential legal loopholes that in the end may not be such and could leave it exposed to legal action. How does the Council propose to tell a Nobelist or a Fields medalist that they deserve less pay than somebody with lesser credentials as a consequence of requirements in a deed for which the University spent money on external lawyers to find legal loopholes?

Is there a plan in case those at the very top of our Faculty decide that it is time to find a new place where meritocracy is still considered a must and not a quaint concept applied only when convenient? Are there any serious justifications to take this enormous risk? Moreover, how does the Council propose to explain to students and candidates for admission that they are judged only on their merits for the dubious privilege of paying £9,000 per year in fees but that

the merit rules do not apply to some Professors? Since the year started we have already had two unflattering headlines in the papers, one about elitism and the other about excess pay. How is the Council proposing to stop this type of headlines once it is known that we have subverted the pay spine and have ditched meritocracy?

As if this was not worrisome enough: suppose that the Chair is filled with a young person; Paul Dirac was 30 when he became Lucasian Professor. Potentially, to satisfy the terms of the deed, it could be necessary to create up to four more Professorships if several successive Chair holders are 30 at the time of their appointments and seven years later, and 30 years before retirement, each one is moved to a standard Professorship. How does the Council propose to handle the creation of this many Professorships in a single discipline within a single Department? Moreover, if all these other Professors need to be paid the same salary they had: how does the Council propose that the average salary clause of the contract be calculated? Has the Council located the money for these expenses, or will the Department have to dismantle itself to pay for the aftermath of successive appointments? If the option of leaving the Chair vacant while the last Chair holder is still in the Department is chosen, it could produce a 30-year vacancy, making DAMTP look like a dead Department.

This proposal has many flaws, and unsurprisingly, is deeply divisive. What is unusual about this donation is its uncanny ability to bring out the worst behaviour in people, and to generate appalling behaviour: from misrepresenting the outcome of votes and meetings, and trying to dissuade people from speaking in this Discussion of the Senate by telling them 'whatever you say in there will be forgotten five minutes after you said it', to subjecting lower-ranking colleagues, in front of peers, to a put-down; most of it dutifully recorded via email as is done in this digital age. Perhaps this is what happens when people are obliged to advocate for indefensible positions or perhaps when somebody is engineering a promotion. I do not know the reasons with certainty. However, if this past when the Chair is not even in existence is any guide, a future when all the flaws will have to be dealt with, promises to be a future out of Dante's *Inferno*. I have wondered many times if something capable of such negativity can ever be transformed into the humble, heartfelt homage it should be, or if it is forever condemned to be just a soulless money exchange. The answers to these questions led me to oppose this donation on moral grounds. At risk of sounding ridiculous, I oppose it because I love this University and because I have immense respect for the person who will lend his name to the position.

A few years back my very young nephew came to visit from Argentina. He did not want to believe that my office was in the same building complex as Professor Hawking's. After showing his office to my nephew, miraculously, I became 'the best aunt in the entire universe'. It is this ineffable quality that this donation has been unable to capture, the fact that Professor Hawking has the ability to touch people's lives and inspire them. This Chair, with all its crass money counting and its deviation from fairness laws, looks more like a nightmare created by a group of obdurate American corporate lawyers running amok after losing the guidance from their employer than the homage to somebody who by now, belongs to the world. It is us, the members of this University, who ought to set up the Stephen Hawking Chair following the precedent of the G. I. Taylor position for which friends, admirers, and colleagues created the fund. I believe that the only fair, proper, and honourable way to create this position is by

letting the millions around the world, who were and are, inspired and lifted by Professor Hawking's life, have the privilege of setting up the Stephen Hawking fund with the goal of creating a position to truly honour him, not ourselves through him. I hope the Council will be willing to give this idea some consideration.

