

***AdvanceVT* PhD and Postdoctoral Fellowship Program**  
**Summary Report**  
**November 2010**

Overview

*AdvanceVT* supported ten postdoctoral fellows and nine PhD fellows during academic years 2004-05, 2005-06, 2006-07, and 2007-08, years two through five of the grant. The fellowships supported young scholars preparing for a faculty career, especially individuals from groups historically underrepresented in the professoriate. A mentoring plan was a key component of the fellowship, ensuring that the fellow developed appropriate knowledge and skills with support from senior colleagues. A member of the *AdvanceVT* leadership team met with each fellow and her mentor(s) mid-way through the fellowship year to review progress on the mentoring plan, and fellows were asked to report on the outcomes of their fellowship at the end of the year. All fellows reported at least one publication or conference presentation developed as a result of the fellowship.

Selection Process

The availability of the fellowships was advertised by email to Virginia Tech faculty in the targeted colleges, by announcement in the university's electronic newsletter, and on the *AdvanceVT* web site. Examples of the fellowship announcements and nomination instructions are included in Appendices A (PhD fellowships) and B (postdoctoral fellowships). Host departments submitted a completed nomination form, a statement of the nominee's career plan (PhD fellowships) or research plan (postdoctoral fellowships), curriculum vita, transcripts (PhD fellowships only), letters of recommendation, and a mentoring plan. Fellowship nominations were reviewed by a selection committee of faculty members from several disciplines.

The mentoring plan was a key component of the selection process. Mentoring activities oriented around the multiple skills that nominees would need to be proficient as a faculty member, such as teaching, advising, and research, were encouraged. A strong mentoring plan that demonstrated a thoughtful evaluation of the nominee's developmental needs frequently proved to be the deciding factor in awarding the fellowships. Review of the nominations also revealed many weak mentoring plans, demonstrating that faculty members do not automatically make good mentors, and that education around the concept and techniques of mentoring would be valuable for the faculty as well as graduate students and post-doctoral fellows.

Program evolution

In the first two years of the program, fellowship recipients were limited to the colleges of science and engineering. Based on feedback from faculty members, in years four and five the fellowships were made available to individuals in all science and engineering fields in which women are underrepresented in the professoriate, opening the program to the college of agriculture and life sciences and the college of natural resources. Over the life of the program, nominations were received from five different colleges (Engineering, Science, Agriculture and Life Sciences, Natural Resources, and Veterinary Medicine).

*AdvanceVT* planned to award two PhD fellowships and two postdoctoral fellowships in each of the four years. Between 8 and 27 individuals submitted applications for PhD fellowships each of the four years of the program. The postdoctoral fellowships were less popular, with only one application received in the first year of the program. Since the applicant was well qualified, one postdoctoral fellowship was awarded and funds were reallocated to support three PhD fellows that year. Four postdoctoral fellowship applications were received in the second year, and two were funded. Feedback indicated that one year of funding was not considered attractive to many faculty members seeking to hire a postdoctoral researcher, and the timing of the fellowship selection process did not necessarily coincide with a faculty member's need to hire a postdoc. In the last two years of the program, the postdoctoral fellowships provided supplemental funding of up to 50% of salary or \$20,000. As a result, 14 postdoctoral fellowship nominations were received for 2006-07, of which four were funded, and 13 nominations were received for 2007-08, of which three were funded.

### Outcomes

Of the nine PhD fellows, four are currently assistant professors, two are postdoctoral researchers, one is in an academic staff position, one works in industry, and the whereabouts of one are unknown. Of the ten postdoctoral fellows, three are currently assistant professors, two are still postdoctoral researchers, four are in research scientist or academic staff positions, and one is currently not seeking employment.

