



American Society for Investigative Pathology

Investigating the Pathogenesis of Disease

9650 Rockville Pike, Bethesda, MD 20814-3993 (USA)

Tel: 301-634-7130 • Fax: 301-634-7990 • Email: asip@asip.org • www.asip.org

George Michalopoulos, MD, PhD, Receives the 2009 ASIP Rous-Whipple Award



The Rous-Whipple Award is presented to a senior scientist with a distinguished career in research who has advanced the understanding of disease and has continued productivity at the time of the award. Dr. George Michalopoulos is the 2009 recipient of this honor.

Dr. Michalopoulos has made several significant contributions to the field of hepatocyte biology and is known for at least 2 pioneering contributions: first for his work on the importance of matrix (collagen gels) in maintaining epithelial integrity and functions and second for the foundations he laid that resulted in the discovery of hepatocyte growth factor (HGF), a multifunctional cytokine with mitogenic, motogenic and morphogenic manifestations.

His pioneering work paved the way for the novel concept of the dependence of epithelial cells on extracellular matrix. He began the use of type 1 collagen for hepatocyte culture and his very first paper describing this work became an ISCI Citation classic.

Several aspects of the role of HGF in liver growth have been determined by his group: 1) HGF protein is consumed from stores in the extracellular matrix until new HGF becomes available from synthesis of new protein; 2) administration of HGF to livers of normal rodents causes massive proliferation of hepatocytes; 3) HGF receptor, c-Met is activated within 30-60 minutes after partial hepatectomy, thus documenting the active involvement of HGF at the early stages of the regenerative process; and 4) RNA interference with c-Met abolishes the proliferative activities of hepatocytes seen in the rat 24 hours after partial hepatectomy. His most recent work utilizes liver conditional nulls and RNA interference to study the role of β -catenin and HGF, respectively.

“George truly lives and breathes research, has done so for his entire career, and will continue to do so for many years to come.” an apt comment made by Harriet C. Isom, Ph.D., Assistant Director of Penn State Cancer Institute, after citing Dr. Michalopoulos’s active involvement in FASEB’s summer research conferences. He has organized and co-directed these conferences held every other year since 1988, and has led workshops and discussion groups on liver research. Dr. Isom adds that Dr. Michalopoulos’ research continues to break ground in the area of stem cell biology of the liver. He began publishing

studies in 2005 showing hepatocytes and biliary epithelial cells can act as facultative stem cells for each other. These new stem cell studies “actually recapitulate and expand, using current methodology and terminology (stem cell), basic findings from more than twenty years ago.”

Dr. Michalopoulos earned his M.D. at Athens University Medical School, Athens, Greece and his Ph.D. from the University of Wisconsin, Madison. He completed a residency in pathology at the University of Wisconsin.

Dr. Michalopoulos presented his award lecture on “Liver Regeneration” on Sunday, April 19, 2009 at the annual meeting and received the Rous Whipple Award on Monday, April 20.