

ISAAC NEWTON TRUST

ANNUAL REPORT

TO THE COUNCIL OF

TRINITY COLLEGE

COVERING THE PERIOD

14 MARCH 2002 – 12 MARCH 2003

VOLUME XIII

CONTENTS

	page
Trustees and Officers	2
Introduction	3
Aims and objectives of the Trust	3
Financial summary	4
Research grants approved 2002–2003	
Policy	6
Grants Awarded	7
Recurrent Trust scheme grants:	
Newton Trust Bursary scheme for UK undergraduates	10
UK Research Students scheme	14
College Teaching Officer schemes	16
Time-Limited Teaching Fellowships scheme	19
Grants made to other bodies:	
Domestic Research bursaries	20
Newton European Research bursaries	20
Special Donations from Trinity College	21
Appendix 1: Audited accounts for year ended 31.1.03	
Appendix 2: Consolidated list of grants (1988 onwards)	
Research grants awarded (by Department) – Yellow Table	
Special Donations from Trinity College:	
Bursary scheme – Cream Table	
Other special donations – Green Tables	
Index to Tables	

TRUSTEES AND OFFICERS

H.R.H. the Prince of Wales (*Chairman*)
Professor Sir Tony Wrigley (*Deputy Chairman*)
Baroness O'Neill
Professor A K Sen
Dr C T Morley
Mrs A Lonsdale
Professor N O Weiss
Professor E J Hinch
Professor M S Neuberger

Director

Dr J M Rallison

Treasurer

Dr J R F Fairbrother

Trinity College, Cambridge CB2 1TQ
Tel (01223) 339933 Fax (01223) 367944
www.newtontrust.cam.ac.uk

INTRODUCTION

This report to the Council covers the period from 14 March 2002 up to, and including, the Trustees' meeting on 12 March 2003. There were no changes to the Trustees or Officers of the Trust during that period. Mrs G Smith was appointed Administrator of the Trust from July 2002 in succession to Mrs S E L Hancock. The report lists for the period new research grants approved by the Trustees, developments in the main schemes of the Trust, and grants from the Special Donations made by Trinity College. The audited Trust accounts for the year ended 31 January 2003 are given as Appendix 1.

A full account of the Trust's activities in earlier years may be found in Annual Reports volumes I to XII. A consolidated summary of all grants made by the Trust since 1988 is given in this report as Appendix 2.

The Trust maintains a website (www.newtontrust.cam.ac.uk) that gives details of the Trust schemes. Those web pages that are concerned with the Bursary scheme (see page 10) are accessible to prospective applicants for undergraduate places from outside Cambridge. The remaining pages, including guidelines to applicants for grants, are accessible only from @cam addresses.

AIMS AND OBJECTIVES OF THE TRUST

To promote education, learning and research in the University of Cambridge.

FINANCIAL SUMMARY

General Fund

Trinity College has agreed to make donations to the Trust for the next five years of £2 million per annum. These donations are credited to the Trust's General Fund. Grants from the General Fund are made to specific research projects and also to recurrent Trust schemes. A summary of the grants made from the General Fund from 1988 up to 12 March 2003 is shown in Table 1 and a breakdown of these grants by Department in the Yellow Table in Appendix 2.

There was a substantial fall in the value of the Trust's investments in the year ended 31 January 2003. The falls in the past two years have offset the capital gains of the previous six.

Expenditure on Other grants (mainly research) was higher during 2002-03, reflecting in particular the first (of two) instalments paid to the Language Centre initiating the *Languages at Your Fingertips* collaboration with the BBC that was agreed by the Trust in 2000-01.

The projections of future expenditure in Table 1 are speculative both as to amount and to timing. They include all the grants that the Trustees have approved, though experience suggests that some 20% of these grants will not, in the event, be taken up, either because circumstances change or else because the matching conditions have not been met.

During the past year a number of long-standing commitments (totalling about £0.5 million) have been removed from the projected expenditure because the associated grants will not now be taken up.

Special Funds

In addition to its donations mentioned above, the College has given the Trust various Special Donations, earmarked for particular purposes. These are credited to Special Funds and are considered individually in the sections below (pages 10-12 and 21-22). The aggregate balance in the Special Funds is given as the final line in Table 1. The Special Donations A, B and C for University projects are now fully committed, though not yet fully spent.

GENERAL FUND (£000's)
STATEMENT OF INCOME AND EXPENDITURE AS AT 12 MARCH 2003
Including decisions made at the March meeting

	Actual														Projected (at 4% return)					
	Year ended	31.1.90	31.1.91	31.1.92	31.1.93	31.1.94	31.1.95	31.1.96	31.1.97	31.1.98	31.1.99	31.1.00	31.1.01	31.1.02	31.1.03	31.1.04	31.1.05	31.1.06	31.1.07	31.1.08
Balance at start of year			5604	7173	7758	8796	10982	8946	10659	11784	12740	13133	14059	15191	13367	10328	8563	7903	7805	8269
INCOME																				
Trinity College		5000	1000	1000	1000	1000	1000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Other Donors*		10	0	2	15	21	19	28	41	81	113	44	317	280	327	297	230	164	72	72
Newton Bursaries Endowment Fund*		0	0	0	0	0	0	0	0	0	0	0	161	223	164	139	147	153	155	155
Dividends and interest		606	873	834	876	663	575	660	712	623	640	626	616	549	490	413	343	316	312	331
TOTAL INCOME		5616	1873	1836	1891	1684	1594	2688	2753	2704	2753	2670	3094	3052	2981	2850	2720	2633	2540	2558
EXPENDITURE																				
Total Trust expenditure on Bursaries*		0	73	141	175	216	257	310	357	334	396	754	633	859	991	1020	1020	1020	1020	1020
CTO Schemes		0	0	0	0	47	76	98	125	130	128	80	149	148	148	160	160	160	160	160
Domestic Research Studentships		0	0	0	0	0	0	0	0	0	75	75	75	75	0	210	135	135	135	135
UK Research Students Scheme		0	0	0	0	0	9	50	56	46	47	104	117	107	118	150	150	150	100	50
Time-Limited Fellowships Scheme		0	0	0	0	0	0	0	0	0	0	0	0	32	56	100	100	100	100	100
European Research Studentships Scheme (CET)		0	0	0	0	0	0	0	0	0	0	0	58	122	162	200	200	172	86	0
Community-related grants scheme		0	0	0	0	0	0	0	0	0	0	0	18	23	23	25	25	25	25	25
Shortfall on hardship grants**																70	70			
Other grants (mainly research)		19	276	1077	1224	1530	1385	1368	1358	1700	2356	1492	1144	1556	2148	2560	1410	858	340	247
Administration		10	12	21	46	46	46	70	57	66	66	70	97	96	94	120	110	110	110	110
TOTAL EXPENDITURE		29	361	1239	1445	1839	1773	1896	1953	2276	3068	2575	2291	3018	3740	4615	3380	2730	2076	1847
Gain/Loss on investments		17	57	-12	592	2341	-1857	921	325	528	708	831	329	-1858	-2280	0	0	0	0	0
Balance at end of year		5604	7173	7758	8796	10982	8946	10659	11784	12740	13133	14059	15191	13367	10328	8563	7903	7805	8269	8980

