

ISAAC NEWTON TRUST

ANNUAL REPORT

TO THE COUNCIL OF

TRINITY COLLEGE

COVERING THE PERIOD

15 MARCH 2001 – 13 MARCH 2002

VOLUME XII

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TRUSTEES AND OFFICERS

H.R.H. the Prince of Wales (*Chairman*)
Professor Sir Tony Wrigley (*Deputy Chairman*)
Baroness O'Neill
Dr J R F Fairbrother (*until September 2001*)
Professor A K Sen
Dr C T Morley
Mrs A Lonsdale
Professor N O Weiss
Professor E J Hinch
Dr M S Neuberger

Director

Dr J M Rallison

Treasurer

Dr J R F Fairbrother (*from October 2001*)
Dr J R G Bradfield (*Acting Treasurer until September 2001*)

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INTRODUCTION

This report to the Council covers the period from 15 March 2001 up to, and including, the Trustees' meeting on 13 March 2002. It lists for that 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 2002 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 XI. A consolidated summary of all grants made by the Trust since 1988 is given in this report as Appendix 2.

Dr J R F Fairbrother was appointed Treasurer by the Trustees from 1 October 2001 and resigned as Trustee from that date. The Trustees express their thanks to Dr J R G Bradfield for returning to the Trust to serve as Acting Treasurer during the period March 2000 – September 2001.

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 until 14 March 2002 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 2002, wiping out the capital gains of the previous three years.

Expenditure on Other grants (mainly research) was reduced during 2001-02 by repayment (from the Wyse Fund of which Trinity is a Trustee) of an unspent grant of about £150,000 originally made in 1997/98. But the total was also increased by payments delayed from 2000-01 as a result of CAPSA difficulties in University Departments.

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 fossilised commitments (totalling more than £1 million) have been removed from the projected expenditure because the associated grants will not now be taken up.

In the light of present market uncertainties, the Trustees have agreed that it would be prudent to project investment returns at 4% rather than 5% as in the recent past.

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.

GENERAL FUND (£000's)
STATEMENT OF INCOME AND EXPENDITURE AS AT 13 MARCH 2002

Year ended	Actual													Projected (at 4% return)				
	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
Balance at start of year		5604	7173	7758	8796	10982	8946	10659	11784	12740	13133	14059	15191	13367	11901	11089	11142	11678
INCOME																		
Trinity College	5000	1000	1000	1000	1000	1000	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	297	297	230	164	72
Newton Bursaries Endowment Fund [1]	0	0	0	0	0	0	0	0	0	0	0	161	223	164	172	180	185	188
Dividends and interest	606	873	834	876	663	575	660	712	623	640	626	616	549	535	476	444	446	467
TOTAL INCOME	5616	1873	1836	1891	1684	1594	2688	2753	2704	2753	2670	3094	3052	2996	2945	2853	2795	2727
EXPENDITURE																		
Total Trust expenditure on Bursaries [1]	0	73	141	175	216	257	310	357	334	396	754	633	859	950	975	975	975	975
CTO Schemes	0	0	0	0	47	76	98	125	130	128	80	149	148	160	160	160	160	160
Domestic Research Studentships	0	0	0	0	0	0	0	0	0	75	75	75	75	75	0	0	0	0
UK Research Students Scheme	0	0	0	0	0	9	50	56	46	47	104	117	107	150	150	150	150	150
Time-Limited Fellowships Scheme	0	0	0	0	0	0	0	0	0	0	0	0	32	90	100	100	100	100
European Research Studentships Scheme (CET)	0	0	0	0	0	0	0	0	0	0	0	58	122	200	200	200	133	67
Community-related grants scheme	0	0	0	0	0	0	0	0	0	0	0	18	23	25	25	25	25	25
Other grants (mainly research) [2]	19	276	1077	1224	1530	1385	1368	1358	1700	2356	1492	1144	1556	2702	2036	1081	606	374
Administration	10	12	21	46	46	46	70	57	66	66	70	97	96	110	110	110	110	110
TOTAL EXPENDITURE	29	361	1239	1445	1839	1773	1896	1953	2276	3068	2575	2291	3018	4462	3756	2801	2259	1961
Gain/Loss on investments	17	57	-12	592	2341	-1857	921	325	528	708	831	329	-1858	0	0	0	0	0
Balance at end of year	5604	7173	7758	8796	10982	8946	10659	11784	12740	13133	14059	15191	13367	11901	11089	11142	11678	12444

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

[2] In year ended 31.1.99 includes £1m endowment grant to the Isaac Newton Institute for Mathematical Sciences.

