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IJN's second year is now a part of nanomedicine history!

Welcome to the second year of the *International Journal of Nanomedicine*! As our readers know, nanomedicine research worldwide is going strong. As an example, the US National Science Foundation forecasts that the global market for nanotechnology-related products and services will reach US\$1 trillion by 2015 (NSF 2007). Nanomedicine may be defined as the monitoring, repair, construction, and control of human biological systems using engineered nanodevices and nanostructures at the molecular level. Although this definition still seems quite broad and all-encompassing, it is clear that this definition is founded on the design, synthesis, and evaluation of nanomaterials in medicine. Basic nanostructured materials, engineered enzymes, and the many products of biotechnology will be enormously useful in near-term medical applications (Foresight 2007b).

One part of nanomedicine is the development of precisely controlled or programmable medical nanomachines and nanorobots. Such microscopic machines were first hypothesized by the Nobel-winning physicist Richard Feynman in 1959, and later were described at length by K Eric Drexler in his popular books *Engines of Creation* (1986) and *Unbounding the Future* (1991), and in his more recent technical book *Nanosystems: Molecular Machinery, Manufacturing, and Computation* (1992) (Foresight 2007b). While we are often focused on the future of the field of nanomedicine, it is equally important to consider its past. Below is a list of critical dates in the field of nanotechnology, and the outgrowth of nanomedicine from nanotechnology that we must never forget (Foresight 2007a):

- 1959** Richard Feynman gives an after-dinner talk describing molecular machines building with atomic precision, believed to be the first time nanotechnology is proposed as a research initiative that could revolutionize science.
- 1974** Norio Taniguchi (1974) uses term “nano-technology” in paper on ion-sputter machining.
- 1986** The Atomic Force Microscope is invented which has subsequently allowed for unprecedented control over nanomaterial design and characterization.
- 1987** First university symposium “Exploring Nanotechnology” on Jan 20th at the Massachusetts Institute of Technology, Cambridge, MA, US.
- 1988** First university course at Stanford University, Palo Alto, CA, US: “Nanotechnology and Exploratory Engineering”.
- 1990** First nanotechnology journal called *Nanotechnology* published.
- 1996** First nanobio conference by International Business Communications “Biological Approaches and Novel Applications for Molecular Nanotechnology” December 9–10, 1996, in San Diego, CA, US.
- 1998** First study demonstrating increased tissue growth on nanostructures compared with currently used materials (Webster et al 1998).
- 2000** US President Clinton announces US National Nanotechnology Initiative.
- 2003** Congressional hearings on societal implications of nanotechnology.
- 2006** Reflecting the worldwide interest in nanomedicine, the first international journal in nanomedicine is created: *International Journal of Nanomedicine*.

Welcome to the *International Journal of Nanomedicine*'s second year, now a part of history.

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