

*Increasing the representation and advancement of women in academic science and engineering careers*

## Graduate Student and Post-Doc Luncheon *Applying for an Academic Position*

**April 21st, 2005, Noon  
Donaldson Brown Hotel and Conference Center**

What should you be thinking about now to prepare for an academic job search? Get pointers from two Virginia Tech faculty members on seeking a faculty job, preparing to be competitive in the job market, and tips for success in academic careers. Students just beginning their graduate studies as well as those who will be seeking a faculty job in the next few years are encouraged to attend.



Dr. Mary Kasarda  
Associate Professor  
Mechanical Engineering



Dr. Madeline Schreiber  
Assistant Professor  
Department of Geosciences

## Family Friendly Policies

During April, *AdvanceVT* and the Commission on Faculty Affairs will be hosting discussions with faculty across campus on a variety of work life issues. Faculty work life balance has attracted a great deal of attention nationally over the last several months. Recommendations by the American Council on Education, *An Agenda for Excellence: Creating Flexibility in Tenure-Track Faculty Careers* recently set the stage for important dialogue at the institutional level, and new research results also inform these conversations. See pages 2 and 3 for a small sample of results from of 160,000 doctoral recipients and a recent survey of faculty at the nine campuses of the University of California system. In future issues, we'll share what we learn about work life issues at Virginia Tech from faculty focus groups and the university wide survey.

## Congratulations!

Congratulations to Dr. Elizabeth Creamer, recipient of an Excellence in Research and Creative Scholarship Award from the College of Liberal Arts and Human Sciences.

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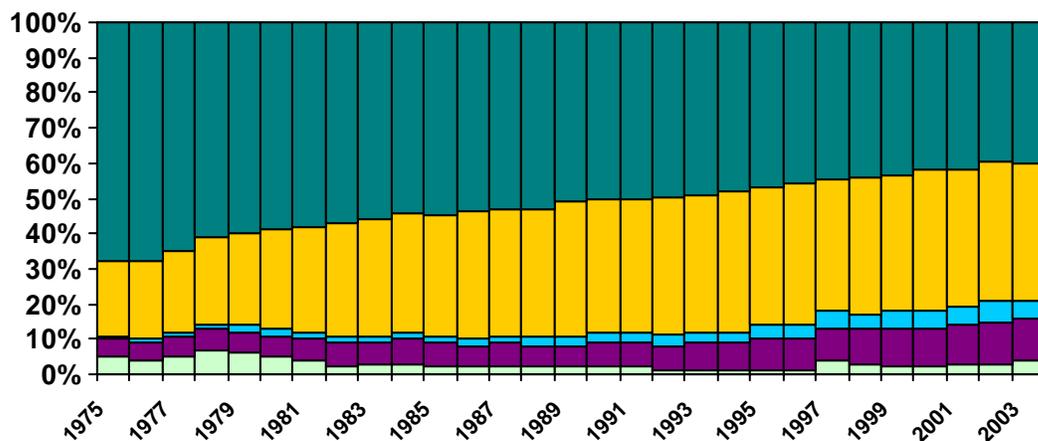
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## Changing Demographics of U.S. Ph.D. Recipients (U.S. citizens only)

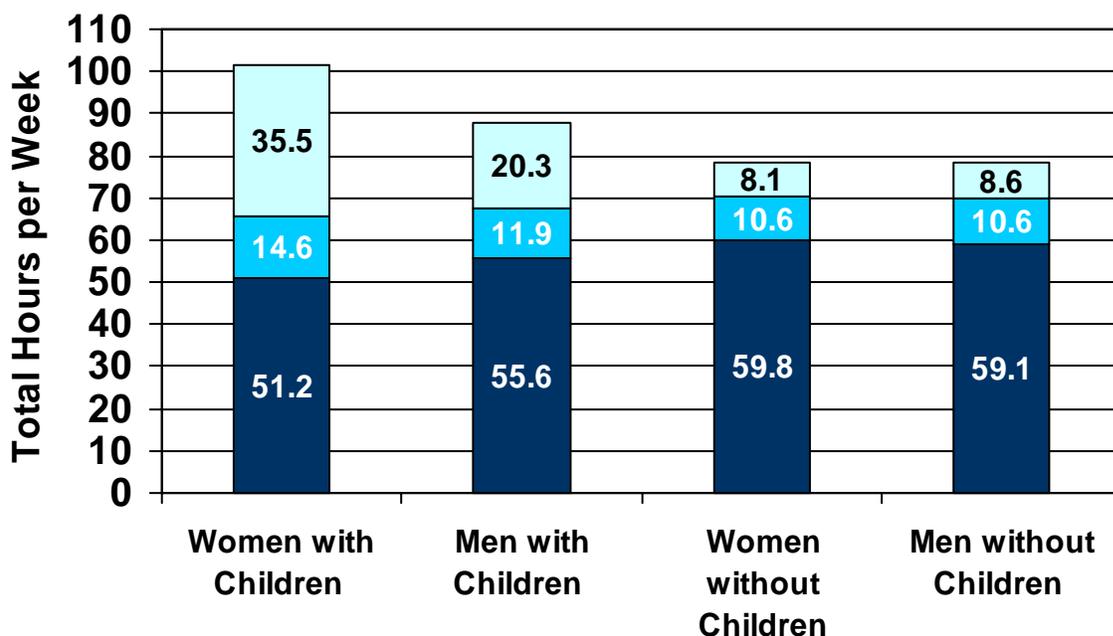
■ Other/Unknown     ■ Under Rep. Minorities     ■ Asian Americans  
■ White Women     ■ White Men



