

10th ICCBMT Summary

The Tenth International Conference on the Chemistry and Biology of Mineralized Tissues (10th ICCBMT) meeting took place November 7-12, 2010 in Carefree, Arizona. The actual program is attached as a PDF file. The overall goal of the meeting was to disseminate state-of-the-art information about the structure, function, and interactions of the mineral, extracellular matrix and cellular components in vertebrates in tissues such as bone, cartilage and tooth as well as other invertebrate tissues while encouraging collaboration among investigators across various scientific disciplines. This was the 10th meeting in a series that meets every three years. The research presented at this meeting provided knowledge and basic understanding of the events involved in the formation, maintenance and repair/regeneration of mineralized tissues and ectopic mineralization of tissues. The intent is that this understanding will lead to improved diagnosis, treatment therapies and ultimately prevention of diseases as well as rare diseases of dystrophic mineralization. Also it is expected that this knowledge will facilitate the development of improved biomaterials for tissue-engineered devices with dental and skeletal applications such as dental and orthopedic implants.

The meeting topics focused mainly on bone and teeth with respect to the development, progression, and the formation of these hard structures from the initial cell signaling to the physical use of the formed structures. The presentations give detailed information of how this process works and unfortunately what happens when the process does not work. The meeting brings together a unique group of established investigators and new/young investigators in a setting that allows interaction and exchange of ideas.