### **Graduate Professional Development Review Committee Report**

### **Background**

- The University of Vermont has nine colleges with 63 master's programs and 21 doctoral programs.
- In 2013, at the request of President Sullivan, Dean of the Honors College S. Abu Rizvi prepared The Career Success Action Plan. Two career preparation needs were identified for graduate students.

One need is support for figuring out how their academic interests relate to career possibilities. Those who are in the College of Medicine or who are pursuing particular professional degrees (e.g. DPT) have a well-developed system of support already in place. Similarly, those students who intend to pursue academic careers benefit from mentoring by their academic advisors. What could be developed further is a system of advising for students pursuing research degrees who do not intend to enter the academic labor market. Such opportunities are not well understood by students, who require developmental programming to understand career possibilities before they can pursue them. This programming, appropriate for a cohort size of 250-300 students, should be tailored to serve STEM as well as non-STEM students. The second need is for a polished approach to the career search process. Graduate students need job interview training as well as CV and cover letter preparation advice. The first need could be addressed within the Graduate College using funds it has along with a modest graduate student fee increase. The second need can be covered with existing resources within Career Services.

- In 2013, the President and Interim Provost appointed a Graduate College Review Committee to review the function and structure of the Graduate College and to make recommendations pertaining to its future evolution. Although a number of strengths were identified, "absence of mentoring programs" was identified as one inadequate service for graduate students. Among the options recommended for consideration to help improve graduate student services were the following: The creation of a GC listserv; upgrading the GC web site to include an updated and user-friendly inventory of information and links to all relevant aspects of GC life at UVM; developing a system for effectively and efficiently distributing relevant information directly to graduate students; a similar but related upgrade of a web site focused on providing relevant information to faculty and staff involved in initiating, building and maintaining successful graduate education programs; establish the role of GC ombudsman; and establish the expectation of and oversight of mentoring programs through the GC. While many of these recommendations have been implemented, Professional Career Development has received minimum attention.
- In 2015 Provost Rosowsky proposed consideration of a "pre-faculty fellows" program. As
  part of this program, Dean Cynthia Forehand appointed a committee to make
  recommendations for UVM's approach to doctoral student professional development.

### **Charge From Dean Forehand**

A major strategic goal for the Graduate College is building professional development and other non-curricular support for graduate students. As an example we have initiated development of a graduate arm to the Writing Center and have put a graduate ombudsperson in place this year. This committee's charge is to help in this process. The committee will:

- 1. Query current UVM programs/colleges/schools/offices to catalogue kinds of activities they provide graduate students. Emphasis is on professional preparation such as career seminars, teaching prep, digital presence training (Linkedin, for example).
- 2. Suggest ways to collaborate across units to be more efficient in delivery of these programs.
- 3. Define components essential to career development support both for academic and non-academic careers; doctoral specific programs and more global programs should be considered.
- 4. Propose directions UVM should take to best support graduate students. The focus will be on doctoral programs but also consider master's programs, including professional degrees.

A report is expected by the end of the term.

### **Committee**

Two graduate students [Ian Davis (CALS); Elyse Rosenberg (CAS)] and four faculty members [Nicholas Heintz (COM); Donna Rizzo (CEMS); Kimberly Wallin (Rubenstein); Rex Forehand (CAS), chair] served on the committee. Each member brings a vested interest in professional development for graduate students (e.g., participant in CTL program; Kidder Award winner, student advocate, active graduate mentor) to the committee and provides representation from five different colleges at UVM.

### **Process**

- Dean Cynthia Forehand emailed Rex Forehand on September 1, 2015 requesting that he chair a committee on graduate student professional development.
- Dean Forehand and Rex Forehand met on September 30, 2015 and discussed: (1) the charge; and (2) potential committee members.
- Dean Forehand asked four faculty members and one graduate student to serve. Professor Forehand asked one graduate student to serve, All accepted.
- The committee met with Dean Forehand on October 12, 2015 to be charged.
- The committee subsequently met on October 27, 2015, November 10, 2015, and December 1, 2015.
- A final draft of this report was approved by the committee and sent to Dean Forehand on December 7 with a suggestion that, if she wishes, we can meet and discuss the report.