*For details see Isaac Newton Trust Bursary Scheme (Bursaries Table), which also shows *net* cost of Bursaries to General Fund.

**See Green Table for Special Donation C

Includes £1m endowment grant to the Isaac Newton Institute for Mathematical Sciences

Aggregate balance at end of year in Special Funds+	1615	4897	6512	6585	7043	6202	4222
--	------	------	------	------	------	------	------

+These totals are included for completeness. The Special Funds are kept separate from the General Fund (and are not included in the totals above).

For detail of the Special Funds see the Bursaries Endowment Fund, and the Green Tables, Grants A, B and C.

RESEARCH GRANTS APPROVED 2002-2003

POLICY

The policy of the Trust in relation to Research Grants is summarised in its Guidelines to Applicants. The key features of those Guidelines during 2002/2003 were as follows:

- *The Trustees realise that the funds at their disposal could soon be wholly absorbed in a few big projects. They believe they can best assist the University by focusing their help selectively on projects of various sizes which otherwise might not get started or be significantly delayed, particularly those where a grant from the Trustees can open up opportunities for additional funds from outside Cambridge. The Trust is able to move quite quickly and so help in enabling opportunities to be seized which otherwise might permanently be lost. In all cases the Trustees need to be satisfied that projects are of a high standard. They aim to assist with the funds at their disposal a wide range of projects, covering many departments and faculties across the humanities and sciences.*
- *Since one of the purposes of the Trust is to attract resources from outside, grants from the Trust are normally conditional upon raising from sources outside Cambridge **at least twice** the amount of the grant. The Trustees have agreed to vary or even set aside this condition for projects that they consider of particular importance where the prospects of obtaining such external funding are remote.*
- *When applications are made to Research Councils in a routine way, the Trust will expect applicants to apply to the Councils for the full amount of the funds that they require. If a particular application is not wholly successful, the Trustees may be willing to consider an application for a top-up grant from the Newton Trust for a new initiative or project they regard as particularly important; and may allow the partial grant from the Research Council to be regarded as matching funds; but they do not guarantee to do so.*
- *The Trustees are persuaded that their most effective contribution is to help attract talented persons to Cambridge and to maintain the University's reputation as a centre of excellence in research. Thus the aim of the Additional Appointments Scheme (by which grants are made of up to £15,000 per annum for no more than 5 years, subject to matching amounts being raised from outside sources) is to provide limited-tenure research posts, perhaps involving a small amount of teaching, for younger academics.*
- *The Trustees do not in their own right seek funds from outside (the only exception being the scheme of Newton Bursaries for undergraduates). It is therefore the responsibility of recipients of grants to raise the additional monies which are a condition of their grants from the Trust.*
- *The Trustees do not give priority to grants for equipment and in particular do not normally support requests for replacement of standard items. However, they have made modest provision for equipment grants and will give priority to requests for new equipment for teaching or new equipment which has multiple use. Such grants will normally be for no more than one-third of the total cost. The Trustees do not normally entertain requests for "bricks and mortar" projects.*

These guidelines reflect a wish by the Trustees to be a little more flexible than hitherto in inviting applications that do not meet the usual matching requirement.

GRANTS AWARDED

The following grants (totalling £1.4 million) were approved by the Trustees during the report period. They are listed alphabetically by Department. The amounts of individual grants may be found in Appendix 2 (Yellow Table or Green Table). If the matching requirement associated with each grant is achieved, the total matching sum associated with these grants will be £1.7 million. In some instances this matching sum would no doubt have come to Cambridge anyway; in others it has been elicited by the Newton Trust grant.

Applied Mathematics and Theoretical Physics: A grant over eighteen months towards the salary of Dr James McElwaine to work with Dr Stuart Dalziel on the project entitled, 'Saltation and transition to suspension in granular flows'.

Applied Mathematics and Theoretical Physics: A grant for three years towards the salary and associated costs of a post-doctoral research associate to work with Professor James Stone, newly appointed under the Wellcome Trust Principal Research Fellowships scheme, on the project entitled, 'Computational studies of astrophysical accretion disks'.

Architecture: A grant over three years towards the salary of an Assistant Course Director for the Masters Course in Interdisciplinary Design for the Built Environment, together with the extension of an earlier grant for a further and final year towards bursaries for students taking the course.

Biochemistry: A grant to provide start-up funding for Dr Florian Hollfelder in connection with a project entitled, 'Towards mechanistic snapshots of catalytic evolution'.

Institute of Biotechnology: A grant for three years towards the salary costs of Dr Electra Gizeli to work on the project entitled, 'High throughput acoustic screening technique for probing membrane-interactions' under the direction of Professor Christopher Lowe.

Chemistry: A grant to purchase equipment to expand the computer facilities of the Theoretical Chemistry group.

Chemistry: A grant for three years towards the salary of two post-doctoral Research Associates to work on the project entitled, 'Pump-probe spectroscopy of NO decomposition on bimetallic surfaces' under the direction of Professor David King.

Classics: A grant over five years towards the costs of Dr Anne Thompson to work as an Editorial Associate on the New Greek Lexicon Project.

Earth Sciences: A grant for three years towards the salary of a post-doctoral Research Associate, equipment and consumables for a project entitled 'Controls and effects of reactive flow in hot porous media: EU Research Training Network EU-ROMELT', under the direction of Professor Herbert Huppert and Dr Marian Holness.

