

Outline for a memorandum of understanding between Chile & Croatia's institutions of science, technology and higher education

Working draft, October 28, 2005

Both sides agree that connections be built up step by step, and single out areas where concrete activity is most likely to develop first.

1. Institutional relationship, development and formalities (Agreements)

Institutions in Chile: Education Ministry, CONICYT, Chilean Academy of Sciences, Universities

Institutions in Croatia: To be defined

- 1.1** Official agreement on collaboration in science, technology between Chile and Croatia, through their respective governments and embassies.
- 1.2** Agreement between Chile's Ministry of Science & Technology. Protocol between CONICYT and Croatia's Ministry of Science, Education and Sport (Oct. 21, 2005).
- 1.3** Agreement between University of Chile and University of Zagreb Schools of Medicine (Aug. 25, 1993), Agreement between the Catholic University of Chile School of Economics and University of Split (date?), Agreement between Catholic University of Chile and University of Zagreb (date?).

2. Medium and long-term collaboration (Technology Cooperation)

Institutions in Chile: CONICYT through FONDEF, CORFO, Council on Innovation

Institutions in Croatia: Ministry of Science and Education and Sport through the public institutes and higher education institutions.

- 2.1** Explore opportunities of collaboration in Research, Development, Innovation and Transfer of Technology among institutions and companies of Chile and Croatia.
- 2.2** Transfer Chilean expertise in devising a system or a network of centers of excellence in research and development. CONICYT is available to receive a representative from the Croatian science and technology system (1 month, for instance). Perhaps MIDEPLAN through ICM.

2.3 Involve Chilean and Croatian scientists and technologists in selection committees or panels that determine which individual or collaborative research proposals are awarded in their respective systems.

2.4 Set up workshops on topics of shared interest between Chile and Croatia, or on aspects of institutional building of scientific and technological capacity, in which both countries have common interests. Both sides agree the scientific emphasis to be on fields of applied mathematics, astronomy, biomedicine, ecology & biodiversity, materials science, oceanography, natural sciences, while the emphasis on applied R&D and innovation is in agribusiness, aquaculture, biotechnology, forestry, information technologies, mining and engineering.

2.5 Share experience between Chile and Croatia regarding technology foresight, innovation processes and market development, involving research and development projects conducted by universities, institutes, and companies.

2.6 Stimulate existing and ongoing research & development projects between Chilean and Croatian researchers, through facilitating application to travel funds available in either country.

2.7 Set up a collaborative framework to stimulate new joint projects or to coordinate new ventures that match Chilean and Croatian researchers working in similar problems in either basic science or technology development.

3. Exchange of scholars and students (Mobility)

Institutions in Chile: Catholic University of Chile, University of Chile, CONICYT-FONDAP Centers of Excellence, MIDEPLAN-ICM Institutes

Institutions in Croatia: Public institutes and higher education institutions.

3.1 The protocol (1.2 above) envisages concrete mechanisms to establish bilateral mobility. Institutions are encouraged to make use of these mechanisms and support them through whichever additional means are available.

3.2 Institutions may jointly take advantage of additional opportunities for exchanges of lecturers, scholars and students whenever possible.

3.3 Short-term stays for professors or researchers in universities, institutes, centers and laboratories in both Chile and Croatia to collaborate, teach or lecture in workshops and seminars.

3.4 Medium-term stays for postdocs and doctoral students, to conduct part of their research or to take courses, which must be credited in the respective doctoral programs, in Chile and Croatia.

3.5 Short- to Medium-term stays for doctoral or predoctoral students, to attend language and cultural studies, in Chile and Croatia.

4. Subject areas/activities (Start-up)

- 4.1 The protocol envisages a joint panel to select areas for support. We bring the following areas, institutions and activities in science to the panel's attention:
- collaboration in biochemistry, biomedicine and public health (ICBM-University of Chile and FONDAP Center of Biomedicine , Institute of Medical Research, U. of Zagreb School of Medicine, Institute of Public Health, Institute Ru_er Bo_kovi_, Faculty of Science, Institute of Oceanography and Fisheries).
 - collaboration in applied mathematics and mathematical modelling (FONDAP Center of Mathematical Modeling, Faculty of Electrical engineering and naval architecture, U. of Split, Faculty of Mechanical engineering and Naval Architecture, U. of Zagreb).
 - collaboration in ecology, oceanography and biodiversity (FONDAP Center of Ecology & Biodiversity, FONDAP Center of Oceanography, ICM Institute of Ecology & Global Change, Institute of Oceanography and Fisheries, Institute Ru_er Bo_kovi_, Faculty of Science).
 - collaboration in astronomy and astrophysics (FONDAP Center of Astronomy/Astrophysics, Faculty of Science).
- 4.2 We similarly bring the following areas of technology and engineering to the panel's attention:
- Materials research, including sample preparation
 - Informal modeling for building scenarios of technology transfer
 - contacts between universities in matters of curriculum transfer (Catholic University of Chile College of Engineering, Universidad Austral de Chile Ingenieria Naval, Faculty of Mechanical Engineering and Naval Architecture, U. of Zagreb)
 - information technology and infrastructure (Catholic University, University of Zagreb, University of Split)
- 4.3 Concrete technological projects with the purpose of bringing new products to the market will be supported on an ad-hoc basis, provided at least the following is true:
- Objectively measurable goals are specified
 - Definite timetables are proposed

Both sides find it important in the establishment of closer ties between our countries

- to establish departments of Croatian studies or Croatian language at one of Chilean universities;
- for lecturers in Chilean literature and culture to be received in one Hispanic language department at Croatian universities;

- to use Chilean-Croatian cooperation as basis for multilateral projects, in particular European Framework 7, as universities and industrial partners;
- to support the engagement of the private sector in collaborative programs.

5. Targets of opportunity

5.1 Meetings following up this Workshop.

5.2 Meetings with authorities responsible of large scientific endeavors in Chile (FONDAP Centers, Institutes). Researcher and Postdoctoral exchange, collaborative grants.

5.3 Meetings with authorities of major universities in Chile. Doctoral and predoctoral exchange, exchange fellowships.

5.4 Meetings with authorities of Chile-Croatia Chamber of Commerce. Explore setting up a fund that facilitates the integration of the two countries through their scientists and technologists.