

**2011 Davidson Fellows Application for Mathematics**

All applications must be received by 5 p.m. on March 2, 2011 PST. Entries may not be sent via fax or e-mail.

Application pages 1, 4 and 5 may be typed or handwritten. If you choose not to type this form, please write legibly.

All applications and attachments become property of the Davidson Institute for Talent Development and will not be returned to the applicant.

**Contact Information**

**Applicant**

*Please type or print clearly, especially e-mail addresses.*

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Gender:  Female  Male

Citizenship:  U.S. Citizen  Permanent Resident of the United States Do you reside in the United States?  Yes  No  
**If you are not a U.S. Citizen, please attach written confirmation that you are a Permanent Resident.**

Date of Birth \_\_\_\_\_ Age \_\_\_\_\_ **Individuals born on or before October 1, 1993 are not eligible.**

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

E-mail \_\_\_\_\_ Home Phone ( ) \_\_\_\_\_

Time Zone:  Eastern  Central  Mountain  Pacific

Name of School \_\_\_\_\_ Current Grade Level \_\_\_\_\_

School Web Site \_\_\_\_\_ School E-mail Address \_\_\_\_\_

School Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone ( ) \_\_\_\_\_

Principal's Name \_\_\_\_\_ Principal's E-mail \_\_\_\_\_

Range of dates attended school listed above (mm/dd/yy) \_\_\_\_\_ Have you ever been accelerated?  Yes  No

**Parent(s)/Guardian(s)**

(Circle One: Ms. Mrs. Mr. Dr.) First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Relation to Applicant \_\_\_\_\_ Occupation \_\_\_\_\_

E-mail Address \_\_\_\_\_ Work Phone ( ) \_\_\_\_\_

(Circle One: Ms. Mrs. Mr. Dr.) First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Relation to Applicant \_\_\_\_\_ Occupation \_\_\_\_\_

E-mail Address \_\_\_\_\_ Work Phone ( ) \_\_\_\_\_

**Please provide home address and phone if different than the applicant's:**

Parent or Guardian's Name \_\_\_\_\_ Home Phone ( ) \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Time Zone:  Eastern  Central  Mountain  Pacific

**Title of Prodigious Work**

*Please attach the following on a separate page with your last name and first initial, category and title of prodigious work at the top of the page.*

- Brief Description of Prodigious Work in 100 to 150 words. Please email your brief project description, including your name and application category to [davidsonfellows@davidsongifted.org](mailto:davidsonfellows@davidsongifted.org) by March 2, 2011.**
- Table of Contents for Application, including a list of Prodigious Work Required Elements.**

## 2011 Davidson Fellows Application for Mathematics

### Prodigious Work Required Elements

The applicant must submit a prodigious work in a specific domain area of mathematics. Please select one of the following domain areas:

	Domain	Specific Field
<input type="checkbox"/>	Calculus	
<input type="checkbox"/>	Fractals	
<input type="checkbox"/>	Geometry	
<input type="checkbox"/>	Number Theory	
<input type="checkbox"/>	Other	

#### **Component One:**

Three copies of a Formal Research Report with a works cited page and an annotated bibliography formatted according to the American Psychological Association's Publication Manual or any other widely recognized style guide.

Each page should be labeled in the upper right hand corner with the applicant's last name and first initial, category, title of prodigious work, and page number in the form of page x of y.

#### **Component Two:**

Three copies of a computer model or a physical model.

If the submission is a **computer model**, three copies of a CD-ROM with specific viewing instructions and/or instructions for viewing it via the web must be submitted. Please label all CDs with your first and last name and the title of your work. If you are uncertain about the definition of a computer model, please refer to the Frequently Asked Questions (FAQ) at [www.DavidsonGifted.org/Fellows](http://www.DavidsonGifted.org/Fellows).

#### **OR**

If the submission is a **physical model**, photographs and/or three copies of a descriptive video on DVD, must be submitted. Please do not submit the actual physical model. Please label all materials with your first and last name and the title of your work. If you choose to submit a video of your physical model, you may record this on the same DVD as the Attachment 4 video, as long as the DVD is properly labeled with all of its contents. DVDs must be labeled with permanent marker only, do not affix adhesive labels to the disk itself.