Aggregate balance at end of year in Special Funds [3]	1615	4897	6512	6585	7043	6202												
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[3] 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 2001-2002

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 2001/2002 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 £14,000 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 £1.7 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 £1.4 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.

Anatomy: A grant for a graduate studentship for the project entitled 'Genomic imprinting and placental development on the mouse'.

Applied Mathematics and Theoretical Physics: A grant for one year towards the salary of a Dr Nicolette Bila to work on a project entitled 'Monge-Ampère equations and their applications'.

Applied Mathematics and Theoretical Physics: A grant, in the form of underwriting, for four years towards the continuing support of Dr N Nikiforakis to work on computational mathematics and scientific computing.

Applied Mathematics and Theoretical Physics: A grant, in the form of underwriting, for five years towards the continuing support of Dr Mark Spivak to work on industrial mathematics.

Applied Mathematics and Theoretical Physics: A grant for two years towards the salary of Dr Richard Munro to work on the project entitled 'Resuspension by coherent structures in turbulent flows'.

Babraham Institute: A grant for two years towards the salary costs of a postdoctoral research worker on the project entitled 'High-throughput analysis of the effect of radiofrequency electromagnetic fields on cellular processes'.

Institute of Biotechnology: A grant for one year towards the salary costs of Dr Marian Rehak to work on a project entitled 'Chromogenic amplifier for cell membrane-receptor mimic'.

Institute of Biotechnology: A grant over three years towards consumables and gene sequencing costs for Dr Alan Tunnacliffe to work on the project entitled 'Life without water: the molecular biology of anhydrobiosis in nematodes'.

Earth Sciences: A grant for three years towards the salary, travel and consumables to enable Dr Emily Rayfield to work on a project entitled 'Engineering solutions for Palaeobiology'.

Earth Sciences: A grant towards the salary of Dr Mirjam Schaller to work on the project entitled 'Climate erosion: cosmogenic measurement of fluvial erosion rates'.

Economics: A grant towards the salary of Dr Anthony Garratt to work on the project entitled 'Components of forecast uncertainty: an application to inflation and asset returns'.

Economics: A grant towards the salary of Dr Supriya Garikipati to work on the project entitled 'Labour supply and risk mitigation in rural Indian households'.

Engineering: A grant for five years towards the salary of a Lecturer in Combustion Engineering to work in conjunction with a new Chair of Experimental Combustion funded by Rolls Royce.

Geography: A grant to the Unit for Landscape Modelling for three years towards the salaries of Dr Robin Fuller and a part-time Research Associate to work on the project entitled 'Extraction of environmental parameters from airborne LiDAR imagery'.

History: An additional grant to enable the completion of the Cambridge volume of the Corpus of British Medieval Library Catalogues.

History of Art: A grant for two years to fund a research fellowship in Early Italian Painting for Dr Thomas de Wesselow.

History of Art: A further and final grant towards the salary of Dr Nebahat Avcioglu to work on the project entitled 'Architecture, travel and politics of 'the Other' in the Ottoman Empire in the nineteenth century'.

McDonald Institute/Clinical Veterinary Medicine: A grant to enable Dr Marsha Levine to gather data from China for the project entitled 'Palaeopathology as a tool for investigating the evolution of horse husbandry'.

Music: A grant (from Special Donation B1, with the permission of the Vice-Chancellor) towards the expansion, remodelling and renovation of the University Music School.

Oncology: A grant towards the development of a computing farm for cancer studies.

Pathology: A grant for two years for the salaries, transport and storage costs of two part-time midwives for the project entitled 'How do genetic differences between the mother and her fetus influence the success of the pregnancy?'

Clinical Pharmacology Unit: A grant towards the salary of a post-doctoral research associate to work with Dr Kevin O'Shaughnessy on the project entitled 'The molecular regulation of sodium homeostasis in the distal nephron'.

