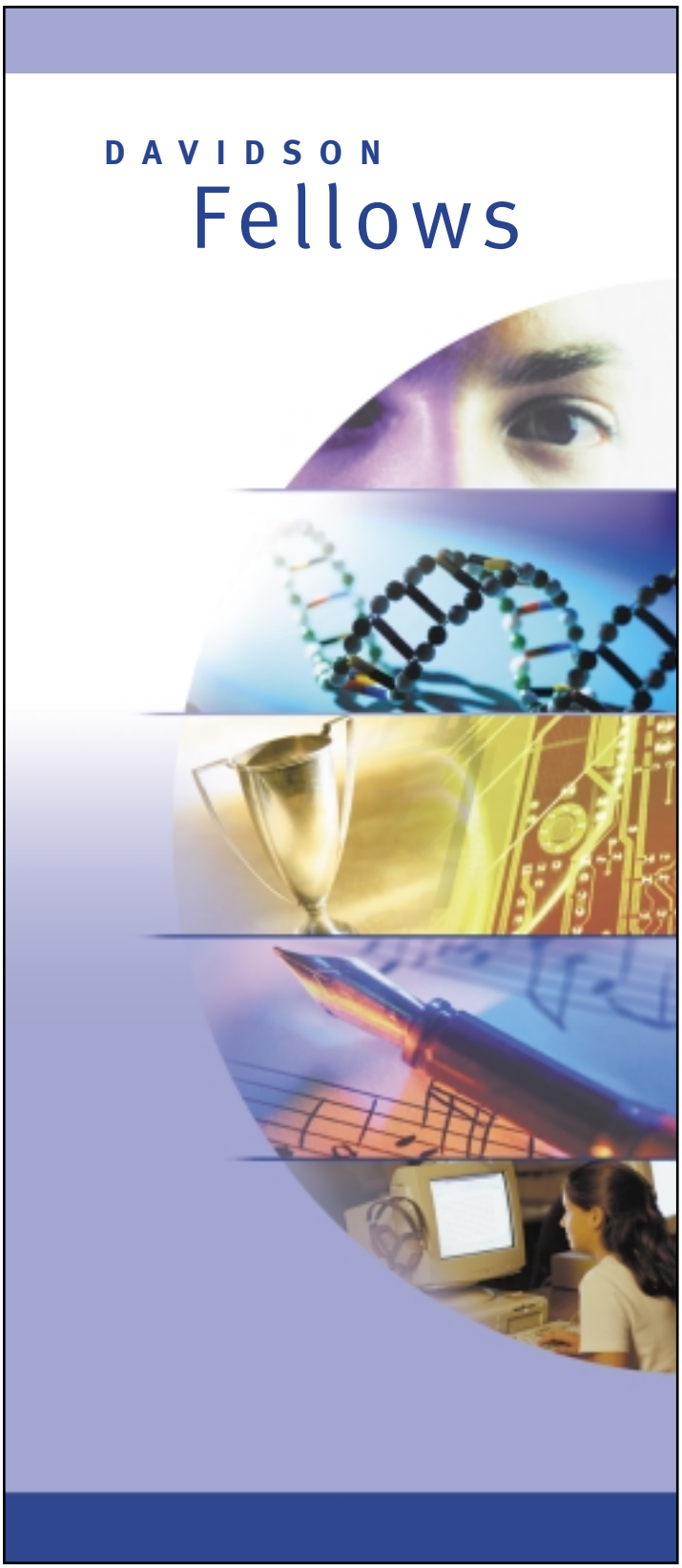
DAVIDSON

Fellows



DAVIDSON

Fellows

Davidson Fellows are outstanding young people who demonstrate the development of their talents with a significant piece of work in one of the following submission categories:

Science
A prodigious work in a specific domain area of science, such as physics, biology, chemistry, engineering, earth science, space science, environmental science or medicine.

Technology
A prodigious work in a specific domain area of technology, such as artificial intelligence or computer programming.

Mathematics
A prodigious work in a specific domain area of mathematics, such as calculus, fractals or number theory.

Music
A prodigious work in the form of a portfolio that is representative of the applicant's talent as a composer, vocalist, classical instrumentalist or jazz instrumentalist.

Literature
A prodigious work in the form of a portfolio displaying a number of literary styles and genres.

Philosophy
A prodigious work in the form of a portfolio exhibiting depth and breadth of knowledge concerning the study of philosophy, human thought and culture.

