# Random and Personal Thoughts on Statistics in Academia

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#### Personalistic view of state of statistics in academia, in 2010 climate.

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- Describe opportunities and challenges for those embarking on academic career in statistics.

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- Say something about what it's like, its rewards and challenges.

#### Disclaimer

#### Personal, partial, anecdotal and unstructured/haphazard.

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Considers UK academic life, permanent positions within mathematics/statistics groups.

# AY CV

Own path:

- Degree in Mathematics and Statistics, University of Edinburgh.
- Diploma in Mathematical Statistics, University of Cambridge.
- Ph.D., 'Data-based Statistical Methods', Statistical Laboratory, University of Cambridge.
- ▶ JRF, Christ's College, Cambridge.
- Assistant Lecturer, Lecturer, Reader, Statistical Laboratory, University of Cambridge.
- Professor of Statistics, Imperial College.

2009 survey for Committee of Professors of Statistics shows:

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- So, 165/655 full time staff are female. Of Ph.D. students completing in 2008, 34/62 were female.
- 200 are aged 30-39, with 140 aged 50-59 and 54 over 60.
- RAE2008: 388.78FTE academic staff submitted to UOA22 'Statistics and Operational Research'.

Commenting on the health of UK academic mathematics:

'In particular, the area of statistics has outstanding scientists in the 50-and-above age group, but has experienced and experiences serious difficulty recruiting young talented statisticians. There is a serious concern that now the UK is not producing a sufficient number of Ph.D. graduates in statistics to satisfy the demand from industry and at the same time to maintain the level of excellence in universities. Anecdotal evidence suggests that in recent years a large proportion of new appointments at UK universities are made from outside the UK.'

## 2010 scene, implications

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Job prospects good. Institutions struggle to make appointments in statistics/OR/probability.

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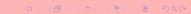
Salary levels OK. [Starting salaries around £35,000-£45,000, say].

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Departments find recruitment to senior positions difficult. With demographic structure, implies junior people often required to take on positions of responsibility [admissions, teaching management etc. etc.] early.

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Lower initial teaching workloads, etc., etc.

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Departments seek evidence of independence in research, ability/potential to publish high-quality research in prestigious outlets. 'Workload formulae' might recognise research as contributing, say, 60% of working time. RAE/REF places most weight on 'quality of research outputs'. For healthy, supportive research environment, critical mass important.

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Identifying the areas of research that are **becoming** important is a good skill to have. Self-confidence/esteem is crucial. 'Always work with people who are cleverer than you are'.

Considerable pressures on departments/researchers to increase quality, research income (grant and 'QR').

Under REF, statistics/OR/probability etc. will be combined into a single mathematics evaluation. Threat or opportunity? Will measure 'impact' of research on economy and society. Should advantage statistics, but the threat is that less mature research groups will be dominated by more established pure/applied groups.

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- research funding crucial, but again new lecturers are aided by 'first grant schemes' etc.

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Institutions generally have promotions procedures that are transparent, non-discriminatory, with well-defined criteria. These will involve high-quality contributions in teaching, research and administration. Realistically, research is the crucial criterion, certainly to Reader/Professor.

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- Time pressures uneven over year.
- Efficiency increases with age/experience, but creativity declines....

#### But, I like it!