Physics: A grant towards the salary of Dr Christian Guertler and the purchase of equipment for the project entitled 'Spin engineered nanostructures and spin electronics'.

Physics: A grant for five years towards the salary of Dr Valery Talyanski to provide specialist 'high-frequency' expertise in the Cavendish Laboratory'.

Plant Sciences: A grant to purchase equipment for a microarray facility for the analysis of plant gene expression.

Psychiatry: A grant for three years towards the salary of a postdoctoral researcher to work on a study of emotional, cognitive and hormonal factors resulting in bipolar affective disorders with Professor Ian Goodyer.

Psychiatry: A grant towards the salary of Dr Joyce Whittington to work on the Cambridge Prader-Willi Syndrome (PWS) study.

Social Anthropology: A grant for two years towards the salary and essential costs of Mr A Hürelbaatar to work on a project entitled 'The language of politics in Democratic Mongolia'.

University Library: A grant (from Special Donations A and B2 with the approval of the Vice-Chancellor) over three years towards the completion of the conversion of records in the guardbook catalogue.

Clinical Veterinary Medicine: A grant to provide staff costs, consumables and travel costs for Dr Kerstin Gläser to work on a project entitled 'The role of cathepsin L in skeletal development'.

Clinical Veterinary Medicine: A grant to provide consumables for Dr Elisabeth Davies to work on a project entitled 'Cellular signals for cartilage damage or repair in joint disease'.

Clinical Veterinary Medicine: A grant towards the salary costs of Dr Cerian Webb to work on investigating farm animal networks in relation to disease spread.

Clinical Veterinary Medicine: A grant towards the purchase of an ABI Prism 7900HT Sequence Detection System to be used for quantification of multiple DNA and RNA species.

Clinical Veterinary Medicine: A grant (from Special Donations A and B with the permission of the Vice-Chancellor) towards the building of a surgical facility for teaching and research in clinical veterinary medicine.

Wellcome/CRC Institute: A grant towards the salary costs of Ms Katharine Arney to work on the project entitled 'Genomic reprogramming for mammalian development'.

Zoology: A grant towards the cost of restoration and improvement of land used for the project entitled 'The evolutionary causes and ecological consequences of cooperative breeding in mammals'.

Zoology: A grant towards the purchase of equipment to be used on the project entitled 'Molecular mechanisms underlying spinal cord plasticity'.

Zoology: A grant towards the salary and associated costs of Dr Ian Adams to work on the project entitled 'Entry of mouse primordial germ cells into meiosis'.

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 and 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 toward 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 a private donor (Atlantic Philanthropies).

In the light of these donations, the Trustees agreed 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 and during the year the levels of College contribution were revised in line with their recent endowment income per capita. Levels of contribution are shown in Table 3. Homerton College was included in the scheme for the first time this year on the basis of its new Collegiate status. St John's College agreed progressively to take over the cost of awards for its own students.

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).

As a condition of their gift, Atlantic Philanthropies required that a long-term evaluation of the bursary scheme should be undertaken. The University's School of Education has agreed to perform this task and Atlantic Philanthropies has made a donation of some £300,000 over 10 years to fund the associated costs.

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 £24,475. Most of the grants to individuals were for sums less than £500, but within the total the Trust approved a grant of £5,000 to Student Community Action towards equipment and office costs.

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.

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
Newton Bursaries Endowment Fund	0	0	0	0	0	0	0	0	0	0	161	223	164	172	180	185	188
Atlantic Philanthropies (1)	0	0	0	0	0	0	0	0	0	0	200	200	200	200	133	67	0
Evaluation												43	25	25	25	25	0
Clifford Chance	0	2	8	10	10	14	1	37	18	18	25	0	35	35	35	35	35
Hinduja Foundation	0	0	7	8	9	11	15	14	30	0	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
Armourers and Braziers Gauntlet Trust	0	0	0	0	0	1	1	1	1	1	1	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
Eagle Star (BAT Industries)	0	0	0	0	0	0	25	25	25	25	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
General Fund (net cost)	73	139	160	195	238	282	315	254	282	710	156	356	489	506	565	626	715
TOTAL TRUST EXPENDITURE ON BURSARIES (actual)	73	141	175	216	257	310	357	334	396	754	633	859	950	975	975	975	975
College contributions (3)	0	0	0	0	0	0	0	0	0	0	180	220	240	240	240	240	240
Trinity, Caius and St John's (own schemes - estimated)	20	35	45	50	60	90	90	90	100	140	140	200	240	250	250	250	250
TOTAL EXPENDITURE ON BURSARIES (Estimated)	93	176	220	266	317	400	447	424	496	894	953	1279	1430	1465	1465	1465	1465

