## The 2010 Kyoto Prize Laureates

Advanced Technology Prize Field: Biotechnology and Medical Technology



Dr. Shinya Yamanaka (Japan / September 4, 1962)

Medical Scientist Professor, Kyoto University

## Development of Technology for Generating Induced Pluripotent Stem (iPS) Cells

By introducing just four transcription factor genes into dermal fibroblasts, Dr. Yamanaka succeeded in producing induced pluripotent stem (iPS) cells, which exhibit a pluripotency similar to that of embryonic stem (ES) cells. The iPS cell technology is now expected not only to expand the possibilities of regenerative medicine, but also to make significant contributions to the rapid progress of medical science in general.

Basic Sciences Prize Field: Mathematical Sciences (including Pure Mathematics)



Dr. László Lovász (Hungary, U.S.A. / March 9, 1948)

Mathematician Professor, Eötvös Loránd University

## Outstanding Contributions to Mathematical Sciences Based on Discrete Optimization Algorithms

Through his advanced research on discrete structures, Dr. Lovász has provided a link among various branches of mathematics in terms of algorithms, thereby influencing a broad spectrum of the mathematical sciences - including discrete mathematics, combinational optimization and theoretical computer science. In so doing, Dr. Lovász has made outstanding contributions to the advancement of both the academic and technological possibilities of the mathematical sciences.

Arts and Philosophy Prize Field: Arts (Painting, Sculpture, Craft, Architecture, Design)



Mr. William Kentridge (South Africa / April 28, 1955)

Visual Artist

## An Artist Who Has Created an Original Art by Fusing Traditional Drawings with Animation and Other Media

Mr. Kentridge introduces traditional drawing techniques into animation, video projection and other media to develop a new medium for art in which these elements fuse together in multiple ways, thus creating an original world to express poetically his deep insights into society and human existence.