Nanomedicine is a medical application of Nanotechnology . Integration of Nanomaterials with biology has lead to the development of the diagnostic devices, analytical tools, physical therapy applications and drug delivery vehicles. It ranges from the medical application of Nanomaterials and biological devices to Nano electric biosensors. It can be useful for both in vivo and in vitro biomedical research and applications. The most common application of nanomedicine involves employing nanoparticles to enhance the action of drugs in treatment. Some nanotechnology based drugs are commercially available ,i.e. *Abraxane* is used to treat breast cancer or non-small cell lung cancer as well as pancreatic cancer,*Doxil* is used for HIV related Kaposi’s sarcoma and is also used to cure ovarian cancer, metastatic pancreatic cancer is treated by *Onivyde* . Nanomedicine research is funded by NATIONAL INSTITUE OF HEALTH COMMON FUND program (US).