(b) Newton Bursaries Endowment Fund

Balance at start of year										2078	3211	4461	4097	4297	4497	4630	4697	
Donations																		
Trinity College										2000	1000	1205	200	200	200	133	67	0
Atlantic Philanthropies (1)											67	-67	0	0	0	0	0	0
Cambridge Society												5						
Dividends and interest										45	115	153	147	164	172	180	185	188
Gain/Loss on investments										33	-49	115	-488	0	0	0	0	0
Transfer to Receipts and Expenditure account (4%)											0	-161	-223	-164	-172	-180	-185	-188
Balance at end of year										2078	3211	4461	4097	4297	4497	4630	4697	4697

(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 2001-02 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 (2000-01 and 1999-00 figures in parenthesis):

- a total of 1551 (1290) (971) bursaries were awarded at a total cost of about **£1,054,000** (£867,000) (£720,000);
- the cost to the Trust net of College contributions is about **£911,000**;
- of the total **1567** applications for bursaries (new and renewals), **16** were deemed ineligible to receive support.

The total number of bursaries awarded is now twice as great as it was four years ago. The cost of these bursaries to the Trust was £911,000. The cost was kept down by a more rigorous view of levels of sponsorship and other bursaries awarded from outside sources. Numbers of bursaries increased by 20%; and costs by 21%.

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

Collaborators

Clifford Chance: The Trustees are grateful that Clifford Chance have agreed to continue to make a contribution to the bursary scheme at a level of £35,000 per annum. Two former Newton Trust bursary holders have joined Clifford Chance as trainees.

Atlantic Philanthropies, formerly identified in the Annual Report of the Trust simply as a 'private donor', now publicly acknowledge the support that they offer to the bursaries scheme and to others. They now advertise their grants on their own website.

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

Cambridge Society: The second 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 have been paid.

TABLE 3

Bursaries for UK Undergraduates 2001-02

<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	48	40	25
Churchill College	55	41	25
Clare College	48	34	25
Corpus Christi College	40	30	50
Downing College	50	35	6.25
Emmanuel College	75	54	50
Fitzwilliam College	77	52	6.25
Girton College	96	62	12.5
Homerton College	53	42	6.25
Hughes Hall	7	4	6.25
Jesus College	75	52	25
King's College	56	43	50
Lucy Cavendish College	25	22	6.25
Magdalene College	48	36	6.25
New Hall	84	64	6.25
Newnham College	109	78	25
Pembroke College	93	66	6.25
Peterhouse	46	33	50
Queens' College	89	62	6.25
Robinson College	65	50	6.25
St Catharine's College	73	53	6.25
St Edmund's College	27	13	6.25
St John's College	66	42	50
Selwyn College	41	30	12.5
Sidney Sussex College	61	35	25
Trinity Hall	33	22	25
Wolfson College	11	9	6.25
Total	1551	1,104	

Total cost of awards	£1,104,000
College contributions	£193,000
Net cost to the Trust	£911,000

Total number of New awards (across all years)	678	Cost	£440,000
Total number of Renewals (across all years)	870	Cost	£664,000

NEWTON AWARDS FOR UK RESEARCH STUDENTS

Aims and objectives

The scheme aims 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 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.

Some earmarked awards are offered to individual Departments and Faculties; other non-earmarked awards are allocated to Departments and Faculties by Councils of Schools at their discretion.

