

Research Capacity and Attitudes in UK Cellular Pathology

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Background

Cellular pathology is the science of understanding disease at the level of tissues and cells within the body. It is crucial to understanding cancer and its treatment, as a key component of molecular pathology underpinning stratified approaches to cancer treatments. To maximise the benefits of these treatments, a new academic discipline of 'cellular molecular pathology' (CMP) is needed.

Ongoing decline in academic pathology, documented in annual surveys conducted by the Medical Schools' Council (MSC) over 15 years, poses a major threat to cellular pathologists' capacity to gain molecular skills and innovate. For best use of resources to revitalise academic cellular pathology through CMP development, we must first understand current attitudes towards, and capacity for, research among cellular pathologists. We need also to understand what factors are perceived by pathologists as enablers or barriers to innovation within the profession.

Methods

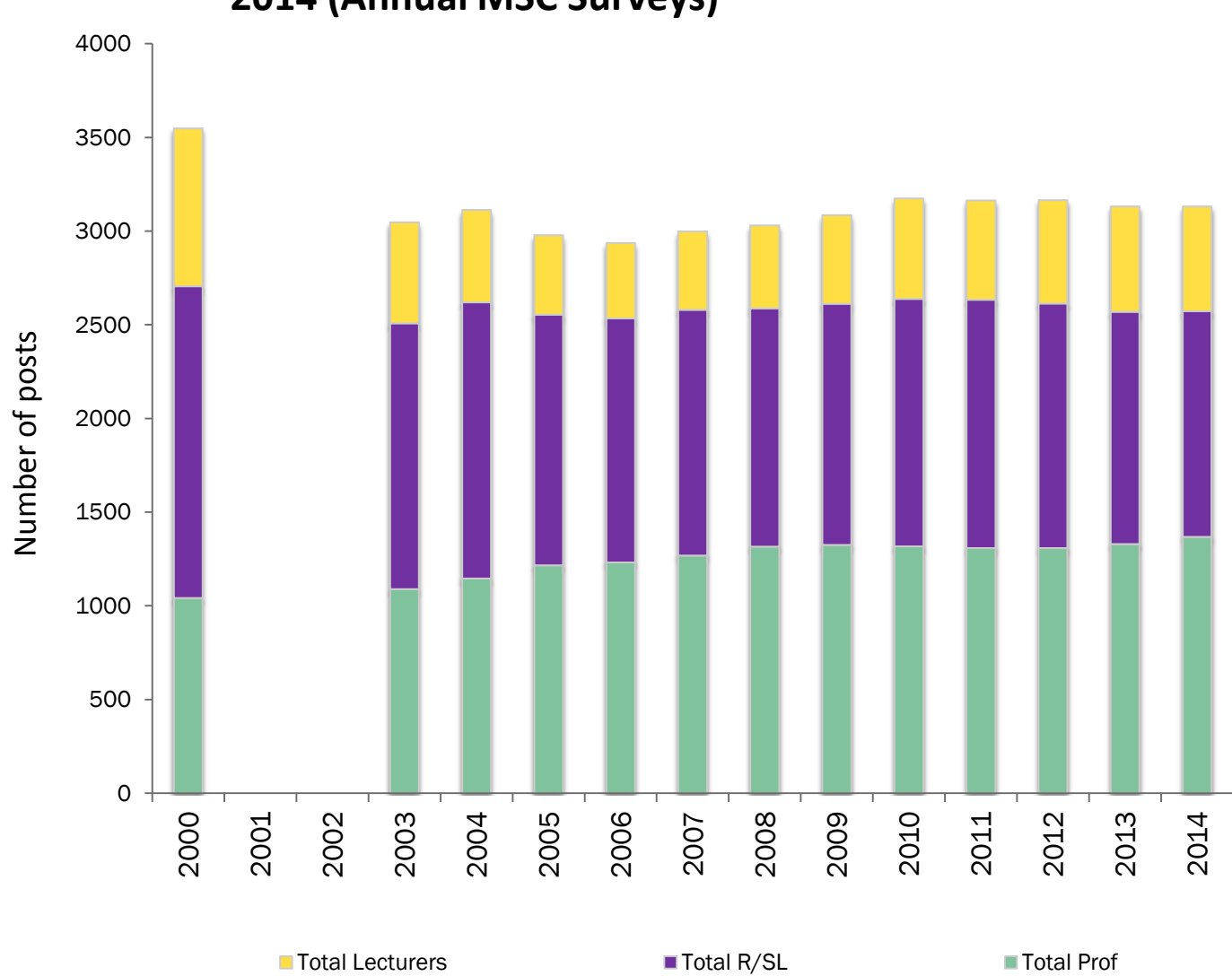
To support our CMP development proposal ("CM-Path") to NCRI partner funders, we conducted two surveys. Firstly, we recapitulated elements of the annual MSC surveys to gain information about current academic posts specifically in cellular pathology (the MSC surveys report all sub-specialities of pathology collectively and so lack this detail). Secondly, we surveyed NHS cellular pathology consultants throughout the UK to establish current attitudes to research within this community.

