### EVALUATION OF THE WELLCOME TRUST HISTORY OF MEDICINE PROGRAMME



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APRIL 2000

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### Executive summary

This report describes an evaluation of the Wellcome Trust History of Medicine Programme. This evaluation was intended to answer three main questions:

- (i) What is the state of the history of medicine in the UK and how has it developed during the period of Trust funding, from around 1960 onwards?
- (ii) Are the overall size, shape and funding structures of the Wellcome Trust's History of Medicine Programme satisfactory?
- (iii) What impact has the history of medicine had on the study of history in general, the general public, health policy development and medical practice?

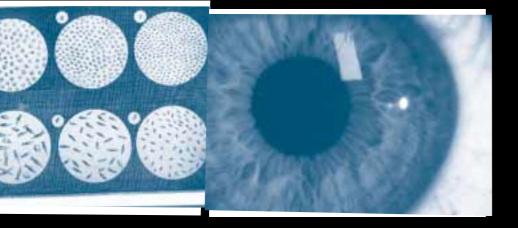
#### **Main findings**

We sought evidence from written questionnaires; personal interviews in the UK, continental Europe, the USA and Canada; a bibliometric study; and a workshop with members of the history of medicine community. Our main findings are as follows.

- 1. Over the last 30 years, the history of medicine has become a flourishing academic discipline in the UK, and is considered to be a leader in the international history of medicine community.
- 2. In particular, it is associated with the development of social approaches in the field, and innovative use of methodology and concepts from a variety of disciplines. A tendency to concentrate on UK issues and a lack of exploitation of international sources for comparative material were identified as potential weaknesses in the current field.
- 3. The diverse academic backgrounds of researchers and the broad-ranging nature of research interests are considered to contribute to the vibrancy of the UK discipline.
- 4. The integration of the history of medicine into the mainstream UK university system has been a key achievement of the last 30 years. It has taken root in a variety of locations from independent units encompassing a large number of scholars, to individual positions in history and other departments. The geographical spread of the subject across the UK is considered to be important, particularly for regional research and dissemination.
- 5. Research in the field tends to be carried out individually by scholars, but there is a strong emphasis on maintaining close contact with other historians of medicine. This is considered to be particularly important for nurturing a good research and training environment, and is strongly supported by history of medicine students.

- 6. In spite of its growing presence in UK universities, a key problem facing the field as indeed for other fields remains one of long-term career stability. While overall the Trust's funding in the field is thought to be good, particular questions arise about the balance between its various schemes. In the short term, there are concerns about the lack of secure opportunities available to researchers at mid-career level and there is widespread support for the resumption of the University Award scheme. In the long term, it is feared that insufficient numbers of PhD students are being trained to maintain the present size of the field. A coherent strategy on careers needs to ensure that both the levels of funding are right at each stage, and that gaps between them are filled.
- 7. The administration of the Trust's Programme was praised for its friendliness and efficiency, but some refinement and clarification of procedures are needed, particularly in terms of detailed dissemination of policies. There is considerable enthusiasm in the field for greater involvement and consultation in the policy process.
- 8. In terms of its wider impact, the history of medicine in the UK has had a significant influence on general history, and has, in turn, derived much benefit from being seen primarily as a historical discipline. Its close links to the history of science are thought to be of continued importance, and the dynamic between the two subjects needs to be considered in the context of the funding scope of the Trust Programme.
- 9. Interactions between medicine and the history of medicine, and communication of research to wider audiences appear to be the smallest areas of activity, in part owing to the research emphasis which funding schemes have imposed on the discipline, both in Trust reviews and the Research Assessment Exercise (RAE).
- 10. Unlike the situation in other areas of Europe and North America, history of medicine in the UK is not primarily associated with medical schools and, although there are some mutually advantageous links, there are areas for improvement. Teaching of the history of medicine to medical students was highly praised where it did occur, and there is much potential for its expansion, if issues of time and resources can be addressed.
- 11. Some types of dissemination to wider audiences have been very successful, including television programmes, popular books and exhibitions. The Trust could play a much bigger role in supporting these activities, by making provision for them in its awards and by taking account of them in evaluation procedures. The History of Medicine Programme has the potential to overlap with other areas of Trust interest, in its public understanding of science activities and also in cross-Panel interdisciplinary projects in more contemporary areas of the discipline. As well as continuing and building on the intellectual leadership which the UK field now possesses, there is much scope for the Trust to play a greater role in encouraging the larger academic and public interest which such research excellence in the history of medicine has fostered.

# Introduction



### 1 Introduction

#### 1.1 Background

In April 1999, the Medicine, Society and History Committee agreed to carry out an evaluation of history of medicine activity in the UK to inform the Wellcome Trust on future directions that could be taken to develop the Trust-funded Programme. The main objectives for the evaluation were to:

- ➤ provide the History of Medicine Grants and Units Panel with a view on the state of the history of medicine in the UK and show how this has developed during the period of Trust funding, from approximately 1960 onwards;
- review the overall size, shape and funding structure of the Wellcome Trust's History of Medicine Programme;
- review the impact of the history of medicine on the study of history in general, the general public, health policy development and medical practice.

The evaluation was conducted by the Wellcome Trust's Policy Unit. At the same time, the Trust commissioned the Office for Public Management (OPM) to seek a broad range of views on the Wellcome Trust's involvement in the history of medicine and to present options for the future.

This report presents the following outcomes of the Policy Unit's review:

- the remainder of Chapter 1 provides a brief history of the History of Medicine Programme and an outline of the evaluation methodology;
- ➤ Chapter 2 analyses the state of the history of medicine in the UK and how it has changed over the last 30 years, drawing on questionnaires, interviews and bibliometric

- studies. Some areas of UK strength and weakness have been identified;
- ➤ Chapter 3 looks at the overall size, shape and funding of the Trust's Programme. In particular, it examines the demography of the profession, its geographical distribution and specialization, the Trust's support schemes and the development of policy and programme administration;
- Chapter 4 considers the influence of the history of medicine on other academic disciplines, on the medical profession and health policy, and on the general public.

#### 1.2 The Wellcome Trust History of Medicine Programme

Sir Henry Wellcome's philosophy of research was all-encompassing and not restricted to a quest for new medicines, but instead

"incorporated a broad and historical study of the human scene and of the ills that flesh is heir to." 1

The breadth of Wellcome's concept of research is evident from his Will, in which he provided for two funds. First, 'The Research Fund' for

"the advancement of research work bearing upon medicine surgery chemistry physiology bacteriology therapeutics materia medica pharmacy and allied subject and any subject or subjects which have or at any time develop an importance for scientific research which may conduce to the improvement of the physical conditions of mankind..." <sup>2</sup>

Second, 'The Research Museum and Library Fund' for

"...my Research Museums or Libraries now in existence and...any new Research Museum or Library and for the purchase and acquisition of books

<sup>&</sup>lt;sup>1</sup> Hall A R, Bembridge B A (1986) Physic and Philanthropy: A history of the Wellcome Trust 1936–1986. Cambridge University Press, p. 4.

<sup>&</sup>lt;sup>2</sup> A copy of the Will of the late Sir H S Wellcome, and the memorandum for the guidance of his trustees. Cameron Markby Hewitt, 1936, p. 7.

manuscripts documents pictures and other works of art and other objects and things for such research Museums or Libraries and for conducting researches and collecting information connected with the history of medicine surgery chemistry bacteriology pharmacy and allied sciences..." <sup>3</sup>

In accordance with this aim, a vast quantity of paintings, books, manuscripts and other artefacts were collected for the Museum and Library. In 1967, a symposium was held in order to assist the Trustees in their formulation of policy regarding the history of medicine. It was apparent that the Wellcome Institute (Museum and Library) was greatly esteemed in the UK and abroad; in particular, the facilities offered by the Library to foreign scholars were praised.<sup>4</sup>

The outcome of the symposium was a decision by the Trustees to devote more money to the history of medicine and its own Institute. This would be achieved by building up the capacity of the academic discipline in the UK through the funding of a number of units to encourage postgraduate-level research. In 1976, an Academic Unit was formally established at the Institute under a 'scheme of association' with University College London, devoted to research and advanced teaching in the history of medicine. Trust support also spread beyond London as other universities developed a scholarly interest in medical history. Units were established at several other UK universities: Cambridge (1971-97), Oxford (1972-), Edinburgh (1976-84), Glasgow (1985-), Manchester (1986-) and East Anglia, Norwich (1998-).

The Trust's support for the history of medicine now occurs through a wide variety of schemes, including travel, symposia, project and programme grants, and support for individuals through studentships and fellowships. In 1990, a programme of University Awards was added to address the Wellcome Trust's concern about the lack of established posts in history of medicine outside the Units. These were five-year fellowships, with the Trust paying for the first three years and the host institution

progressively assuming responsibility for the post-holder, who was assured of an established teaching post at the end of the five years.

From the outset, the History of Medicine Programme has been open to applicants from the Republic of Ireland as well as the UK, although few have come forward. Since 1991, eight awards have been made to applicants from The Netherlands and one-year fellowships have also been made in an attempt to widen the Programme to continental Europe and the USA. The History of Medicine Programme operates in a similar way to the biomedical ones: it has a peer-review panel, which includes one overseas member, and a current annual budget of £4.5 million. This is relatively small, representing about 1 per cent of the total Trust expenditure in 1999/2000.<sup>5</sup>

#### 1.3 Definition and evaluation

Evaluating the History of Medicine Programme presented a number of methodological issues. First, the scope of the study had to be defined in terms of the discipline and second, the most appropriate methods had to be considered for its evaluation.

The scope of the study was set by creating a definition of the history of medicine against which researchers could assess themselves. This definition evolved from discussions with OPM, the evaluation Steering Group (see below) and the Trust's History of Medicine Grants and Units Panel. The agreed definition for the evaluation was:

- the history of medical, dental and veterinary knowledge, including epidemiology and diagnostic and therapeutic practices;
- ➤ the history of medical, dental and veterinary practitioners and the organizational structures that underpin their activities;
- ➤ the study of the interactions between medicine and society and the processes by which the

<sup>&</sup>lt;sup>3</sup> Ibid. p.9.

<sup>&</sup>lt;sup>4</sup> See Hall A R, Bembridge B A, p. 141.

<sup>&</sup>lt;sup>5</sup> By contrast, from 1964 to 1976, history of medicine funding represented between 10 and 15 per cent of the Trust's total expenditure (although this was a much smaller total than at present). See Hall and Bembridge, p. 414.

evolving power structures, behaviours and beliefs of society can be illuminated.

In the context of this definition, we took 'medicine' to mean not only the treatment of patients but also the prevention of illness and health improvement.

There is an extensive literature on the theory and practice of research evaluation, but most of it is concerned with scientific research. In biomedical science, for example, publications in journals are a widely accepted measure of output, as their numbers are usually large so that statistical methods can be used to make comparisons. Although we attempted to gauge the overall success of UK history of medicine in part by bibliometric means, we considered them inappropriate for an evaluation of the Trust's individual funding schemes or particular Units or universities for the following reasons:

- although books make up a significant part of a group's research output, their numbers are too few and they vary too much in size to be evaluated by a simple metric;
- individual researchers will often have been supported by more than one type of grant from the Trust, making it difficult to attribute a publication to a particular funding scheme;
- because many books and conference proceedings will have been financed by several different sources, the apparent role of the Trust in their support will be magnified.

Even if it had been possible to have accounted for these factors, an assessment of the effectiveness of different support mechanisms or of individual groups of researchers would need to be balanced by wider considerations, such as issues of career development or regional distribution of research.

Therefore, we carried out an evaluation of the whole Programme on the basis of the three questions and considered the balance between funding schemes in the context of a number of wider issues.

Throughout, we have sought to collect evidence from a wide range of sources in order to increase confidence in our findings.

The evaluation was guided by a Steering Group,

which advised us on the methodology and provided an outside perspective on the field. This group, chaired by Dr Laurence Smaje, the Director for Medicine, Society and History, consisted of three other people:

- Professor Martin Daunton, University of Cambridge;
- ➤ Professor Robert Fox, University of Oxford;
- Professor Eddy Houwaart, University of Amsterdam and a current member of the Trust's History of Medicine Grants and Units Panel.

#### 1.4 Evidence used for evaluation

Full details of the methodology are given in the Annexes. The principal means of enquiry used were as follows:

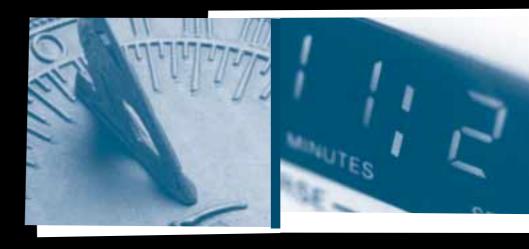
- Written questionnaires. These were sent out to five groups:
  - ▶ UK history of medicine researchers (416 sent out, 149 returned);
  - foreign history of medicine researchers (190 sent out, 52 returned);
  - UK history of medicine PhD students (100 sent out, 41 returned);
  - physicians who had attended history of medicine courses (BSc or Society of Apothecaries: 100 sent out, 33 returned);
  - researchers in related fields (e.g. social history, history of science, biomedicine: 100 sent out, 30 returned).

Further details are in Annex A.

➤ Interviews with UK history of medicine researchers. These were intended primarily to illuminate organizational and administrative issues, and to allow first-hand knowledge of the situation in UK universities. A total of 48 interviews were conduct ed in 11 universities: Cambridge, Durham, Exeter, Glasgow, London, Manchester, Newcastle, Oxford, Oxford Brookes, UEA and Warwick. Further details are in Annex B.

- ➤ Interviews with history of medicine researchers from Canada, USA, France, Spain, Germany, and The Netherlands. These were designed to learn about the organization and funding of history of medicine research in other Western countries and gather views on the UK history of medicine field and the Wellcome Trust Programme. Further details are in Annex C.
- ➤ A bibliometric study of publications, both articles in journals and books or monographs. In particular, a comparison was made between UK and US outputs. Details of the methodology can be found in Annex D.
- ➤ A workshop, held on 24 November 1999 at the Wellcome Trust. This was organized jointly by the Policy Unit and OPM. Invitations were extended to 25 researchers in the UK history of medicine community, including members of Trust Units, University Award holders, those from other large history of medicine groupings, and students at postdoctoral and PhD level. All attendees had either already participated in an interview for the evaluation, or responded to a questionnaire. The purpose of the day was to share some preliminary findings of the evaluation and to consider the possible interpretations and implications of them. Further details are in Annex E.

# The standing of UK history of medicine



### 2 Standing of UK history of medicine

#### 2.1 Introduction

This chapter intends to answer the first of the three evaluation questions. It begins with a short discussion on the nature of the discipline of history of medicine and its relation to other disciplines. The next sections review evidence on the overall standing of the field in the UK – from the perspective of UK history of medicine researchers themselves, from history of medicine researchers in North America and continental Europe, and from bibliometric studies.