New awards 2000-2001

70 Shared-Cost Awards and **16 General Awards** were offered in 2001-2002 as follows:

Earmarked Shared-Cost Awards

Biochemistry	3	Classics	1
Chemical Engineering	3	Divinity	2
Chemistry	8	Economics	2
Computer Laboratory	2	English	1
Earth Sciences	1	History	1
Engineering	4	History and Philosophy of Science	1
Geography	2	Land Economy	1
Materials Science and Metallurgy	2	Social and Political Sciences	1
Physics	2	Unilever Centre for Molecular Science	2
Zoology	1	Informatics	
		Total	40

Earmarked General Awards

Education	1	History and Philosophy of Science	1
English	2	Law	1
History	1	Modern and Medieval Languages	2
		Philosophy	1
		Total	9

Additional non-earmarked Awards

	Shared-Cost Awards	General Awards
School of the Physical Sciences	10	
School of the Biological Sciences	8	
School of Technology	4	
School of Arts and Humanities	5	3
School of Humanities and Social Sciences	3	4
Total	30	7

By the end of February 2002, 50 Shared-Cost awards and 15 General awards had been taken up, representing a 76% take-up of the awards.

The scheme operated in the present form for the last time in October 2001. The introduction of Doctoral Training Accounts from EPSRC has meant that Science Departments may now pay maintenance grants at levels determined at their discretion. The Trustees have agreed to establish a new scheme of awards restricted to the Arts, Humanities and Social Sciences that will operate for the first time in 2002.

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 2001-2002

Main scheme

Thirty-two 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)
- Law (4)
- Mathematics (3)
- Modern and Medieval Languages (5)
- Physics and Chemistry (1)
- Social and Political Sciences (1)
- Social and Political Sciences and History and Philosophy of Science (1)

One additional (supernumary) award has been made to the Faculty of Oriental Studies (Turkish).

Thirty-one posts are currently filled and **two** are vacant (Law, and Social and Political Sciences). Two post-holders are currently on leave (Dr Gonda and Dr Tadmor) – their posts have been temporarily filled (by Dr Connell and Dr Tuck).

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

Norton Rose scheme

The CTO list includes also 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. Seven posts have been filled under the Norton Rose scheme.

Costs

The cost of the CTO scheme for the academic year 2001-2002 was **£120,105** – £116,190 to Colleges and £3,915 to the University. No further payments will be made to the University under this scheme. The cost of the Norton Rose scheme in 2001-2002 was **£24,517**.

Recent changes

Several new appointments and reappointments arose during the year.

Faculty of Classics

Dr Vedia Izzet, Christ's, appointed for 5 years from 1 October 2001, replacing Dr Whitmarsh who has been appointed to a post at the University of Reading.

Dr D J Thompson, Girton, reappointed for (final) 2 years from 1 October 2001.

Department of Economics

Dr Rupert Gatti, Trinity, appointed for 5 years from 1 October 2001.

Faculty of English

Dr Philip Connell, Selwyn, appointed for 1 year from 1 October 2001 as a replacement for Dr Caroline Gonda, St Catharine's, who is on leave for 2001-2002.

Dr R Douglas-Fairhurst, Emmanuel, appointed for 5 years from 1 October 2001.

Faculty of History

Dr Guy Rowlands, Newnham, appointed for 5 years from 1 October 2001.

Dr David Smith, Selwyn, appointed for 5 years from 1 October 2001.

Faculty of Modern and Medieval Languages

Dr Victoria Best, St John's, appointed for 5 years from 1 October 2001, replacing Dr Morgan who has been appointed to a Lectureship in German at the University of Oxford, and a Fellowship at Worcester College.

Dr Sarah Cooper, Trinity Hall, appointed for 5 years from 1 October 2001.

Faculty of Mathematics

Dr S Demoulini, Downing, appointed for 5 years from 1 January 2001.

Dr Matthias Dörrzapf, St John's, appointed for 5 years from 24 April 2001.

Faculty of Oriental Studies (Turkish)

Dr Kate Fleet, Newnham, appointed for 5 years from 1 January 2001.

Department of Physics

Dr J Riley, Girton, reappointed for 3 years from 1 October 2001.

Faculty of Social and Political Sciences

Dr P J N Baert, New Hall (and King's) resigned with effect from 30 September 2001 to take up a Fellowship at Selwyn College.

Department of Social Anthropology

Dr Barbara Bodenhorn, Pembroke (and Girton), appointed for 5 years from 1 October 2001.