Applied Economics: A grant towards essential subject fees and travel costs to enable Dr Tanga McDaniel to work on the project entitled, 'Regulation and competition in utilities: an experimental analysis' under the direction of Professor David Newbery.

Engineering: A grant for two years towards the salary of Dr Darren Radford to work on the project entitled, 'The development of energy absorbing materials and structures' with Professor Norman Fleck.

Engineering: A grant for three years towards the salary and associated costs of a post-doctoral research associate to work with Dr David Cardwell on a project entitled, 'Uranium-doped bulk high temperature superconductors (HTS)'.

Engineering: A grant for five years towards the salary costs of a Research Fellowship for Dr Richard Roebuck to work on a project entitled, 'Dynamics of heavy goods vehicles' in the Cambridge Vehicle Dynamics Consortium.

Fitzwilliam Museum: A grant for five years towards the salary of an Objects Conservator.

French: A start-up grant towards the cost of cataloguing, housing and shelving the Deniaud collection of French film videos.

Genetics: A grant towards the purchase of a fluorescence microscope for use by Dr Marisa Segal on the project entitled, 'The role of Clb5p-associated kinase in spindle morphogenesis in *S. cerevisiae*'.

Geography: A grant for two years to the Scott Polar Institute towards the salary of a Research Associate to work with Professor Julian Dowdeswell on the project entitled, 'Ice cap response to climate change in the Canadian High Arctic'.

History: A grant for two years towards the salary costs of Dr Andrew Merills to work on the project entitled, 'Imagining and exploring the Nile' - a study of the cultural significance of the River Nile in Western and Islamic thought from 27BC to 1500AD.

History and Philosophy of Science and King's College: A grant for four months towards the salary of Dr Debby Banham to complete the project entitled, 'e-TK: Medieval science in Latin manuscripts'.

Judge Institute of Management Studies: A grant for one year towards the salary of Ms Zhang Jin to work with Professor Peter Nolan on the project entitled, 'Large corporations, China and the global value chain'.

Kettle's Yard: A grant for five years towards the salary of a Music Fellow. The first appointee under the scheme is Dr Richard Baker.

Language Centre: A grant for five years towards the salary of a full-time Lecturer in Spanish shared with the Language Unit of the Engineering Department.

Linguistics: A grant for three years towards the salary costs of Dr Theodora Alexopoulou to work on the project entitled, 'The gradient nature of resumption and crosslinguistic variation' investigating the linguistic principles underlying the permissibility of pronouns in questions and relative clauses.

Medical Genetics: A grant for one year towards the salary of Dr Katharine Sugars to work with Professor David Rubinsztein on the project entitled, 'Modification of the expression of the Huntington's Disease (HD) gene as a therapeutic approach to HD'.

Medicine: A grant for two years to the Rheumatology Research Unit towards the salary of Dr Andrew Corps to work with Dr Graham Riley and Dr Brian Hazleman on the project entitled, 'Neuropeptides and tendon pathology: a potential target for therapy of chronic tendon pathology'.

Medicine: A grant for two years to the Rheumatology Research Unit towards the salary of Dr Gavin Jones to work with Dr Graham Riley and Dr Brian Hazleman on the project entitled, 'Characterisation of 'aggrecanases' and their role in normal and pathological human tendon'.

Oncology: A grant over eighteen months towards the salary of Mr Daniel Lietha to work with Dr Ermanno Gherardi on the project entitled, 'Engineering growth factors for therapy'.

Oriental Studies: A grant for three years towards the salary of a Lector in Korean Studies.

Oriental Studies: A grant for two years towards the salary costs of Ms Irina Kuznetsova to work with Dr John Smith on the project entitled, 'The concept of Dharma in the Sanskrit Epic and Puranic Literature'.

Pathology: A grant towards the salary of Mrs Suchitra Jain to work with Professor Margaret Stanley on the project entitled, 'Canine oral papillomavirus (COPV) infection - a model for human disease'.

Pathology (Ophthalmology): A brief grant extension, in the form of underwriting, towards the salary of Dr Allan Richards to work with consultant ophthalmic surgeon, Mr Martin Snead, on the project entitled, 'Clinical and molecular genetic analysis of rhegmatogenous retinal detachment'.

Physics: A grant over eighteen months towards the salary of Dr John Loram to work with Professor Archie Campbell on the project entitled, 'Specific heat measurements of high Tc superconductors' in the high-temperature superconductivity group.

Physics: A grant, in the form of underwriting, towards the salary of Dr Patricia Alireza to work with Dr Stephen Julian on the project entitled, 'Metal-insulator physics up to 20 GPa' in the low-temperature physics group.

Plant Sciences: A grant over eighteen months towards the salary of Dr Wendy Robe to work with Professor Howard Griffiths as a post-doctoral Research Associate on the project entitled, 'Molecular ecology and photosynthetic diversity of Rubisco', together with a grant for consumables.

Experimental Psychology: A grant for two years towards the salary and associated costs of a post-doctoral Research Fellow to work with Professor Lorraine Tyler on the project entitled, 'Mapping brain and behaviour: the neural representation of conceptual knowledge'.

Social Anthropology: A grant for two years towards the salary of Dr Todd Sanders to work on the project entitled, 'Globalisation and African witchcraft', exploring the effects of globalization on Tanzanians in Tanzania and the Tanzanian Diaspora in London.

Clinical Veterinary Medicine: A grant for the purchase of an Amersham Biosciences Typhoon 9410 phosphoimager and microarray reader and ImagQuant software to be used on the project entitled, 'Imaging for molecular biology applied to veterinary and comparative disease problems' under the direction of Dr David Sargan, Dr Clare Bryant and Dr Barbara Blacklaws.

RECURRENT TRUST SCHEMES

NEWTON TRUST BURSARIES FOR UK UNDERGRADUATES

Aims and objectives

The scheme of Newton Trust Bursaries for UK Undergraduates was set up in response to the freezing, and progressive phasing out of student grants, the introduction of student loans and later of tuition fees. The main purpose of the scheme is to help attract the best candidates to Cambridge and to widen the field from which they are drawn, through support for students from disadvantaged backgrounds and from families with modest financial resources.