"Outside the Box"
A prodigious work that is a unique combination of science, technology, or mathematics with music, literature or philosophy.

Davidson Fellows are awarded scholarships of $50,000, $25,000 or $10,000 and are recognized for their achievements at a special awards reception in Washington, D.C.

Davidson Fellows are encouraged to make a moral commitment to support others in the development of their talents by serving as role models and mentors to other profoundly intelligent young people.

WHO SHOULD

Apply

Davidson Fellows applicants are individuals who recognize wisdom in the adage, "it's the journey, not the destination." They are passionate about their work and value the opportunity to learn. If you see these qualities in yourself and have been pursuing the development of your talents for an extended period of time, we encourage you to apply.

How to Become a Davidson Fellow

Applicants must submit:

- A detailed description of the significant piece of work and, in some categories, a portfolio containing copies of the original work and/or audio recordings.
- Information about the work, why and how the work was pursued, the challenges that were encountered, and a description of why the submission is a "significant piece of work."
- Three copies of a 15-minute videotape, narrated by the applicant, describing and showing the work.
- Three nomination forms: one from a mentor and/or supervising scientist; one from a teacher, tutor, or school administrator; and one from a professional in the field who is familiar with the applicant's work.
- A statement of commitment that, if named as a Davidson Fellow, the applicant and a parent/guardian will attend the award reception in Washington, D.C. in September 2004.

To dowload an application, please visit www.davidsonfellows.org.

Applications must be received by the Davidson Institute by 5:00 p.m. Pacific Standard Time on March 26, 2004.

2003 DAVIDSON FELLOW LAUREATES

$50,000 Scholarship Recipients

Devon Guthrie (Music)
A 16-year-old young woman from Claremont, California, Devon Guthrie compiled a moving vocalist portfolio entitled "An American Quartet: Poet, Composer, Singer, and Pianist" in which she performed songs based on the poetry of Emily Dickinson, Edna St. Vincent Millay and Langston Hughes set to music by American composers such as Aaron Copland, Richard Hundley, Jake Heggie and Ricky Gordon. Devon's work speaks to the fundamental value of music in American culture.

Daniel Kane (Mathematics)
A 17-year-old young man from Madison, Wisconsin, Daniel Kane explored the theory of partitions, a branch of additive number theory, and proved a conjecture posed by national experts in the field. Daniel's work makes a significant advancement in number theory with far-reaching applications in many other areas of mathematics, including the fields of coding theory, representation theory and algebraic geometry.

Justin Liu (Science)
A 17-year-old young man from Sacramento, California, Justin Liu pursued an alternative treatment for HIV. He conducted research about the relationship between tyrosine sulfation, a process that results in enhanced biological activity, and chemokine receptors, a protein family that mediates vital functions of the immune system. Justin based his research on the relationship between chemical modification and HIV in hopes of developing more effective treatments for HIV patients.

Jamie Rubin (Science)
A 16-year-old young woman from Fort Myers, Florida, Jamie Rubin conducted in-depth research into treating infections caused by the Candida albicans fungus with a combinatorial approach, cutting the time needed for future research from several years to less than a week. Jamie's research could improve the quality of life for millions with compromised immune systems, including cancer, HIV and AIDS patients.

2003 DAVIDSON FELLOWS

$25,000 Scholarship Recipients

Timothy Andres (Music)
A 17-year-old young man from Washington, Connecticut, Timothy Andres has received national recognition for his musical talents as both a composer and pianist. He recently graduated with honors from Juilliard Pre-College Division where he delved into the techniques of past masters and developed his own signature style heralding his emergence as a prominent, contemporary American composer.

Qilei Hang (Science)
A 17-year-old young woman from Cumberland, Maryland, Qilei Hang translated her knowledge of numerical modeling, analytical solutions and experimental modeling into a civil engineering project optimizing the design of material stockpiles used in the mining industry. Qilei's approach is a more effective method for mining operators to locate conical stockpiles and determine draw points. Since this new method no longer requires mining workers to operate machinery on top of the stockpile, Qilei's work will help minimize on-site safety risks.

Anders Kaseorg (Mathematics)
A 16-year-old young man from Charlotte, North Carolina, Anders Kaseorg advanced the field of game theory by investigating a new class of combinatorial games, known as p-set games, in which players are allowed to interfere in some way with their opponents' moves. While exploring p-set games, Anders discovered how to find the winning strategy in any sum of impartial p-set games and successfully applied his explanation to a more general class of games.