Professor M. B. GREEN (Department of Applied Mathematics and Theoretical Physics), read by Professor A. C. DAVIS:

Deputy Vice-Chancellor, I would like to reinforce the view of the Theoretical Physics groups in DAMTP that there is a very strong academic case for the establishment of a Stephen Hawking Professorship of Cosmology with the very generous Avery endowment. In recent years it has proved difficult to attract the very best researchers worldwide working in areas such as cosmology, relativity, and particle physics, due in part to the inability of the University to match the scales of salary and research support in the USA and certain European countries. Having the freedom to appoint someone to the Hawking Professorship with a salary at the top end of the Professorial pay scale and provide generous research funds would help to resolve this. The controversial points concerning the length of tenure of the appointment and the costs to DAMTP and to the School if the appointee ceases to hold the Chair before retirement can surely be resolved by discussions within the School.

Professor A. C. DAVIS (Department of Applied Mathematics and Theoretical Physics, and King's College):

Deputy Vice-Chancellor, as Professor of Mathematical Physics I speak on behalf of the theoretical physicists in the Department of Applied Mathematics and Theoretical Physics and speak in strong support of the establishment of the Hawking Professorship. The Theoretical Physics group in DAMTP is a large group, one of the largest groups worldwide and one of the most prestigious. However, we only have one established Chair in our field. It is important for the future of the subject that we maintain our internationally leading position. For this end we need established Chairs to attract world-leading researchers to Cambridge. This generous endowment would allow us to do just that.

Stephen Hawking is a giant in the field and this Chair rightly holds his name. For a very long time he has paved the way in general relativity and cosmology with groundbreaking work. This Chair will enable us to attract the very best in the field to continue his example and maintain our position in the international community.

Recently we have experienced difficulty in recruiting top Professors internationally, particularly when trying to recruit in the US. This endowment would offer greater flexibility and enable our opportunity to attract the very best.

Whilst the terms of this endowment are a departure from previous endowments, we are confident the salary will be consistent with the Cambridge scale, albeit higher than that of the average Professorial salary in the Department. The endowment allows research expenses in addition to salary, something which the other established Chair in theoretical physics and the Lucasian Chair lacks, but is essential for our field.

I strongly endorse the establishment of the Hawking Chair as a way of attracting and retaining a world-leading researcher to Cambridge.

Dr B. STEGER (Faculty of Asian and Middle Eastern Studies, and Downing College) read by Dr A. HONERKAMP-SMITH:

Deputy Vice-Chancellor, I am encouraged to express my concerns by the Vice-Chancellor's words during his annual address on 1 October 2013, when he urged our community to contribute to these debates. He said that the choices in front of us 'are critical; our responsibility is great. Maintaining our freedom is hard and needs watchfulness. The right to choose has been hard earned – let us embrace it.'<sup>1</sup> I am here, embracing that right, responding to his call for engagement. It is the responsibility of members of the Regent House to exercise due diligence over the governance of this University, which is why I wish to voice my objections to the conditions outlined in this Report.

Even those of us not directly involved in the sciences are aware and proud of the achievements of Professor Stephen Hawking, both in research and outreach. The initiative to endow a Professorship in his name must be welcomed. However, I am deeply concerned that the current offer to contribute to the endowment of such a Chair will require the University to fundamentally contradict its own regulations and principles, such as equal pay, meritocracy, and the employment of Professors until retirement. These regulations and principles have served this University extremely well over the decades – indeed, over the centuries – and I am genuinely surprised that the General Board is even contemplating making these concessions. I am deeply concerned that the General Board seems willing in this case to make major changes to well-tried practices. As the Vice-Chancellor rightly emphasized in his annual address: 'It is the freedom with which we pursue education, learning and research at the highest international level of excellence that enables us to achieve the end of contributing to society, as encapsulated in our mission statement.'<sup>1</sup> I urge the Regent House to be vigilant and to maintain our freedom to pursue education, learning, and research without the kind of donor intervention that comes with the proposed Professorship.