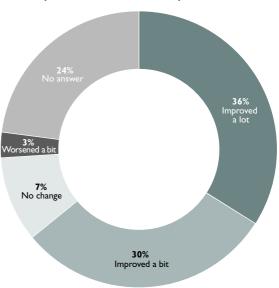
Before embarking upon a detailed review of the standing of the history of medicine, it is important to understand the nature of the discipline itself. Throughout our interviews, it became clear that it is impossible to consider history of medicine except in the context of the other disciplines that have contributed to its evolution, and which continue to play an intrinsic part in its existence. Described as a field that faces many directions, gaining creativity from the tension between the disciplines it crosses, interviewees provided many examples of this in their research:

"History of medicine is absolutely interdisciplinary. I collaborate here with other departments on the history of pharmacology and twentieth-century biological sciences. It helps having a medical background to communicate. I also collaborate with the history department on colonial history."

A subject like the history of medicine appears to invite an interdisciplinary approach, with the methods of two or more disciplines being brought together to consider a common issue. Most clearly this is seen in the interaction between medicine and history, but the subject also overlaps with interests in areas as diverse as geography and sociology through to biology and chemistry.

The close connection of the field with other disciplines is also demonstrated in the diversity of academic backgrounds from which current

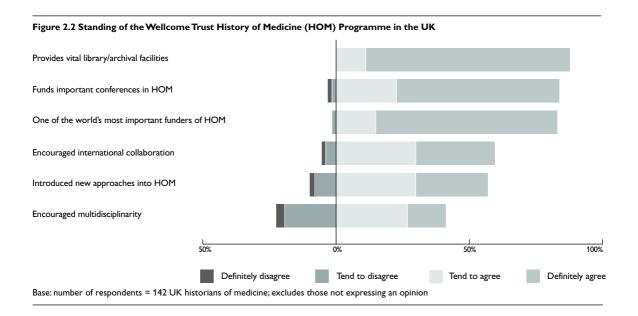
Figure 2.1 Perceptions of change in the international profile of UK history of medicine over the last ten years



Base: number of respondents = 142 UK historians of medicine

historians of medicine originate, including classics, English, modern languages and science, as well as history and medicine (as is discussed in more detail in Chapter 3). Many history of medicine researchers study within the context of other disciplines, and indeed work in the field is often carried out in different departments under a variety of names, such as medical demography, sociology and historical epidemiology.

For researchers, the study of the history of medicine can constitute a full-time career or one particular aspect of another research agenda. As such, it is a field that involves research on a number of different levels, from full-time university positions to one-off project and programme grants. Not only does the history of medicine interface with a multitude of other subjects but it also, for this reason, comprises a remarkably fluid population at any one time, with many people moving in and out of the field as their research interests steer them.



#### 2.2 Standing and influence of the UK field

We attempted to gain a view on the standing of the UK history of medicine field from a variety of perspectives. We asked those in the UK to assess for themselves their view of the field; we sought international views on the field; and we reviewed the strength of the UK by considering measures relating to the numbers and impact of publications produced. We recognize that each of these measures alone could be vulnerable to criticism: however, by reviewing them together and seeing whether or not they point in the same direction, we can provide a reasonably robust view of the standing of the field in the UK.

#### 2.2.1 The UK perspective

We sought the views of UK historians of medicine on the current position of their field through interviews and written questionnaires. The impression given during the interviews was very positive, a typical comment being:

"The UK field is the most innovative and dynamic in the world."

Nearly all respondents were agreed that the discipline was currently flourishing, with a majority of UK historians of medicine believing that the UK standing of the history of medicine had improved over the last ten years (see Figure 2.1).

It was striking the extent to which there was agreement on the dramatic influence of the Wellcome Trust (see Figure 2.2).

"Wellcome funding gave Britain an international standard in the history of medicine. The late 1970s–1980s, when Units began to emerge, was a very important time. 1985–95 was when the fruits of research became obvious...the standing rose hugely."

"There have been an increased range of journals, monographs and conferences since the 1970s. There was a falling fashion in urban history and demography/econometrics – and a re-styling as health/medical historians. Momentum gathered, supported by Wellcome funding."

The social and, more recently cultural, perspectives on the history of medicine were considered to be strong and distinctive UK developments.

Students working for their doctorates admired past generations for the development of the subject, but considered that there were still a great many new opportunities – both in terms of work that could be

carried out in a regional context, as well as the development of the discipline more generally. We found a high level of enthusiasm with regard to the future potential of the discipline from PhD students:

"There's a feeling that it is an under-exploited area with opportunities. With Wellcome there is the backup to take advantage of them. It is enjoyable being part of something which is growing rather than diminishing."

Where concerns did exist within the UK academic community about the reputation of the discipline, these tended to focus on gaps in knowledge – especially in the regional context:

"There are huge gaps, especially in Scottish medical history, holes that need filling up. Most British history is English history, most English history is London history."

#### 2.2.2 The international perspective

The international perspective of the field was sought from questionnaires sent to the international community and interviews overseas. These were conducted in Canada, the USA, France, Germany, The Netherlands and Spain, where there has been long-standing research activity in the field. The results from the interviews and questionnaires give a positive view of UK history of medicine and the Wellcome Trust's role, as one international questionnaire respondent illustrates:

"Simply put, it is the largest, most diverse, generally most capable and best history of medicine program in the world... The Wellcome is the link between the US and Canada and Europe. If it did not exist, it would have to be invented."

There seemed to be little doubt among international interviewees that the current standing of UK history of medicine was extremely high and that the Wellcome Trust played an integral role in its development. Its incorporation of other disciplines and development of new methodologies were frequently mentioned:

"History of medicine in the UK is open to new topics and ideas."

In the opinion of many, the location of the discipline in a variety of situations – and especially separate units and history departments – had allowed the history of medicine to develop beyond the control of the medical schools and their perceived traditionalism. Several related this divergence to the independent funding base that the Wellcome Trust afforded the subject:

"The Wellcome Trust has built a very powerful, strong structure."

Others, however, considered the UK field to be vulnerable precisely because of its separation from its traditional medical academic base, and because of its high dependence on one charitable fund.

Interviewees were asked to give their views on the perceived strengths and weaknesses of subject areas or periods in the history of medicine in the UK. Table 2.1 lists those areas of strength and weakness that were mentioned most frequently during interviews with international researchers.

A clear message from the majority of interviewees was that the UK's key strength was the social history of medicine:

"The UK successfully combined history of medicine and social history... This has been very important as it formed the link between medical history and the social context."

With praise for the subject came some expressions of concern. In particular the UK's perceived Anglo-American bias, lack of reference to continental European sources and limited second-language skills:

"Its [history of medicine's] splendid isolation!...
British medical history fails to take into account
the European experience. A major disadvantage is
its focus on British history only...Brilliant students
go to London but few of their British counterparts
spread out."

"The English don't feel that they need to be fluent in another language... UK history of medicine does not know what it is missing because of its lack of language ability."

Table 2.1 Number of mentions (above two) of percieved strengths and weaknesses of subject areas and periods in the UK history of medicine field by international interviewees.

Strengths	n	Weaknesses	n
Social history of medicine	37	Too UK-focused	20
Patient's viewpoint	10	Early modern period	18
Demography	10	Twentieth-century history of medicine	12
Nineteenth-century history of medicine	9	Comparatives with continental Europe	6
Medieval history of medicine	6	Language	5
Classical history of medicine	5	Ethnicity and gender	4
Eighteenth-century history of medicine	5	Health policy	3
Colonial history of medicine	5	Physicians' viewpoint	3
Institutions, hospitals	5		
Mental health/psychiatry	5		
Twentieth-century history of medicine	4		

As Table 2.1 shows, opinion was more divided on other issues, such as twentieth-century medicine, where different interviewees variously rated it both highly and poorly.

#### 2.2.3 Publications

In order to seek a quantitative measure for the standing of UK history of medicine, we carried out a number of bibliometric analyses to consider the volume of publications and their relative impact, which may be taken as a surrogate indicator of their quality.

Volume measures used were:

- > numbers of journal articles;
- numbers of books and monographs cited by history of medicine articles;
- numbers of history of medicine books reviewed in journals.

Impact measures used were the numbers of citations and numbers of reviews for individual books.

We recognize that these indicators are open to different interpretations. However, the justification for using them is that they provide a further pointer – to be considered in the context of others – on

the overall standing of the field. The results of the bibliometric studies reveal similar trends to the outcomes of the interviews and questionnaires.

Taking volume indicators first, we counted the number of history of medicine papers published in journals covered in the Social Sciences Citation Index (SSCI). It showed that, during the period 1988 to 1999, the UK averaged 18 per cent and the USA 51 per cent of all history of medicine papers. This compares with a 10 per cent share for the UK in biomedicine and a 40 per cent share for the USA. In history of medicine, UK output overall averaged more than one-third of US output, and in the last two years it increased to almost one-half. From this it is possible to conclude that UK output of papers in history of medicine is very strong (even allowing for the English-language bias in the SSCI) and that it has grown relatively over the last decade.

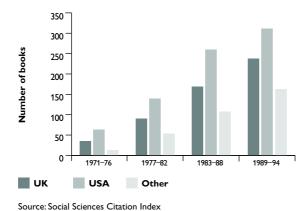
In order to estimate the number of books in the history of medicine field, we determined the number of book reviews appearing in SSCI journals. During the period 1988 to 1999, there were reviews of 1847 different history of medicine books, of which 664 had identifiable addresses for the authors. Of these, 32 per cent were from the UK and 44 per cent were from the USA. If the authors with addresses are a representative sample of the total,

<sup>6</sup> This limitation is because the addresses of the authors of books are not normally given, and have to be discovered from other sources such as from articles by the authors in SSCI journals. This means that only some of the books cited as a reference or formally reviewed can be attributed to a country. This might be explained by many non-Anglophone authors not writing articles or book reviews in journals covered by the SSCI.

then it appears that the UK is authoring proportionately more books than papers, relative to the USA.

History of medicine books can also be identified from references given in history of medicine articles in the SSCI. These citations allow estimates of the volume of output from much earlier years, although only a minority of the books so identified can be attributed to specific countries. Figure 2.3 shows the numbers of books from the UK, the USA and other countries over the period 1971 to 1994. The UK share has remained almost constant at 32 per cent, whereas the US share has declined from 60 per cent in the early 1970s to 43 per cent in the early 1990s. This is further evidence of the high and increasing standing of the UK relative to the USA in terms of output. 8

Figure 2.3 Citation of books in history of medicine articles, 1971–94



We next sought evidence of impact by using the numbers of citations and numbers of reviews as proxy indicators. Citations of books from history of medicine journal articles in the SSCI were unified to give citation counts for each document.

Table 2.2 shows the percentage differences between UK, USA and other countries in relation to numbers of citations (3 or more, 6+ or 12+) given to books. During the time period 1970–87 UK-authored books were being cited about as often as US-authored ones (and much better than ones from other countries), while from 1988 the UK books were being cited more often than US and other ones (Table 2.2). This suggests that the impact (or quality) of UK books has increased and is now superior to that of US ones.

When considering this evidence, it should be borne in mind that some of the other-country books would have been in languages other than English. This would reduce the number of potential citations from Anglophone authors. There is also a marked tendency for authors to cite preferentially others from the same country. Since US history of medicine articles outnumbered UK ones over the period by nearly threefold, this strengthens our conclusion of the high relative impact of UK history of medicine books.

The other indicator of book impact was the number of times they were reviewed.

Table 2.2 Percentages of all identified books from the UK, USA and other countries cited in history of medicine articles in SSCI with given numbers of citations.

Number of		1970–87 (	%)		1988 and la	ater (%)
citations	UK	USA	Other	UK	USA	Other
3+	31.3	31.6	15.9	19.9	12.1	16.8
6+	14.8	12.4	6.2	8.8	4.6	3.6
12+	4.3	5.0	2.8	2.1	0.9	0.0

Books were distinguished from journal articles by the absence of a volume number in the citation. Although the large majority appeared to be books, there were also some reports and conference proceedings. The term 'books' in the following analyses therefore refers to all non-jornal documents.

 $<sup>^{8}</sup>$  The decline in the percentage of US output is statistically significant on a  $\chi^{2}$  test with p=0.02.

The distribution of numbers of reviews for books identified as coming from the UK, USA and from other countries is shown in Table 2.3.

On this criterion, UK books are reviewed less often than those from the USA, although they are comparable to ones from other countries. However, as mentioned above, there is a same-country bias in book reviewing. The reviewers were predominantly from the USA (55 per cent), with only 29 per cent from the UK. There was concern that this result might also reflect different review practices in the UK and USA. However, consultation with a number of interviewees suggested that there was no consistent pattern of practice in either country.

Table 2.3 Percentages of UK, US and other-country history of medicine books reviewed in SSCI journals from 1988 to 1999.

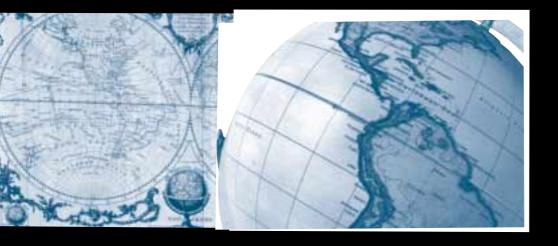
No. of		Percentage	
reviews	UK	USA	Other
3+	33.2	41.2	34.2
6+	10.7	17.9	11.6
12+	2.3	2.4	1.9

A more important factor appeared to be the willingness of academics to write book reviews. Although this will depend primarily on the interest of a book to the individual reviewer, it may also reflect whether they gain academic credit for such activities, which can vary as much between universities as it does between countries.

#### 2.3 Conclusions

UK history of medicine research appears, from all the evidence we have been able to collect, to be of very high international standing. This reputation has increased over the last 30 years, as shown both by the opinions of interviewees and our bibliometric studies. Moreover, UK history of medicine books appear to have an even stronger world presence than journal articles, and their impact is comparable to that of US books. The only consistent negative point made was the lack of international comparative analysis in the field. Overall, however, it would appear that the discipline of history of medicine is flourishing in the UK.

# The History of Medicine Programme – size and shape



### **3** The History of Medicine Programme – size and shape

#### 3.1 Introduction

This chapter considers the Wellcome Trust History of Medicine Programme in the context of the UK field at large, examining in particular the composition of the field, how it is funded, and exploring issues relating to working patterns, careers and the running of the Programme.

#### 3.2 The history of medicine community

We attempted to form a better understanding of the history of medicine community by examining:

- the size of the field, in a national and international context;
- the age structure, research interests and disciplinary backgrounds of history of medicine researchers.

