

Workshop I: Identifying Demands

b) And who asks us? – Students and Junior Researchers

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The ideal scenario for a researcher is to conduct original and interesting science, spending his days answering questions that he/she finds intriguing. However, this dream could end by being just that. The future of medicine includes advances in cellular-based therapies, genome-based tailored treatments, and antibody therapies. And from those three branches the researcher has to decide where to get involved.

Once he/she decides, he/she has to find a centre (laboratory), since conducting own, independent research is almost impossible today. Laboratories require a lot of ethical and legal permissions, without mentioning funding concerns and economic facts. After the researcher applies to the chosen laboratory, the people in charge could hear his propositions, but 90% of the time they will involve the new researcher in a project which is already running or has all permissions and its ready to begin. Starting a new project involves a lot of bureaucracy and scepticism as some scientists are not willing to take a risk by letting less experienced investigators rather than proven researchers work on new projects.

It is also important to say that investigation groups have been generating vast amounts of data. For the research into many diseases such as HIV scientists are required to analyse these tonnes of data. Pooling and sharing of data from different sources will really help saving the lives of many.

Health and epidemics are no longer a regional problem. With so many airplanes travelling between continents every day, health needs to be global. And that worsens the scenario from now on because we need to prioritise diseases like malaria, tuberculosis and HIV. (Malaria by itself kills more than 2 million people per year).

Science needs to focus on these types of diseases, which leaves few chances to investigate low incidence diseases, even if you have a great idea.

Another bioethical dilemma is whether the pharmaceutical industry is going to deliver what is needed, considering their profit motivations? There is some cynicism over how the pharmaceutical industry allows supply and demand to dictate the direction of research (for example the neglect of investments into new antibiotics developments in the last couple of years).

Does this reflect a shifting culture around lab work, leading to a business-oriented point of view of “pure” science? Are there going to be more students who leave academia in favour of working for industry, who may not only have truly noble causes?