While the small number of participants makes evaluation of the impact of the PhD and postdoctoral fellowships difficult, feedback from fellowship recipients indicates a positive impact on their career development. Examples follow:

*"The AdvanceVT fellowship enabled me to take further steps along my career path and strengthen my publication record, which is necessary to be competitive for academic faculty positions."*

*"I believe that because of the Advance Program, I will have a much stronger CV and application package when I begin applying for jobs. In fact, I've been sharing my knowledge with colleagues several years ahead of me professionally as they interview for assistant professorships."*

*"The ADVANCE Fellowship gave me the opportunity to team teach a junior level class last spring, which was vital experience during the application and interview process."*

*"With the ADVANCE fellowship, I was able to start an independent research program; such experience is not often found among post-docs in my area of study. I'm currently applying for a faculty position at research institutions, and the fact that I have already started a research program and applied for grant support in this project gives me more confidence that I'll succeed in my academic career. Thanks to the ADVANCE program!"*



*AdvanceVT*

236 Burruss Hall (0180)  
Blacksburg, Virginia 24061  
540-231-7682  
<http://www.advance.vt.edu>

## ***AdvanceVT Ph.D. Fellowship Program***

Virginia Tech's Advance Program is pleased to announce a request for nominations for its Ph.D. Fellowship Program for the 2004-2005 school year. This Program is designed for Ph.D. students from either the College of Engineering or the College of Science who aspire to pursue an academic career. The National Science Foundation's Advance Program recently awarded Virginia Tech a five-year institutional transformation grant in response to a national effort to increase the representation and advancement of women in academic science and engineering careers. The vision for Virginia Tech's Advance Program is to encourage cultural changes and remove barriers to success so that all members of the Virginia Tech community, faculty, students and staff, can reach their greatest potentials. You can find more information about the Virginia Tech Advance program at our website: <http://www.advance.vt.edu>.

One goal of Virginia Tech's Advance program is to encourage the career progression of students who exemplify the goals of NSF's Advance program. Nominations of students from underrepresented groups are especially encouraged. In this year's fellowship program, two awards will be given. Each award is a one year (12 month, beginning August 10) GRA stipend (20 hours per week, 100% GRA at department rate) and tuition waiver. Matching funds can be proposed (but are not required), and may include stipend, fee, travel or supply supplements pledged in addition to the fellowship amount, partial coverage for the stipend, or partial coverage for tuition.

Fellowship applications will be reviewed by a faculty panel reflecting diverse disciplines, and selection will be based on a number of criteria: quality of career plan and applicant's potential for success, academic and professional record, and letters of recommendation. Furthermore, nominating departments or academic units must propose a plan for mentoring the nominated student in ways that will prepare them for success as a faculty member. Mentoring activities oriented around the multiple tasks nominees will have to be proficient in as faculty, such as teaching, advising and research, are encouraged. *AdvanceVT* Ph.D. Fellowship recipients will be asked to give a presentation that highlights their accomplishments at an event to be scheduled toward the end of their fellowship year.

**Proposals are due to the *AdvanceVT* Office, 236 Burruss Hall (0180) by 5 pm on Monday, February 16, 2004.** Applicant finalists may be asked to undergo a personal interview as part of the selection process. Awards will be announced by Monday, March 29, 2004.

Questions about this program can be directed to the team leader of the Pipeline Element for *AdvanceVT*: Dr. Nancy Love, Department of Civil and Environmental Engineering, [nlove@vt.edu](mailto:nlove@vt.edu), 231-3980.



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**Advance VT Ph.D. Fellowship Program  
Application Instructions**

All documents must be received as a single application packet at the address listed above by **Monday, February 16, 2004**. Application materials may be downloaded from the world wide web at [www.advance.vt.edu](http://www.advance.vt.edu); however, applications may not be submitted electronically.

**APPLICATION FORM.** Please type or print the information requested. Note that the first page of this form must be signed by the Department Head or Director of the primary academic unit for the applicant.

**STATEMENT OF CAREER PLAN.** Write a statement that is double-spaced, 12 point font, 1 inch margins and no more than 3 pages in length, beginning with your Career Plan title and your name. Indicate your academic career goals and how your current academic pursuits prepare you for success toward those goals. Discuss the professional and personal experiences that led you to aspire toward an academic career. State how, through your goals, you plan to impact your professional field. Your discussion can refer to your professional research plan, but your statement should not be solely focused on this element of your career.

**GRADUATE TRANSCRIPTS.** Attach all transcripts for post-baccalaureate studies. Official copies must be provided.

**CURRICULUM VITA.** Attach a curriculum vita that describes your academic training and performance, awards received, teaching experience, research experience, scholarship and professional service.

**TWO LETTERS OF RECOMMENDATION.** Two letters of recommendation, one from your primary mentor for this fellowship year and one from another faculty member, are required. The letters should address how the recommender knows the applicant, the applicant's qualifications and potential for success as an academic, and any other information that may assist the committee in evaluating the applicant. These letters must be sealed in envelopes with the recommender's signature across the seal, and submitted at the same time as the application.