Women and minorities will make up an increasing fraction of future faculty, and are particularly interested in family friendly policies and resources.  
 - UC System Study

## Everyone is Very Busy (UC Faculty ages 30 to 50)

■ Professional     ■ Housework     ■ Caregiving



**In 2001, the AAUP adopted a statement of Principles on Family Responsibilities and Academic Work. See <http://www.aaup.org/statements/REPORTS/re01fam.htm>**

**This material was excerpted from Mason, M. A., & Goulden, M. (2004, November-December). Do babies matter (part II)? *Academe*, 90 (6), 3-7.**

**For more information, see <http://ucfamilyedge.berkeley.edu>**

## The Changing Faculty Workforce

The answer to why work life issues for faculty have become so important in recent years is at least in part attributable to the changing demographics of Ph.D. recipients. As is easily visible on the graph on the opposing page, women and underrepresented minorities are a large and growing proportion of Ph.D. recipients. In 2003, women received 45.2% of all doctorates awarded in the U.S. For many women academics, a faculty career has meant a lower probability of marriage, higher probability of divorce, and both later and fewer children than their male counterparts. These are sacrifices that many women are unwilling or unable to make, reducing the pool of talent available for faculty positions. Men with working wives and young families also face tensions between work and family obligations.

AAUP recently devoted a complete issue of *Academe* to balancing faculty careers and family work (<http://www.aaup.org/publications/Academe/2004/04nd/04ndtoc.htm>) and the Sloan Foundation has funded a variety of studies and projects, including some work at the University of California, to bring attention to the issue and encourage the exploration of more flexible faculty careers.

## The University of California Survey

The entire ladder-rank faculty of the University of California system was recently surveyed about work life issues. More than 50 percent of the faculty—4,400 individuals out of about 8,700—responded, creating a rich data set about faculty at research universities.

One consistent finding across all nine campuses was that women were more than twice as likely as men to indicate that they had fewer children than they had wanted—a full 38 percent of women said so compared with 18 percent of men. Men were more likely than women to have children in the years immediately preceding their appointment as tenure track faculty (presumably during graduate study and postdoc appointments) and during the years as assistant professors. Since the average age for completing a PhD is 33 and many faculty members do not achieve tenure until age 40, the intense career building years are in direct competition with reproductive years for women.

The UC survey also shows that women spend much more time on child care compared with men. Women between thirty and fifty with children clock over a hundred hours each week on caregiving, housework, and professional responsibilities, compared with a little more than eighty-five for men with children. (See graph on opposite page.) For many women, this work load is simply not attractive or not manageable.

The UC system and a number of other research universities, including Virginia Tech, are exploring ways to make faculty careers more flexible to help attract women job candidates and to assist them in achieving both professional success and family goals.

## Congratulations to the *AdvanceVT* 2005-06 Ph.D. and Postdoctoral Fellows

**Congratulations to  
*AdvanceVT*'s 2005-  
06 Ph.D. and  
Postdoctoral  
Fellows!  
These individuals  
have demonstrated  
outstanding  
scholarship and  
potential for  
success in faculty  
careers.**



### **Charlotte Wahl, Postdoctoral Fellow Mathematics Department**

Dr. Wahl obtained her PhD at the Mathematical Institute in Göttingen, Germany, specializing in noncommutative geometry. She spent the academic year 1995/96 at the Ecolé Normale Supérieure in Paris and then continued her studies in Göttingen. Her first postdoctoral position was in Paris at the Institut Henri Poincaré where she studied K-theory and noncommutative geometry.

### **Cortney V. Martin, Ph.D. Fellow Industrial and Systems Engineering Department**

Ms. Martin researches the development of design guidelines and usability testing methods for procedural assembly instructions for children. She is an adjunct instructor in the Department of Engineering Education and previously worked with Virginia Tech's broadband wireless research testbed and as Assistant Director of the Blacksburg Electronic Village.



### **Elena F. Burguera, Postdoctoral Fellow Materials Science and Engineering Department**

Dr. Burguera obtained her Ph.D. in chemical engineering from the University of Santiago de Compostela. She worked in the Paffenbarger Research Center at the NIST campus in Gaithersburg MD. She is studying sedimentation profiles of aggregating proteins involved in the progression of several neurodegenerative diseases using a z-axis translating laser light scattering device (ZATLLS), with a goal of developing an *in vitro* screening test for chemicals with potential for inhibiting protein aggregation.

### **Sara Chiara Haden, Ph.D. Fellow Psychology Department**

Ms. Haden is primarily interested in risk and protective factors involved in the development of aggressive behavior in children. She works on several research projects involving the effects of community violence exposure, physiological and neurochemical correlates of aggressive behavior, and treatment outcomes for children with specific phobias. She would like to continue research on the etiology and treatment of antisocial behavior and work with forensically-minded clinical psychologists in evaluating and treating offenders' risk for recidivism.



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