\$6 million (or £3.6 million) sounds like a lot of money. This is the amount that The Avery-Tsui Foundation is seeking to put towards endowing this Professorship together with another fund that would seem to be outside the influence of the University. But to put this into perspective, as we have learned from that same speech the Vice-Chancellor gave in October, 'since the [800th Anniversary] Campaign closed, ... more than £215 million [have come in to] support ... the Collegiate University.' This, he pointed out, 'is more than £2 million per week!'<sup>1</sup>

Moreover, although the donation seems to be generous and helpful at first sight, even the General Board admits that this arrangement will potentially cost the University (or the Department) a lot of money. Should this Professorship be approved in the way these donors wish, the University could have to meet the full employment costs of any former holders of the Professorship until their normal retirement age. This would require the University to pay one Professor an extraordinarily high salary, which would undoubtedly be detrimental to the collegial climate in the Department concerned.

What is more, endowing a single Professorship in this way, likely ensuring that it is among the highest paid Professorships at the University, increases existing inequalities in income between members of different Departments, and between the subjects that are more attractive to potential donors and those which are not. The thought that the University allows a donor to demand that any one person receives a superior salary to others is repulsive. In a time when the world is facing a global

economic crisis and the gap between rich and poor is enormous, the University must firmly stand against such a demand. It would not be unthinkable that this complicated case would provoke legal battles, for which the University would have to foot the bill. It is vital that we choose wisely when accepting gifts that may bear within them the undoing of our academic freedoms.

If we allow just one donor to influence the University's rules and regulations so drastically, the University loses its independence. Agreeing to accept this donation with the current stipulations will make the University extremely vulnerable to pressure from donors in the future, and this for a relatively small financial gain (in the scheme of things). Being one of the richest and most prestigious universities in the world, it is also our moral duty to be a shining example for academic freedom, and to withstand pressure from donors to change our rules. 'We are a self-governing community of scholars,' the Vice-Chancellor reminded us. 'We write our own Ordinances, and, ... we write our own Statutes too, and have exercised these powers since our foundation.'<sup>1</sup> It is essential that we maintain this tradition if our research is to remain unfettered, and our faculty governance remain the source of our sovereignty.

Accepting this problematic agreement may in the end cause great damage not only to the University's reputation, but potentially also to the reputation of Professor Stephen Hawking after whom the Chair is named. This is one of those 'pivotal moments' of which the Vice-Chancellor spoke in October. I urge the General Board to think again and reject this or any other donation that requires changing our rules of employment and increases inequality, so that we can continue to live up to the reputation of the University of Cambridge as a place where teaching, learning, and research is driven by imagination, creativity, and academic excellence with the goal of contributing to society. Do not let us become a place driven by greed and vanity.

<sup>1</sup> <http://www.cam.ac.uk/notices/news/choices-and-responsibility>

Mr D. J. GOODE (Faculty of Divinity and Wolfson College):

Deputy Vice-Chancellor, I would be very happy indeed to see the great Professor Hawking honoured with a named Chair established in the customary way, and with our standard terms and conditions of employment for its occupants, but I am very unhappy about the bizarre proposal before us today. Surely, if those who succeed us in generations of Regents to come ever find themselves in need of a text-book example of how not to establish a Professorship, they will reach for *Reporter* No. 6327.

Never mind about the present ecclesiastical anomaly of both a pope and a pope *emeritus* occupying the Eternal City at the same temporal moment; how about a Stephen Hawking Professor and one or two, or maybe even three, Hawking Professors Laureate in Cambridge at once, all occupying the same space-time continuum? I mean, what will happen cosmologically should one day they collide with one another at random on King's Parade? Will the Corpus Chronophage spring from its lair and devour them in an instant? (Mind you, that would keep the potential stipend liability down, I have to say!)

I have taken the unusual step of bringing with me to this Discussion a pre-addressed envelope, in which I suggest we return The Avery-Tsui Foundation's cheques, along with a polite note explaining that when we put them next to our own agreed salary scales we found their Avery scales wanting in the balance.

Professor H. S. REALL (Department of Applied Mathematics and Theoretical Physics):

Deputy Vice-Chancellor, I am a member of the Relativity and Gravitation research group in DAMTP. I speak to express my strong support for the establishment of a Hawking Professorship in Cosmology. Stephen Hawking's monumental discoveries in cosmology and gravitation have set the agenda for much of modern theoretical physics. His ability to communicate scientific ideas to the general public has made him the world's most famous scientist. His reputation is such that another major institution – Texas A & M University – has established a Professorship bearing his name. It seems fitting that the University of Cambridge establishes this Chair to celebrate Professor Hawking's achievements and to maintain DAMTP's leadership in the field of cosmology and gravitation.