**A MENTORING PLAN.** The department or academic unit that endorses the student's application must submit a mentoring plan targeted toward the applicant. This plan, limited to 200 words, should outline who the primary mentor(s) will be, what activities the student will participate in that will ensure successful progress during the fellowship year, and additional activities that the student will be allowed to participate in that will enhance their professional network, visibility and career development. Examples of activities include (but are not limited to): pledged funds to travel to a national conference in the student's professional area, participation in an active

## Appendix A: PhD Fellowship Solicitation

program targeted at preparing the future professoriate, participation in Advance career development workshops, and participation in a mentored teaching experience.

### SELECTION CRITERIA

Below are examples of questions that the Selection Committee members will consider in their selection of Ph.D. Fellowship Recipients. Please consider these questions when preparing your application.

- Does the career plan articulate a well thought out and achievable set of goals?
- Does the applicant's academic record coincide with the stated goals such that the goals are realistic?
- Is the applicant's academic record progressing satisfactorily toward that needed for a successful academic career?
- Do the outside letters of recommendation reflect confidence in the applicant's abilities and potential as a professor?
- Is the mentoring plan sufficient to assist the applicant in their career development?

In the event that several high quality applicants apply, applicants may be invited to interview with one or more members of the committee. Applicants will be contacted if they are invited to undergo an interview. These interviews will not exceed one hour.

### REPORTING REQUIREMENTS

- Fellowship recipients will be required to meet with one or more members of the Advance VT Pipeline Element committee in December of the fellowship year to discuss their progress.
- Fellowship recipients will be asked to give a presentation that highlights their accomplishments during the fellowship year at an event to be announced, but which will occur toward the end of their fellowship year. An electronic copy of the presentation must be submitted to the chair of the fellowship program (Dr. Nancy Love).
- Toward the end of the fellowship year, recipients are required to complete a form that highlights their academic accomplishments during the year.



## Appendix A: PhD Fellowship Solicitation

<b>REFERENCES:</b>	
Name	Department
1.	
2.	

### **Signatures and Endorsements**

1. The attached information is accurate and correct to the best of my knowledge. If selected for the *AdvanceVT* Ph.D. Fellowship, I agree to comply with the specified reporting requirements:

\_\_\_\_\_  
Nominee Signature

\_\_\_\_\_  
Date

2. I endorse this Advance GRA Ph.D. Fellowship application and the mentoring plan.

\_\_\_\_\_  
Signature of Dept. Head or Director of Academic Unit

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name: Dept Head or Director of Academic Unit

\_\_\_\_\_  
Dept./Academic Unit

Mail Code: \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone No. \_\_\_\_\_

### **Items to append to this form (See Nomination Instructions for details)**

1. Statement of Career Plan (written by the nominee)
2. Graduate Transcripts
3. Curriculum Vitae
4. Two letters of Recommendation
5. Mentoring Plan (written by the nominating department)

**Due 5 pm, February 16, 2004**

236 Burruss Hall  
Mail Code 0180

## ***AdvanceVT* Postdoctoral Fellowship Program**

*AdvanceVT* is pleased to announce a call for nominations for its Postdoctoral Fellowship Program for the 2006-07 academic year. This program is designed for candidates whose success will further the efforts of *AdvanceVT* to promote the advancement of women into academic careers, and who meet Virginia Tech's Postdoctoral Associate classification (section 2.2.1.5 in the Special Research Faculty Handbook, [http://www.provost.vt.edu/web\\_pages/faculty\\_handbooks.html](http://www.provost.vt.edu/web_pages/faculty_handbooks.html)).

Virginia Tech is a recipient of a five-year institutional transformation grant from the National Science Foundation as part of a national effort to increase the representation and advancement of women in academic science and engineering careers. The vision for *AdvanceVT* is to encourage cultural changes and remove barriers to success so that all members of the Virginia Tech community, faculty, students, and staff, can reach their greatest potential. More information about *AdvanceVT* is available at <http://www.advance.vt.edu>.

