

The Vision of the International Institute of Nano and Molecular Medicine (I²NM²)

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The International Institute of Nano and Molecular Medicine (I²NM²) of the University of Missouri-Columbia is embarking upon an in-depth study of cancer therapy using the boron neutron capture reaction, the only binary radiation therapy of its type. To accomplish this extensive study the I²NM² will lead by devising delivery vehicles for boron-10 which are specific for cancer cells. This study could benefit from collaboration with a research group interested in assisting us in the very extensive evaluation of new boron species in bio-distribution at I²NM² and therapeutic work at the MU nuclear reactor (MURR). This would, above all, involve maintaining the supply of tumor-bearing mice using a variety of tumor models, cellular biology as it relates to therapeutic results, and treatment of experimental therapeutic data. The ultimate purpose of this initial study would be identification of superior boron target species which could then be evaluated in larger animals and eventually in humans.