

## The role of microorganisms in steroidal hormones transformation

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**B**iocatalysis concept is based on the use of biological catalysts (enzymes, living organisms and cells) to perform chemical conversions on organic compounds. Biotransformations have been applied for the conversion of a variety of organic compounds, especially steroidal and terpenoidal compounds, since it is difficult to carry out direct chemical changes on unreactive carbon centers of steroidal molecules by conventional chemical reactions. Steroids are generally present in animals, plants and fungi. All steroids that are found in animals and fungi are biosynthesized from the lanosterol. While those found in plants are biosynthesized from the cycloartenol. Both lanosterol and cycloartenol are

derivatives of a triterpene squalene. Microorganisms have been used extensively for the transformation of steroids and particularly steroidal hormones since their enzymes catalyze reactions with high regio- and stereospecificity. In this study, microbial transformations of steroidal hormones have been compiled and covered

### Speaker Biography

Bushra Abdul-Hadi has obtained her PhD degree (Therapeutics and Clinical Pharmacy) in 2012 from Hungary. She is currently working as an Assistant Professor at the Faculty of Pharmacy and Medical Sciences, Al-Ahliyya Amman University, Amman, Jordan. She wishes to contribute in raising standards of education and research in Jordan.

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