**All application materials must be sent in ONE package, including the completed application with all components and attachments. Do not send any of these items separately.**

## 2011 Davidson Fellows Application for Mathematics

### Attachments to the Application

**Please include the following attachments when submitting your application.**

Attachments One, Two and Three should be typed, in English, on 8 ½ x 11 white paper in an 11 or 12 point standard font and three copies should be submitted. *Do not staple, bind or fold any portion.* Each page should be labeled in the upper right hand corner with the applicant's last name and first initial, category, title of submission and the words Attachment One: Significance Essay; Attachment Two: Benefit to Society Essay; Attachment Three: Process Essay - Part One and Part Two, respectively. Page numbers in the form of page x of y should also be placed in the upper right corner. Please page number each Attachment separately. All Attachments are to be completed by the applicant. The word count or length of the Attachments is up to the applicant. **Failure to follow these guidelines may result in disqualification.**

#### ATTACHMENT ONE: Significance Essay

Please submit a detailed description of your work and explain why your submission qualifies as a significant piece of work, as defined by at least one of the following criteria:

- exceptional creativity
- a new idea with high impact and/or broad implications
- an innovative solution with regional, state and/or national implications
- an important advancement that can be replicated and built upon
- an interdisciplinary discovery with the potential to effect positive change
- a prodigious performance

#### ATTACHMENT TWO: Benefit to Society Essay

Please explain how your work may make a positive contribution to society or has social relevance.

#### ATTACHMENT THREE: Process Essay

Part One: Please answer the following questions:

- What inspired you to pursue this work?
- How much time (hours/days/months) did it take you to complete this work?
- How did you organize the work that went into doing it?
- What difficulties did you encounter and how did you handle them?

Part Two: Please answer the following questions:

- Where was the work completed?
- Who supervised your work? (Give names, titles, addresses, e-mail, and phone numbers)
- What help have you received in doing this work?

List who helped you and what assistance he/she provided.

(Please include individuals who offered equipment, ideas, critiques, materials, methodology, etc.)

#### ATTACHMENT FOUR: Video Describing Prodigious Work

Submit three copies of a maximum 15-minute, home-production quality video recording, on a DVD that will play on any standard DVD player. Please test all DVDs before submitting. DVDs must be labeled with permanent marker only, do not affix adhesive labels to the disk itself.

You are encouraged to speak "from the heart" in your video, rather than reading directly from a script. The videotape is a chance to talk about a topic not addressed in the essays or to expand upon a point the essays touched on only briefly. Suggestions for the structure of the video:

- In the first few minutes of the video, you should briefly describe your submission summarizing why it was done, its significance, its benefit to society/social relevance and other details of your prodigious accomplishment.
- Continue by describing how you became interested in this project, how it evolved and how working on it has helped you develop your talents.
- Next, describe how your submission fits into the larger context of the field of study and be sure to describe the specific ideas/people/theories that influenced your work.
- Conclude your video with a brief description on how you think your work/talent should be applied/highlighted.

Please label all three DVDs with your last name and first initial, category and title of prodigious work, and "2011 Davidson Fellows Application, Attachment Four."

**Note: Applicants in ALL categories must submit Attachments 1 through 4 IN ADDITION to all elements described in the Prodigious Work Required Elements portion of this application.**

# 2011 Davidson Fellows Application for Mathematics

## Davidson Fellows Nominating Forms

Three individuals who are familiar with your work must each submit a Davidson Fellows Nominating Form, which can be downloaded at [www.DavidsonGifted.org/Fellows](http://www.DavidsonGifted.org/Fellows). It is preferred that one form be from a mentor or supervising scientist; one from a teacher, tutor or school administrator; and one from a professional in the field who is familiar with your work. Family members may not serve as nominators.

Forms must be submitted directly by the nominator to the Davidson Institute for Talent Development on or before the submission deadline of 5 p.m. PST on March 2, 2011. **All three nominators are required.** Applications with missing Nominating Forms as of the March 2, 2011 deadline will be disqualified.

Please list the name, phone and e-mail address of each individual you have asked to complete a nominating form.