Pallavi Mahidhara (Music)
A 15-year-old young woman from Bethesda, Maryland, Pallavi Mahidhara demonstrated her musical journey with the piano by performing various Classical, Romantic and 20th century compositions with the National Symphony Orchestra and the Chicago Symphony Orchestra in such world-renowned venues as the Kennedy Center and the Hollywood Bowl. Pallavi continues to expand her musical education while sharing her talent, skills and passion by teaching music on a volunteer basis.

2003 DAVIDSON FELLOWS

$25,000 Scholarship Recipients

Michael Snow (Science)

A 17-year-old young man from Woodmere, New York, Michael Snow studied the effects of clay on interface and surface properties of polymers discovering clay mixtures that can enhance protective coatings to prevent adhesion of dirt and ultraviolet (UV) degradation. His research has the potential for far-reaching applications of polymer/clay nanocomposites in bio-toxin research, automobile engineering and food packaging.

Irene Sun (Science)

A 17-year-old young woman from Indianapolis, Indiana, Irene Sun analyzed gene expression regulation experimentally and computationally using rheumatoid arthritis cells as model systems. Irene's work provides a deeper characterization of the disease, as well as clues to the treatment and control of rheumatoid arthritis.

2003 DAVIDSON FELLOWS

$10,000 Scholarship Recipients

Julian Gingold (Science)

A 17-year-old young man from Scarsdale, New York, Julian Gingold performed advanced research in computational chemistry to develop a new and detailed method for understanding protein function, structure and motion. Julian's study into protein motion has broad implications for public health, future pharmaceutical development and biochemistry education.

Tim Lyakhovetskiy (Technology)

A 17-year-old young man from Palo Alto, California, Tim Lyakhovetskiy developed a flexible, object-oriented C++ application programming interface (API) to allow for the rapid development of multimedia applications. Tim created a framework that significantly reduces development time and costs for applications used in scientific research, education, entertainment and other computer simulations.

2003 DAVIDSON FELLOWS

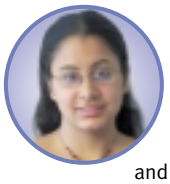
$10,000 Scholarship Recipients

Keerthi Prabhala (Technology)

A 17-year-old young man from Irvine, California, Keerthi Prabhala applied his knowledge of electrical engineering and computer programming to develop a low-cost concept for Brain Computer Interface, which uses digital signal processing and a neural network to control electronic devices. Keerthi's research offers potential benefits to those who are physically disabled.

Arielle Tambini (Science)

A 17-year-old young woman from Suffern, New York, Arielle Tambini studied the role of organophosphate pesticides in the etiology of Gulf War Syndrome. Arielle examined the neuropsychological status of Gulf War veterans compared to civilians exposed to the pesticide organophosphate. She established a link between this pesticide and Gulf War Syndrome that could aid in the development of a treatment for Gulf War Syndrome.



Mandeep Virdi (Science)

A 17-year-old young woman from Plainview, New York, Mandeep Virdi recognized the need for a new anti-cancer drug to achieve better targeting of cancer cells through increased water solubility and reduced cytotoxic effects. Mandeep's drug delivery research advances a powerful anti-cancer strategy that combines the advantages of chemotherapy with photodynamic therapy without some of the common reactions of hypersensitivity.

COULD YOU BE NEXT?

If you possess unparalleled vision, passion and perseverance, there is an exciting community of scholars and peers waiting to meet you.

Please visit our web site today to apply. **www.davidsonfellows.org**

ABOUT

the Institute

Our Mission

The mission of the Davidson Institute for Talent Development is to recognize, nurture and support profoundly intelligent young people and to provide opportunities for them to develop their talents to make a positive difference.

Our Programs & Services

Davidson Young Scholars

Provides an individualized, family-oriented program aimed at nurturing profoundly intelligent young people between the ages of 4 and 18.

Davidson Fellows

Awards substantial scholarships to high-achieving young people in recognition of their prodigious accomplishments in math, science, technology, literature, philosophy and/or music.

Educators Guild

Provides information, training, and consulting services to professionals who work with profoundly intelligent young people.

GT-CyberSource

www.gtcybersource.org is the largest collection of resources for and about profoundly intelligent young people.

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