Hilton Kaplan, MBBCh FCSSA PhD
Associate Research Professor, New Jersey Center for Biomaterials
Rutgers, the State University of New Jersey

Hilton Kaplan, MBBCh FCSSA PhD
University of Southern California
Colleges of Medicine of South Africa
University of the Witwatersrand

Dr. Kaplan is a Reconstructive Plastic Surgeon and Biomedical Engineer with research foci in neurosciences and tissue engineering. He has held various clinical and research positions across academia and industry, including Senior Medical Director at Allergan and Vice President of Clinical Sciences at LifeCell. Dr. Kaplan is also an Adjunct Professor at the University of Southern California in Regulatory Science; and is a founding board member of the non-profits Grossman Burn Foundation, and Look at Us Alliance for Craniofacial Differences.

Summary of Research Interests:

Dr. Kaplan's research interests in neuroscience focus predominantly on neural prosthetics and other implantable man-machine interfaces, such as fine flexible brain micro-electrodes and his extensive work on injectable electronic micro-chips for stimulating movement in the paralyzed. These areas have direct application to restoring functional sensory-motor interactions in spinal cord injury and stroke patients.

Another important research area of Dr. Kaplan's is in the tissue engineering field, where he is building a program at the NJCBM to develop, implement and optimize techniques for decellularization and recellularization of musculoskeletal composite tissues, for allotransplantation of limbs and faces.

One of the pre-eminent hurdles to overcome in limb and face transplantation is the re-innervation of distant body parts. This is where Dr. Kaplan's neuroscience and tissue engineering interests intersect. This program aims to explore the utility of novel techniques for nerve regeneration over long distances, in conjunction with motor-endplate "baby-sitting" approaches.

145 Bevier Road, Piscataway, NJ 08854
Ph: (732) 445 3888 Email: kaplanh@dls.rutgers.edu