

### **The Science at Croatian Universities: A Gloomy View through SCISEARCH and MEDLINE**

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**Aim.** Comparison of scientific articles published during the last 10 years by scientists working at the universities of Zagreb, Rijeka, Osijek and Split (Croatia), Ulm (Germany) and Graz (Austria).

**Method.** Analysis of the numbers of papers obtained by searching the SCISEARCH database of the Institute for Scientific Information (ISI) and MEDLINE.

**Results.** The Universities of Osijek, Rijeka and Split, with only 0.42, 0.55 and 0.75 published papers per scientist over a 10-year period respectively, were found to have the lowest scientific output.

Although the 1.65 papers published by an average scientist from the University of Zagreb were a significantly higher output compared with the above regional universities, they were still considerably below the production of the University of Ulm (6.6 papers per scientist). The comparison of the number of papers per 1,000 students gave similar results.

**Conclusion.** Irrespective of the parameter used for the comparison of scientific development, all the three Croatian regional universities were found to lag significantly behind the University of Zagreb. In our opinion, the level of research activities is so dramatically low that it questions further development of these universities. The two main obstacles to an immediate improvement of Croatian science are: (a) a lack of high-quality scientists who could take up the burden of scientific development, and (b) a slow process of the organizational transformation of universities, with an obvious tendency to be devaluated since its very beginning. What Croatian scientific research urgently needs is the introduction of international standards, including the selection of scientists. The new Bill of Science and the National Research Program may be a good foundation for such efforts in the future.

**Key words:** Croatia; publishing; research; science; universities