Faculty of Law – Norton Rose CTO posts

Mr Michael Dougan, Downing, has transferred to a Newton Trust CTO post and **Dr Jennifer Davis**, Wolfson, has taken up the vacant Norton Rose post. The swap took place in order to meet the sponsor's wish to support a post in intellectual property law.

Dr Albertina Albers-Llorens, Girton, has been appointed to a University Lectureship in the Faculty of Law from 1 April 2002.

TABLE 4 : Present holders of CTO appointments

Name	Title	Initials	Faculty	No	College	Start of tenure	End of tenure
Baert	Dr	P J N	Social and Political Sciences	1 of 1	New Hall (and King's)	1.10.1998	30.9.2001
Best	Dr	Victoria	MML	2 of 5	St John's	1.10.2001	30.9.2006
Bodenhorn	Dr	Barbara	Social Anthropology	1 of 1	Pembroke (and Girton)	1.10.2001	30.9.2006
Brookes	Dr	C J B	Mathematics	1 of 3	Corpus Christi	1.10.1998	30.9.2003
Castor	Dr	H R	History	3 of 6	Sidney Sussex	1.10.2000	30.9.2005
Connell	Dr	Philip	English	3 of 7	Selwyn	1.10.2001	30.9.2002
Cooper	Dr	Sarah	MML	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	S	Mathematics	3 of 3	Downing	1.1.2001	30.9.2006
Dörrzapf	Dr	Matthias	Mathematics	2 of 3	St John's	24.04.01	31.3.2006
Dougan	Mr	Michael	Law	1 of 4	Downing	1.10.2000	30.9.2003
Douglas-Fairhurst	Dr	R	English	1 of 7	Emmanuel	1.10.2001	30.9.2006
Fleet	Dr	Kate	Oriental Studies (Turkish)		Newnham	1.1.2001	30.9.2006
Gatti	Dr	Rupert	Economics	1 of 1	Trinity	1.10.2001	30.9.2006
Guthrie	Dr	J	MML	1 of 5	New Hall	1.10.2000	30.9.2005
Izzet	Dr	Vedia	Classics	2 of 2	Christ's	1.10.2001	30.9.2006
James	Dr	I	MML	4 of 5	Downing	1.10.2000	30.9.2005
Khalfa	Dr	J	MML	5 of 5	Trinity	1.10.1998	30.9.2003
Lyne	Dr	R	English	5 of 7	New Hall	1.10.2000	30.9.2005
O'Hanlon	Dr	R	History	1 of 6	Clare	1.10.2000	30.9.2005
Phillips	Dr	Cathy	English	4 of 7	Downing	1.10.1999	30.9.2004
Preston	Dr	Claire	English	2 of 7	Sidney Sussex	1.10.1998	30.9.2003
Reid	Dr	A J	History	2 of 6	Girton	1.10.1993 1.10.1999	30.9.1998 30.9.2002
Riley	Dr	J	Physics and Chemistry	1 of 1	Girton	1.10.1996 1.10.2001	30.9.2001 30.9.2004
Rowlands	Dr	Guy	History	5 of 6	Newnham	1.10.2001	30.9.2006
Seville	Miss	C	Law	2 of 4	Newnham	1.10.1995 1.10.2000	30.9.2000 30.9.2003
Smith	Dr	David	History	4 of 6	Selwyn	1.10.2001	30.9.2006
Tee	Mrs	L	Law	3 of 4	Lucy Cavendish	1.10.1998	30.9.2003
Thom	Dr	D	SPS and HPS	2 of 2	Robinson	1.10.1995 1.10.2000	30.9.2000 30.9.2003
Thompson	Dr	D J	Classics	1 of 2	Girton	1.10.1992 1.10.1998 1.10.2001	30.9.1998 30.9.2001 30.9.2003
Tuck	Dr	S G N	History	6 of 6	Gonville & Caius	1.10.2000	30.9.2002
Zeeman	Dr	N	English	6 of 7	King's	1.10.2000	30.9.2005
Albors-Llorens	Dr	Albertina	Law – Norton Rose		Girton	1.10.1999	31.3.2002
Davis	Dr	Jennifer S	Law – Norton Rose		Wolfson	1.10.2000	30.9.2005
Kim	Dr	Keechang	Law – Norton Rose		Selwyn	1.10.2000	30.9.2002
McBride	Dr	Nick	Law – Norton Rose		Pembroke	1.10.1999	30.9.2004
Miles	Ms	Jo	Law – Norton Rose		Trinity	1.10.2000	30.9.2003
Rotherham	Dr	Craig	Law – Norton Rose		Gonville & Caius	1.10.2000	30.9.2003
Spaventa	Dr	Eleanor	Law – Norton Rose		New Hall	1.10.2000	30.9.2003