### Assessment

- Components of professional development competence were generated.
  - One committee member (Nicholas Heintz) generated a list of recommended components for Graduate Professional Development which was then modified based on examining 7 Graduate College websites at other universities by a second committee member (Elyse Rosenberg). The committee as a whole then discussed the Recommended Components.
  - O The Recommended Components of Graduate Student Professional Development are: Analytical Skills; Communication Skills; Teaching Skills; Networking Skills; Information Technology Skills; Career Options; Behavioral Expectations; Community Service; and Personal Well-Being. Skills under each Recommended Component and at what level of the university [Program/Department or General (e.g., university level) the skill would be taught are delineated in Appendix 1.
- Assessment occurred at 4 levels
  - o Individual level
    - Interviews with Graduate Student Senate President, Vice-President, and other graduate students in 2 colleges (COM & CAS). Input from two graduate student committee members.
  - Department level
    - Online survey of program leaders (i.e., graduate coordinators, chairs, directors. Note: leadership title varies by program) asking if they addressed each of the Recommended Components and, if so, how. (See Appendix 2 for survey).
  - o College level
    - Emails, interviews, and committee member input to determine what is currently offered.
  - University level
    - Interviews (e.g., by email) with Center (e.g., CTL, Writing Center, Career Center) personnel.
    - Examination of Graduate College website
    - Communication with Hannah Helme (Assistant to Dean) and Dean Forehand.
- Other Units assessed
  - o VT EPSCoR

### **Findings**

- Individual level
  - Two recommended components of Graduate Professional Development: (1. Career Options and 2. Personal Well-Being) primarily occur through the mentor or advisor (see Departmental level findings & Appendix 3).
- Department level
  - o 62 of 97 (64%) program leaders responded to the online survey.
  - o Percent of program leaders reporting they offer some opportunities in each recommended component of Graduate Professional Development.
    - Analytical Skills Development (collection, organization, & analysis of research data): 77%. (Note: Qualitative data inadvertently not sampled).
    - Communication Skills Development (presenting information to others): 92%.
    - Teaching Skills Development (formal instruction and mentoring): 41%.
    - Information Technology Skills Development (how to exploit electronic information): 53%.
    - Career Options (expectations and strategies for employment opportunities): 71%.
    - Behavioral Expectations (responsible professional conduct): 69%.
    - Community Service (give back to your community: UVM, local, national): 38%.
    - Personal Well-Being (promoting a healthy lifestyle): 40%.
    - Note: Networking Skills (Developing professional contacts) inadvertently not included.
  - O Brief summary by recommended components of how departments develop competence in each component (see Appendix 3 for details).
    - Analytical Skills: Predominantly through course work.
    - Communication Skills: Predominantly through course work and presentations (e.g., in class, at conferences).

- Teaching Skills: Predominantly through serving as GTA.
- Information Technology Skills: Predominantly through course work.
- Career Options: Predominantly through workshops/ seminars/colloquia/retreats and through mentoring/advising.
- Behavioral Expectations: Predominantly through course work.
- Community Service: Predominantly through local outreach experiences/field experiences/internships.
- Personal Well-Being: Predominantly through mentoring/advising.
- Of note, university level resources were rarely mentioned: Center for Teaching and Learning, Writing Center, and Center for Health and Well-Being mentioned 1, 2, and 1 times, respectively.

### • College level

- With two exceptions, professional development is not offered by a college.
  - Nine Rubenstein Professional Development Workshops are offered and delineated in Appendix 4.
  - College of Nursing and Health Sciences sponsors 2 to 3 lecture series on integrative health and graduate students are invited.
- o Most colleges indicate professional development is done by department and individual faculty member.

### University level

- The Center for Teaching and Learning (CTL) offers a training experience (e.g., a series of workshops, observation of master teachers, participation in book group, preparation of teaching portfolio) to 10 graduate students each year.
  - Workshops are open to additional students.
  - Graduate student reports suggest program is not sufficiently cohesive (e.g., after initial meeting, cohort of 10 does not meet again).
  - One college (Rubenstein) set up its own teaching development program because of the limited number of students taken in CTL.
- The Center for Writing.

 Graduate College is funding a pilot of a new Graduate Writing Center, beginning January 1, 2016.

