The Bologna process represents the biggest common project in the reform of the educational system in the history of Europe. In this process, doctorate or PhD is seen as a third cycle of high education. However, “the third cycle of high education” does not mean that PhD is no more what it used to be in most developed countries - and that is research.

In European Medicine and Health Sciences, in the past and even today, there are countries where traditionally PhD does not exist, especially considering clinical medicine. There are countries where you can find even two doctorates (former Warshaw Pact counters), one after another. There are countries where you can earn a PhD mainly by advanced learning. There are countries where you can earn a PhD only by internationally recognized results of research. Thus, when we mention a PhD in medicine today, people will have different concepts in mind in different countries, and in some countries they will probably not know what to think at all.

Worst of all is that we do not have information what is going on in the neighbourhood. According to one survey only a small percentage of European universities have web pages written in a language understandable to students from other countries. Imagine US science if a young person from Denver would not be able to find and understand information about different study programmes in Los Angeles. This is how Europe looks like today.

Organizing European conferences
This need for better understanding, for better-defined PhD programmes and homogenous criteria in many European countries, as well as the willingness in many countries to break up with the tradition of a small autarkic scientific community, lead to the First European Conference on Harmonisation of PhD Programmes in Biomedicine and Health Sciences held at the University of Zagreb – Medical School, where we tried to find out whether the consensus is possible to achieve. Participants coming from 25 universities and from 16 European countries adopted unanimously Declaration of European conference on harmonisation of PhD programmes in biomedicine and health sciences (‘Zagreb declaration’). This was basically the first international agreement on what a research doctorate is, what a PhD programme should include, etc. We are proud to say that this conference was held before the Bologna seminar in Salzburg, where the well-known ten principles on PhD programmes were adopted. It is not surprising that the academic community in one field and a wider community of European universities shared the same ideas.

Since it was issued in 2004 until today, ‘Zagreb declaration’ has been supported by representatives of more than 50 European medical schools. Certain conclusions of the ‘Zagreb declaration’ appear self-explanatory, however, at many universities in scientifically less developed European countries they might appear almost “revolutionary”.

For the first time there was an international agreement on what the PhD and PhD programmes in medicine are. It should not be the beginning of scientific work, neither its “crown”. It should be the proof of capability “to carry out independent, original and scientifically significant research” and capability to “critically evaluate work done by others”.

On the international level it was said for the first time that for the procedure of dissertation assessment the same criteria pertain as for the peer review of any scientific paper, project,
position, etc. Understandably, to many small and autarkic scientific communities the achievement of such an aim would not be easily accomplished.

The published papers must be the most important proof of the successfulness of dissertation and its constitutive part—this is the logical conclusion of the conference by which a model traditionally present in the Scandinavian countries, already applied in Hungary and in the numerous other countries, is recommended. Recommendations about the number of papers are very often misinterpreted—they should be considered just as a minimal requirement, while quantification is almost necessary in some countries where it is very difficult to organize independent and competent peer review system of evaluation. Otherwise such simplified quantification may be seen as a misuse of scientometrics. Common sense suggests to us that in a small or medium scientific community, or in a contact with a young scientist we would ask, among other things: what did you publish?, how many papers?, etc. In contrast to that, when we are speaking at leading world universities or when we speak to “Nobel size” scientist we would ask: what did you discover?, how important it is? There is a long way for all of us to go.

The Second European Conference on Harmonisation of PhD programmes in Biomedicine and Health Sciences was held in Zagreb on 22 – 24 This Conference was attended by high-level representatives from the medical faculties of 33 universities from 21 countries, as well as the representatives of four major pan-European bodies (AMSE, AMEE, ASPHER and EMA) concerned with issues relating to academic biomedicine and health sciences. The Conference was made possible by the grant from The National Foundation for Science, Higher Education and Technological Development of the Republic of Croatia. The activities after that i.e. registration and start up of ORPEHUS were supported by Croatian Ministry of science, education and sport.

The Conference resulted in ‘Guidelines for Organisation of PhD Programmes in Biomedicine and Health Sciences’.

In the Guidelines participants of the Second Conference have agreed on the basic principles of admission criteria, criteria for advisers, criteria for institution/university, basic principles of the Structure and Organization of PhD Programme, and finally PhD candidates were defined not as a classical students, primarily recipients of the knowledge which has been discovered and synthesized by others, but are also active contributors to the generation of new knowledge. Their status should be established accordingly.

**Long-term creation of ORPHEUS**

Joint conclusion of the Second 2005 Conference was that in medicine and healthcare an umbrella organization is needed, which will help us to harmonise and improve PhD programmes, promote mobility and cooperation. And thus, the idea of ORPHEUS (Organisation for PhD education in Biomedicine and Health Sciences in the European System) was born. Even the Executive Committee was elected. However it soon turned out that this could be only initiative committee. However, in a moral sense, universities and associations present at Second 2005 Conferences are founders of ORPHEUS.

At Conference 2005 the initiative was launched by the president of EMA, to make a proposal for ERASMUS project. It looked like very good idea to start to exist as a project, to strengthen connections among us and to get some financial support for further activities. That initiative was enthusiastically accepted by all participants and we wrote immediately a draft of the project named ORPHEUS. Unfortunately, due to reasons we do not know the project was not accepted and the idea that ORPHEUS could start its activity as a project was not realized.

The process of registration of an institution is complex one. Members of Initiative Committee spent months investigating all the possibilities, and rules in different countries. There is no EU registration. Legislative in most countries does not recognize international organization. Even if they do – the association must be registered in line with national regulations. Thus,
there was no real choice but national registration according to the law of a particular country. Since we had some money and a strong support from Croatian authorities it was suggested to Initiative Committee to register in Croatia. According to Croatian Law only members who are present at Constitutive Assembly can make an organization. At Constitutive Assembly they must accept/create Statutes and other documents, etc. As the consequence, Constitutive Assembly was held by a small number of people, members of Initiative Committee, and their associations and universities who met in Dubrovnik, November 2006 and worked two days on Statutes and other documents. Government office in Croatia issued the registration permit and ORPHEUS started to exist as a legal entity in February 2007.

**Is there a future for ORPHEUS?**

Of all the recommendations agreed in Zagreb 2005 it is difficult to extract only some. However, some of them are long-term oriented and will shape ORPHEUS activity probably for a long time:

It is recommended that national and international authorities create specific funds which would specifically facilitate the mobility and co-operation in the PhD programmes.

It is recommended that all European medical schools and schools of public health create a pan-European network to enable the mobility of the candidates.

Joint advisership should be encouraged. Possible local regulations, which restrict scientists from other countries to be acknowledged as advisers, should be abandoned.

In line with the need for international cooperation, all universities should allow the presentation of the PhD thesis not only in national languages but also in other European languages understood by most participants in such public presentations.

How to achieve such goals if there is almost extreme inequality in scientific development among European countries? In Croatia they say that the chain is as strong as the weakest link. We need a lot of wisdom to make a strong chain from such an unequal material. My personal belief is that no country can have good science if is not competitive. Simply, no country is rich enough to support the wishes of all the people working in science. In its core, science is like sports or arts-based on rare talent, competition and hard work. For example, best football players come from countries both rich and poor. Let us help the best putative ‘players’ in science to develop and grow independently of their origin or politics.

‘Unquestionably, there has been no one like Einstein in physics in this century, but one has to reflect on how easily Einstein might have been lost …’ (Kinnon, 1981)

Ideally the doors of all European universities i.e. laboratories, research facilities, and advisers should be open to all young scientists as much as possible...

It seems like a long way is ahead of us...

**Literature**