

## Interdisciplinary Researches in Iran VI: Student Clubs

In the previous editorial,<sup>[1]</sup> we explained the necessity of transition from interdisciplinary researches to interdisciplinary technologies in Iran. Now, we wish to explain about one of the major opportunities in Iran that can help us to expedite this transition. According to the current procedure of student's admission for Iranian universities, there is a highly competitive race among students to enter universities, especially in the medical and engineering fields. It provides this opportunity to benefit from these talented students for research & technology development. However, the current curriculum for both medical and engineering students does not include any serious program for research and technology development, by which capable students may become a research- & high-tech man as soon as possible. However, there are several successful experiences in Iranian universities such as "Research Student Committees,"<sup>[2,3]</sup> which show the capability of learning and performing researches in student side. In addition, a fair amount of medical students have some engineering background and capabilities, vs. some engineering students have some related studies and interests in the medical fields. The main idea is to develop interdisciplinary conversations/researches/technologies among students by different disciplines by construction of an "Interdisciplinary Student Club." This club could include small interdisciplinary student groups with the main following role players [Figure 1]:

- (1) One to two interdisciplinary professor(s) (main supervisor(s)) as the mentor(s)
- (2) One to two interdisciplinary post-graduate student(s) as the mentor assistant(s)
- (3) One to three medical students
- (4) One to three engineering students

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The main context that would connect all the members of the group is a small interdisciplinary project defined by the mentor, which is regularly followed by members.

As a sample interdisciplinary student group, a project for identifying (and grading) dental student's skills in tooth carving based on producing a software for capturing images from the tooth moulages and fully/semi-automatic image analysis by comparing the images before and after carving was proposed and performed in School of Advanced Technologies in Medicine (AMT), Isfahan University of Medical Sciences. This mini-project was carried out in a group containing undergraduate electrical engineering and dental students under supervision of two professors from Biomedical Engineering Department and School of Dentistry, and was finalized in 4 months. This successful experience encouraged the Student Research Committee at AMT to plan an event for development of "Interdisciplinary Student Club" in the school by calling medical and engineering students for predefined interdisciplinary mini-projects.

Accordingly, developing interdisciplinary conversations/researches/technologies among students could be an especial available situation in Iran that can expedite the development of interdisciplinary research and technologies in the country.

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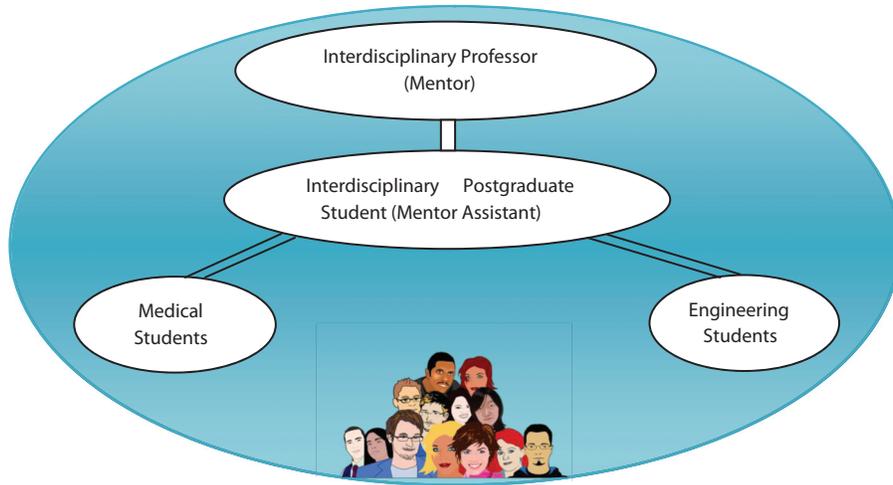


Figure 1: Small interdisciplinary student groups

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### References

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