## **3.2.1** The size of the UK history of medicine community

The particularly broad nature of the subject and the appeal which it holds for a wide variety of academic researchers, as discussed at the beginning of Chapter 2, make it impossible to delineate a clearly identifiable or static population of history of medicine researchers at any time. The various levels at which academics engage in research in the field - from an occasional interest which forms part of a wider research agenda, to a lifetime career in a history of medicine position provide a sense that the community comprises both a 'core and penumbra' of researchers at any one time. Any survey that considers the age structure, degree background, or research focus of a history of medicine community will, therefore, represent a mixture of both short- and long-term interests in the field. In the questionnaires sent out for this evaluation, attempts were made to filter recipients according to whether they considered their work to fall under the given

definition of the history of medicine,<sup>9</sup> and whether they held an active interest in the field.

Attempts to estimate the size of the UK community naturally invite criticism of any one definition of the subject and its boundaries. The different ways in which both researchers and organizations interpret their interests and classify their work makes distinctions of one recognizable community problematic. As a result of such difficulties, conclusions derived from information about the size and shape of the field, and scope of research interest, are automatically limited both by definitions of the discipline and the nature of research carried out.

Notwithstanding the above, this evaluation attempted to capture a broad representation of history of medicine interest throughout the UK by a variety of methods. Potential questionnaire recipients were identified using two databases (supplemented by additional information on PhD students). To place the results into a wider context, both bibliometric and other data sources were used to provide different comparative settings. The first considered the UK history of medicine in an international context. The second considered its shape and size compared to the wider UK history base.

Levels of history of medicine interest in the UK were first measured through the Trust's own database of applications. Taking a ten-year period of grant applications (removing duplicates), we identified a potential population of just over 500 individuals. The level of interest in the field that this implies was not borne out by the number of replies received to the questionnaires (149 replies from the 416 posted). Although the low response rate may be attributable to a range of reasons, <sup>11</sup> this suggests that while there may be up to 500 individuals with an interest in the history of medicine (the penumbra), there may also be a significantly smaller core at any given time.

<sup>&</sup>lt;sup>9</sup> As detailed on page 10 of this report.

<sup>&</sup>lt;sup>10</sup> See Annex A for details.

<sup>&</sup>lt;sup>11</sup>Such as a proportion of individuals no longer working at the application address, or lacking time to respond to the questionnaire

The Higher Education Statistical Agency (HESA) does not use a separate history of medicine category for data collection. However, it provides information on the numbers of historians that are funded by a medical charity (63 individuals in 1997/98), which represents approximately 2 per cent of the total population of UK historians.<sup>12</sup>

The Social Sciences Citation Index (SSCI) was used to consider the level of UK history of medicine interest in an international context. While the English-language bias in the SSCI makes it impossible to speculate on a worlwide basis, it does provide some measure of the UK population in relation to a wider English-speaking/publishing community. Over a 12-year period, out of a total of 2334 individuals addresses for history of medicine papers listed in the SSCI, 1246 were in USA (53 per cent of the total), 527 in the UK (23 per cent), 144 in Canada (6 per cent) and 73 in Australia and New Zealand (3 per cent).

In conclusion, the UK history of medicine population is the second largest English-speaking history of medicine community in the world. Around 500 researchers have been active in the UK field over the last decade. Taking into account changes over time as well as differences between 'core' and 'penumbra' levels of interest, it is likely that the current number of researchers with an interest in the history of medicine is about half that figure.

#### 3.2.2 Age profile of UK historians of medicine

Determining the age profile of researchers within the history of medicine is clearly difficult given the problems of identifying the members of the history of medicine population. However, we can show the age distribution of the researchers and PhD students who responded to the questionnaire, and compare their age distribution with that of history academics in total, in order to see whether there are similarities or differences in the overall shape of the profiles.

Figure 3.1 shows the age distribution of current UK history of medicine researchers and PhD students who responded to the questionnaire. Figure 3.2 sets out the corresponding distribution of all history staff in UK universities (not including PhD students).

With regard to the long-term sustainability of the field, a number of points are evident:

- ➤ For the history of medicine, the largest number of researchers of both sexes is in the 46–55 year age ranges, which is similar to the pattern for history overall. This reflects concerns registered by interviewees about the ageing profile of the history of medicine community both in the UK and abroad.
- ➤ Questionnaire findings indicate that there are significantly more female PhD students than male. <sup>13</sup> This would suggest that there is potential for a stronger presence of women in the field in subsequent generations of researchers. However, data on the ratio of male and female biomedical researchers show that while there is a high representation of women at junior levels, this is not the case at senior levels. <sup>14</sup>
- ➤ History of medicine PhD students (especially women) are distributed over a wide range of ages, reflecting the comments made by some that the history of medicine is popular as a choice for a second career.

There was considerable concern amongst workshop participants and History of Medicine Grants and Units Panel members that insufficient PhD students were being funded to sustain the history of medicine field at its present size. Statistics from HESA indicate that the number of PhD students in historical subjects in British universities is currently nearly 3000, of whom more than half are part-time and slightly over half are men. This compares with some 3500 staff.

<sup>&</sup>lt;sup>12</sup> One can make the assumption that the majority of those classified under 'medical charity' are funded by the Trust since there are no other known UK medical charities that provide funding for this area. The term 'historians' refers to staff whose highest qualification is held in 'History', 'Economic and Social History', 'History of Art', and 'History and Philosophy of Science' under HESA definitions. It is noted that members of staff may be active in more than one area of academic activity and they may be active in areas other than those identified.

<sup>13</sup> Male/female response ratios closely match the initial ratio of those dispatched in the case of both UK researcher and PhD questionnaires.

<sup>&</sup>lt;sup>14</sup> Women and Peer Review: An audit of the Wellcome Trust's decision-making on grants. London: Wellcome Trust, 1997, PRISM Report no. 8, p.13

10 12

PhD student

20

16 18

Figure 3.1 Age distribution of current UK history of medicine researchers, including PhD students

20

18 16

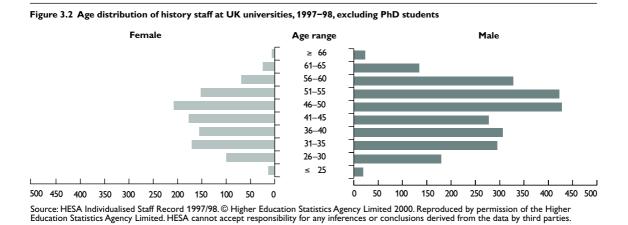
PhD student

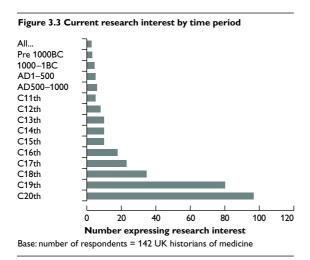
12 10

Researcher

Base: Number of respondents = 165 of 183 history of medicine researchers and PhD students combined who supplied age information, and excluding questionnaire respondents who stated they were no longer in the history of medicine field

Researcher





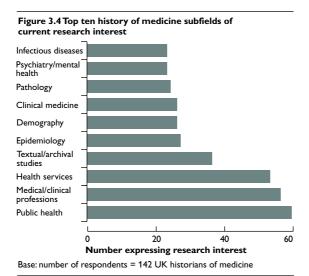


Figure 3.5 Current research interest by geographical area

Latin America/
Caribbean
Australasia/
Pacific
Africa
Middle East
Asia
(not Middle East)
World
North America
Europe
UK/ROI

Number expressing research interest

Base: number of respondents = 142 UK historians of medicine
ROI = Republic of Ireland

In history and philosophy of science, with which history of medicine can perhaps be best compared, the ratio was 100 students to 73 staff. In comparison, the history of medicine PhD student population at about 100 seems small compared with an estimated core group of about 250 researchers.

Questionnaires sent to PhD students showed that 18 per cent of respondents were funded by the Wellcome Trust, suggesting that the Trust played a relatively minor role in history of medicine PhD training. We discuss this later on in the report.

### **3.2.3** Research interests of UK historians of medicine

Using the questionnaires, we attempted to obtain a view of the research interests of the UK historians of medicine. Figures 3.3–3.5 and Table 3.1 show research interest by time period, by the top ten subfields of interest, the top five interests by time period and the geographical areas of interest.

In displaying these results, we acknowledge that questions were raised in the workshop as to whether these were appropriate methods of categorization. They were chosen to reflect those used in a previous analysis performed for the History of Medicine Grants and Units Panel to examine Wellcome Trust funding levels by area of interest. However, feedback from interviews and the workshop suggested that researchers could categorize themselves and others more broadly, or alternatively, as much by ideological framework for example a social constructionist or gender approach – as by a given theme or subfield. We hope that the information about research interests provides some useful indicators on areas of particular UK and international interest, while acknowledging the limitations of using it to draw wider conclusions about research agendas.

The key points arising here are:

research interests are most concentrated in the last three centuries, with the twentieth century proving more popular than the nineteenth century by a relatively small margin;

Rank	C20th interest (n=97)	C19th interest (n=80)	C18th interest (n=35)
1	Public health	Public health	Medical/clinical professions
2	Health services	Medical/clinical professions	Textual/archival studies
3	Medical/clinical professions	Health services	Public health
4	Epidemiology	Psychiatry/mental health	Psychiatry/mental health
5	Psychiatry/mental health	Clinical medicine	Health services

Table 3.1 Top five history of medicine subfields of current research interest

Base: number of respondents = 142 UK historians of medicine

- public health is identified by respondents as the largest area of research interest overall, as well as being the most popular in nineteenthand twentieth-century interest in particular;
- medical and clinical professions, and psychiatry and mental health in the eighteenth, nineteenth and twentieth centuries are also popular;
- ➤ there is a large concentration of research interest in Europe and the British Isles in particular (the latter representing 44 per cent of the total).

The questionnaire findings illuminate several issues raised in interviews with UK researchers. First, twentieth-century medicine was identified in many interviews as a prime area for future research because of: an intrinsic interest in the period; a large amount of unexploited archival material; and, at least partly, the fact that the Wellcome Trust had identified it as an area of special development in the 1997 History of Medicine Grants Handbook.

It appears that the status of an area of special development led to assumptions that there was more money available in this area than others, and that selection criteria for projects might be different. In reality, neither is the case — with the same level of assessment being applied, and by far the majority of the Programme's budget still being dispersed by responsive mode funding. Although the reality is otherwise, it would seem that such beliefs have become widespread within the community.

The interviews yielded conflicting messages over how far the Trust should attempt to drive a research agenda in the history of medicine. Some believed that it was the job of a funding agency to provide direction and identify areas of weakness:

"It is a good thing, one needs progress, not a scattergun approach."

Others were concerned that such proactivity would stifle the natural energies of the field, and mislead applicants:

"It should be made clear that not only applications in these areas are welcome, otherwise you could lose some valuable work. I also worry about pushing people into 'policy-relevant' areas. There is important scholarly work which has an impact on history and so on. For example, would Wellcome be happy with losing work on antiquity?"

It is apparent that the Trust needs to resolve confusion surrounding the relationship between funding of 'special areas of development' and other areas, as well as considering more generally whether it has a role to play in facilitating or leading a research agenda in the history of medicine.

Also, on the issue of twentieth-century research, there was concern among interviewees that important archives – particularly medical records – were being destroyed for lack of storage, money and legal uncertainty over rights of access. On this point, it should be noted that during this evaluation, the Wellcome Trust announced that it was considering a new initiative to provide funds for archives.

The questionnaire findings show that there is a clear focus on Western medicine in UK research, a point also made by the US interviewees. It was predicted by UK interviewees and the workshop participants that there would be a rise in the number of non-Western

researchers entering the field with more diverse research interests, and a growing public interest in non-Western medicine. Furthermore, as we have already noted, <sup>15</sup> the international interviewees highlighted what they perceived to be a lack of use and reference to European sources, which has led the history of medicine in the UK to be considered very Anglocentric.

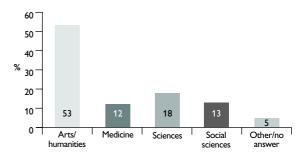
However, in general, it would appear that the interests of UK historians of medicine are similar to those within other countries, as shown in Table 3.2.

#### 3.2.4 Degree backgrounds of UK historians of medicine

The respondents to the questionnaire were asked to provide information about their degree backgrounds. Figure 3.6 shows the diversity of backgrounds, though it is notable that over half of the respondents held arts/humanities first degrees. This contrasts with the situation in other European countries where it was more common to have a medical background, with the interest in history coming later. Indeed, in The Netherlands, some interviewees were strongly of the view that it would not be possible to research or teach within the history of medicine without a medical background.

Figures 3.7 and 3.8 respectively show the degree background of the respondents in relation to their research interests by time period and by geographical area. Connections between first degree and current research interest suggest that researchers

Figure 3.6. UK historians of medicine – subject area of first degree



Base: number of respondents = 142 UK historians of medicine

with a medical background have a greater interest in eighteenth- to twentieth-century history of medicine, and that research in early periods is confined almost exclusively to researchers from arts and humanities backgrounds.

While UK interviewees tended to offer broad reasons for the development of their interest in the history of medicine, they identified a number of specific issues concerning the relationship between degree backgrounds and current research interests. Some claimed that their medical or historical training greatly influenced their research focus:

"A history background is necessary. You need a strong sense of social history, you also have to do straight forward history teaching as well."

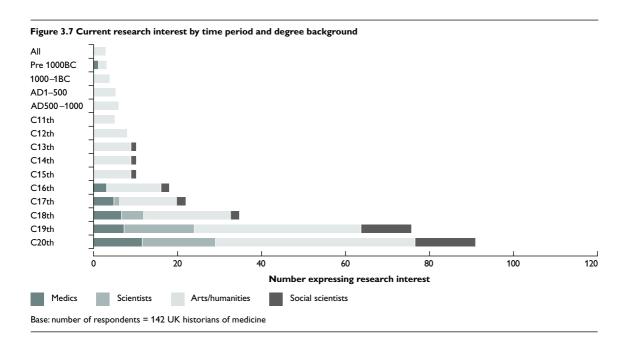
"It depends on your background when you choose topics of research. I chose topics with medical aspects."

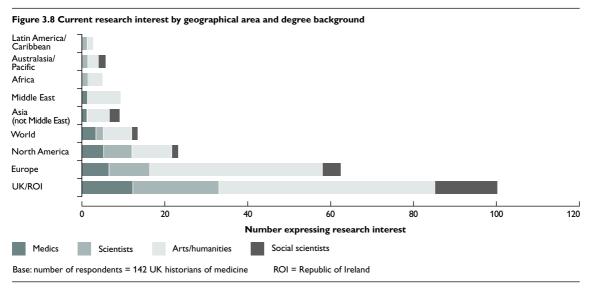
Table 3.2 Subject areas and periods of interest to UK and foreign history of medicine researchers from the questionnaires.