Policy

The Trust has received several Special Donations from Trinity College towards the endowment of the Bursary scheme. In addition the scheme has been supported on a recurrent basis by several sponsors and by a donation of £1 million phased over seven years from Atlantic Philanthropies.

In the light of these donations, the Trustees agreed in 1999 to expand the bursary scheme substantially. A guarantee was offered that any student in receipt of full LEA fee remission (i.e. with a parental income of less than about £20,000) would receive a full bursary of £1,000, with a sliding scale for students who qualify on the basis of their parental income for a lower level of fee remission.

The cost of these awards is borne in part by Colleges, broadly in line with their endowment income per capita. Levels of contribution are shown in Table 3. First and second year students at Homerton College were eligible to apply for bursaries in 2002-03 following its inclusion in the scheme for the first time in 2001-02. St John's College is progressively taking over the cost of awards for its own students; in 2002-03 only third and higher year students at St John's were eligible to apply to the Trust.

The finances of the expanded bursary scheme are shown in Table 2 (which includes the Newton Bursaries Endowment Fund, established to receive the Trinity College Special Donations earmarked for endowment of Bursaries).

A long-term evaluation of the bursary scheme, funded over ten years by Atlantic Philanthropies, is being carried out by the University's School of Education.

The scheme of bursaries is advertised on the Trust's web-site, in the University prospectus and in advertising sent to schools. This material includes a guarantee that any student who qualifies for full fee remission will also be awarded a full bursary.

After several postponements, the Government White Paper on student finance was finally published in January. Top-up fees of about £2,000 p.a. are likely to be introduced, but not before 2006. Publicly funded student grants of up to £1,000 p.a. will be reintroduced in 2004, but only for the poorest students. Subject to consultation with Colleges, the Trustees have agreed to maintain the present bursary scheme substantially unchanged up to 2006. Projections of costs after that date are speculative.

Grants for Community-Related Projects

The Trust has continued to operate a scheme offering contributions to community-related undergraduate projects with preference being given to bursary-holders and those undertaking projects within the UK. Some 100 awards were made under this scheme at a total cost of £24,510. Most of the grants to individuals were for sums less than £500, but within the total the Trust approved a grant of £2,000 to Student Community Action towards equipment and office costs.

ISAAC NEWTON TRUST BURSARY SCHEME (£000's)**(a) Receipts and Expenditure account (actual and estimated)**

Year ended 31.1	Actual													Projected (at 4% return)				
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Newton Bursaries Endowment Fund	0	0	0	0	0	0	0	0	0	0	161	223	164	139	147	153	155	155
Atlantic Philanthropies (1)	0	0	0	0	0	0	0	0	0	0	200	200	200	200	133	67	0	0
Evaluation												43	21	25	25	25	0	0
Clifford Chance	0	2	8	10	10	14	1	37	18	18	25	0	69	35	35	35	35	35
Hinduja Foundation	0	0	7	8	9	11	15	14	30	0	15	15	15	15	15	15	15	15
Mitsubishi Corporation	0	0	0	3	0	2	0	3	0	0	0	0	0	0	0	0	0	0
Armourers and Braziers Gauntlet Trust	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2	2	2	2
Malaysian Commonwealth Bursaries	0	0	0	0	0	0	0	0	40	0	20	20	20	20	20	20	20	20
Eagle Star (BAT Industries)	0	0	0	0	0	0	25	25	25	25	0	0	0	0	0	0	0	0
Voluntary contribution from Colleges (for 00-01)(2)	0	0	0	0	0	0	0	0	0	0	55	0	0	0	0	0	0	0
General Fund (net cost)	73	139	160	195	238	282	315	254	282	710	156	356	500	584	643	703	793	793
TOTAL TRUST EXPENDITURE ON BURSARIES (actual)	73	141	175	216	257	310	357	334	396	754	633	859	991	1020	1020	1020	1020	1020
College contributions (3)	0	0	0	0	0	0	0	0	0	0	180	220	250	250	260	260	260	260
Trinity, Caius and St John's (own schemes - estimated)	20	35	45	50	60	90	90	90	100	140	140	200	240	260	260	260	260	260
TOTAL EXPENDITURE ON BURSARIES (Estimated)	93	176	220	266	317	400	447	424	496	894	953	1279	1481	1530	1540	1540	1540	1540

(b) Newton Bursaries Endowment Fund

Balance at start of year										2078	3211	4461	4097	3486	3686	3819	3886	3886
Donations	Trinity College								2000	1000	1205	200	200	200	133	67	0	0
	Atlantic Philanthropies (1)									67	-67	0	0	0	0	0	0	0
	Cambridge Society										5							
Dividends and interest									45	115	153	147	142	139	147	153	155	155
Gain/Loss on investments									33	-49	115	-488	-789	0	0	0	0	0
Transfer to Receipts and Expenditure account (4%)										0	-161	-223	-164	-139	-147	-153	-155	-155
Balance at end of year									2078	3211	4461	4097	3486	3686	3819	3886	3886	3886

(1) 67 from Atlantic Philanthropies credited to Newton Bursaries Endowment Fund 1999/2000; but was intended to be spent, so transferred to Receipts and Expenditure account 2000/2001.

(2) These voluntary contributions made in 2000-2001 relate to bursaries paid in 1999-2000.

(3) These totals are the formula amounts that Colleges have agreed to contribute to their own students as part of the Scheme. They do not include other Hardship Grants provided by Colleges to their students.

Results of the 2002-03 Bursary allocation

All eligible applicants were awarded a bursary on a sliding scale up to £1,000 thereby meeting the Trust's guarantee. The number of awards made is given below (2001-02 and 2000-01 figures in parenthesis):

- a total of 1629 (1551) (1290) bursaries were awarded at a total cost of about **£1,202,000** (£1,107,000) (£867,000);
- the cost to the Trust net of College contributions is about **£970,000**;
- of the total **1702** applications for bursaries (new and renewals), **73** were deemed ineligible to receive support;
- **230** of these awards remain to be settled upon receipt by the Trust of students' LEA assessments.

First year students taking the Graduate Course in Medicine were invited to apply for a bursary for the first time. Seventeen of the 20 students applied; 10 bursaries were awarded.

The total number of bursaries awarded is more than twice as great as it was five years ago. About 19% of UK students now receive bursaries.