Dr S. J. COWLEY (Department of Applied Mathematics and Theoretical Physics, and University Council):

Deputy Vice-Chancellor, I am Chair of the Faculty of Mathematics, and a member of both the Council of the School of the Physical Sciences and the University Council. However, I speak in neither of the first two capacities today, although the fact that I am a member of the Council is relevant to some of my comments.

I am in agreement with previous speakers, that the establishment of a Professorship would be a magnificent way to recognize the achievements of Stephen Hawking. Similarly, the Faculty Board of Mathematics was very grateful for the offer of the benefaction, was keen to support the teaching and research of cosmology, and very much wished to acknowledge Stephen Hawking's scientific legacy. However, as the Faculty Board Minutes record (and I might note that the members of the Faculty Board are the elected representatives of the Faculty), 'many members of the Board strongly expressed concern and reservations at the structure of the gift'. Thus, while the current Report correctly records that 'The Faculty Board of Mathematics has agreed the strong academic case for the establishment of a Stephen Hawking Professorship of Cosmology', it is important to note the inclusion of 'academic'.

In a personal capacity, I share concerns and reservations at the structure of the gift. I will touch on two of these concerns. One is the principle of equal pay, and the other arises from my role as a Charity Trustee of the University, and the consequent requirement that I should ensure that any private benefit enjoyed as a consequence of the charity's activities is not more than is ancillary or incidental to the main (public) purpose.

The University is committed to equal pay, as evidenced by the award of various 'kite' marks. Indeed, the Faculty of Mathematics has applied for an Athena SWAN bronze award, and the University holds such an award. Further, in the Consultative Joint Report of the Council and the General Board on a new pay and grading structure for non-clinical staff (*Reporter*, 5970, 2003–04, p. 971) it is stated that 'In respect of possible equal pay claims, it is essential to have in place for all staff an objective, analytical methodology for determining basic salary and a non-discriminatory pay reward system.' The University's current pay reward system is not perfect, but it at least has the advantage that it is unified and that, in principle, the right hand knows what the left hand is doing (otherwise I can see no way in which it could be objective, analytical, and non-discriminatory). The current proposals break that principle, and the University should have nothing to do with them in their current form.

For equal pay reasons the Hawking Professor will be entitled to be treated, and indeed must be treated, exactly as any other member of staff in the University. Hence she or he will be able to apply for increments, and/or for an Advanced Contribution Supplement (ACS) and/or for Market Pay (as any other Professor is able to). In the case of increments, the University will have to make a decision without due regard to whatever Crown Distribution that the Hawking Professor is in receipt of. The cases of ACSs and/or Market Pay are less clear to me, since they are for retention purposes, and this needs to be clarified for the University by means of legal opinion. There is also a chicken and egg issue: if a retention payment is necessary who goes first, the University or the Trustees. I ask this because it seems to me that both could be flying blind. In particular:

- Does the Trust have a right to tell the University how much it is paying the Hawking Professor given the constrictions of the Data Protection Act? If not, then if the Hawking Professor applied to the University for an ACS and/or Market Pay, how could the University come to an objective and analytical decision?
- Conversely, it is not clear to me that the Trust has the right to know the Hawking Professor's University salary. Under Clause 9, all the University will do is confirm that the salary and associated benefits received are equal to or greater than the average salary and benefits received by other Professors of similar years of service or rank. So how can the Trust come to an objective and analytical decision about the Crown Distribution?

As far as I can tell, the Hawking Professor could play the University and the Trust off against each other, or as one of my colleagues put it, 'All I can say is that if this goes through, the University is inviting itself to be blackmailed'.

