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Annual program censor report 2015

Honoured being program sensor for the master program in medisinsk cellebiologi since 2009 I would like to summarize my impressions in the following way. There are several reasons to be optimistic about the future of the program. Enthusiastic students, competent teachers with an excellent academic record, excellent facilities for laboratory work and not the least, a fantastic nature within reach from Bergen, which is an asset for recruitment of both students and teachers, as it offers interesting outdoor activities for an active generation.
There are some obvious trends in clinical medicine, which are relevant for a master program in biomedicine (medicinsk cellbiologi, I prefer in the following text the designation Biomedicine from own experience). Evaluation of risk factors like gene variants or biomarkers have gained impact both in the general public perception and in clinical practice. The upcoming cheap methods for high through-put screening may generate questions like: Will alleles of a certain gene found in a commercial screening program offered to me on the web tell something of the risk of attracting Alzheimer's disease? This type of questions also occurs in clinical research based on quality registers or in basic mechanistic studies. In other words, the new technical possibilities for gene sequencing and high resolution biomarker studies point to the importance of basic natural science both for evaluation of clinical outcome on the individual patient level and for the understanding of basic physiological and cell biological phenomena.

Obviously these trends supports the efforts of teachers in the medical faculty to build up master programs, where weight is given to natural science topics like mathematics, chemistry, biochemistry, physics, biostatistics, genetics, bioinformatics, but with a specific perspective towards the relevance of basic biological knowledge for clinical medicine.

Unlike most students in the medical faculty, these master students will not receive a professional certificate ('legitimation') which should direct the focus on their chances on future job markets. Students with excellent skills in experimental methods and a good training in critical evaluation of experimental data will have goodchances. Many of these students will be associated with existing research groups and will obtain a PhD degree. Naturally this points to the necessity that the faculty in future recruitments of scientists and in future development keeps up with the current good tradition of scientific excellence.

As many of these students will end up as group leaders, training in leadership should be encouraged. It is of value that some important courses are together with other courses e.g. medical students, thus making the students used to work with other professionals in a medical context. Thus joint courses with other programs should be encouraged.

There are two aspects worth working on for the future. First student recruitment. The students are recruited from many programs, some on the bachelor level. Few students have a background in a specific bachelor program in biomedicine. This could mean, that in order to synchronize the students e.g. in biochemistry or genetics, some parts of the master program will be too basic and does not fit to the master level Things like progression and quality therefore need continued attention. Ongoing efforts to create joint Nordic courses seem to me to be most helpful to improve student recruitment.

Second, course size. The course in imaging recruits few students. In my opinion this course should continue due to its natural science character and its relation to system biology. Imaging techniques have a great pedagogic and explanatory potential.

The experience from other Scandinavian countries is that these students need a good background in computer science, which most medical biology students lack, while some of the students with background in computer science are more interested in algorithms than in biological phenomena.

Group dynamics are an important tool in student activating pedagogics. My recommendation is that the master program leadership (programutvalget) and the faculty should further develop Nordic joint courses and consider to develop the imaging courses into graduate courses or courses for postdocs.

In summary the master program in biomedicine is in good hands and has the potential to provide the faculty and the medical profession with excellent employees. My thanks to the faculty to giving me the opportunity to work as a program sensor for this important program with its enthusiastic and competent leadership.

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