Experience on organisation of scientific investigations in EU Universities

Professor Mick Fuller

Organisational options

- Academic Department
- Faculty
- Research Group
- Research Centre
- Research Institute

- Research and Innovation Departments

Critical Mass

What level of organisation is adopted depends on Critical Mass

- Critical Mass increases from:
  - Research Group < Centre < Institute
- Research Groups can exist in Departments
- Research Centres can exist in Departments or Faculties
- Research Institutes can exist in Departments, Faculties or whole Universities

Critical Mass

- The Research Lab
  - Usually built around individual researchers or Professors who have a reputation and can attract research grants funding research assistants (research students, postdoc fellows), and attracting visiting researchers.
- Sometimes the Research Lab can turn into a Research Group or Centre but more normally a Research Group or Centre is a collection of Research Labs i.e. a collection of research active Professors

Critical Mass

- Once you have a number of Research Groups or Centres then University may decide that it has enough Critical Mass to establish a Research Institute
- Sometimes 2 or more Universities create a Research Institute between them
- Sometimes Government decides to create a free-standing Research Organisation within or outside of a University(s)

Research Organisations need resourcing

- No matter what organisation structure you have, resources are needed
  - Equipment
  - Space
  - Consumables
  - Technicians
  - Administrators
  - Travel & Networking

Resourcing

- Central or Core funding (University or Government)
  - Often for core facilities e.g. buildings or labs, administration, salary for Director/Leader, networking funding
- Competitive funding – grants
  - Usually for specific projects with aims and objectives

Resourcing

- Web Presence
  - All organisations require a Web Presence
  - Easy to resource, but good web presence needs sophisticated web designers and constant upgrading/updating
  - Must explain what the Institute/Centre/Group is aiming to achieve and contain links to individuals with their publications lists and to research student/postdocs engaged with them
  - Must show how good you are

Individual projects

- Rarely carried out by a single person
- Normally a team approach
  - PI – Principal Investigator (Grant holder; Supervisor)
  - Co-Investigator(s) (Associated colleagues and possibly International collaborators)
  - Research Assistants (Postdocs/Technicians)
  - PhD students (research assistants who are also training to become researchers)

Individual projects

- Divided up into Work Packages or Experiments
- Require reviews and interim Reports
- Require final Report to sponsors
- Require publications in Journals
- May require completion and award of PhDs

Applying for Grants

- Grant awarding authorities
  - Open mode – open for applications across whole theme of the awarding body
  - Responsive mode – in response to a published theme
  - The bigger the Research activity the more likely to have Research Officers to help spot Research Calls and to help with applications
- Research and Innovation Offices
    - Not researchers themselves but invaluable colleagues who understand the research awards process and can increase the chances of success of getting Grants