Subject area	UK (%)	Foreign (%)	Time period	UK (%)	Foreign (%)
Public health	40	35	20th century	65	65
Medical/clinical professions	38	33	19th century	54	67
Health services	36	12	18th century	23	37
Textual studies	24	14	16th and 17th centuries	16	16
Epidemiology	18	24	Medieval (C12th–15th)	10	14
Demography	17	4	Ancient (before 500 AD)	5	10
Clinical medicine	17	27			

All figures are percentages of respondents, UK = 149, foreign = 49.

<sup>&</sup>lt;sup>15</sup> See also 2.2.2.The international perspective p. 16.





This finding is emphasized by analysis of the top five history of medicine subfields of current research interest by first-degree subject area (Table 3.3 on page 28). Once again, there is a strong suggestion that textual and archival studies are more the preserve of arts and humanities researchers, while epidemiology was in the top five interests of those of social science and science origin. Medical professions and clinical medicine were of interest to those with a medical background, although it is difficult to be sure of such trends in a wider context, given the relatively small number of questionnaire responses by members of this category.

It was generally emphasized that this diversity of backgrounds was vital for the strength and wide perspective of the subject (a view also shared by the non-UK interviewees). Such views, in turn, led individuals to question whether the recent growth in numbers of history of medicine Master's courses as a prelude to further study represented a possible conflict in purpose. On the one hand, the cultivation of a broad historiographical knowledge of the field and research methods through a specifically designed Master's course was almost universally praised:

Rank	AII (n=142)	Arts and humanities (n=75)	Medicine (n=17)	Sciences (n=25)	Social science (n=18)
1	Public health	Health services	Medical/clinical professions	Public health	Public health
2	Medical/clinical professions	Medical/clinical professions	Public health	Pathology	Health services
3	Health services	Public health	Clinical medicine	Medical/clinical professions	Demography
4	Textual/archival studies	Textual/archival studies	Psychiatry/ mental health	Clinical medicine	Epidemiology
5	Epidemiology	Demography	Military medicine	Epidemiology	Medical ethics

Table 3.3 Top five history of medicine subfields of current research interest by first-degree subject area

Base: number of respondents = 142 UK historians of medicine

"The Master's and PhD in the history of medicine give you a really good grounding in historiography."

On the other hand, several researchers queried whether the Trust's requirement of Master's training for further study in the history of medicine would produce an undesirable level of uniformity in future generations of researchers:

"There are a limited number of courses forming a similar background scope...you only need short courses in the history of medicine to get up to speed on projects."

This view could be set against the relatively minor role the Trust plays in the overall funding of PhD students.

Researchers working in certain subfields identified a number of other desirable backgrounds for future historians of medicine, such as linguistic knowledge for classical studies. There was concern, too, that researchers coming from different countries with different training would be excluded from later Wellcome Trust funds if the Master's route was seen as the major route into research. Already it is a prerequisite for obtaining Trust funding for PhD work, and this in turn is assumed by some to be a key mode of entry for support higher up the career ladder which will be discussed further below.

"Even if you have not done an MSc in a Unit, you may have enough background for a particular topic. I can see that Wellcome want the best possible grounding for people but they don't really acknowledge that people have different education and qualification backgrounds, especially from Germany and the

USA. There should be provision for those from another track to get in there."

Overall, historians of medicine in the UK enjoy a diversity of backgrounds which appears to have contributed to the field's vitality and strength. From time to time, this has also led to tensions, yet these also tend to be seen in a positive light. Although there are other funding bodies – and therefore routes – into the history of medicine, the Trust might want to reconsider its policy of defining career routes through specific Master's courses, to ensure that its schemes encourage and stimulate diversity.

#### 3.2.5 Funding of history of medicine in the UK

The main funding sources for the history of medicine derive directly from a university, or from funding agencies such as the Wellcome Trust, the Leverhulme Trust, the Nuffield Foundation, the Economic and Social Research Council (ESRC), the Arts and Humanities Research Board (AHRB), and the British Academy. It is not possible to quantify the amount of funding provided specifically by agencies other than the Trust because they tend not to categorize projects by subject matter, but rather by scheme. This means that current and previous levels of financial support cannot easily be assessed.

However, analysis of questionnaire responses from UK researchers shows a wide range of funding sources for salaries. The most significant sources were the Higher Education Funding Councils, representing 50 per cent of the total, followed by the Wellcome Trust at 26 per

cent, with miscellaneous university, government and charity sources making up the rest. At PhD level, the mixture of funding sources is even greater, with only 18 per cent being funded by the Trust, and a considerable number (38 per cent) being self-funded.

From an international perspective, the Wellcome Trust was seen as the major fund provider for the history of medicine. No specific foundations comparable to the Wellcome Trust were present in continental European countries, with the majority of funds coming from government to the university. In Canada, the Hannah Institute for the History of Medicine was noted as a fund provider in this area, as was the National Endowment for the Humanities in the USA.

The questionnaire and interviews sought UK views on the adequacy of the level of funding provided by the Trust. A total of 62 per cent of questionnaire respondents either tended to, or definitely agreed that the Wellcome Trust provided sufficient funds to support UK history of medicine. In general, it was the distribution of funds between schemes, rather than the actual level of funding, that was seen as the issue:

"The money is good — it's like a wildlife reserve for historians. It's particularly good for postgraduates, and for computers, projectors, the library... The funding is good. Its distribution [across schemes] is another matter."

There appears to be little doubt that the Wellcome Trust is the major agency that supports research in the history of medicine. This is recognized both in the UK and overseas.

Although the majority of the Trust's money is directed to the UK, its leadership and example extend wider. We asked international interviewees whether they thought that the Trust could play a greater financial, as well as intellectual, role in the history of medicine overseas. While researchers identified many gaps in funding in their own countries which Trust money could supply, there was a surprising amount of support for keeping the Programme focused so that money was not distributed diffusely, so lessening its impact overall. In order, however, to continue to build upon its involvement in the international community, the Trust could consider

initiating a formal programme for high-profile international researchers to come and work in the UK. Such a scheme might take the form of funding an established academic to study and lecture in the UK for one year, hosted by the Units on a rotational basis. Arrangements could be reciprocal, with UK researchers being given financial support to carry out work abroad. It might be hoped that greater contact with international research will promote the more global perspective occasionally deemed to be absent from UK work. In such ways, the international range of activity – considered by both communities to be important – could be extended, without weakening the UK base.

#### 3.3 Wellcome Trust mechanisms for support

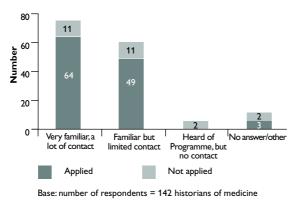
#### 3.3.1 Introduction

This section considers some of the main issues that arise from both the type and balance of funding schemes offered by the Wellcome Trust History of Medicine Programme. The schemes provided by the Trust are:

- project and programme grants (three-and five-year support respectively);
- > support for Units;
- fellowship support (three years), research leave fellowships (up to three years) and fellowships for clinicians and scientists (three to four months);
- studentships (Master's and PhD support) and support for self-funded PhD students;
- ➤ research expenses (up to £2500), travel grants (up to £1000) and conference and symposia support (up to £1500).

The majority of those who responded to the questionnaire were familiar with the Wellcome Trust Programme (Figure 3.9 on page 30) and only 18 per cent of UK questionnaire respondents had never applied to the History of Medicine Programme.

Figure 3.9 Familiarity with the Wellcome Trust and the History of Medicine Programme



The major issues addressed by respondents when considering the Wellcome Trust schemes were:

- career development;
- > funding of history of medicine in 'clusters';
- supporting specialization within the history of medicine.

Each of these is considered below, although many of the points recur across each issue.

#### 3.3.2 Career development

For many, the presence of the Wellcome Trust in the history of medicine represents the preservation of jobs in a discipline that would have otherwise remained small, if not non-existent, in UK universities. The Trust supports different stages of an academic career through its studentships (Master's and PhD level), fellowships (normally, immediately postdoctoral), and the University Award scheme (permanent positions gradually taken over by the university). Special '5+5' Unit fellowships are also available, with the expectation that salaries will be taken over by the host institution in the second five-year period. Postdoctoral students are also supported in Research Assistant positions through project and programme grants.

A key concern was that these schemes were not well integrated and did not provide long-term career support. Interviewees made a clear distinction between the opportunities for salary support at various stages of their career (which such schemes offered) and the presence of a career path. There was a sense that while many researchers had successfully made a life-long career from various methods of support, this was not the same as holding a permanent and secure position in the field. This was contrasted with the Trust's policy within biomedical research funding where a career development scheme is in place.

Recent changes in policy appeared to have exacerbated concerns in the community on this issue, most notably those relating to the structure and location of Units, and current discussions with UCL involving the Academic Unit.

"People are unclear about the future because of Wellcome. There's a general sense of anxiety — you don't know if you can rely on coming out with a career. People are moving outwards and sideways — we need longer-term and more secure funding...it's alienating good candidates."

Nevertheless, there was a prevailing sense in interviews that support for a career was equally precarious, if not worse, in other related disciplines. The lack of adequate career support for contract researchers and more general issues relating to career development within universities have recently been highlighted in the Bett report. <sup>16</sup> One interviewee remarked:

"There is no career structure in the humanities...
There's instability in small contracts, it takes persistence
and luck to get a permanent post. It's wonderful that
Wellcome has protected security and productivity."

Our interviews overseas did not offer any more positive models for career progression. In some countries, the situation appeared to be even more precarious than in the UK.

In this country, the usual first stage of a career as a researcher in the history of medicine is the Master's level. We have already discussed the suitability of this stage as a prerequisite for all future historians of medicine. In addition, we heard a high level of dissatisfaction amongst many interviewees

<sup>&</sup>lt;sup>16</sup> Independent Review of Higher Education Pay and Conditions. A review chaired by Sir Michael Bett. London: The Stationery Office, 1999.

from Units about the balance between the numbers of Trust-funded Master's places relative to PhD places. Many academics believed they were losing high-quality Master's students because of a lack of funding at PhD level. This is interesting in the light of information previously discussed which highlights the lower PhD/staff ratio in the history of medicine compared to history overall.

Non-Unit groupings expressed equal levels of concern that Master's funding was automatically restricted to Units, with the exceptions of some specialist areas within the field. This was likely to produce difficulties when trying to foster research interest at PhD level at these institutions, although four current Trust-funded PhD students are situated outside of Units. There may be scope for the Trust to consider widening its Master's funding beyond Units, providing there is a supportive history of medicine environment for both Master's and PhD students. A number of non-Unit groupings offer Master's courses in the history of medicine, as well as many undergraduate options.

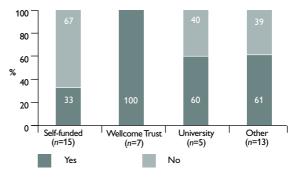
At the PhD level, 44 per cent of PhD questionnaire respondents believed that the Trust provided career development opportunities. When we asked PhD students about their future intentions (Figure 3.10), we found that the Trust tends to fund people who want to stay in research. This could be because applicants believe that they are more likely to get subsequent Wellcome Trust funding if they have had a Wellcome PhD studentship.

"The future prospects are better for Wellcome-funded PhD students — with fellowships — it's always an impression you get."

Indeed, statistics do show that individuals with Wellcome-funded PhDs are more successful at obtaining a fellowship position than non-Wellcome-funded PhDs.<sup>17</sup>

Considering the wider role of the PhD programme, a number of established academics raised questions about its role and purpose. Many considered it to be an intrinsically valuable programme, for both the student and the discipline, irrespective of the students' future intentions to remain in the field or availability of academic posts. It was thought to provide a useful and valuable route into many careers other than academia, and should be funded as such. A number of PhD students interviewed already knew that they did not wish to stay in the field but intended to move into related areas — including veterinary practice, health and social policy research, and museum work — where the skills and knowledge acquired in the PhD would be put to use.

Figure 3.10 Intention to continue at postdoctorate level in the history of medicine (by PhD funding source)



Base: number of respondents = 41 PhD students

We have already shown the broad age range of PhD students. On this point, an issue that raised most concern was that the Trust's Master's and PhD schemes were focused on younger postgraduates. This focus was seen as short-sighted and potentially limiting to the discipline more generally.

"The ten or 15 years older people have in the field might be just as productive as others. They are enthusiastic and have experience."

"This University has a high proportion of mature students. It completely changes the way that subjects are taught and learnt (for the better). The PhD I do now will be infinitely better than the one I would have turned out at 21."

It was also noted during the non-UK interviews that the situation, for example in Germany, is quite different from the UK. The 'dual' background of the community means that many researchers have medical and history degrees and, therefore, are older than their UK counterparts:

<sup>&</sup>lt;sup>17</sup> Of applications for fellowships in the years 1989–1998, ten out of 12 previous Wellcome Trust PhD students were successful (83 per cent), compared with 119 out of 223 others (55 per cent) – this is a statistically significant difference.

"Because most of our researchers tend to be MDs specializing in the history of medicine, on average they are much older than British students."

Beyond PhD level, research assistant posts and fellowships are the next natural career stage within the Wellcome portfolio. These were generally seen as good frameworks, although their short-term nature and corresponding lack of longer-term security was emphasized by those who had been employed under them. Of far greater concern was the perceived lack of opportunities after the postdoctoral level in the Trust schemes, as expressed by one current postdoctoral researcher:

"The nature of short-term funding is not good for settling down...once you have spent time in postdoctoral research, you feel that options are being closed down."

The perceived lack of opportunities was also expressed in the international interviews where the discipline is drawing in young researchers but little opportunity arises because of lack of posts or movement at the top:

"We are in a position of having the best-trained generation, but no positions to assimilate people into. You spend money on people but you cannot take advantage of their knowledge – it's discouraging."

Changes to Unit funding structures (the removal of core staff from 'rolling contracts') were the subject of mixed messages. Some considered that the changes were sensible, since they forced universities to introduce career development opportunities. Others saw them as leading to a reduction in security and opportunity. These sentiments were compounded by general concerns about career structures in UK universities more widely as mentioned above.

Of particular interest to participants was the University Award scheme, which had put 28 researchers in positions in universities (through joint funding) since 1990, but has recently been suspended while the cost of converting old core posts into University Awards is absorbed by the Programme's budget. Of the 28 positions awarded under the scheme, 14 have been taken over by the host university. Of these 14, two incumbents have been promoted to Professor

and four to Reader. On the positive side, some believed that the University Awards provided career opportunities after the postdoctoral stage. There was concern that the cessation of the scheme was removing a valuable career route and blocking future opportunities.

