Dr. Nicholas Grammatikakis, Senior Researcher Sofia Aliberti, Graduate Student **Research Interests**

Current research activities

The general focus of the laboratory is on studying the basic mechanisms regulating cell signaling, cell cycle progression and cell transformation.

A) Cell Signaling

- Mechanisms of mammalian kinase regulation during normal differentiation and disease
- Chemotherapeutical inhibition of oncogenic kinase activity

B) Cellular Responses to Stress

- Regulation of Chaperone Protein Activity
- Identification of Signaling Mediators (including kinases and transcriptional factors) which are modulated by the Chaperone Machinery in transformed cells and in response to Stress

C) Cell Cycle Regulation

- The Chaperone Machinery as an effector of cellular Stress in cell cycle progression

D) Novel Molecular Chaperones

- Identification of novel Molecular Chaperones and study of their potential role as mediators of the assembly and activity of mammalian kinases in cell proliferation and cell cycle progression. Our study extends to learning how the activity of these novel signal modulators is regulated by Growth conditions and Stress and in malignancy.