#### Career Center

- Based on a report by Mary Beth Barritt, the Career Center had 635 graduate student contacts and provided services to 288 graduate students in the 2014-2015 academic year.
- Website listings
  - Resources (e.g., Graduate Student Plan for Career Success).
  - Preparing for job search (e.g., do you do a CV or Resume?)
  - Career fields (e.g, industry).
- Of note, there appears to be a recent uptick in university level professional development opportunities and resources for graduate students.
  - Graduate Writing Center (opening 1/18/16)
  - SPARK\*
  - OVPR's Grant Writing "Brown Bag"\*
  - Workshop series: "Writing and Communicating Science for Trainees" (Part of "Developing Science Writing Skills: A Sustainable Program for UVM.")
  - Potential of communications classes in conjunction with Alan Alda Center for Communicating Science (Stony Brook University).
  - Creation of a Graduate Student Ombudsperson.
    - \*Upon inquiry, a committee member was told graduate students could attend.

### Other

- VT EPSCoR can serve as an effective example of how professional development can be done.
- o VT EPSCoR does the following:
  - Individual Development Plans (IDPs).
  - Workshops

- Grant writing
- Communication
- Tech transfer and start-up
- Data management
- Newsletter
- Symposia
- Training in ethics
- Website
  - Clearing house

### **Addressing The Committee Charge**

- Charge: Query programs about what is provided now.
  - Online survey results
    - 40-77% of recommended components for Graduate Professional Development are being addressed by programs.
    - Various recommended components were addressed through course work, serving as GTA, workshops, field experiences, and individual mentoring.
    - University level resources (e.g., Centers) were rarely mentioned.
- Charge: Suggest ways to collaborate across units.
  - o The Graduate College's leadership and involvement is critical for this to occur.
  - o Recommendations (see next section) include:
    - Build on and publicize university level resources.
    - Website development.
    - Weekly communication with graduate students about professional development opportunities.
    - Sponsoring workshops.

- Provide resources for professional development of both doctoral and master's degree graduate students.
- Work closely with Graduate Student Senate.
- Charge: Define components essential to career development support.
  - o 9 essential components identified (see Assessment, Findings, and Appendix 1).
  - o Identified if skills for each component should be taught at program and/or university level (see Appendix 1).
- Charge: Propose direction to take to best support graduate student.
  - o See next section: Recommendations.

### **Recommendations** (Note: Those with asterisk are viewed as primary)

- A clear message should come from the Graduate College to program leaders, graduate students, and faculty that professional development is a priority.\*
  - Marketing and coordination of many of the professional development activities should be undertaken by the Graduate College.
- Build on existing resources and recent uptick in opportunities offered.
  - o Utilize VT EPCoR as a model for what the Graduate College can do.
  - Continue and enhance involvement and investment in UVM Centers: Center for Teaching and Learning; Graduate Writing Center (opening 1/18/16); and Career Center.
    - These Centers can serve as the conduit for enhancing graduate student professional development.
    - As they were rarely mentioned in program leaders' survey, publicize to department leaders and graduate students what these centers can offer.
    - Include UVM well-being and mental health services (Center for Health and Well-Being, Counseling Center, Behavior Therapy and Psychotherapy Center) as services for graduate students.
  - A special emphasis should placed on collaboration with CTL (or, as noted in bullet
     5, an alternate structure put in place) to offer teacher training to more students.\*
    - Increase number of slots in existing program.

- In addition to existing program, create a less intense program that can be made available to more students.
- Work with CTL to improve cohesiveness.
- Clarify on the CTL website what "formal recognition from the Graduate College" for program completion means. At a minimum, it should be the awarding of a certificate.
- If CTL is not a feasible route for teacher preparation for large numbers of students, consider adopting the Rubenstein model (see Appendix 4)
  - Note: The "right leader" is necessary to make these workshops effective.
- Meet with each college dean or associate dean and program leaders within colleges to emphasize importance of, and Graduate College's interest in and commitment to, graduate student professional development.
- Graduate college website.
  - Put recommended components for Graduate Student Professional Development on Graduate College website.
    - See Cornell University website as an example.
    - Begin developing strategies to achieve competence in each component.
       Admittedly, this will be a slow, but important, process.
    - Note in Appendix 1 that the committee recommends some competencies be taught at the program/department level and some at the university (general) level.
  - o Include on Graduate College website:
    - Tips for Faculty: Mentoring Graduate Student Professional Development.
    - Tips for Graduate Students: Professional Development.
      - Working with your Mentor.
      - Department and College Resources.
      - University Resources.