Some concerns were raised that the thin spread of the University Award holders would not in the long term enhance the history of medicine field, since individuals would either be absorbed within traditional history departments or would move to established history of medicine centres or Units. However, others believed that integration into existing history departments was not necessarily a negative outcome because it provided an opportunity for history of medicine to influence wider historical perspectives:

"Spreading researchers widely will be increasingly hard to sustain. The trend is towards centres of excellence. The University Award scheme just makes people 'fodder' for the golden triangle who will move when given the opportunity."

"Creating the University Award scheme was one of the greatest achievements over the last 20 years, however, it has to go on now. It is not satisfactory having only individuals sitting there who are being absorbed and not really true historians of medicine anymore. The way forward is 'mini-units' of about three people (which can also change the age structure) on fixed-term contracts. Otherwise you don't have that critical mass."

Overall, the Wellcome Trust has been able to provide some level of support for careers, yet this is not done in an integrated manner across all the possible stages. The Trust should consider the following points:

➤ Provision of more stages as part of the fellowship programme – from junior through to senior fellows – similar to the Career Development Scheme in the Trust's biomedical portfolio. This would provide longer-term stability for a small number of outstanding individuals. The number of posts supported at each stage would inevitably decrease as it is unlikely that additional funding would be

- available. The universities themselves have a continuing responsibility to provide greater career stability for their staff.
- ➤ Resumption of the University Award scheme, at a lower yet more regular rate than in previous years, with the continued requirement that universities subsume the posts after five years. The introduction of new posts (either University Awards or fellowships) for those in their mid-30s would improve succession issues in the field.
- Reconsideration of the policy that makes a history of medicine Master's course a prerequisite to PhD funding, and clarification of the award criteria for Master's and PhD students with regard to background and age.
- Consideration of whether more funding should be made available for PhD students or whether to change the balance of funding between the Master's and PhD levels to bolster the latter.
- ➤ Reduction of existing limits on the PhD programme, so that a PhD studentship could be associated with a project or programme grant, a University Award holder or within a Unit. The prime objective would be to ensure that there is sufficient relevant research activity at the host institution to provide the PhD student with a suitable environment.
- Development of a PhD alumni group to demonstrate to new PhD entrants the range of possible career options for an historian of medicine, beyond those within a university.
- ➤ Regular Trust data collection and monitoring of age/sex/appointment factors likely to affect the future career structure of the field.

#### 3.3.3 Clustering

One of the key features of the interviews – and a topic that resulted in considerable debate at the workshop – was how historians of medicine worked together and the need (or not) for them to work in groups or 'clusters'.

The majority (just under 70 per cent) of UK

questionnaire respondents stated that they currently worked alone on research rather than in a group. However, one of the strongest messages emerging from interviews with UK researchers was that despite this method of working, the need for contact with other scholars, and in particular other historians of medicine, was important. This apparent paradox is perhaps best summed up by the comment:

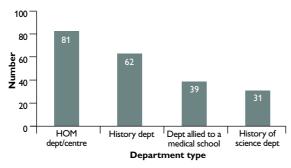
"History is individualistic but you need an environment in which to develop it."

Wellcome Trust-funded History of Medicine Units are the clearest demonstration of the collectivization of history of medicine researchers into separate clusters. However, several other clusters, and 'virtual clusters' (networks of individuals from different universities) of history of medicine interests, have recently emerged without direct support from the Trust. Warwick, Exeter and Oxford Brookes were the most prominent ones we visited in the course of the evaluation. In addition, a number of University Award holders deliberately distributed widely across the country claim that they are now attempting to create their own clusters, or mini-units, with requests for further consolidation, rather than further scattering, of new history of medicine posts and funding.

In some respects, this tendency to cluster goes against the preferred model of research used by historians of medicine, namely to work as individual scholars. However, this evidence must be put in the context of the views of individuals on the academic environment they believe is the most conducive to their work. As Figure 3.11 on page 34 shows, the majority of respondents prefer working in a history of medicine department compared to other possible locations.

The benefits of this critical mass of historians of medicine were considered to be manifold. Teaching, seminars, idea sharing and, most of all, providing a distinctive identity and community for the subject were almost universally mentioned. The regional distribution of clusters was also considered important in relation to the exploitation of local archives and interaction with local communities. As well as bringing intellectual gains, clusters could also bring

Figure 3.11 Environment where history of medicine (HOM) research and teaching is best conducted



Base: number of respondents = 142 UK historians of medicine; respondents could indicate more than one option

financial benefits, with Trust support in particular attracting joint funding schemes for projects and people, especially in the form of the University Award scheme, from universities and external funding sources.

PhD students and young researchers seemed to attach particular importance to the close-knit environment of a cluster. Reading groups and seminars were considered a key attraction:

"There are fantastic seminar series. They are very vibrant with good group discussion. They help you to develop your thinking."

"The reading groups are here to broaden my perspective. There are lots of conferences...it informs my thesis in ways I wouldn't have imagined."

...as was formal and informal contact with a number of researchers with related interests:

"Knowing the standard of your own work – that's where the Units are a necessity, just to have the sense that you are on the right track."

Units appeared to make PhD students feel they were part of a bigger movement, and even those who were not funded by the Trust emphasized the benefits gained both from the infrastructure and the people gathered together in such groups:

"The Wellcome Unit gives context – you know that you are part of something even if I am alone studying... Wellcome conferences give contacts and there is moral support from people who are in the same boat."

"It's a package; more than money. You have a support system through Wellcome."

The advantages of having Units were also noted abroad, particularly the opportunities they provide for drawing together researchers, the interaction both within the Unit and the wider environment, and the potential for dissemination, through lectures, public workshops and seminars:

"Seen from abroad they have their advantages in drawing people together. Students can go to a 'lively' centre for a year and study."

"They provide opportunities for professional discussion and collaboration, which will attract students and huild critical mass."

However, there were notes of caution about taking the concept of a unit too far, centring on concerns about its potential isolation, lack of connectivity to other departments, and even the danger of its work being dominated by the interests of a Director:

"[Units] could become isolated from the universities and there's a danger of not having a strong link to teaching in medical schools."

While such clusters had undoubtedly cultivated a distinctive identity, some interviewees believed that physical isolation of the subject could trigger a disciplinary shift away from other subjects, changing the nature of the research being carried out. University Award holders, while keen to work with other historians of medicine and to establish the discipline in their universities, spoke of the benefits of not being in a 'pure' history of medicine environment. The challenges of defending the subject to fellow colleagues, and putting the history of medicine into a wider academic context, were considered beneficial both for the researcher and the subject in integrating history of medicine into mainstream academic thought. There appeared to be two angles of discussion as to where the history of medicine should be located. The first was the desire to protect it as a separate and identifiable

entity; the second, a wish for it to exist as a subject that could draw on methodology and research ideas from a number of different disciplines. The relationship between the history of medicine and other disciplines is further explored in Chapter 4.

#### 3.3.4 Specialization

Beyond the clustering of historians of medicine, itself in one sense a form of specialization, a second form of specialization – the focus of a cluster on a particular theme within the history of medicine – raised several further issues.

Interviewees often associated such specialization with a 'science model' approach to solving particular problems, with implications of a finite funding life. It was also interpreted to mean work involving a high degree of collaboration on projects, although the tendency towards individual research was still evident in many such specialist environments visited in the course of this evaluation. Mainstream historians of medicine often considered the scope for such areas of specialization to be limited:

"There isn't much 'big history'. History is done small-scale and that's the way it's funded."

"It is bad to use a science model which makes careers dependent on research groups – it narrows research rather than broadens it."

However, researchers carrying out project work in the history of medicine, but not necessarily describing themselves as historians of medicine (mostly remaining outside history of medicine departments), generally saw more benefits in certain areas of collaborative specialist work. An example was the collection of large data sets and archive work, where a project-based approach enables the bringing in of necessary skills from different areas. Researchers who undertook this type of activity spoke of a dynamism created by the collaborative environment, where 'a project never stands still'.

One argument sometimes advanced against a high degree of specialization was the problem of offering postgraduate (and indeed undergraduate) courses that demanded a wider teaching base than specialists in one area could offer. This argument was countered by a number of PhD students, who claimed to have identified their university through the specialisms on offer (from Master's level onwards).

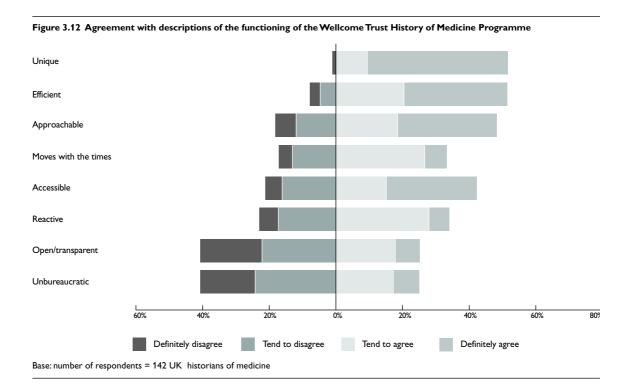
Whilst such specialization was seen as highly introspective in one sense, in other ways, there seemed to be more interaction with a wider academic community. The Oxford Unit, for example, while focusing on the history of tropical medicine and infectious diseases, brought together a number of scholars from different disciplines, such as Africanists and malariologists. Likewise, the Manchester Unit – while having a focus on nineteenth- and twentieth-century research in the history of medicine – was part of a centre encompassing the history of science and technology as well. Clustering around a topic, rather than the history of medicine *per se*, appeared to bring about as much, if not more, interdisciplinarity in the field.

In all these issues, the Trust has a role to play in facilitating discussions in the community as to where and how methods such as specialization or setting a research agenda more generally, are appropriate. Overall, it is apparent that a diversity of situations – from formal units to large and small groupings, down to individual placements – and a balance between the extremes of clustering for no research purpose and specialization is desirable. The Trust would do well to formalize diversification as a strategy in order to foster a dynamic history of medicine research environment.

# 3.4 Management and administration of Wellcome Trust support

As would be expected, there were a great many comments on the way in which the History of Medicine Programme has been managed over the years. From the questionnaires, the overall view of the respondents was that, although many considered the Programme to be 'unique' and 'approachable', it was also seen as overly bureaucratic and lacking in transparency, as shown in Figure 3.12 on page 36.

The detail behind these comments was explored both in the interviews and in the workshop. What was striking from the interviews was the high level of uncertainty about where decision-making on



policy lies within the Trust. Different individuals thought variously that decisions about the future of the Programme and its schemes were made by the office, the Panel, the Medicine, Society and History Committee, and the Governors. In reality, it is a mixture of all of these sources, but what is not clear is the influence and involvement at each level and, more importantly, how those outside these structures have an opportunity to make their voice heard.

Perhaps as a consequence of the limited understanding about the decision-making process, we heard many criticisms about the overall direction of the Programme:

"People are no longer sure about what Wellcome wants and what policies it is pursuing."

"We don't know how to read the runes of the Wellcome. The secretariat is helpful, but the Panel is not so clear. We need to know where we are."

The overall ambiguity about how the Programme operates might explain many of the perceptions and misunderstandings surrounding the issues previously discussed in this chapter.

Within the interviews, issues were raised about various procedures used by the Trust to manage the

Programme. Overall, there was a sense of shifting goalposts on some procedures and that there was too much red tape, especially for small-scale funding. There was a strong belief that the field had matured sufficiently for the Trust to relax some of its procedures.

The issues that were mentioned most frequently were:

- Concern about the procedure of personal requests for application forms. Although for some this could be seen as friendly, it was also thought to discourage new researchers from applying to the Trust.
- ➤ Confusion about the details of schemes available. This has been recognized by the Trust with the recent publication of new guidance on its website (www.wellcome.ac.uk).
- while there is a requirement for the Trust to approve the individual before a grant can be made, this was thought to restrict the potential scope of applicants when posts were initially advertised, as the field would have to be canvassed and assessed without the guarantee of a position at the end of it. This was mentioned most often in respect of research assistants, but was also seen to have an important bearing on other appointments to Units.

- ➤ Tension between universities and the Wellcome Trust on the issue of appointment-making especially on who has the last say when there is joint funding.
- Time delays between appointments being proposed and final approval, because interviews are held after the application is considered at one Panel meeting, before a decision is taken at the next.
- ➤ Concern about the level of feedback given to unsuccessful individual applicants. It is not current office policy automatically to provide feedback to applicants, but there were also some complaints that such feedback was insufficient when it was given. Such issues are obviously limited by factors of time and referee confidentiality, but there is potential for agreement on the level of feedback provided to those who ask for it.
- ➤ Lack of knowledge on how Panel members are selected and rotated.

Perhaps one of the most contentious issues raised about procedures relates to the reviews of Units. This is not surprising given that a poor review can essentially have a significant influence on the future of a Unit and its Director. Overall, there were requests for:

- clearer and widely accepted criteria for the reviews;
- consideration by the review of the wider context within which a Unit is operating, especially regards teaching and dissemination roles:

"Units have a range of functions: teaching, supervisions, conferences, publishing. We should not be punished for teaching."

"I would like medical teaching to be acknowledged in a review."

more openness and transparency on the outcomes of reviews. A desire was expressed by some interviewees that people other than the Unit Director should also be allowed to see the findings of a review, given its potential implications for all Unit members.

Finally, the way in which the Trust operated was often described as being like an exclusive club, and that this had been exacerbated by the development of the Units. Although being part of the 'Wellcome club' was seen to generate a sense of community and identity (praised in particular by PhD students and postdoctorates), it was also seen as exclusive and privileged:

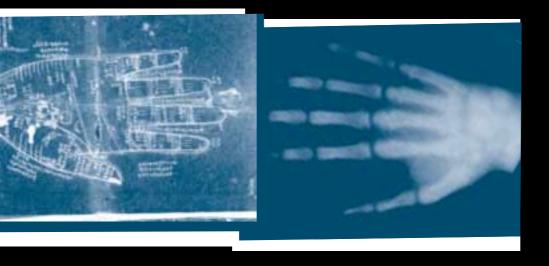
"There's a perception that there are outsiders and insiders in the Wellcome Trust. It's a legacy of the Units because they had to be protected – that was understandable in the past."

"There's a sense of a Wellcome Family which has Crown Princes and second cousins (like me). You are either in the family or you are not. It can be well behaved or cannibalistic."

Overall, the Trust should consider:

- clarifying the roles of the different advisory and decision-making bodies of the Trust;
- how the views of individuals can be brought to bear on policy decisions on a more regular basis in the longer term;
- a review of detailed regulations with the aim of relaxing unnecessary procedures and passing more responsibility to universities, for example, on the selection of some individuals;
- regular up-dating of the information provided on the schemes and frequent monitoring of its comprehensiveness and clarity for potential applicants, now possible given the widespread use of the web;
- development of clearer and more widely accepted criteria for Unit reviews;
- continuation or re-instatement of independent advisory groups for Units to advise the Director and provide external comment upon the activities of the Unit, with an emphasis on formative rather than summative assessment;
- re-instatement of a regular series of visits by the office to Units and major grant holders to improve communication and identify issues at an early stage.

