

TRENDS AND CHALLENGES OF SCIENCE IN LATIN AMERICA

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Science in Latin America has experienced vigorous growth in the past decade, as demonstrated by the increase in Latin American share of the world's scientific publications and by the numbers of PhDs in science and engineering. In most fields, however, the recognition or relative impact of Latin American science, measured by the average number of citations received by published articles (CpP), is below world averages and much lower than in developed nations. We show that CpP values for 34 developing and developed countries correlate with gross expenditure in research and development (GERD), with gross domestic product (GDP) per capita and with the number of researchers per million inhabitants (RpM). Among those countries, Latin American nations present some of the lowest values of CpP (< 6), GERD (≈ 1% of GDP) and RpM (< 2,000). Latin American Biochemistry and Molecular Biology (BMB) is one of the areas for which relative impact - compared to developed nations or to world averages – is lowest. These observations indicate the need to establish effective policies to increase competitiveness in terms of the international recognition of Latin American natural sciences in general, and BMB in particular.

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