Numbers and costs of awards by College are shown in Table 3.

Collaborators

Clifford Chance: Clifford Chance continue to make a contribution to the bursary scheme at a level of £35,000 per annum.

Atlantic Philanthropies, who hitherto preferred to remain anonymous, now publicly acknowledge the support that they offer to the bursaries scheme and advertise their grants on their own website.

Armourers and Brasiers: Three Armourers and Brasiers awards were made.

Cambridge Society: The third Cambridge Society bursary has been awarded.

For the remaining schemes (*Dharam Hinduja Newton Bursaries*, *Malaysian Commonwealth Studies*) the bursary recipients have been identified and the students notified. The usual contributions from the sponsors, £15,000 and £20,000 respectively, have been paid.

TABLE 3

Bursaries for UK Undergraduates 2002-03

<i>College</i>	<i>No of awards</i>	<i>Total cost of awards £k</i>	<i>percentage of total costs paid by College %</i>
Christ's College	68	50	25
Churchill College	65	46	25
Clare College	45	32	25
Corpus Christi College	48	37	50
Downing College	47	40	6.25
Emmanuel College	76	54	50
Fitzwilliam College	73	54	6.25
Girton College	103	72	12.5
Homerton College	100	82	6.25
Hughes Hall	15	8	6.25
Jesus College	84	65	25
King's College	59	51	50
Lucy Cavendish College	25	19	6.25
Magdalene College	47	36	6.25
New Hall	97	67	6.25
Newnham College	108	79	25
Pembroke College	97	70	6.25
Peterhouse	48	38	50
Queens' College	87	58	6.25
Robinson College	66	50	6.25
St Catharine's College	79	57	6.25
St Edmund's College	14	14	6.25
St John's College	32	20	50
Selwyn College	37	28	12.5
Sidney Sussex College	60	33	25
Trinity Hall	36	33	25
Wolfson College	13	9	6.25
Total	1629	1,202	

Total cost of awards	£1,202,000
College contributions	£232,000
Net cost to the Trust	£970,000

Total number of New awards (across all years)	666	Cost	£475,000
Total number of Renewals (across all years)	963	Cost	£727,000

NEWTON AWARDS FOR UK RESEARCH STUDENTS

Aims and objectives

The scheme, now discontinued in its original form, aimed to encourage a greater number of United Kingdom students with outstanding academic records and research potential to study for the degree of PhD at Cambridge. The awards supplement the maintenance allowances available under the usual British Research Council studentships.

Policy

There are two types of award:

- **Shared-Cost Newton Awards for UK Research Students** of a value of £1,500 per annum, each of up to three years' tenure, subject to satisfactory academic progress by the student. The awards are funded on a fifty:fifty basis by the Newton Trust and by industrial and commercial sponsors outside Cambridge.
- **General Newton Awards for UK Research Students**, each of a value of £750, also of up to three years' tenure, subject to satisfactory academic progress, the whole amount to be provided by the Newton Trust. These awards are offered to students in Departments and Faculties where the prospects of sponsorship are remote, but where the academic arguments for encouraging research are strong.

No new awards were made under this scheme in 2002-03, though a number of awards are ongoing from previous years. The cost of these awards in 2002-03 was **£117,750**. On the Science side, the availability of Research Council Doctoral Training Accounts since 2001 has enabled Departments to make top-up maintenance awards from public sources.

NEWTON AWARDS FOR UK RESEARCH STUDENTS IN THE ARTS, HUMANITIES AND SOCIAL SCIENCES

A new scheme of awards restricted to the Arts, Humanities and Social Sciences operated for the first time in 2002. Awards of £1,500 per year were offered for new PhD students from the UK holding either a 3-year Research Council maintenance grant or a similar 1-year Research Council grant with the intention of proceeding thereafter to the PhD degree in Cambridge. The scheme will operate for the second time in 2003.

Aims and objectives

A review of post-graduate support by the British Academy identified as a high priority increasing maintenance allowances for PhD students above the new Research Council levels. The Trust's aim is that this new scheme will be a partial contribution to that objective and will attract good students who might not otherwise have come to Cambridge. A further objective is that a high calibre of students will be attracted into the Domestic Research Studentships competition operated by the Board of Graduate Studies, which is also partially funded by the Trust.

Policy

The Trust allocated **49** new awards to Departments and Faculties as follows:

School of Arts and Humanities

Architecture	1
Classics	2
Divinity	2
English	6
Modern & Medieval Languages	7
Oriental Studies	2
Philosophy	3

School of Humanities and Social Sciences

Archaeology	2
Anthropology	2
Criminology	3
Economics	2
Education	3
History	6
Law	2
History & Philosophy of Science	4
Social & Political Sciences	2

Some Departments are themselves adding to the awards from their own Trust funds.

Faculties and Departments are required to advertise these awards to potential applicants for PhD places and to draw to the attention of such applicants to the Board of Graduate Studies Domestic Research Studentships (DRS) competition.

Awards made in 2002-03

Of the **49** awards offered to Arts, Humanities and Social Sciences Faculties, **37** awards were made. Three Faculties did not submit nominations; two Faculties did not use their full allocation of awards and two candidates were ruled ineligible. The cost of the awards in 2002-03 was **£55,500**.

COLLEGE TEACHING OFFICER (CTO) SCHEMES

Aims and objectives

The aims of these schemes are to increase CTO involvement in Faculty teaching and the amount of University teaching available, allow Faculties to choose such extra teachers from CTO ranks as they wish, make it possible for the Tuition Funds of poorer Colleges to afford the consequent reduction in the amount of CTO teaching, and to achieve these aims through a scheme that is simple to operate. Tenure in these posts is limited to a maximum of ten years.

The original scheme established in 1992 operates across faculties, though in practice most posts are in the Humanities. The Norton Rose scheme established in 1999 is part-funded by City solicitors Norton Rose and operates only in the Faculty of Law.

Summary of awards 2002-2003

Main scheme

Thirty-four awards have been made under the first and second phases of this scheme as follows:

- Classics (2)
- Economics (1)
- English (7)
- History (6)
- History and Archaeology and Anthropology (1)
- Land Economy (1)
- Law (4)
- Mathematics (3)
- Modern and Medieval Languages (5)
- Oriental Studies (1)
- Physics and Chemistry (1)
- Social and Political Sciences and Economics (1)
- Social and Political Sciences and History and Philosophy of Science (1)

There are no vacant posts at present. Four post-holders are currently on leave (Dr Phillips, Dr Preston, Dr Tadmor and Dr Thompson). Dr Thompson's post has been temporarily filled by Dr Rimell.