Results

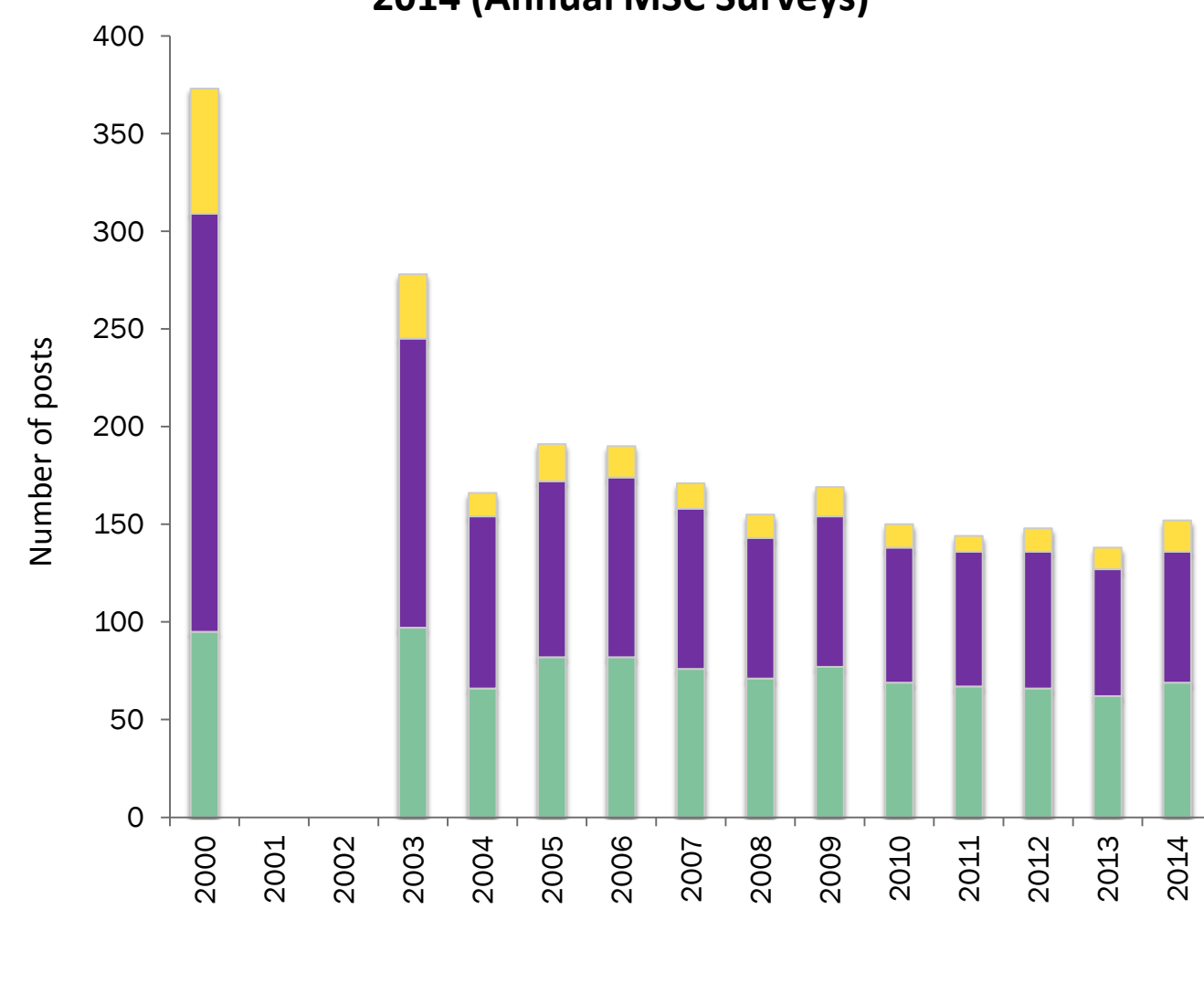
25 of the 34 centres surveyed annually by the MSC responded to our first survey, reporting 37 professors, 25 readers/senior lecturers and 20 clinical lecturers, 20 academic clinical fellows and 15 academic FY2s.