Further, for equal pay reasons I do not think that the University could increase the band or step of the Hawking Professor in order not to fall foul of Clause 9, and the more I think of it, falling foul of Clause 9 is a non-zero possibility. Note that the average is going to be calculated 'on the basis of the stipends, including contribution increments and market supplements, of all holders of Professorships in the Department'. (I note that 'market supplements' have been superseded, so I presume the reference is to ACSs and Market Pay.) However, the Hawking Professor's salary will not include the Crown Distribution. Suppose that in coming years DAMTP recruits some superstars and pays them at the same rate as some in the School of Technology, which has one academic with a market supplement of over 170%, another with a supplement over 92.5%, and four more with supplements over 40%, or as some other Professors in the School of Arts and Humanities, which has one academic with a market supplement of over 97.5%, and three more with supplements over 40% (needless to say, all these Professors are male). It is then not out of the question that the University would not be in a position to make the confirmation required in Clause 9, and the Hawking Professor would lose all her or his Crown Distribution. What then? Boost the University pay of the Hawking Professor on the grounds that others are being paid more? Is that objective? How does that sit with equal pay? I must admit I would rather like a pay rise because of the efforts of my colleagues rather than my own!

Further, from my personal point of view as one of the University's Trustees, I am aware that it is not lawful for a charity to overpay staff since such overpayment cannot be regarded as ancillary or incidental to the public purpose and therefore bestows upon the employee an undue private

benefit. Unless this whole procedure is far more open, then I cannot see how the University's Trustees can be sure that the Hawking Professor is not being overpaid by the University.

When I first heard of this last September, my initial view was that the proposal stank. Since then various senior members of the University have made the comment to me (although I am sure that they would not like to be quoted), that this is a mess. Frankly, it is a mess, and the University seems to be in a lose-lose situation as a result. If the proposal lapses, then how will future philanthropists view us? If the proposal goes ahead, are we really committed to equal pay, and can the University's Trustees fulfil their obligations?

Is a compromise possible? Maybe. What the University needs to do is to ensure, and by that I mean by Regulation rather than a woolly assurance in a Report or in a Discussion (given that on past record what happens is that such assurances seem to be forgotten), that as far as possible the Hawking Professor should be treated as any other member of staff. The Trust Deed imposes conditions on the University; I propose some reciprocal conditions, by adding the following extra three Regulations to the current six regulations:

7. In accordance with the Deed Agreement the University shall confirm to the Foundation and the Trustees each year that the salary and associated benefits that the Hawking Professor receives from the University (without taking into account the Crown Distribution) are equal to or greater than the average salary and benefits received by other Professors of similar years of service, or rank who hold appointments in the Department of Applied Mathematics and Theoretical Physics. For the purposes of this Regulation, the University will interpret all Professors in the Department of Applied Mathematics and Theoretical Physics as having equal rank. In calculating the average salary and benefits the University will include any Advanced Supplementary Payments or Market Pay (or their successors) received by any Professor, but will not include any Crown Distribution received from the Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust by the Hawking Professor. No reference will be made to the requirements of this Regulation in setting the salary and benefits of any employee of the University.

8. So far as allowed by English and European law, the University will include in the contract of employment of the Hawking Professor permission to divulge the salary and benefits of the Hawking Professor to the Trustees of the Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust. The University will provide to the Trustees of the Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust the procedures it follows in determining Advanced Contribution Supplements and Market Pay (or their successors), together with any data requested by the Trustees, subject to the provisions of the Data Protection Act and other legislation.

9. The University will take into account any Crown Distribution received from the Dennis S. Avery and Sally Tsui Wong-Avery Endowment Trust by the Hawking Professor in any application from the Hawking Professor for any Advanced Supplementary Payments or Market Pay (or their successors). The University will ensure that at all times any private benefit enjoyed as a consequence of the charity's activities is not more than is ancillary or incidental to the main (public) purpose.

Now, I was going to stop there but I feel that I need to make one further comment. I am a member of the Council of the School of the Physical Sciences and reference has been made to the strong support of the School of the Physical

Sciences. Matters may have moved on but I would like to quote from two Minutes of the October Council Meeting: 'In the open discussion which followed, a number of reservations were strongly expressed' and 'In conclusion, and on balance, the Council [of the School of the Physical Sciences] felt it should not deliver an outright 'no' to the donation.'

