

CONFERENCIA

“INGENIERÍA TISULAR CUTÁNEA”

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Regenerative Medicine is an emerging field that combines basic research and clinical observations in order to identify the elements required to replace damaged tissues and organs in vivo and to stimulate the body's intrinsic regenerative capacity. Great benefits are expected in this field as researchers take advantage of the potential regenerative properties of both embryonic and adult stem cells, and more recently, of induced pluripotent stem cells. Bioengineered skin emerged mainly in response to a critical need for early permanent coverage of extensive burns. Later this technology was also applied to the treatment of chronic ulcers. Our group has established a humanized mouse model of skin grafting that involves the use of bioengineered human skin in immunodeficient mice. This model is suitable for the study of physiologic and pathologic cutaneous processes and the evaluation of treatment strategies for skin diseases, including protocols for gene and cell therapy and tissue engineering.