213 cellular pathologists responded to our profession-wide survey. 71% stated a desire to undertake research and 55% to mentor others. Key enabling factors identified were protected time, research funds, technical support staff and collaboration with established academic groups. Currently, absence or limitation of these factors poses major barriers to cellular pathologists' undertaking research.

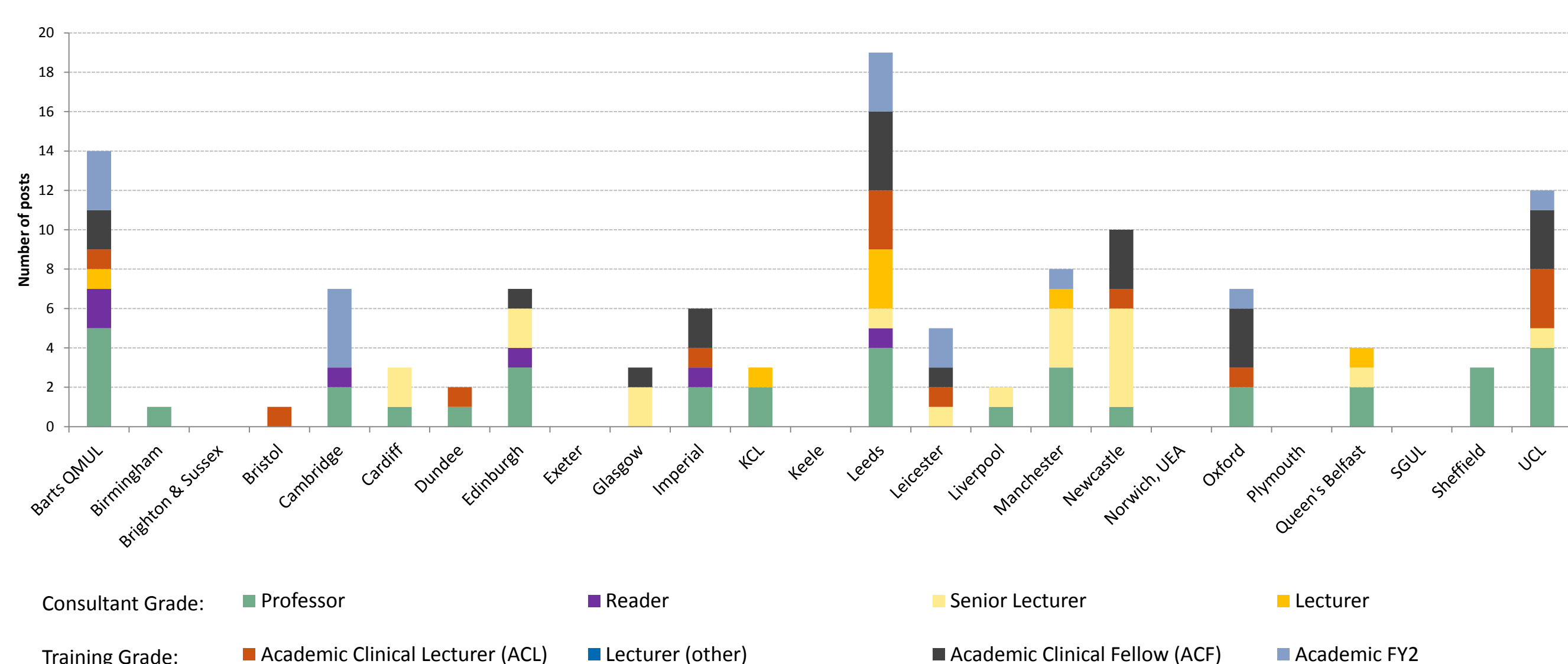
All Academic Medical Staff by grade 2000 – 2014 (Annual MSC Surveys)