Professor G. P. EFSTATHIOU (Institute of Astronomy, Kavli Institute for Cosmology, and King's College):

Deputy Vice-Chancellor, I would like to give my support to the General Board paper. Although the arrangements are a little unusual, I think that the paper does a good job of maintaining equitability with other Professorial appointments in the University. Cambridge has an extremely strong record in cosmology. People of the calibre of Stephen Hawking are very rare and in high demand. If Cambridge is to maintain its standing as a world leader in theoretical cosmology, it must be able to compete with the top institutions in the world, such as Princeton and Stanford. In reality, if we rejected the Avery-Tsui benefaction, the costs of recruiting and/or retaining people of the highest calibre in this field would fall on existing University funds. The Avery-Tsui benefaction will strengthen this University despite its unusual nature. For this reason, the General Board paper has my support.

Professor E. P. S. SHELLARD (Department of Applied Mathematics and Theoretical Physics):

Deputy Vice-Chancellor, I speak as Director of the Centre for Theoretical Cosmology within DAMTP, a centre that was founded by Professor Stephen Hawking in 2007 with the generous support of Dennis Avery. The Discussion today marks an important step towards fulfilling a five-year plan outlined in 2010 to support excellence in mathematical cosmology and gravitation and to ensure that world-leading research in Cambridge is sustained into the future. A set of strategic goals for this fundraising initiative was agreed with the School of Physical Sciences, helped by the Development Office and Cambridge in America. The highest priority was the creation of a Professorship in cosmology and gravitation, one of the largest subject groupings within DAMTP, but for which there is no established Chair.

The case for a cosmology Chair was built on the need to attract and retain theorists of the highest international standing. The study of the extreme universe has advanced rapidly with Cambridge mathematicians at the forefront, making key breakthroughs in our understanding of both the Big Bang and Black Holes. These advances continue to be driven by confrontation with new experiments, such as the Planck satellite and the LIGO gravitational wave observatory, and this activity will grow as our Universe is mapped and compact objects are probed at higher resolution. Our ambitious research programmes about the fundamental structure of the Universe and the nature of gravity must be built on a secure faculty presence with the opportunity to balance appointments at both senior and junior levels. The worldwide reputation of Cambridge in this field is reflected by a constant influx of postdoctoral fellows and visiting scientists each year and by the large number of students enrolling in our Master's Degree programme (Part III) and wishing to undertake Ph.D. research. The need for senior faculty in this area is clear.

In 2012, at Stephen Hawking's 70th birthday conference, we heard the welcome news that a long-standing benefactor, Dennis Avery, had decided to endow this

Professorship. The proposed Chair was to be named not after the donor but rather Professor Stephen Hawking to honour his watershed contributions to the field. Professor Hawking is indeed worthy of this honour, as many have affirmed today. Others may speak about his unparalleled insights on Black Holes, but as a cosmologist, I remind you that he is towering figure also in modern cosmology. Among his achievements are the cosmological singularity theorems, mathematically demonstrating the inevitability of the Big Bang and a beginning in time, and there are also his ambitious proposals for understanding the quantum state of the Universe. However, the greatest impact has come from his 1982 proposal that quantum fluctuations in the early universe are the primordial seeds for the formation of large-scale structure, that is, for galaxies and stars and everything else we observe in the Universe today. This far-reaching proposal about the origin of the Universe has faced up to rigorous observational tests, most recently from Planck, and it continues to define current research. Professor Hawking has presented us with an exciting vision of our place in the Universe and he has communicated this to the wider public more successfully than anyone before him. His intellectual achievement is matched only by his courage in the face of many challenges; he offers inspiration to us all.

