



Editor-In-Chief

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Editorial

Nanomedicine is the application of nanosciences and nanotechnology to medicine: Nanomedicine includes monitoring, control, construction, repair, etc of the human biochemistry using nanochemicals and nanodivices.

The global market for nanomedicine in 2010 and 2011 were \$63.8 billion and \$72.8 billion respectively, according to report published by BCC Research. The market is expected to reach between \$140-160 billion in 2016 according to some reports.

Nanotechnology will revolutionize the health system. More efficient tablets will be produced that will have little or no side effect. Drug delivery system will target exactly areas of need in the body. Drugs will become more efficient and cheaper. Nanosensors will be capable of dictating diseased cell at early stage leading to prevention medicine. Wireless nanodevices will lead to continuous contact between patients and medical professionals and institutions; leading to proactive diagnosis and prevention. Devices like nanoboat will be able to repair damage cell (efficient) without any operation or radiotherapy, which damage healthy cells. Nanomaster will be able to identify diseases cell, kill them systematically and remove them. Such multifunctional drug delivery systems can be used as cures for elusive sicknesses and diseases like cancer, tumor, HIV/AIDS, Alzheimer, etc. Nanovaccines because they are produced at molecular scale at the same level of the body chemistry will be more and more effective that vaccines as available now. Advances in sensors will lead to self-diagnosis. More efficient filters will be built by the use of nanoparticles. These filters will be cheaper and more durable. It will be able to filter the smallest contaminants (bacteria, dusts, etc). Diapers and other sanitary wears will be made such that there will be sensors to tell parents when the children need to be changed. Clothes and others wears will notify the owner when they need change. Clothes will be self-cleaning (ability to remove stains). This current issue will explore nanomedicine.

Further this issue will report on nanotechnology and nanosciences development in Costa Rica and a comment on nanofiltration. The journal continues its tradition of being in the frontline of the emerging field of nanosciences and nanotechnology. My appreciation goes to those editors and authors who made this issue possible.

Editor-In-Chief

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