# Impact of the History of Medicine Programme



# **4** Impact of the History of Medicine Programme

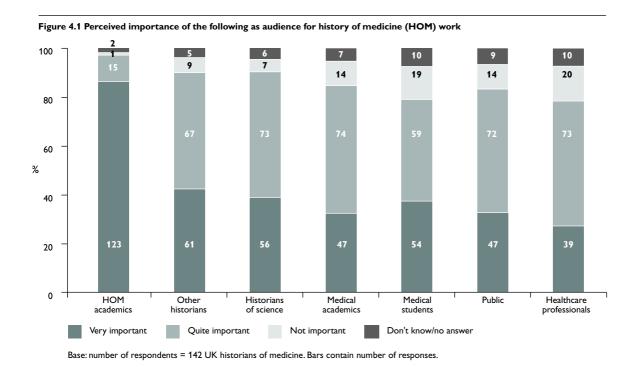
#### 4.1 Introduction

This chapter considers the impact of the history of medicine from a range of perspectives:

- in relation to research in the humanities and social sciences;
- in relation to research in science and medicine;
- the relationship of research in history of medicine with teaching, especially with regard to the teaching of medical students;
- the relationship with wider audiences, such as the public and public policy-makers.

We sought views from historians of medicine, and those in other, related branches of history and in biomedicine, on the relationship between the various areas. When asked about the relative importance of different audiences for history of medicine work (Figure 4.1), over 80 per cent of those in the field identified other historians of medicine as the most important audience. These were followed by other historians, historians of science and medical academics.

From the viewpoint of related societies, respondents considered that the history of medicine had influenced new approaches and thinking in history and had brought a multidisciplinary approach to history (Figure 4.2 on page 40). Opinion was more divided on the impact that the history of medicine had had on health policy and the general public. In considering specifically the effect of the Trust's involvement in this area (Figure 4.3 on page 40), questionnaire respondents identified some movement away from other areas by PhD and postdoctoral students as a result of funding opportunities, but again registered its positive impact on other disciplines.



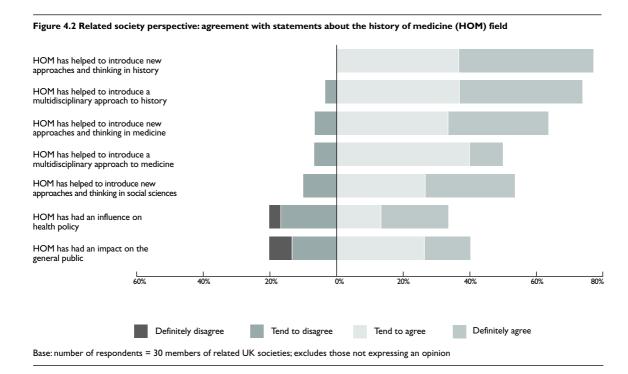
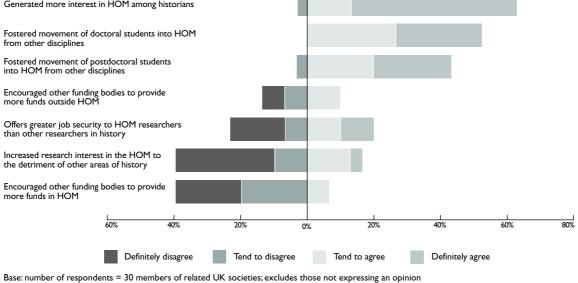


Figure 4.3 Related society perspective: agreement with descriptions of the Wellcome Trust History of Medicine (HOM) Programme

Generated more interest in HOM among historians



# 4.2 Interaction with the wider academic community

#### 4.2.1 The humanities and social sciences

The outcomes of the interviews and questionnaires pointed to a very strong relationship between history and the history of medicine. Some 90 per cent of questionnaire respondents believed that other historians were either very or quite important as an audience for their work. Many interviewees considered the history of medicine to be strongly influenced by currents in both history and the social sciences, deriving much from areas such as the history of ideas, social history, and gender studies:

"It has had a leading role in developing the history of ideas."

"The social context is now taken for granted in history of medicine pages whereas it was unheard of before – theories have become conventional through dissemination and have successfully influenced popular knowledge."

A strong view emerged from the interviews that history of medicine had matured as a discipline, and used historical thinking and methods to explore concepts and ideas that did not take place when the discipline was in its infancy. This view was echoed in the international interviews:

"It's no longer amateurish."

There was a strong belief that this had led to the history of medicine having a higher profile among historians. Generally, historians of medicine believed that it was important for them to be more closely allied with historians than with scientists:

"It's good to be in a history department...it would be a ghetto in the faculty of science."

"It's so interconnected to other humanities – it's not immune to the direction they can take."

"It's important for historians of medicine to be recognized as historians. It's not just an adjunct of science or medicine. We don't want it to be driven by scientists or doctors, but as historians, we're aware of a wider audience."

A key feature of research activity over the past 30

years within the UK has been the challenge of being accepted by the community of history researchers. This has been achieved, but, as will be discussed later, possibly at the expense of moving away from medicine and science.

#### **4.2.2** The history of science

The evidence that we have gathered on the relationship between history of medicine and the history of science comes in part from UK questionnaire respondents' views and in part from the views of foreign history of medicine researchers who were interviewed or who completed a questionnaire. Generally, we found it difficult to obtain any single picture on the influence of the discipline on the history of science because it is difficult to say what might have been had the Trust not funded the history of medicine so generously over the years.

From the UK perspective, several interviewees considered the history of medicine to have grown out of the history of science. Yet now, some sensed that 'the tail was wagging the dog', with the history of medicine superseding the history of science in terms of funding and academic posts, owing to the presence of the Wellcome Trust. Several interviewees noted the close links that the Units fostered with the history of science, most notably in Manchester, but earlier too, in the Oxford and Cambridge Units. The close relationship between the two areas raised questions about whether the Trust should broaden its funding remit to encompass areas in the history of science that have a bearing on work in the history of medicine. The aim would be to protect the survival of both areas and to ensure that the synergy between the two is not lost as the history of medicine becomes the more dominant partner.

The relationship between the history of medicine and the history of science was also explored in international interviews. Overall, it would seem that the history of medicine is stronger than the history of science in the countries visited. The Max Planck Institute in Germany was cited as a rare source of support for the history of science. It is interesting to note that in other countries the origins of study in the history of medicine were not so heavily associated with the history of science.

In Spain, for example, the history of medicine, while now categorized within the history of science for administrative purposes, was noted to have had a much longer and stronger institutional presence. If anything, the history of science was the growing, rather than declining partner in the relationship, although at present the history of medicine remained stronger in absolute numbers.

Whatever the evolution of the relationship, it is clear that in the UK and elsewhere, historians of science are considered to be among the closest colleagues of historians of medicine, both geographically and intellectually. As such, the fortunes of both disciplines must be carefully monitored.

#### 4.2.3 Medicine and science

Interviews conducted both in the UK and abroad demonstrated that the link between the history of medicine and medical practice was a mutually necessary and beneficial one. Some 85 per cent of questionnaire respondents considered medical academics to be either a very or quite important audience for their work. As well as believing that they had much to contribute to medical learning (and in particular the training of students), historians of medicine highlighted their reliance on medical knowledge for the type of medical history they practised.

This interaction with the medical community, however, was seen as a source of contention for several reasons. First, medical practitioners were often thought to pursue the study of the history of medicine in order to document the progress of a certain aspect of medical history in a positive light.

# One historian urged:

"It's not our job to please the medical profession, it's more important to be historians and sociologists... History is about bringing scrutiny to things."

Second, some historians of medicine were concerned about the perceived lack of historical methodological training held by medical practitioners, which they believed undermined the academic credibility of the whole discipline and prompted comments that 'history is a profession'.

Generally, tensions between medical practitioners

and 'professional historians' appeared to be easing, some of which is attributable to the work of the Wellcome Trust, a medical research charity, predominantly funding this area. Also, some of the initiatives of the Trust – such as the Witness Seminars – were widely praised, both in the UK and abroad, as bringing together practising historians and medics:

"Before it was doctors who did the history of medicine, then historians came into the field. Now they have merged — one of the achievements of Wellcome Units is to have brought these people together. You can really see the mixture of historians and doctors. It's good that Wellcome made funding available to all these backgrounds."

The relationship between medicine and the history of medicine can be defined by the physical location of the academics within a university. As already mentioned, the UK is noted for its separation of history of medicine from medical faculties, as opposed to the normal situation in Europe. The international interviewees were asked their views on a suitable location for history of medicine. The responses were mixed, with many commenting on the advantages and disadvantages of both medical faculties and history departments.

Interviewees highlighted the possible dangers of conservatism within the discipline when located in medical schools, but added that there were advantages to working with medics, as long as strong links with other disciplines were maintained.

"If one of the important scopes of the history of medicine is to help 're-orientate' medicine then it's a weakness if it's not based or linked with medical schools."

"It is good that we are a problematic voice in the medical faculty – challenging them. We use history of medicine as a tool to look at contemporary problems."

Overall it was clear that the exact location was not as important as the links that should exist between medical schools, history and other departments:

"History of medicine should be situated in its own department, a history department or a medical school. Different arrangements are desirable in different places. It should relate both to history, medical schools and also social sciences."

We attempted to measure the impact of the history of medicine on medical thought by reviewing the extent to which UK and US medical journals carried history of medicine articles. We looked at four leading general medical journals (British Medical Journal, Journal of the American Medical Association, the Lancet and the New England Journal of Medicine) covering the last 20 years. Using the Science Citation Index (SCI), we applied a historical 'filter' to select history articles. These were examined and those not relevant to the history of medicine, including epidemiological studies, were removed. This left 121 articles, of which 56 were in the two UK journals and 65 in the US ones (see Table 4.1).

Table 4.1 History articles featuring in leading general medical journals.

Year	BMJ, Lancet	JAMA, NEJM	
1980–84	8	20	
1985–89	2	8	
1990–94	12	18	
1995–99	34	19	

This shows that there has been an increase recently in history of medicine articles in UK and US journals. However, of the 56 articles in the UK journals, only 23 were from UK addresses and only 12 of these were published in the last five years. So, most of the recent increase has been in foreign-authored papers. This again reflects the trend mentioned earlier that UK history of medicine appeared to be moving away from medicine as a key audience.

#### 4.3 Teaching

The history of medicine has evolved from intellectual interaction with other disciplines and continues to do so through interdisciplinary work. Its impact beyond the immediate sphere of other historians of medicine was considered by many interviewees to be hindered by limited teaching of the history of medicine in a greater variety of arenas. The point was made frequently in the interviews that it was not possible to dissociate teaching from research in a clear-cut way because research informs teaching which informs research.

To date, the history of medicine has not possessed

its own regular constituency of history of medicine students at undergraduate level or below. A number of possible reasons were identified by interviewees:

➤ Trust schemes (limited by the Trust objects) first and foremost support research and do not give prominence to teaching aims. One particular issue raised a number of times was the Trust restriction of 30 per cent teaching time on its funded researchers. For the University Award holders in particular, this was considered to be unrealistic and potentially damaging since teaching was important for both the discipline's and the individual's development. One University Award holder said:

"If you want to make the subject credible, you need courses up and running. It's important for promotions and committees. You've got to do it in the arts and humanities for career development."

- ➤ The creation of 'internal markets' within universities, where it 'costs' departments to send their students on courses in other departments, was thought to militate against more marginal subjects such as the history of medicine and the history of science where there was often no automatic undergraduate base to fall back on;
- ➤ Fulfilment of Research Assessment Exercise (RAE) and Trust review criteria with the emphasis on traditional academic publication records.

# **4.3.1** Teaching medical students

The relationship in the UK between the history of medicine and medical student training is not straightforward. When asked about the importance of different audiences, only 38 per cent of UK historians of medicine considered medical students to be a 'very' important audience for their work. We found this outcome surprising since in many interviews historians of medicine attached considerable importance to teaching medical students, and their enthusiasm was matched by that of the medical students. Those in the medical profession who had encountered the history of medicine (either as part of an intercalated BSc or through a

course at the Society of Apothecaries) stated that their key motivation behind studying the subject was an existing interest in the area, followed by a desire to understand how people used to think about medicine (Figure 4.4).

Overall, we heard a range of highly positive comments from those medics who had taken the opportunity to study the history of medicine as part of their training. The range of benefits were:

an alternative to the mode of learning and thinking in medicine:

"The breadth of thinking the history of medicine allowed influenced me after two years of dry scientific medical facts."

the opportunity to gain a deeper understanding of medical practice and its social and political background:

"I am very interested in the politics of medicine and its relation to modern culture. I don't think it's possible to understand the current situation without understanding all the background. This degree gave me a perfect opportunity to explore the background."

the ability to view medical practice in a wider context:

"It completely influences me daily in medical practice. Historical context and analytical thought are hugely influential. It has provided and stimulated a life-long interest [that] I wish I had more time to devote to. The best thing I did in medical school (other than football and beer!)."

➤ the ability to develop and use different types of analytical skills and modes of thinking:

"History of medicine has provided me with a different way of thinking about medicine and the type of doctor I would like to be. It has given me a broader, more open-minded approach. I now question why things occur as they do rather than simply accepting the status quo. I have learnt how to carry out research in an analytical and critical way as well as how to present and back up an

argument. History of medicine has vastly increased my general knowledge and influenced the future course of my career. I am delighted I chose the BSc and would recommend it highly to everyone who asked me."

➤ the belief that studying history of medicine can make one a better doctor:

"Assimilating the skills necessary for a discipline outside medicine has given me alternative ways to solve problems, and most importantly, a greater ability to empathize with patients as I have greater fluency in switching between different points of view and expectations."

Further perspectives on the skills acquired are summarized in Figure 4.5.

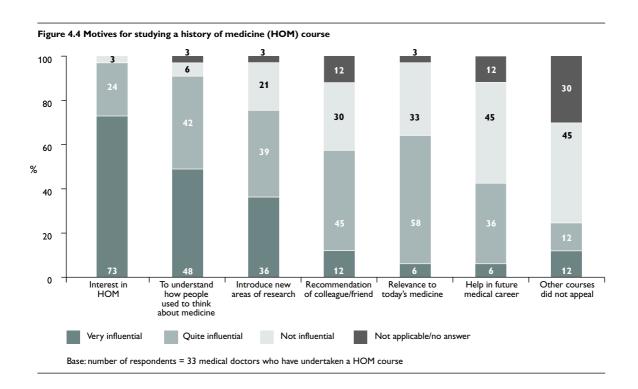
Despite such glowing references, many historians of medicine did not view the medics as their key audience. Information from interviewees suggests that this is not due to a lack of interest but more a result of the difficulties of teaching medical students. These difficulties included pressure on students to complete training, internal university resource allocation methods, and a general sense of history of medicine being tangential to medical education.