The benefactor for the Hawking Chair, Dennis Avery, together with his wife Sally Wong-Avery, have been generous friends of the University and its Colleges over many years. Dennis Avery had a particular vision for a unique Professorship that would attract world-leading candidates to Cambridge and ensure the continuation of Professor Hawking's legacy. His original proposal contained a number of innovations and so a fruitful negotiation with the University was begun to turn this vision into reality. Dennis Avery's untimely passing in July 2012 meant the loss of a great friend. Subsequent negotiation about the Chair was constrained and the final outcome retains some innovative elements that are described in the Report of the General Board. We are assured that these elements are within the capacity of the University to manage successfully. In particular, as we heard at the outset, anomalies outside the normal pay range and structure of the University appear to be very unlikely. I note that the Hawking Chair shares some commonality with a ten-year Royal Society Professorship, though it has greater flexibility for renewal up to seventeen years, and it would be similarly tenured in the longer term by the University. However, appointments to the Chair will be made under normal University procedures and the holder will contribute to teaching. The long-term financial implications have been anticipated and taken into account by both DAMTP and the School of Physical Sciences.

Together with my theoretical physics colleagues, we have carefully considered the implications of the proposed Stephen W. Hawking Chair of Cosmology and we have concluded that it would be of enormous benefit to the subject area in DAMTP and in the wider University. It fulfils the primary goals set out in the 2010 initiative and we gratefully note the generosity of Dennis Avery and Sally Wong-Avery for making this proposal possible. Forged in exceptional circumstances, we believe the Hawking Chair represents a unique opportunity to ensure the continuation of excellence in cosmology and gravitation, while honouring a singular individual who over the last 50 years has done more than anyone else to advance knowledge in these fields. We hope others in the University will share this view and support the recommendation of the General Board.

***Second-stage Report of the Council, dated 6 December 2013, on the restructuring of space and refurbishment of the basement, ground, and first floors of the Department of Genetics on the Downing site*** (Reporter, 6330, 2013–14, p. 233)

No remarks were made on this Report.

***Second-stage Report of the Council, dated 16 December 2013, on the construction of the Maxwell Centre on the West Cambridge site*** (Reporter, 6331, 2013–14, p. 246)

No remarks were made on this Report.

***Report of the General Board, dated 4 December 2013, on the establishment of a Professorship of History of Art*** (Reporter, 6330, 2013–14, p. 234)

Dr F. E. SALMON (Department of History of Art, and St John's College):

Deputy Vice-Chancellor, I am speaking in my capacity as a former Head of the Department of History of Art to warmly welcome the contents of this Report. During my term in office, which ran from 2009 to 2012, creation of an established Professorship in the History of Art was a high fundraising priority within the School of Arts and Humanities; but it did not prove possible, in straitened economic times, to find external support for the purpose, despite the considerable efforts that were made by the Department and by the Cambridge University Development Office. It is to the credit of my successor as Head of Department, and to the Head and Council of the School, that the means have now been found within the University itself to bring the Chair into existence.

The Report before you states that the Department of History of Art is the only Department within the School without a permanently established Professorship, and this is true once it is understood that the prestigious Slade Professorship of Fine Art, established in 1869 and assigned to the Department, is *de facto* only a visiting position, held by a different person each year. It is a measure of the success and standing of the Department, however, that when I joined it in 2006 no fewer than four of the six University Teaching Officers held *ad hominem* Chairs, as did Professor D. J. Howard (whose position was a Faculty one but who had served as Head of Department for the four years from 2002 to 2005). By October 2016 all but one of these Professors will have retired. The creation of an established Professorship now is thus timely, as the key component in a strategy that should see one golden age in the Department's history swiftly followed by another. That process has already begun with the recent appointments of two new Lecturers but, as the Report indicates, there is much to do in terms of building synergies and inculcating visual culture within the University, as well as in repositioning the Department internationally, for all of which high-level leadership is required. The small increase in the establishment should also help ease the burden on a Department that has long endured the worst staff-student ratio of any Department in the School, albeit in part because of its happy ability to attract a larger number of graduate students than has been typical of some other whole Faculties with twice or three times the establishment.