Academic pathologists by grade 2000-2014 (Annual MSC Surveys)

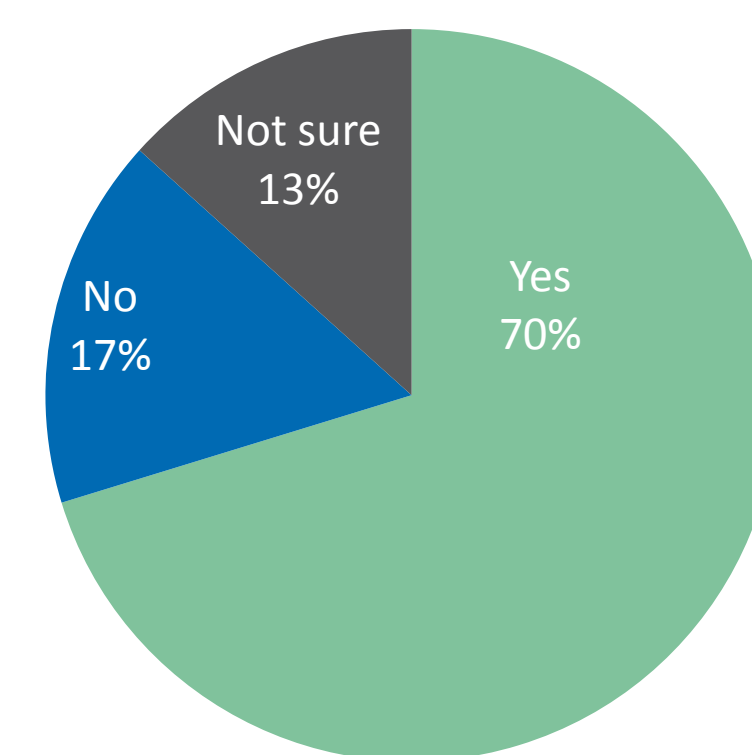


CM-Path Survey: Self-declared academic cellular pathology posts 2015 by centre

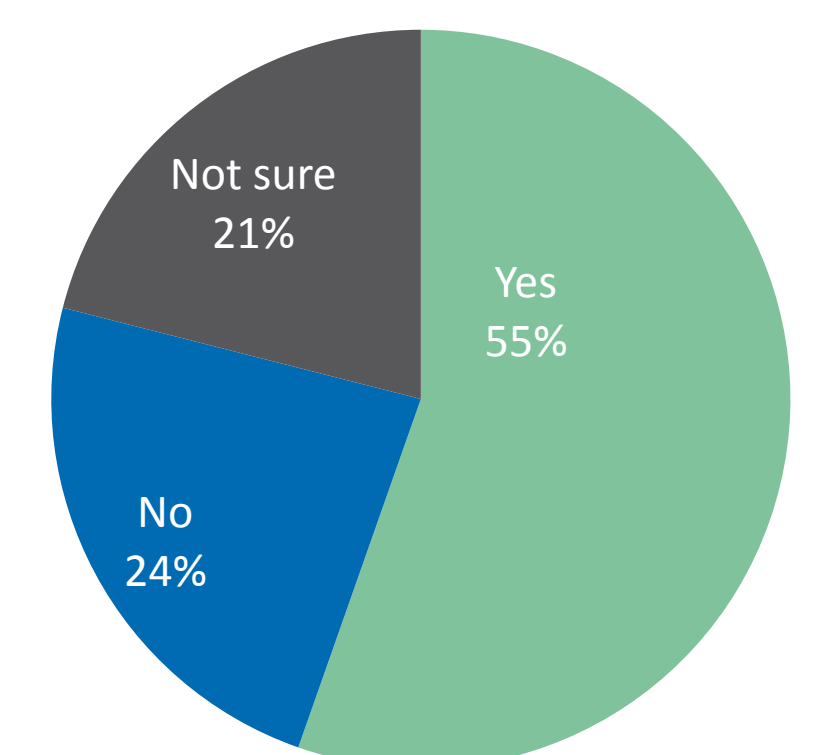


Our profession-wide survey was promoted by the Royal College of Pathologists and all major UK subspecialist cellular pathology groups:

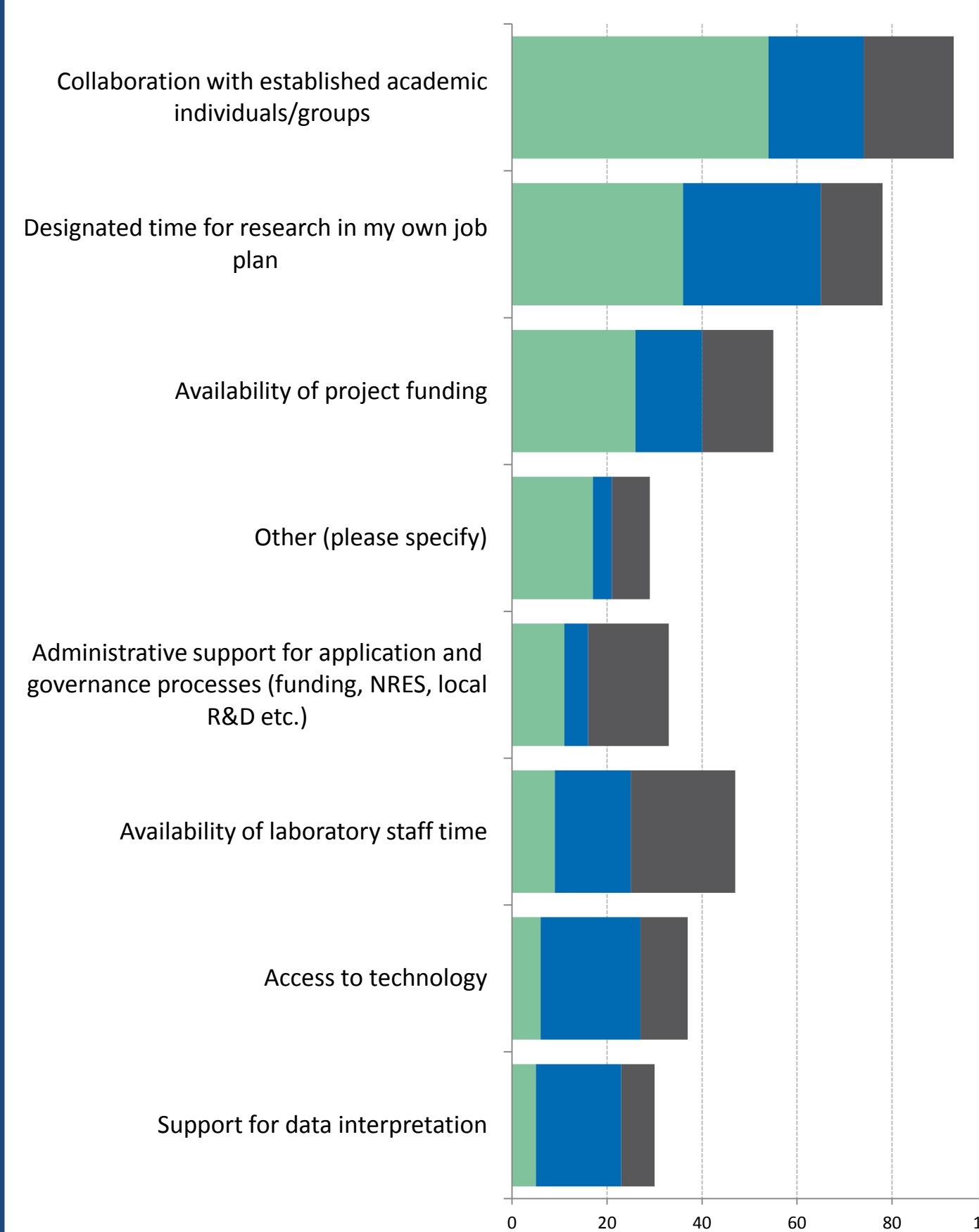
Within your role as a consultant cellular pathologist, do you wish to undertake research? - Research Attitudes Survey 2015



