British academic ophthalmology in crisis

J M Sparrow

Where from and where to?

In December 2004 the headcount for consultant ophthalmologists was 809 (2.6%) of 31 672 NHS consultants.¹ Ophthalmologists provide around 10% of all NHS hospital outpatient department appointments² and similarly perform around 7% of all NHS surgical procedures.³ In a patient care context ophthalmology is unquestionably an important service area.

A survey of medical academic staffing levels undertaken by the council of the heads of the UK medical schools in 2004 identified 1146 full time equivalent (FTE) professors,⁴ 4.2% of the 27 640 FTE NHS consultant workforce at that time.¹ The survey identified just 15.6 FTE clinical professors in ophthalmology or 2.1% of consultant ophthalmologists (calculated by adjusting the consultant "head count" down by 10% to approximate FTE). Since 2000 medical student numbers have risen by 40% in Britain and four new medical schools have opened.⁴ Despite this expansion medical academic numbers (all grades) have declined over these 4 years from 3549 FTE to 3113 FTE, a 12% overall drop, with ophthalmology dropping by 17% from 40 FTE to 33 FTE. Of particular concern has been the dramatic 40% fall in the number of clinical lecturers, both overall and in ophthalmology.⁴ Since the recommendations made in the council of heads' earlier report,³ a partial recovery in some subject areas has occurred, with worsening in others.⁴ General medicine and public health medicine, for instance, have made significant recent gains (23% and 30% respectively) across the 2003–4 period, but of hospital based specialties only general medicine has increased academic staff numbers since 2000 (12% rise compared with overall 12% fall). Academic staffing levels in surgically based or "craft" specialties have continued to decline across the board.⁴

At a time when academic medicine in the United Kingdom is rightly described as being in crisis, what can be said for the state of academic ophthalmology? Clinical professors of ophthalmology comprise around only 2.1% of consultants

compared with 4.2% for professors overall. The first problem for academic ophthalmology is, therefore, that there are insufficient senior clinical academic leaders. For "all grades" the drop in academic ophthalmologist numbers has been 17% over 4 years compared with 12% overall, and clinical lecturer numbers have fallen by 40%. Without a dramatic reversal of these trends the future generation of academic ophthalmologists will be insufficient to maintain a critical mass of teachers and clinical researchers and the already inadequate number of senior academic leaders will contract further.

There is an urgent need for medium and long term investments in teaching and clinical research if our future patients are to receive quality eye care in the United Kingdom

Such figures and predictions make depressing reading. Understanding the origins and causes of the low and falling academic presence in clinical ophthalmology may be of value in identifying remedies. In the over-regulated university sector, conflicting forces create damaging distortions of academic priorities, the research assessment exercise (RAE) being a prime culprit.^{6–7} A system which judges and rewards academic value on the basis of research activity alone is bound to undervalue clinical academics, who are by definition part time researchers, yet are compared directly with full time research scientists. An inevitable result is that research priorities have become skewed away from clinical research,⁸ which, for all the wrong reasons, is viewed by academic institutions as second rate.⁷ As the poor relative, clinical research increasingly struggles to attract funding⁹ and the current situation, with 208 vacant senior medical academic posts across the United Kingdom, 91 of which are professorial chairs, comes to prevail.⁴ These well publicised problems afflicting academic medicine in general undoubtedly impact negatively on ophthalmology, yet there is still more adversity to hand. In a severely resource restricted

environment big fish become predatory. Small departments unable to resist such forces are left to languish and decline, or are actively shut down. Senior and powerful university office holders wishing to bolster and preserve their own interests and academic positions find reasons for not making clinical academic appointments unless these service their own (described as the institution's) needs. In a state of weakness a fight for survival replaces academic creativity and the downward spiral continues. In a system where peer review decides whose grant applications are funded and whose are not, human nature takes over, with an ensuing "club culture" that maintains the status quo for those privileged few who have succeeded in fighting their way to the top. Fresh ideas with potentially high impact on patient care put forward by academic clinicians in daily contact with patients are lost in the undignified scramble for money played out among the "big players." Being numerically small, and buffeted by such forces, academic ophthalmology has declined to a perilous state⁴ despite its obvious importance as a clinical service area.^{2–3} The situation for undergraduate teaching is no better and despite the clear service demands for eye care many UK medical schools provide just 1 week of teaching for clinical ophthalmology in a 5 year curriculum (<1% of teaching time).