- Highlight more the Individual Development Plan (IDP). This is an important document that graduate students, program leaders, and faculty advisors should utilize.\*
  - Devise a system so that the IDP will be utilized across programs.
  - Note: Committee had varying opinions about how this would be implemented (e.g., mandated vs. optional; monitored at Program or Graduate College level).
- Note: The Mission Statement of the Graduate College currently includes "professional development of a diverse...student body." However, the only material on the Graduate College website that could pertain to this part of the mission is: Individual Development Plan (IDP); Gradnet; and links to the Center for Health and Well-Being and to the Graduate Student Ombudsperson.
- Send <u>weekly</u> emails to all graduate students about professional development opportunities.\*
- Workshops\*
  - The Graduate College should sponsor multiple professional development workshops for graduate students yearly (topics can vary across years: e.g., securing employment after graduation in non-academic settings, grant writing, CV development).
    - Utilize the Graduate Student Senate for workshop ideas.
    - Some workshops should be for masters level students (e.g., practitioner-based).
    - Bring in former graduates who have gone into diverse careers after graduation.
    - Coordinate advertisement with Colleges and Departments.
  - Provide workshops for faculty and program leaders (e.g., graduate coordinators) on graduate student professional development.
  - Coordinate with OVPR and other units to include graduate students in workshops offered for faculty and staff.
  - Make explicit which faculty development workshops/opportunities graduate students can attend (e.g., "Doing Your Homework: How to Find the 'Right' Funding; SPARK) and invite them.
- UVM has 3 times as many master's degree programs, including professional programs, than doctoral programs (63 vs. 21). Career development (e.g., job

opportunities, transitioning to a doctoral program) designed *specifically* for individuals in these programs should be a critical part of the role of the Graduate College.

• Work closely with the Graduate Student Senate.

### **Acknowledgements**

• The committee wishes to acknowledge the important role played by Hannah Helme (Assistant to the Dean of the Graduate College) in setting up meetings, conducting and summarizing the survey of Graduate Coordinators, taking minutes of meetings, communicating with Dean Forehand, and a host of other activities.

# Appendix 1 Graduate Student Professional Development - Recommended Components

Components	Where Skills Taught	
Analytical Skills (Collection, organization and analysis of research data*		
<ul> <li>i) Research design and methods</li> <li>ii) Database development and maintenance</li> <li>iii) Statistics or qualitative data analysis</li> </ul>	Program General Program	
2. <u>Communication Skills</u> (presenting information to others)		
a) Written		
<ul> <li>i) Research Reports/Dissertation</li> <li>ii) Grant and project proposals</li> <li>iii) Resumes/CVs</li> <li>iv) For the public</li> </ul>	Program Program/General General General	
b) Oral		
<ul><li>i) Seminars and meetings</li><li>ii) Presentations to the public</li><li>iii) Interviewing</li></ul>	General General	
c) Social media	General	
3. <u>Teaching Skills</u>		
<ul><li>i) As a teaching assistant</li><li>ii) As an undergraduate mentor</li><li>iii) Obtaining formal teaching credentials</li></ul>	General Program/General General	
4.Networking Skills (developing professional contacts		
<ul> <li>i) Local and distant contacts</li> <li>ii) Professional societies/meetings</li> <li>iii) Linked-in and other online networks</li> <li>iv) Fellowships for offsite training</li> </ul>	General Program/General General Program/General	
5. <u>Information Technology</u>		
<ul><li>i) Websites</li><li>ii) Integrating technology in teaching and research</li><li>iv) Accessing public resources and databases</li></ul>	General General Program/General	

6. <u>Career Options</u> (expectations and strategies for various employment opportunities)	
<ul> <li>i) Academia – schools, small colleges, universities</li> <li>ii) Industry</li> <li>iii) Government/Policy</li> <li>iv) Entrepreneurial</li> <li>v) Individual development plans</li> </ul>	Program/General Program/General Program/General Program General
7.Behavioral Expectations (responsible professional conduct)	
i) Title IX ii) Diversity training iv) Professional ethics (authorship, etc.)	General General Program/General
8. Community Service (giving back to your community)	
<ul> <li>i) UVM – grad student senate, committees, etc.</li> <li>ii) Burlington and other local communities</li> <li>iv) National and international societies, charities</li> </ul>	General General General
9. <u>Personal Well-Being</u>	
<ul> <li>i) Diet and exercise</li> <li>ii) Managing finances</li> <li>iii) Coping with work-life balance and stress</li> <li>iv) Time management</li> </ul>	General General General General

<sup>\*</sup>Note that Analytical Skills should have (but did not) include qualitative data analyses in the initial version and was not included in the survey of Graduate Coordinators.