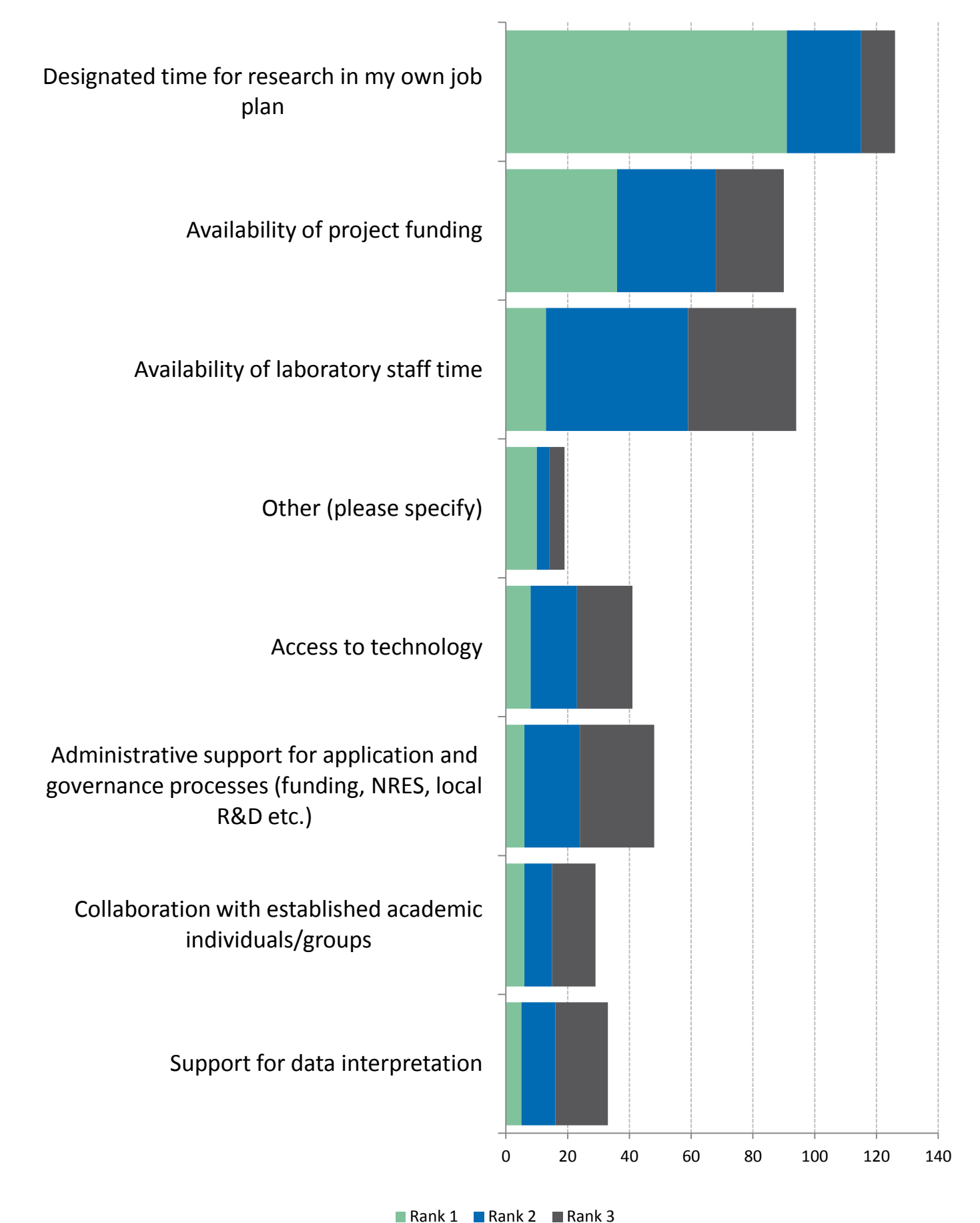
Within your role as a consultant cellular pathologist, do you wish to supervise/mentor others undertaking research? - Research Attitudes Survey 2015



Presence of which three factors in your job plan and work environment are most favourable to your undertaking research?

