

## National Academy of Engineering Fritz J. and Dolores H. Russ Prize

**Grantor:** National Academy of Engineering

**Closes:** 4/1/2010

**Maximum:** \$500,000.00

National Academy of Engineering Fritz J. and Dolores H. Russ Prize

The Fritz J. and Dolores H. Russ Prize, established in October 1999, is named after Fritz Russ, an esteemed engineer and founder of Systems Research Laboratories, and his wife Dolores Russ, a long-time supporter and benefactor of the engineering industry.

The NAE established the prize at the request of Ohio University to honor the Russes for their dedication to education and the field of engineering. Fritz Russ graduated from Ohio University in 1942 with a B.S. in electrical engineering.

The Russ Prize recognizes an outstanding achievement in bioengineering that improves the human condition. This achievement should help the public better understand and appreciate the contributions of engineers to our health, well-being and quality of life. An auxiliary purpose of the Russ Prize is to encourage collaboration between the engineering and medical/biological professions to work closely together.

Awarded biennially (odd number years), the recipient receives a \$500,000 cash award and a gold medallion. NAE members and non-members worldwide are eligible to receive the Russ Prize.

The Russ Prize will recognize achievements in bioengineering in its initial years. Examples of bioengineering include research, education, or product development in such areas as biomedical instrumentation, separation, and control systems; aerospace biomedical engineering; diagnostic technologies; applied genetic engineering; pharmaceutical processing; prosthetic technologies; biomolecular engineering; medical engineering; and applied physiological systems.

The Russ Prize is awarded for a specific achievement or for a series of achievements in bioengineering, and may be awarded to an individual or a group of individuals contributing to the same achievement(s). The Russ Prize is not awarded posthumously. Recipients of the Charles Stark Draper Prize are not eligible for the Russ Prize. NAE members and non-members world-wide are eligible to receive the Russ Prize.

### Russ Prize Selection Criteria

The narrative description of the achievement that accompanies the nomination form and additional materials should provide qualitative and quantitative evidence that the following criteria are met:

\* Demonstrated success in the number of people actually or potentially benefited by the innovation or achievement, and the extent of this benefit.

\* Demonstrated novelty, originality, and fundamental character of the technical idea or concept underlying the innovation

or achievement.

- \* Demonstration that the innovation or achievement has removed fundamental barriers or constraints to subsequent incremental improvement and refinement, or that it embodies wholly new scientific principles.
- \* Demonstrated richness of technical ramifications of the new concept or invention, and its applicability in many different areas of application far removed from each other.
- \* Demonstrated follow-through on the part of the originating individual or team. Excellence in design, execution and management of the innovation, and commercialization or “operationalization ” of a new idea should be demonstrated, in addition to the ingenuity and novelty of the original technical conception of “proof of principle.”
- \* Demonstrated economic impact, actual or potential, of the innovation or achievement. Economic impact would include gross revenues generated by a new product or process, cost savings made possible by a new process, reductions in environmental impact, or benefits to health and safety in the workplace or of consumers.
- \* The achievement nominated helps increase the public understanding of the contributions and achievements engineers make to improve the human condition.
- \* The award of the prize to the nominated achievement will provide encouragement for the engineering and medical/biological disciplines to more closely work together.

A nomination form must be completed and submitted during the NAE Call for Nominations period starting January 4, 2010 ending April 1, 2010.

NAE Awards

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Washington, DC 20001

Fax

Attn: NAE Awards  
(202) 334-2290

**Link:** <http://www.nae.edu/Awards/RussPrize8693.aspx>

**Categories:** Applied Research, Bioengineering, Biomedical Engineering, Biotechnology, Disability Research, Distinguished Service, Gene Therapy, Genetics , Health Technology, Innovation, Molecular/Cellular Biology, Orthotics , Pharmaceutical Sciences, Physical Rehabilitation , Physical Therapy , Physiology , Scientific Importance/Achievement  
**Audience:** Biomedical Engineer, Distinguished Investigator, Distinguished Scholar, Distinguished Scientist, Engineer, Inventor, Senior Investigator, Senior Researcher