A list of present holders of awards is given in Table 4 below.

Norton Rose scheme

The CTO list also includes those appointed under the broadly parallel scheme operated by the Faculty of Law with (half) sponsorship from Norton Rose. The latter scheme has two kinds of post, '25% posts' (the same as the CTO scheme) and also '50% posts' where duties and payments are approximately double those under the CTO scheme. Five posts are presently filled under the Norton Rose scheme.

Costs

The cost of the CTO scheme for the academic year 2002-2003 was **£118,985**. The cost to the Trust of the Norton Rose scheme in 2002-2003 was **£28,765**.

Recent changes

Several new appointments, reappointments and resignations arose during the year:

Faculty of Classics

Dr D J Thompson, Girton, awarded a Leverhulme Research Fellowship and will be on leave for the academic years 2002-2004.

Dr Victoria Rimell, Girton, appointed as a temporary replacement for Dr D J Thompson from 1 January 2003 to 30 September 2004.

Faculty of English

Dr Kate Bennett, Pembroke, appointed for one year from 1 October 2002 as a temporary replacement for Dr Connell.

Dr Philip Connell, Selwyn, appointed for four years from 1 October 2003.

Dr R Douglas-Fairhurst, Emmanuel, appointed to a Fellowship at Magdalen College, Oxford, from 1 October 2002.

Dr Anne Henry, Trinity, appointed for five years from 1 October 2002.

Dr R Lyne, New Hall, appointed to a University Lectureship from 1 October 2002.

Dr Cathy Phillips, Downing, awarded a Leverhulme Fellowship and on leave for the academic year 2002-2003.

Dr Claire Preston, Sidney Sussex, on leave during the academic year 2002-03.

Faculty of History

Dr Guy Rowlands, Newnham, resigned with effect from 31 August 2003 to take up a Lectureship at the University of Durham.

Department of Land Economy

Dr Jonathan Aldred, Emmanuel, appointed for five years from 1 October 2002. This post transferred to Land Economy from Law, which has the benefit of additional appointments under its Norton Rose scheme.

Faculty of Law

Mr Angus Johnston, Trinity Hall, appointed to a supernumerary post under the scheme for five years from 1 October 2001. His post will be fully funded by the Law Faculty until such time as an appropriate vacancy arises within the Law Faculty's proper allocation under the scheme.

Mrs Louise Tee, Lucy Cavendish, granted compassionate leave and tenure extended by one year to 30 September 2003.

Faculty of Social and Political Sciences and Faculty of Economics and Politics

Dr Paul Lewis, Newnham, appointed for five years from 1 October 2002.

Faculty of Law - Norton Rose CTO posts

Ms Jo Miles, Trinity, reappointed for 2 years from 1 October 2003.

Mr Ben Parker, St John's, appointed as the Deputy Director of the Centre for Corporate and Commercial Law for three years from 1 January 2003 under the 25% scheme.

Dr Eleanor Spaventa, New Hall, reappointed for 2 years from 1 October 2003.

TABLE 4 : Present holders of CTO appointments

Name	Title	Initials	Faculty	No	College	Start of tenure	End of tenure
Aldred	Dr	Jonathan	Land Economy	1 of 1	Emmanuel	1.10.2002	30.9.2007
Bennett	Dr	Kate	English	5 of 7	Pembroke	1.10.2002	30.9.2003
Best	Dr	Victoria	Modern and Medieval Languages	2 of 5	St John's	1.10.2001	30.9.2006
Bodenhorn	Dr	Barbara	Social Anthropology	1 of 1	Pembroke/Girton	1.10.2001	30.9.2006
Brookes	Dr	C J B	Mathematics	1 of 3	Corpus Christi	1.10.1998	30.9.2003
Cooper	Dr	Sarah	Modern and Medieval Languages	3 of 5	Trinity Hall	1.10.2001	30.9.2006
de Bolla	Dr	Peter	English	7 of 7	King's	1.10.1996 1.10.1998	30.9.1997 30.9.2003
Demoulini	Dr	Sophia	Mathematics	3 of 3	Downing	1.1.2001	30.12.2005
Dörrzapf	Dr	Matthias	Mathematics	2 of 3	St John's	24.04.2001	31.3.2006
Dougan	Mr	Michael	Law	1 of 3	Downing	1.10.2000	30.9.2003
Fleet	Dr	Kate	Oriental Studies (Turkish)	Super	Newnham	1.1.2001	30.9.2006
Gatti	Dr	Rupert	Economics	1 of 1	Trinity	1.10.2001	30.9.2006
Gonda	Dr	Caroline	English	3 of 7	St Catharine's	1.10.1998	30.9.2004
Guthrie	Dr	J	Modern and Medieval Languages	1 of 5	New Hall	1.10.2000	30.9.2005
Henry	Dr	Anne	English	1 of 7	Trinity	1.10.2002	30.9.2007
Horrox	Dr	Rosemary	History	3 of 6	Fitzwilliam	1.10.2002	30.9.2007
Izzet	Dr	Vedia	Classics	2 of 2	Christ's	1.10.2001	30.9.2006
James	Dr	I	Modern and Medieval Languages	4 of 5	Downing	1.10.2000	30.9.2005
Johnston	Mr	Angus	Law	Super	Trinity Hall	1.10.2001	30.9.2006
Khalifa	Dr	J	Modern and Medieval Languages	5 of 5	Trinity	1.10.1998	30.9.2003
Lewis	Dr	Paul	SPS and Economics	1 of 1	Newnham	1.10.2002	30.9.2007
Mandelbrote	Mr	Scott	History	2 of 6	Peterhouse	1.10.2002	30.9.2007
O'Hanlon	Dr	R	History	1 of 6	Clare	1.10.2000	30.9.2005
Riley	Dr	J	Physics and Chemistry	1 of 1	Girton	1.10.1996 1.10.2001	30.9.2001 30.9.2004
Rimell	Dr	Victoria	Classics	1 of 2	Girton	1.1.2003	30.9.2004
Rowlands	Dr	Guy	History	5 of 6	Newnham	1.10.2001	30.9.2006
Seville	Dr	C	Law	2 of 3	Newnham	1.10.1995 1.10.2000	30.9.2000 30.9.2003
Smith	Dr	David	History	4 of 6	Selwyn	1.10.2001	30.9.2007
Tee	Mrs	L	Law	3 of 3	Lucy Cavendish	1.10.1998	30.9.2004
Thom	Dr	D	SPS and HPS	2 of 2	Robinson	1.10.1995 1.10.2000	30.9.2000 30.9.2003
Zeeman	Dr	N	English	6 of 7	King's	1.10.2000	30.9.2005
Davis	Dr	Jennifer S	Law – Norton Rose		Wolfson	1.10.2000	30.9.2005
McBride	Dr	Nick	Law – Norton Rose		Pembroke	1.10.1999	30.9.2004
Miles	Ms	Jo	Law – Norton Rose		Trinity	1.10.2000 1.10.2003	30.9.2003 30.9.2005
Parker	Mr	Ben	Law - Norton Rose		St John's	1.1.2003	31.12.2005
Spaventa	Dr	Eleanor	Law – Norton Rose		New Hall	1.10.2000 1.10.2003	30.9.2003 30.9.2005