Nominees with outstanding potential for a tenure-track academic future are sought. For the 2006-07 application year, nominees who obtain the Ph.D. at Virginia Tech or elsewhere will be considered. Departments are encouraged to nominate candidates from on-going postdoctoral searches and faculty applicants not extended an offer but who have promising credentials and would benefit from a postdoctoral experience. Postdoctoral fellowship recipients must have a primary appointment in a science or engineering field in which women are underrepresented in faculty positions. Candidates who are re-entering the academic workforce or who have followed a non-traditional career path are strongly encouraged to apply.

*AdvanceVT* Postdoctoral Fellowships will provide partial funding up to 50% of salary or \$20,000 for the academic year commencing mid-August 2006. Evidence that sufficient research supply funds are also available to achieve the research goals of the nominee is required.

Fellowship applications will be reviewed by a faculty panel reflecting diverse disciplines, and selection will be based on the following criteria:

- quality of research plan and applicant's potential for success,
- academic and professional record, and
- letters of recommendation.

In addition, the person who will advise the fellowship recipient (herein called the "Advisor") must propose a plan for mentoring the nominee in ways that will prepare her or him for success as a faculty member. Mentoring activities oriented around the multiple skills that nominees will need to be proficient as a faculty member, such as teaching, advising and research, are encouraged. Fellowship recipients will be asked to give a presentation that highlights their

## Appendix B: Postdoctoral Fellowship Solicitation

accomplishments at an event, such as a colloquium, to be scheduled toward the end of their fellowship year.

Proposal forms and detailed instructions are available at <http://www.advance.vt.edu>.  
**Proposals are due to the *AdvanceVT* Office, 236 Burruss Hall (0180) by 5 pm on Friday, March 31, 2006.** Awards will be announced by Friday, April 28, 2006.

Questions about this program can be directed to the *AdvanceVT* Program Director Peggy Layne at 231-9948 or [AdvanceVT@vt.edu](mailto:AdvanceVT@vt.edu).



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**AdvanceVT Postdoctoral Fellowship Program  
Nomination Instructions**

All documents must be received as a single application packet at the address listed above by **Friday, March 31, 2006**. Nomination materials are available at <http://www.advance.vt.edu>; however, applications may *not* be submitted electronically.

**APPLICATION COVER SHEET.** Please type the information requested. Note that the form must be signed by the Department Head or Director of the primary academic unit for the nominee.

**RESEARCH PLAN FOR THE NOMINEE.** A research statement must be submitted that is limited to *1000 words*. We anticipate that this statement will be written by the advisor, the nominee or both; therefore, please identify the author(s) of the statement at the beginning of the document. The statement should articulate a clear research plan for the nominee that is targeted to an educated reader who may not be proficient in the research discipline being targeted. As a minimum, the research plan should explain:

- why the research is important,
- how the research will help the nominee's professional development,
- why the nominee is the right person to execute the research plan, and
- what is the significance of the nominee's work to date in the context of the research plan.

**MENTORING PLAN FOR THE NOMINEE.** The person who will serve as the primary advisor to the postdoctoral fellowship recipient (herein called "Advisor") must submit a mentoring plan for the nominee that is no more than *500 words*. The statement shall address the following:

- what mentoring activities will be offered to the nominee and the Advisor's role,
- how these mentoring activities will ensure successful professional progress during the fellowship year, and
- what additional activities the nominee will be encouraged to participate in that will enhance her or his professional network, visibility and career development.

**BUDGET.** The Budget Form (provided) must be completed, and shall include:

- Requested salary and fringe benefit costs for the nominee,
- Salary and fringe benefits being provided by the advisor or department,
- Travel funds being provided for the nominee to attend conferences and workshops, conduct field work, or to support any other professional travel needs, and
- Supply funds being provided to support the nominee's work.

## Appendix B: Postdoctoral Fellowship Solicitation

A justification statement for each item in the budget shall be given and should address how the costs listed are being provided (by what funding means) and why the funds are sufficient to address the research and mentoring plan for the nominee. The form must be signed by the Advisor. If additional funds are being provided by another faculty member, a department or another academic unit, the person responsible for releasing those funds if the nominee is selected must also sign the form.

**CURRICULUM VITAE.** Attach a curriculum vitae that describes the nominee's academic training and performance, awards received, teaching experience, research experience, scholarship and professional service.

