Overview

Credit for Computational Statistics Contributions

Tim Hesterberg, Insightful Corp.

17 June 2006

Notes from two other meetings

http:

//www.amstat.org/sections/educ/evaluation.html

http:

//www.lawrence.edu/fast/jordanj/isostat_2004.html

Additional thoughts





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Notes on Evaluation of Academic Statisticians

http://www.amstat.org/sections/educ/evaluation.html Selected notes from a session on Evaluation and Tenure, held at 1995 meeting for isolated statisticians; largely for statisticians housed in mathematics departments.

- (1) Relationships with Mathematicians
 MAA Guidelines for Evaluating Programs in the
 Mathematical Sciences
 - ▶ Not approved by ASA. Major problems
 - ▶ Don Bentley is liaison. Working for change.
 - ▶ Includes guidelines on evaluating faculty
 - New guidelines will appear in Focus, Amstat News

Suggest departments write to: MAA/ASA joint committee, SLAW, David Moore (won MAA top teaching award)

[2] Special Difficulties for Statisticians

- ► Evaluation by Mathematicians, who may not understand the differences between Statistics and Mathematics.
- Starting major consulting project takes time to learn new field.
- ► Transition to teaching in Math Dept. takes more time than for math PhD.
- Time spend consulting on student projects.
- Publication delays long.
- Acceptance rates low.

Suggestions:

- ► CBMS Report (strategic plan?) discuss issues like consulting taking more time.
- Suggest departments write to: MAA/ASA joint committee, SLAW, David Moore
- Obtain copy of forthcoming revised MAA Guidelines for evaluation.

[4] Grants

- (a) Consulting, especially: technical reports (unpublished work in industry), consulting work with proprietary info
 - Keep record
 - ▶ Get letters from people you worked with
- (b) Lab notes, instructional material
 - Send out for review
 - Put on Web page, or JSE

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- (c) Consulting on grants
 - Be listed as principal investigator or at least consulting statistician

- ► Get info from stis.nsf.gov (Web or ftp)
- At MAA meeting, stop by NSF booth
- ▶ Should count like peer-reviewed paper, even if accepted without funding
- ▶ Be sure to be listed as PI or at least statistical consultant



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[5] Advantages for Statisticians

Our work is

- interdisciplinary
- relevant
- involve students (especially consulting)
- can be understood

Notes from Second Meeting, at JSM

- ▶ Make sure your research goes to a reviewer outside your college (and preferably to another isolated statistician, since he/she will understand your situation). Also, its important that your work is reviewed by a statistician, not by a theoretical mathematician.
- ▶ Rely on the isostat group to verify your work.
- ► Talk to your department chair, so he/she knows what journals are peer-reviewed (e.g., since JSE is an online journal, it may not be perceived as peer-reviewed).
- ▶ Get letters of support from colleagues with whom youve consulted.
- ▶ Argue that consulting is professional development and is not simply part of teaching.
- ▶ Look at the ethical guidelines of the MAA.

The group agreed that this kind of conversation is very important and should take place periodically at isostat meetings.



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Non-academic jobs

- ▶ Recruit mentor, other letters of support
 - ▶ Well-established professor
- ▶ Role of ASA Stat Computing / Graphics Sections
 - Prizes
 - Chambers award for student software
 - Add others?
 - ► Mechanism: judges, survey?
 - Recruit willing mentors
 - Discussion group (JSM mixer, luncheon)
- ▶ Role of other organizations
 - European societies
 - IASC
 - ▶ R Foundation
 - Conferences

- Academic job = "natural path" (easiest to visualize)
- ▶ Other jobs:
 - ▶ Potentially greater impact
 - Better working conditions





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Insightful Research Department

- ► Turn research into software for wide use
 - Higher standards than academic software (ease of use, robustness, testing)
- Collaboration
- ➤ Variety: resampling, missing data, group sequential designs, simulation-based econometric software, functional data, stable distributions, proteomics, microarrays, frailty models, causal modeling
- ▶ External funding SBIR grants (NIH, NSF, ...)
 - Somewhat easier funding
 - Commercial potential
 - Risk, research element
- ▶ We're hiring
- ▶ We're looking for good projects and collaborators

References and Final Thoughts

References:

- http:
 - //www.amstat.org/sections/educ/evaluation.html
- ▶ http:
 - //www.lawrence.edu/fast/jordanj/isostat_2004.html
- ▶ Hesterberg, June 06, Amstat News, "Research at Insightful"; (or timh@insightful.com)

Final suggestions:

- Discussion group(s) over lunch; keep notes.
- ▶ Need volunteer to collect notes.