If, in conclusion, I could be permitted to express one personal regret about the Report before you, it would be to observe that it is not proposed the new established

Professorship should bear a name. Named Chairs – and I think the discussion of the previous Report eloquently illustrates this – arguably carry higher visibility within the University than do unnamed ones and are also somewhat more likely to attract applicants of the highest international calibre. More importantly in this instance, naming of the Chair would have helped make clear that it, rather than the Slade Professorship of Fine Art, will be the senior established art-historical position in the University. Had there been scope to attach a name to this Chair, then, in my view, it should surely have been that of Professor Michael Jaffé, Director of the Fitzwilliam Museum from 1973 to 1990, whose vision and force of personality brought the Department into existence nearly fifty years ago. The vision of the University in creating this Professorship of its

own initiative might thus have been celebrated by a purely academic gesture. I imagine, however, that the Professorship is to be left unnamed in the hope that external, substitutional funding, rather ironically of the sort that has not appeared hitherto, will eventually be forthcoming. That, I suppose, is the hard reality of the situation we find ourselves in at the start of the twenty-first century.

*Report of the General Board, dated 4 December 2013, on the re-establishment of a Professorship of Respiratory Biology* (Reporter, 6330, 2013–14, p. 234)

No remarks were made on this Report.

## COLLEGE NOTICES

### Vacancies

*Girton College*: Research Fellowship in Science 2014–17; stipend: £18,523 to £20,764 p.a. for a Research Fellow who has not completed her/his Ph.D. and £19,606 to £22,020 p.a. for a post-doctoral Research Fellow; closing date: 14 February 2014; further particulars: <http://www.girton.cam.ac.uk/vacancies>

### Other Notices

*Emmanuel College*: A recital of music for violin and piano will take place on Friday, 7 February 2014 from 6.30 p.m. to 7.15 p.m., in the Queen's Building Lecture Theatre, Emmanuel College. The recital will feature Eugene Lee (violin and Fellow, Guildhall School of Music) and Simon Over (piano and Director of the Southbank Sinfonia). Further information is available at <http://www.emma.cam.ac.uk/collegelife/events/>.

*Jesus College*: A memorial service for John Cameron Wilson, M.A., Ph.D., Fellow 1965–2004, President 1992–95, Emeritus Fellow 2004, who died on 21 September 2013, will be held at Jesus College Chapel on Saturday, 8 February 2014 at 2 p.m.

## SOCIETIES, ETC.

### Cambridge Philosophical Society

The Society's G. I. Taylor lecture will take place at 6 p.m. on Monday, 27 January 2014, in the Bristol-Myers Squibb Lecture Theatre, Department of Chemistry, Lensfield Road. Professor John Lister will give a lecture entitled *Fluid mechanical processes during geological sequestration of carbon dioxide*.

Further details are available at <http://www.cambridgephilosophicalsociety.org/lectures.shtml>.

### Friends of Cambridge University Library

A meeting of the Friends of Cambridge University Library will be held on Wednesday, 6 March, at 5.30 p.m., in the Milstein Seminar Rooms, University Library, West Road, at which Christopher Hogwood will give a talk entitled *Cambridge's musical records*. Further details are available at <http://www.lib.cam.ac.uk/friends/programme.html>.

## EXTERNAL NOTICES

### University of Oxford

*Department of Psychiatry and Department of Experimental Psychology*: Professorship of Translational Cognitive Neuroscience; closing date: 3 March 2014; further particulars: [http://www.ox.ac.uk/about\\_the\\_university/jobs/fp/](http://www.ox.ac.uk/about_the_university/jobs/fp/)

*Department of Zoology*: Varley-Gradwell Travelling Fellowship in Insect Ecology 2014; value: up to £2,500; closing date: 21 April 2014; further details: email [trustfunds@zoo.ox.ac.uk](mailto:trustfunds@zoo.ox.ac.uk) or see <http://www.zoo.ox.ac.uk/trustfunds>

*Queen's College*: One-year, fixed-term, eight-hour stipendiary Lecturer in Classics from 1 October 2014; closing date: 21 February 2014; further particulars: <http://www.queens.ox.ac.uk/about-queens/vacancies/>