**TWO LETTERS OF RECOMMENDATION.** Two letters of recommendation, one from the nominee's Ph.D. advisor and one from another person who is technically qualified to evaluate the nominee, are required. The letters should address how the recommender knows the nominee, the nominee's qualifications and potential for success as an academic, and any other information that may assist the committee in their evaluation of the application. These letters must be submitted at the same time as the application. The post-doctoral advisor may submit a third letter of recommendation, if desired and if it offers information not elaborated upon elsewhere in the application materials.

### REPORTING REQUIREMENTS

- Postdoctoral Fellowship recipients will meet with one or more members of the *AdvanceVT* Pipeline Element committee during the fellowship year to discuss both their progress and ideas for the fellowship program.
- Fellowship recipients will be asked to give a presentation that highlights their accomplishments during the fellowship year at an event to be announced, such as a colloquium, which will occur toward the end of their fellowship year. An electronic copy of the presentation must be submitted to the *AdvanceVT* program representative.
- Toward the end of the fellowship year, recipients will write a letter to the *AdvanceVT* Pipeline committee that highlights her or his academic accomplishments during the year, thoughts on how the fellowship helped her or him progress professionally, plans for the future, and ideas for what changes should be made to the program to improve it.

Appendix B: Postdoctoral Fellowship Solicitation



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**ADVANCEVT POSTDOCTORAL FELLOWSHIP PROGRAM  
APPLICATION COVER SHEET**

**NOMINEE INFORMATION:**

Name of Nominee:	(Last)	(First)	(Middle Initial)
Select One:	<input type="checkbox"/> Female	<input type="checkbox"/> Male	

Education beyond high school (List degrees received, beginning with most recent degree):

Dates Attended From To	Institution	Degree Received	Major Subject

**POST-DOCTORAL ADVISOR'S INFORMATION:**

Name: (Last)	(First)	Title:
Department:	College:	
Mailing Address:		
Phone No.	E-mail address:	

**TWO LETTERS OF REFERENCE:**

Name	Relation to Nominee	Employer
1.		
2.		

**SIGNATURES AND ENDORSEMENTS:**

- The attached information is accurate and correct to the best of my knowledge. If I am selected for the *AdvanceVT* Postdoctoral Fellowship, I agree to comply with the specified reporting requirements:

\_\_\_\_\_  
Nominee Signature

\_\_\_\_\_  
Date

Appendix B: Postdoctoral Fellowship Solicitation

2. I endorse this Advance Postdoctoral Fellowship application and its contents.

\_\_\_\_\_  
Signature of Dept. Head or Director of Academic Unit

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name: Dept Head or Director of Academic Unit

\_\_\_\_\_  
Dept./Academic Unit

Mail Code: \_\_\_\_\_

E-mail: \_\_\_\_\_

Phone No. \_\_\_\_\_

**Due 5 pm, March 31, 2006**  
236 Burruss Hall, Mail Code 0180

Appendix B: Postdoctoral Fellowship Solicitation



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**ADVANCEVT POSTDOCTORAL FELLOWSHIP PROGRAM  
BUDGET FORM**

All of the costs to be provided refer to the Postdoctoral Fellow and not other personnel or Advisors associated with the nominee.

ITEMS	AMOUNT BUDGETED	REQUESTED FROM ADVANCEVT
Salary		
Fringes <sup>1</sup>		
Research-related travel		
Research-related supplies		
Other costs (please describe in the justification section)		
Totals (right click, select Update Field)	\$ 0.00	\$ 0.00

<sup>1</sup> Use the current fringe benefits rate for Postdoctoral Fellow.

Please attach a justification statement for each budget item listed above. Identify who is providing funding for each budget item. Individuals who provide funding other than the Advisor must sign below or on an attached sheet.

**SIGNATURES**

By signing below, I verify that the funds listed above that exceed those requested from *AdvanceVT* will be provided during the fellowship year for the Postdoctoral Fellow nominee.

\_\_\_\_\_  
Signature, Advisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name, Advisor

If other faculty or administrators are involved with committing funds on behalf of the nominee, those individuals must also verify availability of those funds by signing below. Add additional sheets with all the requested information, as necessary.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
E-mail Address

Appendix B: Postdoctoral Fellowship Solicitation

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Print Name

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Title

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Department (please print)

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Phone Number

**Due 5 pm, March 31, 2006**

236 Burruss Hall, Mail Code 0180