

Guest Editors

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Dr Barbara Hoffman



Dr Barbara Hoffman obtained her PhD degree in 1973 from the University of Michigan, and performed postdoctoral research at the Weizmann Institute and Stanford University. She was appointed Assistant Professor at the University of Pennsylvania in 1986. In 1993 she relocated to the Fels Institute for Cancer Research and Molecular Biology at Temple University School of Medicine, where she is currently a Professor. She has focused her research on the molecular genetics of myelopoiesis, as a model system to study normal differentiation and tumorigenesis; these studies were in collaboration with Dr Dan Liebermann. Both positive and negative regulators of myeloid differentiation were identified, including myeloid differentiation primary response (MyD) genes. Major contributions to the field of hematopoiesis were made by deciphering the role of some of the MyD genes in controlling the myeloid differentiation program, including growth arrest and apoptosis, as well as how the proto-oncogene *c-myc* negatively regulates myeloid differentiation and prematurely activates apoptosis. These studies are ongoing, leading not only to a greater understanding of normal differentiation but also to ascertaining how deregulated *c-myc* and loss of MyD function can each collaborate with other genetic lesions to promote leukemogenesis.

Dr Dan A Liebermann



Dr Dan Liebermann obtained his PhD degree in 1980 from the Weizmann Institute of Science in Israel, and carried out his postdoctoral training at Stanford University School of Medicine. In 1986 he established his own laboratory at the University Pennsylvania, where he resumed his studies of normal cell development and alterations which lead to malignancy. In 1993 he joined the Fels Institute for Cancer Research and Molecular Biology, where is currently a Professor. A central theme in Dr Liebermann's studies, in collaboration with Dr Barbara Hoffman, has been elucidating the molecular mechanisms of terminal differentiation, associated with growth arrest and apoptosis, using hematopoietic cells as a model system. Dr Liebermann has made major contributions in the area of hematopoietic cell differentiation, identifying and characterizing Myeloid Differentiation (MyD) primary response genes, which play an important role in terminal differentiation of hematopoietic cells, including growth arrest and programmed cell death. His current research program is aimed at elucidating the role MyD genes play in hematopoietic cell development, and in growth arrest and apoptosis in general, as well as at understanding how genetic lesions which impair MyD gene expression or function contribute to oncogenesis.