TIME-LIMITED TEACHING FELLOWSHIPS SCHEME

Aims and objectives

The aims and objectives of this scheme are to strengthen the undergraduate supervision system at the less well-endowed Colleges, thereby helping to produce a more even playing field between well-endowed and less well-endowed Colleges; and to help to integrate some of the holders of Newton Additional Appointments and similarly placed postdoctoral researchers into College life.

Policy

The Trustees agreed in 1999 to make up to 25 grants available to enable young postdoctoral researchers to be elected to teaching Fellowships at the less well-endowed Colleges. Each appointment may be held for up to 5 years. The duties of each person appointed include giving 4 hours per week of undergraduate supervision. In return the Trust pays the College £4,000 per annum toward the overheads involved.

Appointments made

Eleven posts were taken up in the first round of appointments in 2000. The Trust advertised second and third rounds of appointments for October 2001 and 2002. A further round of vacancies will be advertised for October 2003. Current post-holders are shown in Table 5.

TABLE 5: Time-Limited Teaching Fellowship appointments as at 12 March 2003

Lastname	Firstname	College	Department	From	End of post-doc
Ball	Stephen	New Hall	Chemistry	1 October 2001	30 April 2005
Beauregard	Daniel	Selwyn College	Biochemistry	1 October 2000	28 February 2005
Blyth	Caroline	St Edmund's College	English	1 October 2000	30 September 2006
Browne	Jude	Downing College	Social and Political Sciences	1 October 2002	30 September 2003
Challinor	Anthony	Queens' College	Physics	1 October 2001	30 September 2003
Clarke	Kate	Queens' College	Plant Sciences	1 October 2001	30 September 2004
Damery	Sarah	St Catharine's College	Geography	1 January 2003	1 January 2005
Dargie	Charlotte	Lucy Cavendish College	Judge Institute	1 October 2000	30 September 2004
Hayward	Stuart	Girton College	Earth Sciences	1 October 2002	31 May 2005
Kaminski	Ann	St Edmund's College	Biochemistry	1 October 2000	30 September 2003
McCarthy	Nicola	St Edmund's College	Clinical School	1 October 2000	30 September 2003
Molteni	Carla	New Hall	Physics	1 October 2000	30 September 2003
Netherton	Clare	St Edmund's College	Psychiatry	1 October 2002	30 September 2004
Padley	Stephen	Robinson College	English	1 October 2000	30 September 2005
Sargent	Carol	Hughes Hall	Pathology	1 October 2000	31 December 2003
Satchell	Max	Fitzwilliam College	History and Philosophy of Science	1 October 2002	30 September 2005
Speed	Catherine	Hughes Hall	Rheumatology	1 October 2001	31 May 2005
Spring	David	Queens' College	Chemistry	1 October 2001	30 September 2004
Wardle	Fiona	St Catharine's College	Developmental Biology	1 October 2002	30 September 2005
Warner	Christopher	Robinson College	DAMTP	1 October 2001	31 March 2004

GRANTS MADE TO OTHER BODIES

DOMESTIC RESEARCH BURSARIES

Aims and objectives

To award research scholarships to the best 'home' (i.e. UK and EU) students who failed to gain support from public sources such as the Research Councils and the AHRB.

Policy

The Newton Trust agreed in 1997 to contribute £75,000 per annum for five years to a University-wide scheme, thus adding to other sources to increase the amount of funds available. The awards are made by the Academic Division's Committee on Awards. During 2002-03 the Trustees agreed to extend the period of support for a further five years at £85,000 per annum.

In addition, the Trust agreed to provide underwriting of £250,000 over a five-year period to enable firm offers of support to be made earlier by the DRS Committee to strong candidates who might otherwise be tempted to go to other Universities but who were likely in the event to receive funding from public sources.

Grants awarded

In 2002 some 30 new awards were made by the General Board's Committee. The Secretary of the Board of Graduate Studies, reported that the availability of the Trust's underwriting had enabled the University to make offers around three weeks earlier than had previously been possible. This had been important in retaining some students, and in the event it had not proved necessary to call upon the underwriting in 2002.

NEWTON EUROPEAN RESEARCH BURSARIES

Aims and objectives

The aims and objectives of this scheme are to encourage able students from the European Union to do research at Cambridge and to help them take up their places. (EU students are eligible for support from public sources for their fees, but not at present for maintenance.)

Policy

The Trustees agreed in 1999 to make a donation to the Cambridge European Trust totalling £600,000 to provide a pilot scheme of Newton European (Research) Studentships of annual value up to £2,000 tenable for up to three years, to be awarded to PhD students from the EU by the Cambridge European Trust on the basis of departmental recommendations. During 2002-03 the Trustees agreed to make further and final donations of up to £400,000 for the same purpose.

Grants awarded

The Cambridge European Trust made 81 awards (totalling £162,000) under this scheme paid during 2002-03.