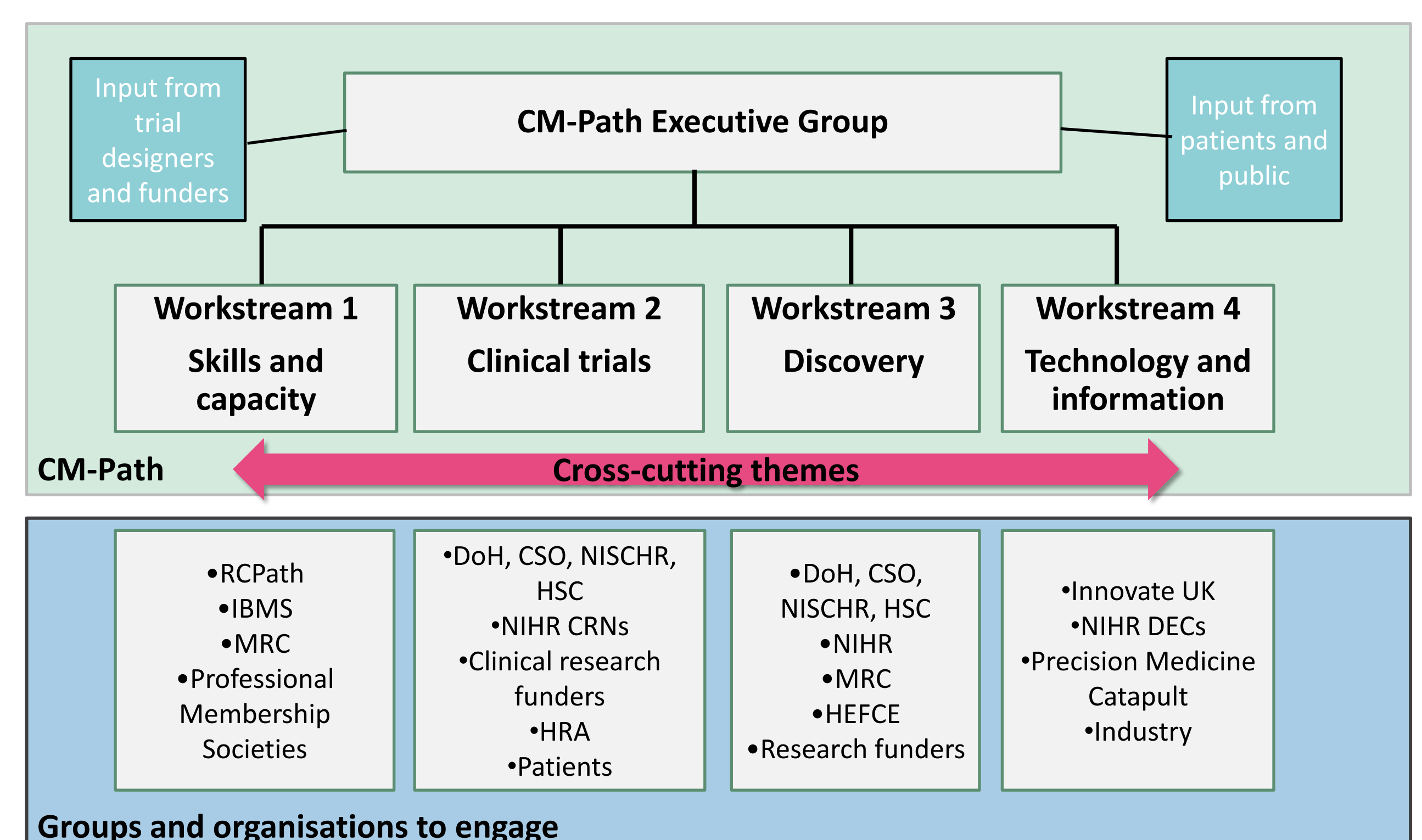


Absence or limitation of which three factors in your job plan and work environment are least favourable to your undertaking research?



Conclusions

Despite attrition of academic posts, most cellular pathologists retain the desire to engage in research and to mentor younger researchers. Resources to overcome key barriers and implement research-favourable conditions are justified to support CMP development, as envisioned in CM-Path; our two surveys provided essential information to support this proposal. The CM-Path structure is shown below and details of the workstream programmes are available in the summary fliers provided.



We acknowledge with gratitude all of the members of the ECMC CMP Networking Group who have contributed to development of these surveys and the CM-Path proposal.