### #1 - Mentor or Supervising Scientist

Name	Phone	E-mail
<b>#2 - Teacher, Tutor or School Administrator</b>		
<b>#3 - Professional</b>		
Name		
Phone		
E-mail		

## Applicant Commitment

Davidson Fellows are asked to make a commitment to encourage and support other profoundly intelligent young people to develop their talents. If scheduling and cost were not a problem, in what ways would you be willing/able to meet this commitment? (Check all that apply.)

- I could present at a gathering of profoundly intelligent young people.
- I could participate in an exhibition with other Davidson Fellows to present and explain my work to my peers, invited guests and the general public.
- I would interact in online discussions with other Davidson Fellows and/or candidates.
- I would be willing to describe, for publication on the Davidson Fellows website, how becoming a Davidson Fellow has positively impacted my life and/or how my work has benefited others.
- Your own idea(s):

How did you learn about the Davidson Fellows Scholarship?

Have you previously applied for the Davidson Fellows Scholarship? If yes, when?

# 2011 Davidson Fellows Application for Mathematics

Termination and Amendment of Program. The Davidson Institute reserves the right in its sole discretion to terminate this Fellows Award program at any time and for any reason and to change any or all of the rules regarding the grant or use of any scholarships. No such termination of the Award program shall apply so as to terminate a scholarship recipient's right to an Award previously granted unless such termination is required in the reasonable opinion of the Davidson Institute to comply with applicable laws or to assure the Davidson Institute that its tax exempt status will not be negatively affected or unless the continued payment of such scholarship will result in any form of tax being imposed upon the Davidson Institute or any of its affiliates, officers, directors, employees or representatives. In addition, amendments to the program may affect the terms and conditions of use of awards previously granted.

Discretion of Institute; Binding Nature of Decisions. By submitting this application, we acknowledge and agree that all decisions of the Davidson Institute regarding the Award program and the grant and use of scholarships and other awards may be made by it in its sole and absolute discretion, subject only to compliance with applicable laws, rules and regulations. As such, all decisions of the Davidson Institute and its committees and judges shall be final and binding and are not subject to challenge by us in any manner. The number of scholarships to be awarded shall be determined by the Davidson Institute in its sole discretion.

Name and Likeness. We understand that the selection and review process will be conducted on a basis that reveals information about the undersigned and our background and family. We also understand that the Davidson Institute may, without compensation to us or anyone else, publicize the Award program, our participation in the Program, information about us and our background and the results of the applicant's work and the Awards process. In that regard, we grant the Davidson Institute the right to use, for any lawful purpose related to the Davidson Institute or the Award program, in any legal form or manner, in whole or in part, in perpetuity, our names, biographical information and likenesses, the work and any information relating to it, as well as any statements made by us to the Davidson Institute. Such uses may be made in the Davidson Institute's discretion in any media or form. The Davidson Institute may take pictures, videos and audio recordings and may use any other form of media with respect to us and the matters described above.

Attestation. The undersigned each attest that all of the information submitted or to be submitted to the Davidson Institute, including the information in this application is true and accurate and does not omit any information necessary to make the information provided not misleading. We hereby further certify that the work submitted here is the applicant's own and that it does not infringe upon or violate any rights of any nature of any third person.

Attendance. The applicant understands that if I am named as a Davidson Fellow, I, along with at least one parent or guardian, must attend the Davidson Fellows event to be held in Washington, D.C. on October 4, 5 and 6, 2011. Attendance is a condition precedent to receipt of a scholarship or any other award or benefits.

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Applicant

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Parent/Guardian (required)

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Parent/Guardian (required)

If applicable, please state the name of your custodial parent/guardian: \_\_\_\_\_

The Davidson Institute strongly recommends that you keep a copy of this application and the other application components for your records, as all applications, including all of the Prodigious Work Required Elements, become the property of the Davidson Institute and will not be returned. Any intellectual property in the application materials will remain the property of the applicant.

All applications must be received by **5 p.m. Pacific Standard Time, March 2, 2011.**

Please submit your application to:



Davidson Institute for Talent Development  
Attn: Davidson Fellows  
9665 Gateway Drive, Suite B  
Reno, Nevada 89521  
Phone - 775-852-3483 ext. 423

The Davidson Institute does not discriminate based on race, gender, religion, ethnicity or physical disability.