Comparative analysis of the biochemistry undergraduate courses in Brazil

Granjeiro, P.A.¹; Lima, E.H.M.²; Fietto, J.F.R.³; Bracht, A.⁴

¹Curso de Bioquímica, CCO-UFSJ, MG, ²Curso de Medicina, CCO-UFSJ, MG, ³Dep. de Bioquímica, ICB-UFV, MG; ⁴Dep. de Bioquímica, CCB- UEM, PR, Brazil

INTRODUCTION: The economic and social development of Brazil during the recent decades has contributed to the installation of several new undergraduate and graduate study programs, as is the case of the undergraduate biochemistry programs at UFV, UFSJ and UEM. The new biochemical professionals are being prepared to work mainly in Industries, research Institutes, government agencies and Universities in all fields that involve Biochemistry and Molecular Biology. The aim of this study was to conduct a comparative analysis of the courses in Biochemistry in Brazil. **MATERIAL AND METHODS:** Comparative analysis of the course units of the UFV, UFSJ and UEM programs, centered on the curricula contents and organization and on the profiles of the students in terms of parameters such as the number of admissions and the graduation completion rates. **RESULTS AND DISCUSSION:** The UFV and UEM programs present a very similar distribution of workload over the biological, exact sciences, humanities, biochemical specialties and technological applications. The UFSJ program presents higher workloads in the areas of biological sciences and technological applications. No significant differences in the distribution of the workloads of mandatory and optional disciplines, complementary activities and supervised activities were detected. Over the past five years there was a decrease in the number of students that abandoned the programs, despite the increased retention time in the three courses. Most graduated students at both UFV and UFSJ continue their academic career toward the Master or Doctor degrees. **CONCLUSION:** Little difference between the study programs analyzed. This is somewhat surprising if one considers the fact that individual conception of each program was based on different local conditions and needs, which indeed justify small differences. The similarity of the programs, on the other hand, reflects the universality of the biochemical sciences and their broad potential of practical applications.

Keywords: undergraduate, biochemistry and molecular biology, analysis, curricula, Brazil

Support: FAPEMIG, UFV, UFSJ, UEM.