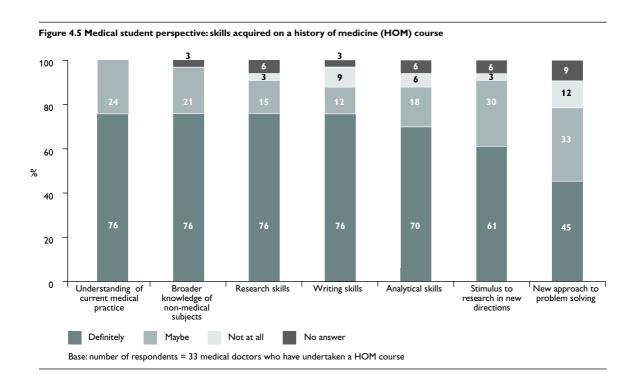
However, from the international interviewees' accounts, it would seem that the situation overseas is quite different from the UK. In North America, there are compulsory undergraduate courses for pre-med students and in continental Europe, history of medicine is often incorporated into medical degrees:

"History of medicine is integrated into the medical curriculum and therefore we have a very heavy teaching load. [These courses] are very well attended throughout the year and are a measure of our success."

A medical background was sometimes deemed necessary. Links with history departments were recognized as important but the 'medical' rather than the 'historical' was primary:

"PhD students are practising medics, we have no money for others, but even if we did, we wouldn't want them, we want those with experience of





medicine. History of medicine is not compulsory, but 90 per cent of medical students select it."

For whatever reason – different priorities or practical limitations – it would seem that the higher levels of teaching of medical students abroad was one of the most marked differences between the UK and international history of medicine scenes.

#### 4.4 Wider audiences

A particularly strong theme that emerged from the interviews was the extent to which the history of medicine had made advances in reaching wider audiences, such as schools, the public and the media. More importantly, there was a belief that there was considerably more potential to do so:

"It is now taught as a school subject. TV projects and text books are written out of the work of specialist historians of medicine."

"TV, radio, newspaper – all the Units do it. It's important for academics to put work in language amenable to the ordinary person. It's an unpaid part of the job."

Popular modes of dissemination were considered to include publication in mainstream academic journals, exhibitions, the popular press, television and radio. The Wellcome Trust television programmes made with the BBC for schools were singled out for praise in interviews on a number of occasions. Involvement of local communities through public lectures and local press coverage by Units and other university gatherings were considered to be of particular importance. Interviewees stressed the importance of this 'outreach' work for the following reasons:

it contributed to the vitality of the UK's interest and strength in history and culture:

"We live in a culture which celebrates history."

the history of medicine can create greater understanding and trust of medicine – including its potential and limitations – by appreciating its history:

- "Everyone has a body, everyone is fascinated by it. It also has a political context no-one trusts medicine now."
- the history of medicine could contribute towards public policy-making.

Despite such positive messages, the public was rated below other academic audiences in terms of importance in questionnaire responses – with only 33 per cent considering them to be a 'very important' audience. As for the responses on teaching, this appeared to be contrary to the importance associated with this type of work in the interviews. We heard a range of factors that affected the viability and effectiveness of outreach, including:

- dominance of the Trust as a funder only of research limited outreach activities inside and outside Units:
  - "We have a big outreach programme. We would be happy to disseminate further if given more time and resources."
- ➤ review criteria, both from the Wellcome Trust and the RAE, placing a premium on research outputs, with no reward for outreach pursuits:
  - "There is tremendous mileage, but the audience for my book is academic for RAE and Trust review purposes."
- ➤ lack of a good, central dissemination mechanism to direct media queries:

"It's difficult to get ideas out...We could do with someone at the Wellcome Trust matching up researchers with TV and radio producers."

It was thought that historians of medicine could contribute enormously to the public understanding of science and the public policy agenda in medical research, both through the regional networks they had developed and using historical material to help illuminate ideas and generate debate. Given that the Wellcome Trust has an interest in public consultation and dialogue, many interviewees suggested that there was enormous potential for the Trust to use the network of Units and other historians of medicine to contribute in this area:

"I am worried about the public understanding of science. There has to be debate, not consensus. We've got to have an input into that. There is a market for people to listen."

"There is a policy side to it, for example, the work on animal experimentation – it interests the public very much. History of medicine can indirectly contribute to policy decisions – it helps to understand where we are now. This is one role of the history of medicine to inform policy-makers about historical backgrounds."

#### 4.5 Conclusions

The history of medicine can make extensive contributions to knowledge and understanding in a variety of ways:

- ➤ in an academic environment, through links with and influences upon other disciplines;
- in medicine, through two-way interaction with the medical community, but especially in teaching medical students;
- in public, through dissemination of ideas which both place and question medicine in different social and cultural contexts.

The greatest development in the history of medicine in the UK in the past 30 years has undoubtedly been its successful integration into the higher academic system. In terms of its scholarship, UK history of medicine research has been of both national and international importance, in its influence on other subjects and as a world leader of its own field in terms of knowledge, concepts and methodology.

This success cannot be dissociated from the Wellcome Trust's funding of the history of medicine over a similar period of time. The Trust's performance in other areas of history of medicine, however, appears to be more mixed. In spite of strong messages in favour of teaching medical students (from both historians of medicine and previous students themselves), and aside from long-standing arrangements in London and Manchester, few programmes as yet formally exist within other Trust-supported locations.

In terms of other interactions with the medical community, while many praised innovations such as the Witness Seminars, an overall rationale behind communication and dissemination of information between these two areas appeared to be lacking. Enthusiasm to communicate research to audiences outside academia was regarded as constrained by time and financial restraints. Given the intensity of recent debates about issues such as genetics and ethics, the potential of the historical perspective to challenge the thinking of both the scientific community and the wider public is strong – as indeed it is useful in considering the relationships between such groupings in society in general.

These outcomes are not necessarily unexpected, given the primacy of research in the Wellcome Trust's funding commitments. However, as many interviewees emphasized, the boundaries of research with teaching and dissemination often overlap, and the Trust could benefit scholarship and help further some of its other interests – such as its role in the public understanding of science – by broadening its funding remit in certain areas. Enhancements might include:

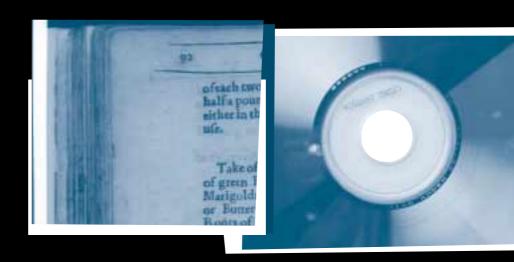
- further encouragement by the Trust for a national programme of teaching of history of medicine to medical students, as occurred in 1994 following the publication of *Tomorrow's Doctors*;
- support for the production of more teaching materials, for example, handbooks and images available to the history of medicine communities in the UK and abroad;
- ➤ wider recognition of the importance and value of teaching in Trust reviews more generally;
- acknowledgement of the potential for certain history of medicine activities to interact with other Trust areas, including the Public Understanding of Science and Biomedical Ethics programmes, and promoting cross-panel grant applications, where appropriate;
- more outreach initiatives to disseminate history of medicine research to wider communities. This might involve using existing Units and other regional groupings of historians of medicine as focal points for activity.

In many ways, such actions would simply make explicit what occurs in the history of medicine community at present. However, greater involvement in any area would benefit not just from a financial commitment, but also an acknowledgement of the impact such activities have on research – both in the positive sense of broadening research scope, and in the negative sense of being time-consuming. Allowance would have to be made for the time devoted to such activities, or require more financial input to help underpin their implementation.

Such suggestions are by no means intended to detract from an emphasis upon the scholarship and research culture which has elevated the UK, and the Wellcome Trust History of Medicine Programme in particular, to the forefront of work into the history of medicine.

This report began with discussion of the evolution of a programme whose origins were deeply rooted in support for a library. There is no denying that the Wellcome Trust Library for the History and Understanding of Medicine remains a focus for the Trust's involvement in this area. The Library was invariably described as a 'Mecca' by the international researchers we interviewed. However, the Programme has now expanded its schemes to encompass a variety of study environments, geographical locations, and research fields, generating a substantial amount of interest along the way. As well as building on the intellectual leadership the UK field now possesses, there is much scope for the Trust to play a greater role in building upon the larger academic and public interest such research excellence has fostered.

# Annexes



# **5** Annexes

# **ANNEX A: Written questionnaires**

Questionnaire recipients

In this evaluation, questionnaires were sent out to five groups of people, shown in Table 1A:

The recipients of the first questionnaire were selected as those who had applied to the Trust's History of Medicine Grants and Units Panel from 1997-99, together with people identified by the Panel in January 1999 as being known history of medicine researchers, irrespective of funding source. The second questionnaire was sent to one in ten of the US members of the American Association for the History of Medicine, one in two of the Canadian members, and all those from third countries (other than the UK); in addition it was sent to writers of history of medicine books reviewed during the last ten years with identifiable addresses outside Canada, the USA and the UK. (For more details, see Annex D.) The third questionnaire was sent to a random sample of physicians who had undertaken an intercalated BSc course at London or Manchester, or who had taken the History of Medicine Diploma course at the Society of Apothecaries, during the last ten years. Their addresses were found in the current Medical Directory.

History of medicine PhD students, who were sent the fourth questionnaire, were identified from a web-based compendium of history theses ('History Online' at: www.ihrinfo.ac.uk/). People were selected if their degree had not yet been awarded and the title of their thesis was clearly in the history of medicine field (using 'history of medicine' as a search category, then checking and refining results). All current PhD students at the five Wellcome History of Medicine Units (UCL, East Anglia, Glasgow, Manchester and Oxford), were sent questionnaires, whether or not they were in receipt of Trust funding.

The researchers from related fields, who received the fifth questionnaire, were council members of the following four societies:

- ➤ British Society for the History of Science;
- Forum for the History of Science, Technology and Medicine;
- Social History Society of Great Britain;
- ➤ Economic History Society.

In addition, 40 questionnaires were sent to researchers who were primarily biomedical but also had history of medicine interests (identified with the help of the Academic Unit).

Questionnaire content

The questionnaires were drawn up to include questions on:

- personal details;
- > academic qualifications;
- > research and funding;
- the Wellcome Trust's History of Medicine Programme.

Table 1A Recipients of written questionnaires, with numbers sent out, returned and response rate.

Quest.	Addressees	Sent out	Returned	Response (%)
1	UK history of medicine researchers	416	149	36
2	Foreign history of medicine researchers	190	52	27
3	UK physicians who had taken an HOM course	100	33	33
4	Current history of medicine PhD students	100	41	41
5	Members of related professions and societies	100	30	30
	Total	906	305	34

The physicians were also asked about their research motivations in history of medicine and the PhD students about their study and career aspirations. Council members of related societies were asked to provide an external perspective on the relationship between the history of medicine and other displines.

The questionnaires were all piloted on volunteers from the Academic Unit in London to ensure that the questions were clear, logically ordered and could readily be answered. For many of the questions it was sufficient to tick one or more boxes: this system was used to facilitate the analysis and also allowed the strength of various opinions to be compared (e.g. on the influence of the history of medicine field and the policies and administration of the Trust's History of Medicine Programme).

The questionnaires were anonymous, but respondents were invited to identify themselves at the end if they were prepared to be interviewed and a number did so. Some were interviewed individually (see Annex B), and some were invited to attend the Workshop (see Annex E).

Blank examples of the questionnaires are available from the Policy Unit on request.

# Questionnaire analysis

The questionnaires were sent out at the end of August 1999, with a deadline for return of 24 September. No reminders were sent. Responses were received up until mid-October when the main analysis took place. This was conducted using Excel spreadsheets and pivot tables to allow cross-tabulations. Many of the questionnaires contained illuminating comments and a number of them have been reproduced in the report.

#### **ANNEX B:** Interviews in the UK

# Objectives

The interviews in the UK were designed to build on the issues explored in the written questionnaires, and all the interviewees were expected to have received one of them.

The main areas covered in the interviews were:

> research background of interviewees,

including funding details and career development;

- research practice, including collaboration, interdisciplinarity, and dissemination to different audiences;
- the Wellcome Trust Programme, covering the individual mechanisms of support;
- general opinions on the UK history of medicine field, including changes in recent years, the geography and demography of the history of medicine profession, international comparisons, strengths and weaknesses, and thoughts on the future.

#### Interviewees

In all, 48 people were interviewed, mostly during September 1999. The range of people chosen was intended to be broad enough to account for a number of variables, including different funding sources, career stages, geographical and departmental locations. Group interviews with PhD students were confined to the Units (but questionnaires were sent more widely). All the interviewees belonged to one or more of the following categories:

- members of Wellcome Trust Units (including PhD students, research assistants and associates, university lecturers, and Directors);
- university Award holders not affiliated to Units;
- researchers in clusters of history of medicine interest around the country;
- history of medicine scholars working in a variety of university locations (including history, geography, and philosophy departments).

The universities visited were:

Oxford Brookes University
University College London (Academic Unit)
University of Cambridge
University of Durham

University of East Anglia, Norwich (Wellcome Unit for the History of Medicine)

University of Exeter

University of Glasgow (Wellcome Unit for the History of Medicine)

University of Manchester (Wellcome Unit for the History of Medicine)

University of Newcastle upon Tyne

University of Oxford (Wellcome Unit for the History of Medicine)

University of Warwick

Information was also gained from interviews with staff working at the following agencies concerned with history of medicine funding in the UK:

The Arts and Humanities Research Board

The Economic and Social Research Council

The Leverhulme Trust

The Nuffield Foundation

The Society of Apothecaries

# **ANNEX C: Interviews abroad**

### Objectives

The intention of these interviews was to gain an international perspective on the study of the history of medicine and learn about other ways in which it was organized, funded, carried out and disseminated overseas. The interviews were conducted in six countries, first in Canada and the USA in September 1999, and then in four European countries (France, Germany, the Netherlands and Spain) in January 2000.

The main areas covered were as follows:

- > background and way of working of respondent;
- organization of history of medicine in university or institution;
- > support for history of medicine in country;
- methods of dissemination and influence in different areas;

- perceptions of UK history of medicine, now and in the past (including strengths and weaknesses);
- comments on the Wellcome Trust's History of Medicine Programme.