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 to make up to 25 posts available for 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

Some 11 posts were taken up in the first round of applications and two of these subsequently resigned. The Trustees advertised a second round of appointments to be filled from October 2001 onwards and a further 11 posts were taken up. A total of 6 posts are currently vacant.

TABLE 5 : Persons approved for the Time-Limited Teaching Fellowships Scheme

Name	Lastname	College	Department	From	End of post-doc
Stephen	Ball	New Hall	Chemistry	1.10.01	30 April 2005
Daniel	Beauregard	Selwyn College	Biochemistry	1.10.00	30 September 2005
Gillian	Bennett	Lucy Cavendish College	Pharmacology	1.10.01	30 September 2002
Caroline	Blyth	St Edmund's College	English	1.10.00	30 September 2005
Andrew	Bond	Wolfson College	Natural Sciences	1.10.01	30 September 2006
Harriet	Bulkeley	St Catharine's College	Geography	1.10.01	30 September 2004
Anthony	Challinor	Queens' College	Physics	1.10.01	30 September 2003
Kate	Clarke	Queens' College	Plant Sciences	1.10.01	30 September 2004
Paul	Cornish	Wolfson College	Centre of International Studies	1.10.00	30 September 2003
John	Cunningham	Selwyn College	Physics	1.10.01	30 April 2004
Charlotte	Dargie	Lucy Cavendish College	Judge Institute	1.10.00	30 September 2004
Ann	Kaminski	St Edmund's College	Biochemistry	1.10.00	30 September 2003
Nicola	McCarthy	St Edmund's College	Clinical School	1.10.00	30 September 2003
Carla	Molteni	New Hall	Physics	1.10.00	30 September 2003
Stephen	Padley	Robinson College	English	1.10.00	30 September 2005
Carol	Sargent	Hughes Hall	Pathology	1.10.00	31 December 2003
Catherine	Speed	Hughes Hall	Rheumatology	1.10.01	31 May 2005
David	Spring	Queens' College	Chemistry	1.10.01	30 September 2004
Christopher	Warner	Robinson College	DAMTP	1.10.01	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, because of cuts in public funding, 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 of funds available. The awards are made by the General Board's Committee on Awards.

The Trustees have agreed to review their contribution to this scheme in 2002.

Grants awarded

In 2001 some 42 new awards were made by the General Board's Committee.

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, both University and College, but not, at present, for maintenance.)

Policy

The Trustees agreed to make a donation to the Cambridge European Trust totalling £600,000 to be spread over five years 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.

The Trustees further agreed to consider providing a further donation of £400,000 for the same purpose. A review will take place in 2002-03 by when, it is hoped, a decision will have been made by Research Councils as to whether EU students may receive maintenance support.

Grants awarded

The Cambridge European Trust made some 61 awards (totalling £122,000) under this scheme to research students in 2001-02.

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 may take place that will be met from the General Fund.

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, 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

The first four grants have been paid. Work in preparation for the Criminology building has begun and it is expected that the final grant will be paid in the coming year.

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, 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 and Plant Sciences, the first of four instalments to Geography, and the first of five instalments to the Computer Laboratory 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 and Engineering and the first three 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 the 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 matching 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 2002 the third instalment of the donation to each College was due to be paid. In all but two cases where further information was required the donation was paid. In more than half the cases, the endowment funding from the Trust has been matched by corresponding donations from donors (usually alumni) outside Cambridge.

APPENDIX 1

Isaac Newton Trust

Accounts

for the year ended 31 January 2002

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 –
1995	448 – 496		

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.