### Appendix 2 Survey Instrument of Program Leaders

### **Graduate Professional Development Survey**

### Welcome to the Graduate Professional Development Survey!

Dean Forehand of the Graduate College has charged the Graduate Professional Development Committee to identify what professional development resources are currently available to graduate students. Your response will contribute to an in depth understanding of what is currently offered by Graduate College programs so that this committee can submit an accurate report to Dean Forehand. Thank you in advance for your participation.

This survey should take 4-5 minutes to complete. Click next to begin.

There are 2 questions in this survey.

Next

Exit and clear survey Are you sure you want to clear all

THE UNIVERSITY OF VERMONT - BURLINGTON, VT 05405 - (802) 656-3131

### **Graduate Professional Development Survey**

You have completed 0% of this survey

Components
*Please indicate your program and college in the text box below.
Answer
*Please check all of the ways that your program currently supports graduate students. In the corresponding text box please provide a brief description of, or a link to, the resource.  Check any that apply  Comment only when you choose an answer.
<ul> <li>Analytical Skills (e.g. data analysis)Make a comment on your choice here:</li> <li>Communication Skills (e.g. written, oral, or social media)Make a comment on your choice here:</li> </ul>

here:			
Informat	on Technology Skills Make a comment on y	our choice	
here:			
Career O	tions Make a comment on your choice	1	
here:			
Behavior	al Expectations (e.g. responsible profession	al conduct)Make a comment on your choic	e
here:			
Commun	ty Service (e.g. local, university, or professi	onal)Make a comment on your choice	
here:			
Personal	Well-being Make a comment on your choice	:	
here:			
None of t	ne above Make a comment on your choice		
here:			

Exit and clear survey Are you sure you want to clear all yo

## Appendix 3 How Departments Cover Recommended Components of Graduate Student Professional Development\*

\*The attached numbers were grouped post-hoc and should be viewed as approximations.

### Number of Programs Using Each Method of Covering Each of Eight Recommended Components of Graduate Professional Development

### **Analytical Skills**

Course work: 30 Lab experience: 6 Workshop/Colloquia: 3 Mentor provides: 2

Thesis/dissertation/comps: 2

Statistical expert: 2

### **Communication Skills**

Course work: 28

Presentations (e.g., in class, conferences): 21

Thesis/dissertation/comps: 9

Workshop/colloquia/journal club: 7

Lab experience: 2

Writing (for publication, for lay audience): 2

Writing Center: 2

Mentor: 1

### **Teaching Skills**

Serving as GTA: 16

Teacher training/orientation/internship: 6

Course work: 4

CTL: 1

\*Note: Teaching required by 5 programs.

### **Information Technology**

Course work: 18

Engage in forms of IT (e.g., Blackboard): 4

Library media training: 2

Workshop: 2 Mentor: 2

Cover in orientation: 2

### **Career Options**

Workshop/seminars/colloquia/retreat: 15

Mentor/Advising: 15

Course: 6
Internship: 6

Job announcement distribution: 1

Network at conferences: 1

### **Behavioral Expectations**

Course work: 14 Advising: 7

Workshop/training session/colloquium/seminars: 5

Use discipline guidelines/manual: 4

Lab/research supervisor: 2 Cover in orientation: 2

### **Community Service**

Local outreach projects/field experiences/internship: 12

Departmental/university service expected: 5

Courses: 3

Professional organizations: 1

### Personal Well-Being

Mentor/Advising: 11

Workshop/colloquium/seminar: 5

Courses: 3

Encourage use of university resources (e.g., Center for Health & Well-Being): 2

Social events: 1

## Appendix 4 Rubenstein Professional Development Workshops

RSENR Graduate Teaching Assistant Workshop
Intro to Library Research Tools Software Program for Natural Resources
EndNote Bibliographic Management Workshop
Presentation Skills
Life After Graduate School
Basic Database Design
Proposal Writing
Meeting Facilitation
Stress and Resiliency Workshop
Future Workshops: Mentoring students, ethics, leadership