SPECIAL DONATIONS FROM TRINITY COLLEGE

Financial summary

Since 1996 the Trust has received several Special Donations from Trinity College for earmarked purposes. The earmarked donations to the Bursary Scheme (1998 and 1999) are included in the Bursary Scheme report (pages 10-12). Spending from the other Special Donations is discussed below.

A financial summary of these other Special Donations is given in Appendix 2 (Green table, Donations A, B and C).

All the donations (A, B and C) are now fully committed, indeed a modest overshoot in expenditure is expected that will be met from the General Fund. By the end of January 2004 almost all of the payments due from these funds will have been made, and the Trust expects to transfer any remaining assets and liabilities of these funds to the General Fund at that date.

A. Special Donation of £1.615m (1996) towards major University building projects (Donation A)

The Trustees have made grants under this initiative, including accrued interest (about £380,000 up to 31 January 2003) , as follows:

• A new building for the Faculty of Divinity	£300,000
• Remodelling and Refurbishment, Raised Faculty Building	£515,000
• Mathematics Faculty relocation to Clarkson Road	£500,000
• Department of Engineering for additional accommodation in Trumpington Street (<i>and see Donation B2 below</i>)	£300,000
• New accommodation for the Institute of Criminology	£300,000
TOTAL	£1,915,000

All these grants have been paid.

B. Special Donation of £1.5m (1997) towards major University projects, buildings or other purposes (Donation B)

The Trustees agreed in 1998 to the use of this Special Donation as follows:

- That £1 million should be deployed in conjunction with the University's Strategic Planning Reserve Fund on the recommendation of the Vice-Chancellor and subject to the condition that payments by the Trust in any year are at least matched by an equal contribution to the Fund in that year from the University or from other donors (**Donation B1**). The money could thereby be used not only for buildings but for recruitment of senior personnel, laboratory refurbishment etc.
- That the remaining £0.5 million, together with interest earned on the total allocation (about £420,000 up to 31 January 2003), should be deployed for urgent capital purposes in the University, to be notified by the Vice-Chancellor to the Trustees (**Donation B2**).

The following grants have been approved:

Donation B1:

• Relocation of the Department of Biochemistry, Part I Teaching Laboratory	£200,000
• Department of Genetics, additional Research Accommodation	£150,000
• Department of Plant Sciences: phased programme of refurbishment of the Department's teaching and research accommodation	£150,000
• Department of Geography: Research Associate Support	£48,000
• Computer Laboratory: Lectureship in Systems Modelling	£125,000
• Music School: expansion, remodelling and renovation	£150,000
• University Library: Greensleeves Project	£200,100
TOTAL	£1,023,100

The grants to Biochemistry, Genetics, Plant Sciences and the Music School, the first two of four instalments to Geography, the first two of five instalments to the Computer Laboratory, and the first of three instalments to the University Library have been paid.

Donation B2:

• Centre for Atmospheric Chemistry, refurbishment	£150,000
• Department of Engineering, for additional accommodation in Trumpington Street	£200,000
• Computer Laboratory as 'enabling money' towards the cost of building a new Computer Laboratory at West Cambridge	£200,000
• Department of Applied Mathematics and Theoretical Physics, refurbishment of laboratory, to meet part of the condition of a successful JIF bid	£250,000
• Veterinary Medicine: New surgical facility	£200,000
TOTAL	£1,000,000

The grants to Chemistry, Engineering, Computer Laboratory and Veterinary Medicine, and the first four of five instalments of the grant to Applied Mathematics have been paid.

C. Special Donation of £1.5m (1997) to provide Hardship Funds for Students at less well endowed Colleges (Donation C)

The Trustees agreed in July 1999 to distribute this Special Donation of £1.5 million, together with expected accrued interest, as capital endowment payments in five annual instalments of some **£400,000** to the thirteen least well-endowed Colleges, sharing the money out on the basis of a formula that takes account of College wealth and undergraduate student numbers. It is a condition that Colleges provide money either to match the donations by way of endowment, or to match the annual income from the endowment with donations by way of income obtained from benefactors on a year-by-year basis.

Donations were agreed as follows:

<i>College</i>	<i>Annual Capital Donation (x5)</i>
	£
Downing	30,000
Fitzwilliam	50,000
Hughes Hall	25,000
Lucy Cavendish	20,000
Magdalene	30,000
New Hall	25,000
Pembroke	25,000
Queens'	35,000
Robinson	50,000
St Catharine's	30,000
St Edmund's	20,000
Selwyn	20,000
Wolfson	35,000

In January 2003 the fourth instalment of the donation to each College was due to be paid. In all but two cases, where further information was required from the Colleges concerned, the donation was paid. In the majority of cases, the endowment funding from the Trust has been matched by corresponding donations from donors (usually alumni) from outside Cambridge.

The fifth and final instalment of the donations will fall due in January 2004. A funding shortfall of about £140,000 is expected owing to adverse market circumstances. This will be made good by the General Fund.

APPENDIX 1

Isaac Newton Trust

Accounts

for the year ended 31 January 2003

APPENDIX 2

Consolidated list of grants

The following Tables list all the grants that the Trustees have approved. As shown in the Tables, not every grant approved has been taken up, either because circumstances have changed, or else because the Trust's matching requirement has not been met.

The following abbreviations are used:

AA=Additional Appointment
EG=Equipment Grant
C=Confirmed [shaded=part confirmed]
U=Underwriting
CU=Underwriting taken up
L=Lapsed
W/D=Withdrawn
X=Not Confirmed
MI=Major Initiative

Sums in square brackets are not included in totals (because the grant has either been withdrawn, or included elsewhere).

The correspondence of Minute numbers to meeting dates is as follows:

Year	Minutes	Year	Minutes
1988	1 – 26	1996	497 – 535
1989	27 – 94	1997	536 – 578
1990	95 – 185	1998	579 – 621
1991	186 – 264	1999	622 – 695
1992	265 – 322	2000	696 – 766
1993	323 – 388	2001	1.00 – 1.59
1994	389 – 447	2002	2.00 – 2.49
1995	448 – 496	2003	3.00 –

The column headed 'Matching Required' indicates the total matching sum (normally from sources outside Cambridge, but occasionally from within) required to release the Newton Trust grant. For Confirmed grants (labelled 'C') this matching requirement has been met.

An index to the Tables is given at the end.

