

WISDOM's London Universities Women in STEM day

Thoughts from...

Prof Keith Mayes

Head of the Information security Group & Head of the School of Maths and Information Security Royal Holloway, University of London

Agenda.....

- Brief overview of the ISG
- The state of information/cyber security resourcing
- Why worry?
- Is quality the problem?
- Stop searching for a magic solution
- Challenges for different groups
- What have we tried
- What might we try

Information Security Group (ISG)



- Since its foundation in 1990 the ISG has been a world renowned centre of excellence in information/cyber security research, education and expert advice.
- It is a GCHQ/EPSRC Centre of Excellence for research (ACE-CSR) and has GCHQ certified education, and hosts one of only two UK Cyber Security Centres for Doctoral Training (CDT), as well as the Smart Card & IoT Security Centre and Systems Security Research Lab.
- 20+ information/cyber security academic specialist staff
- 12+ Postdoctoral Research Assistants
- 90+ PhD, 450+ (600!) MSc Students
- 10+ Visiting Professors and Fellows
- 4000+ International Alumni





The state of Information/Cyber Security resourcing

- A snapshot, from the start of our focus on gender equality
 - In our UK industry <10% are female
 - In our staff, approx 10% were female (now 20%)
 - Of our PGT students, 15-20% are female
 - The figure is largely static over several years
 - The figure is affected by the gender balance in other countries
- Is there hope for change?
 - Veterinary Science



Why worry?

Cold logic



- There is a skills shortage in information cyber security
- This has been recognised by the UK government
- Graduates have very high employability
- There is a limited source of students
- Attracting many more female students will have a big impact on addressing the skills shortage
- Warmer logic
 - A better gender split brings balance and diversity of opinions and experience, to operations.



Is quality the issue?

- Absolutely not!
 - Our female students often become our best graduates
 - Prize winning for exams and projects
 - Our female PhD students publish top quality papers
 - Our female staff, are respected, winning fellowships, carrying out high—ranking research, advising industry and providing quality teaching

So, not the fish we catch, but the ones that get away!







- How many times have you heard .."this should be done to solve gender inequality"?
 - I don't believe in magic solutions
- I believe in support groups like WISDOM
 - Attracting women to the subject areas
 - Providing critical mass for support, beyond organisational boundaries
 - Providing a louder voice
 - Creating a "snowball" effect for change

Challenges for different groups



Students

- Something goes wrong in the 14-18 age range
- Subject needs to be considered interesting/worthwhile
- Need to show a good working environment, great career prospects
- Problems with feeder subjects
- University and Industry staff
 - Fewer female graduates, so fewer female job applicants
 - Fewer female employers means less role models
 - Recruited female employers may feel isolated/lacking support



What have we tried

- Staff recruitment
 - Increase of 10%; but difficult to do more
- PGT student recruitment
 - Videos
- PGR student/research recruitment
 - Event sponsorship (women in crypto etc.)
- Support for WISDOM
 - Funding/Encouragement
- Workload reduction on return from maternity leave
- Embedded positive changes in School Board rules

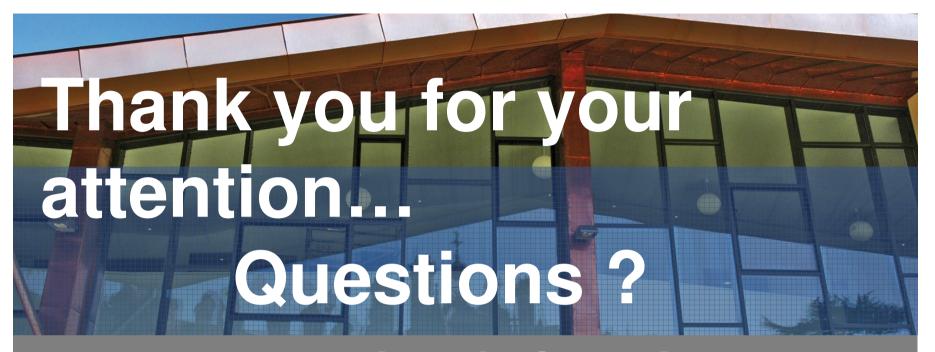




What we might try



- Helping career break professionals
 - Continuity of subject involvement or refresher course
 - Accessible CPD
- Visiting Professors
- Perhaps a fixed term champion for change?
- •
- You tell me ©



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> Royal Holloway University of London

