OUR EXPERIENCE

It is possible to construct a strong research centre which distributes research based consulting to users.
OCBE

UiO
Dept of Biostatistics
6.2 permanent positions
+ 4.2 new ones
+ 21 PhD/p.doc/associated

OUS
Dept of Biostatistics and Epidemiology
15 researchers
Mission:

• Develop statistical methods and their application to the design, analysis and interpretation of biomedical, clinical and epidemiological studies.

• Provide consulting and training in statistics, epidemiology and health-economy to researchers and students of the Medical Faculty of UiO, the Oslo University Hospital and HelseSørØst (regionalstøtte).
Bio statistics

Bioinformatics

- Research
- Teaching
- Consulting

- Inference
- Significance
- Uncertainty of estimates/predictions
- Stochastic models
- Statistical causality
- Optimal design
- Signal extraction from noise

- Sequence similarity search
- Sequence alignment
- Mapping
- HPC
- Phylogenetic analysis
- Motif searching
- Data generation and processing
ORGANISATION

• ONE centre for all biostatics @ Medfak and OUS
• one centre director
• joint organisation of research, teaching, consulting

• UiO employed staff and OUS employed staff.

• Soon: co-localised (Life Science Building?!), Today: Domus Medica + Sogn Arena

• Joint admin (soon)

• There is another biostatistics group at UiO at MI.
OCBE - STAFF

- All permanent staff has 50% research, 40% service and 10% admin
- OUS: service = consulting
- UiO: service = teaching or/and consulting

UiO:

6.2 positions are funded through teaching

4.2 new positions, funded by Medfak, have no teaching, but consulting as duty
OCBE - RESEARCH

- NFR evaluations 2004 and 2010: EXCELLENT
- (SFI)$^2$ and we hope BIG INSIGHT
- One EU grant, but trying more.

- One of the LARGEST Biostats department in Europe.

- High focus on methods
- Top publications
- International visibility
- Large and lively PhD environment

- Hiring top PhD students and postdocs, internationally
- Hiring two top new associate professors, internationally
OCBE - TEACHING

• Professional medical studies (very basic, mini-`master` projects)
• 12 PhD courses @Medfak, basic to advanced, queues on some
• 400 students/year?
• 4000 hours/year (med faktor)
• 1800 hours/year of consulting, currently

• Need more basic courses for non-students, researchers at OUS
• Need a few new advanced courses, (statistical medical imaging, big data, adaptive clinical studies, ....)
OCBE - CONSULTING

• 6.2 positions have teaching as their duty + 1800 hours consulting

NEW! 4.2 positions, consulting as duty = 2500 hours consulting

NOT assigned to any person specifically, divide teaching and consulting among staff at best

OUS: 8000 hours consulting /year

Total ca 12000 hours consulting every year (20% increase)

• Border between research and consulting (first/last author, journals, methods, but mainly self defined)
The new research based consulting service at OCBE

• OUS/UiO common access points, common organisation

• Centralise the distribution of consulting requests among our staff.

• Staff at all level will be involved, seniors and juniors.
Three types of consulting

1. Joint collaborative, long-term research projects
2. Single project support
3. OCBE Policlinic support
1. Joint collaborative, long-term research projects WITH A NODE

- run over many years
- involve one or several research groups on the biomedical side.
- involved in many projects
- co-supervisor of PhD students
- Joint external funding.
- co-author of many papers,
- but also answer the smaller biostatistical questions
- The same OCBE consultant is involved, or more than one, with their students

- Often a source of inspiration and data for methodological research
2. Single project support

- run over one year
- centred on a single paper,
- often co-authored
- PhD or postdoc (or sometimes master) student.
- One OCBE consultant follows the project.

- Sometimes a source of inspiration and data for methodological research
3. OCBE Policlinic support

• basic statistical advice,
• short meeting (usually half an hour) or over the email/phone.
• Short follow-up, for up to some hours.
• concluded after the meeting(s),
• no continuity in OCBE staff should further help be needed
• no, or very short waiting time
• very rarely co-authorships
• OCBE staff will rotate in the drop-in service.
Access points

- Every consulting project has to apply for consulting support by filling out a web-based form.

- This form is then used to:
  - facilitate distribution of consulting tasks to staff with best competence
  - provide a method to manage and document projects
A research center with external consulting service

Critical mass

+ 
  • to do top research
  • to be a lively and pleasant research environment, every day
  • to be a visible unit in international research
  • for getting funding
  • to attract strong PhD student
  • to attract new top staff

  • to be able to offer top consulting in almost all areas, when needed
  • to be less dependent on individuals
  • to exploit synergies
  • to be more in time
  • to better document the total impact of the investment

- 
  • Risk to hide and avoid consulting
  • Risk to prioritise some groups and abandon others
  • Too much consulting to do in an academic job
A hub with staff hired in nodes

- Daily presence of bioinf competence guaranteed for the nodes (but not for the non-nodes, with less capacity available)
- Continuity of consulting

- No lively and pleasant research environment, every day (empty hub)
- No visible unit in international research
- No strong methodological research (experience shows)
- No funding (experience shows)
- Not able to attract top scientists (not in the hub, nor in the nodes) (experience shows – top people leave, difficult to hire strongly)
- Difficult to document the total impact of the investment
- Dependence on one person
Liason between OCBE and the Bioinformatics centre

- Joint research projects (as we have today)
- Joint consulting (as we have today in some cases)
  - full service to users
  - faster task progression
  - better methods
- Joint teaching (should be more)
The new research based consulting service at OCBE

• Compared to today’s organisation, UIO will increase significantly its consulting services.

• A better matching between competence needed and consultant will be possible.

• Reach new research groups who would benefit from our consulting services. We will market the service.

• Focus on timely consulting.