Interviewees

#### CANADA

Jackie Duffin, Queen's University, Kingston ON

Michael Hubenstorf, University of Toronto, Toronto ON

Pauline Mazumdar, University of Toronto, Toronto ON

Shelley McKellar, University of Toronto, Toronto ON

Paul Potter, University of Western Ontario, London ON

Charles Roland, McMaster University, Hamilton ON

Edward Shorter, University of Toronto, Toronto ON

David Wright, McMaster University, Hamilton ON

# **FRANCE**

Patrice Bourdelais, École Pratique des Hautes Études, Paris

Armelle Debru, University of Paris V

Claude Debru, University of Paris VII

Claudine Herzlich, CNRS-CERMES, Paris

Danielle Jacquart, École Pratique des Hautes Études, Paris

Ilana Löwy, INSERM, Paris

Lion Murard, CNRS-CERMES, Paris

Christiane Sinding, INSERM, Paris

Patrick Zylberman, CNRS-CERMES, Paris

#### **GERMANY**

Joanna Bleker, Frei Universität, Berlin Volker Hess, Frei Universität, Berlin Robert Jütte, Institute for History of Medicine, Stuttgart

Peter Schneck, Humboldt Universität, Berlin

Ulrich Trohler, Institute for History of Medicine, Freiburg

Rolf Winau, Frei Universität, Berlin

#### THE NETHERLANDS

H Beukers, University of Leiden

Eddy Houwaart, Free University, Amsterdam

Bert Theunissen, University of Utrecht

M. VanLieburg, University of Rotterdam

R P M Visser, University of Utrecht

#### **SPAIN**

Jon Arrizabalaga, Consejo Superior de Investigaciones Científicas, Barcelona

Luis Garcia-Ballester, University of Santander

Alvar Martinez-Vidal, Autonomous University of Barcelona

Rosa Medina, University of Granada

Alfredo Menendez, University of Granada

Teresa Ortiz, University of Granada

Esteban Rodríguez-Ocaña, University of Granada

Fernando Salmon, University of Santander

#### USA

Toby Abbel, Yale University, New Haven CT

Bridie Andrews, Harvard University, Cambridge MA

Robert Aronowitz, University of Pennsylvania, Philadelphia PA

David Barnes, Harvard University, Cambridge MA

Allan Brandt, Harvard University, Cambridge MA Gert Brieger, Johns Hopkins University, Baltimore MD

Karen Buhler-Wilkerson,

University of Pennsylvania, Philadelphia PA

Harold Cook, University of Wisconsin,

Madison WI

Julie Fairman, University of Pennsylvania,

Philadelphia PA

Elizabeth Fee, National Library of Medicine,

Bethesda MD

Steven Feierman, University of Pennsylvania,

Philadelphia PA

Mary Fissell, Johns Hopkins University,

Baltimore MD

Faye Getz, University of Wisconsin, Madison WI

Anne Harrington, Harvard University,

Cambridge MA

Susan Lederer, Yale University, New Haven CT

Harry Marks, Johns Hopkins University,

Baltimore MD

Edward Morman, New York Academy of Medicine,

New York NY

Ron Numbers, University of Wisconsin,

Madison WI

John Parascandola, US Public Health Service,

Bethesda MD

Katharine Park, Harvard University, Cambridge MA

Kim Pelis, Uniformed Services University

of the Health Sciences, Bethesda MD

Charles Rosenberg, University of Pennsylvania,

Philadelphia PA

Barbara Rosenkrantz, Harvard University,

Cambridge MA

David Rosner, Columbia University,

New York NY

David Rothman, Columbia University,

New York NY

Nancy Siraisi, Hunter College, New York NY

Dale Smith, Uniformed Services University of the Health Sciences, Bethesda MD

Daniel Todes, Johns Hopkins University, Baltimore MD

John Warner, Yale University, New Haven CT

#### **ANNEX D: Bibliometric study**

#### Introduction

Bibliometric analyses were carried out in order to provide some quantitative evidence on publications. It has to be stressed at the outset that, whereas bibliometric methods have become well accepted in biomedical research, they are still at the experimental stage in the humanities. Nevertheless, we thought it appropriate to use them in order to provide some quantitative data to complement the more qualitative findings from other sources. We found that a wide variety of outputs occurred in the history of medicine, whereas in biomedical research, papers in journals are the main output and others are of much less importance. In particular, much of the output of history of medicine research takes the form of books which are not readily capable of analysis for a number of reasons:

- the authors' addresses are not normally available from databases (and sometimes even from inspection of the actual volume) so that attribution of books to individual countries is difficult;
- books often have both titles and subtitles and sometimes the latter are used to refer to them:
- the date of publication is often misquoted and some books are reprinted and therefore have more than one date;
- books are sometimes translated and citations to them may be to a translation.

Nevertheless, an attempt was made to use bibliometric methods to answer three questions:

- how has history of medicine output varied over recent years; is the field growing?
- what is the relative standing of UK history of medicine research output in relation to the world (and in particular relative to the USA) both in quantity and impact?
- what part does the Wellcome Trust play within the UK history of medicine output?

Four studies were conducted in order to answer these questions, looking at:

- 1. papers in journals in SSCI and ROD;<sup>18</sup>
- 2. papers in four leading medical journals;
- 3. books cited in the SSCI;
- 4. books reviewed in the SSCI.

### Papers in journals in SSCI and ROD

This study aimed to determine the volume of UK output in relation to that of the rest of the world, and in particular that of the USA. It aimed also to estimate the proportion of UK papers that had been supported by the Wellcome Trust. In order to extract papers selectively (limited here to articles, notes and reviews) in the history of medicine field from the Social Sciences Citation Index (SSCI), a filter was created which retrieved papers that were:

- published in specialist journals (Bull Hist Med, Hist Psychiat, J Hist Med Allied Sci, J Hist Sexual, Med Hist, Nurs Hist Rev and Soc Hist Med);
- ➤ or had title keywords relevant to medicine (e.g. clinic\*, psychiatr\*, disease\*, birth control);
- ▶ and had title keywords relevant to history (e.g. seventeenth century, medieval, 17\*-18\*).

The filter was successful and almost all the papers on inspection of their titles were found to be relevant to history of medicine. This allowed estimates of the size of UK output of papers to be compared with that of the world and that of the USA in particular.

<sup>18</sup> SSCI = Social Sciences Citation Index, © The Institute for Scienctific Information (ISI); ROD = Research Outputs Database, produced by the Wellcome Trust from ISI data.

The links between authors and addresses (where the addresses were in a single country) were used to form an address book in which the addresses of the authors of books could be determined subsequently. However, not all writers of history of medicine books also write history of medicine papers, and some of the books discussed below were written before 1988 and addresses were seldom available for these authors.

In order to ascertain the magnitude of the role of the Wellcome Trust within the UK history of medicine activity, it is not sufficient to examine the addresses of the papers to see if they include the name of one of the Units. Papers resulting from extramural grants, for example for fellowships, may, however, contain an acknowledgement to the Trust for having provided financial support. Within the Policy Unit, there is a database of biomedical research papers taken from the Science Citation Index (SCI) and the SSCI, called the Research Outputs Database (ROD - A full description is given in Mapping the Landscape<sup>20</sup>). Each paper has been inspected in a library to determine its funding source(s), taken from the acknowledgements section or, for intramural funding, from its address(es). The history of medicine filter was 'translated' into SQL+, the language used to access the ROD, and history of medicine papers were retrieved for the years 1988–97. However, because most of the journals covered in the ROD are biomedical ones in the SCI, many of the 1200 papers retrieved by the filter were judged not relevant to history of medicine,<sup>21</sup> and only 626 were retained for this analysis. Nevertheless, as this was more than double the number of UK history of medicine papers in the SSCI (291) over the same period, the analysis gave additional information on publication trends with time, and in particular on the numbers of history of medicine papers supported by the Wellcome Trust.

Articles in four leading medical journals

The second study aimed to determine whether history of medicine articles in four leading general

medical journals (BMJ, JAMA, Lancet, New Engl J Med) had increased in numbers over the last 20 years, and is fully described in section 4.2.3 of this report (page 43).

Books cited in the SSCI

This third study was intended first to create a list of history of medicine books and then to attribute as many of them as possible to the UK, the USA and other countries. We sought to analyse not only the numbers of these books but to gauge their importance through the frequency with which they had been cited by history of medicine papers, a similar technique to that used widely for the evaluation of research in the sciences.

The SSCI lists all the references from each of the papers it includes. These are given in a standardised format, which for a journal article looks like the following:

# ABRAMS-R-1976-ARCH-GEN-PSYCHIAT-V33-P579

There are also other references, to a wide variety of items which are called 'non-journal' items here. They can be distinguished from journal references for the most part by the absence of a volume number, that is V followed by a digit. A typical non-journal reference is as follows:

#### PORTER-R-1988-SICKNESS-HLTH-BRIT-E

The citations were 'singled up' with a key consisting of the author's surname and the first three letters of the title (i.e. the part appearing after the date beginning '-19'). Once this was done, the authors' addresses were looked up in the address book (for items published in 1970 or later) and the country determined. Although most of the items did not have an address associated with them, it was assumed that almost all history of medicine researchers would have been in the address list (i.e. they would have written at least one article or book review in the last 12 years) and therefore that the other items would not have been history of medicine books. In this way it was

 $<sup>^{19}</sup>$  Addresses of writers of book reviews were also included in this list.

<sup>&</sup>lt;sup>20</sup> Dawson, G, Lucocq B, Cottrell R and Lewison G (1998) Mapping the Landscape: National biomedical research outputs 1988–95. Policy report no 9. London: The Wellcome Trust.

<sup>21</sup> For example, the word 'history' in association with a word connoting a disease or disorder frequently retrieved papers concerned with taking a patient's medical history.

possible to determine the distribution of citations (for a variable number of years) to books by UK authors, by US authors, and from other countries.

#### Books reviewed in the SSCI

The final study aimed to determine what percentage of history of medicine books that were 'frequently reviewed' came from UK authors. This criterion of impact was suggested by members of the Steering Group, and confirmed as a possible useful tool (albeit of less value than citations and the ranking of the publishing house) by interviewees in North America.

The books were selected from the SSCI from 1988 to June 1999 on the basis of the history of medicine filter described above. 'Book reviews' are very numerous in the history of medicine: during the 11 years there were 3243 book reviews compared with 2261 articles, notes and reviews. The numbers of reviews to each book were determined, and an examination was made of books with apparently different titles by the same author in order to correct these numbers as necessary.

A particular effort was made to obtain information about the addresses of the authors of books with three or more reviews. Books where the authors could not be traced from the address file were individually examined in the Wellcome Library and where even this procedure did not yield an address, requests were made for address information from senior historians of medicine.

# ANNEX E: Workshop, 24 November 1999

#### Introduction

Twenty-five members of the history of medicine community, selected from questionnaire respondents and interviewees, were invited to attend a workshop in order to discuss issues arising from the evaluation. The day was designed to:

- ➤ reflect back the preliminary findings of the evaluation and to consider interpretations of them;
- examine what implications the findings might hold for the Programme and discipline more generally.

Presentations were made by the Office for Public Management and the Policy Unit. These were followed by two 'breakout' sessions, where the participants were divided into three groups to discuss issues in more detail. This report highlights the key issues raised by the workshop participants.

### **Key points**

# 1. Evaluation scope

Overall, participants were content with the methods used by the Policy Unit. However, some specific concerns were raised about the following:

- the need for a continental European perspective on the Programme;
- the levels of representation of some categories of researcher, for example social scientists;
- ➤ the response rates to the evaluation questionnaires and whether they were satisfactory;
- the contextualization of the history of medicine in wider spheres, for example new universities, health profession training schemes.

## 2. Careers

The workshop participants identified the lack of career opportunities and stability as key problems facing the field. In particular, concern focused on the following:

- the relatively low numbers of PhD students being trained by the Trust;
- lack of postdoctoral positions;
- problems of joint appointment-making between the Trust and universities;
- the need for diverse entry points into the field, both in terms of professional and academic backgrounds, and age.

#### 3. Clustering

Participants strongly supported the Trust's provision of funding schemes that accommodated both large and small groupings as well as individual history of medicine researchers, thus allowing a variety of working patterns. The following issues were highlighted:

- ➤ the importance of teaching for research, and the problems for universities that cannot secure funding for Master's courses from the Trust because they do not have Unit status;
- ➤ the variety of appointment conditions at different universities, and why history of medicine is more favoured at some institutions than others;
- the growth of 'virtual clustering', bringing networks of researchers together in spite of geographical separation.

# 4. Interdisciplinarity

Participants thought that the level of interaction between the history of medicine and other disciplines was high. However, a number of funding and review issues were raised in relation to this subject:

- uncertainty about how the Trust's History of Medicine Grants and Units Panel viewed interdisciplinary work, and whether cross-panel applications could be made;
- ➤ the relationship between the history of medicine and the allied sciences, and whether this was reflected in the funding remit of the Trust;
- the encouragement of new modes of interdisciplinary research, which might be constrained by the demands of editors for publications in specialist journals;
- the need for recognition of interdisciplinary work in Research Assessment Exercise and Trust reviews.

# 5. Dissemination

Many participants believed that there was greater potential for history of medicine research to be disseminated to wider audiences. Suggestions for its improvement included:

- designated funding for dissemination projects and/or recognition of dissemination efforts in Trust review mechanisms;
- development of a central Trust position to assist the dissemination of information about the discipline;

- more monitoring and analysis of the outcomes of funded research;
- ▶ the use and strengthening of regional resources
   such as Units and other large clusters to
   work with hospitals, museums and libraries.

# 6. Trust policy-making and procedures

Participants welcomed the workshop and evaluation, yet stressed the need for improved communication with the Trust. In particular there was:

- a need for greater openness and transparency on funding schemes and on the decisionmaking processes used by the Trust, for example how Panel members were selected;
- desire for wider consultation and discussion on policy decisions.

# Workshop participants

David Albury, Office for Public Management

Liz Allen, The Wellcome Trust (Policy Unit)

Robert Arnott, University of Birmingham

Virginia Berridge, London School of Hygiene and Tropical Medicine

Roberta Bivins, University of Manchester

James Bradley, University of Glasgow

Catherine Cooper, The Wellcome Trust (Policy Unit)

Roger Cooter, University of East Anglia, Norwich

Robert Dingwall, University of Nottingham

Mary Dobson, University of Oxford

Mary Fisher, University of East Anglia, Norwich

Robert Fox, University of Oxford

David Gentilcore, University of Leicester

Johannna Geyer-Kordesch, University of Glasgow

Bunia Gorelick, University of Oxford

Peter Haggett, Chairman, Wellcome

Trust History of Medicine Grants and Units Panel

Mark Jackson, University of Exeter

Ruth Levitt, Office for Public Management

Grant Lewison, The Wellcome Trust (Policy Unit)

John Malin, The Wellcome Trust (Programme Manager, History of Medicine Programme)

Hilary Marland, University of Warwick

Clare Matterson, The Wellcome Trust (Policy Unit)

Joseph Melling, University of Exeter

Elaine Murphy, The Wellcome Trust (Academic Unit)

John Pickstone, University of Manchester

Roy Porter, The Wellcome Trust (Academic Unit)

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