The futures of academic medicine and academic ophthalmology as we know them presently hang in the balance.^{10–11} In the United Kingdom the Department of Health recently conducted a consultation entitled "Best research for best health: a new national health research strategy" and has set up a National Coordinating Centre for Research Capacity Development¹² in response to calls for the rescue of medical research. These developments build on previous work and recommendations of a number of bodies including the Academy of Medical Sciences,¹³ the UK Clinical Research Collaboration,¹⁴ and the Research for Patient Benefit Working Party (Walport Report).⁸ For the future generation of academics the Modernising Medical Careers programme now sets out specific proposals to facilitate development of integrated academic career pathways.¹⁵ Despite the fact that academic ophthalmology is not separately identified as a priority area in any of the reports, these developments in general do offer hope. As predominantly a "craft specialty" ophthalmology aligns with surgery, which is identified as one of the priority areas for remedial intervention: "Academic training programmes in those specialties

that have been subject to particular decline in their academic activity are encouraged."¹² The task for ophthalmologists is to draw attention to the prodigious clinical demand and service throughput delivered across the NHS and the associated needs for quality clinical and basic research upon which to build evidence based teaching and clinical practice. As ophthalmologists we are best placed to highlight the historic and current state of under-representation of academic ophthalmology and to lobby for improvements at all levels.

The international debate on the difficulties facing academic medicine has revealed a widespread problem with implications for teaching, research, and ultimately clinical care, to which academic ophthalmology has fallen particularly foul. There is an urgent need for medium and long term investments in teaching and clinical research if our future patients are to receive quality eye care in the United Kingdom. Academic ophthalmology is disproportionately badly off because, in addition to current academic woes, it has historically been under represented at senior and junior levels. Remedial action is urgently required to uplift the numbers of academic ophthalmologists at all levels; without

appropriate senior academic leadership, expansion at more junior levels will remain inhibited. Supporting and expanding the present generation of senior academics, teachers, and clinical researchers is vital if a collapse of future critical mass is to be avoided.

Br J Ophthalmol 2006;**90**:404–405.
doi: 10.1136/bjo.2005.088062

Correspondence to: John M Sparrow, D Phil, FRCS, FRCOphth, Bristol Eye Hospital, Lower Maudlin Street, Bristol BS1 2LX, UK; john.sparrow@doctors.org.uk

No competing interests.

REFERENCES

- 1 **Department of Health.** *NHS workforce: consultants and GPs as at 31 December 2004*, 2005; [http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsStatisticsArticle/fs/enCONTENT_ID=4112060&chk=PMHB0u](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsStatistics/PublicationsStatisticsArticle/fs/enCONTENT_ID=4112060&chk=PMHB0u).
- 2 **Department of Health.** *Hospital activity data*, 2004, http://www.performance.doh.gov.uk/hospitalactivity/data_requests/outpatient_attendances.htm.
- 3 **Department of Health.** *Hospital episode statistics*, 2004, <http://www.dh.gov.uk/assetRoot/04/09/70/98/04097098.pdf>.
- 4 **Silke A.** Clinical academic staffing levels in UK medical and dental schools: data update 2004. A survey by the council of heads of medical schools and council of deans of dental schools. June 2005, <http://www.chms.ac.uk/CHMS&CHDDS%20Survey%20of%20Clinical%20Academic%20Numbers%20June%202005.pdf>, 2005.
- 5 **Silke A.** Clinical academic staffing levels in UK medical and dental schools. A survey by the council of heads of medical schools and the council of deans of dental schools, 2004, http://www.chms.ac.uk/Clinical_Staffing%20May%202004.pdf.
- 6 **Fielder AR, Levin M, Tudor-Williams G.** Campaign to revitalise academic medicine: crisis in UK academia affects academic medicine too. *BMJ* 2004;**328**:1376.
- 7 **Banatvala J, Bell P, Symonds M.** The research assessment exercise is bad for UK medicine. *Lancet* 2005;**365**:458–60.
- 8 **Walport M.** *Research for patient benefit working party final report*. London: Department of Health, 2004, http://www.dh.gov.uk/PolicyAndGuidance/ResearchAndDevelopment/ResearchAndDevelopmentAZ/PrioritiesForResearch/fs/enCONTENT_ID=4082668&chk=xUzx/B.
- 9 **Druss BG, Marcus SC.** Academic medicine: who is it for? Funding gap between clinical and basic science publications is growing. *BMJ* 2005;**330**:360–1; discussion 363–4.
- 10 **Charlton BG, Andras P.** Medical research funding may have over-expanded and be due for collapse. *Q J Med* 2005;**98**:53–5.
- 11 **Clark J.** Five futures for academic medicine: the ICRAM scenarios. *BMJ* 2005;**331**:101–4.
- 12 **National Coordinating Centre for Research Capacity Development.** 2005, <http://www.nccrd.nhs.uk/>.
- 13 **Academy of Medical Sciences.** *Strengthening clinical research*, A report from the Academy of Medical Sciences. 2003, <http://www.acmedsci.ac.uk/images/publication/pscr.pdf>.
- 14 **UK Clinical Research Collaboration.** 2005, <http://www.ukcrc.org/>.
- 15 **NHS.** *Modernising medical careers—academic medicine*, 2005, <http://www.mmc.nhs.uk/pages/academic>.