Spotlight on STEM Women

Rebecca Blust is an Associate Professor in the Department of Engineering Technology at the University of Dayton (UD). Her teaching and research interests include Lean Manufacturing Systems, Project Management and Senior Capstone Design Courses.

Professor Blust is Coordinator for UD’s Innovation Center and serves on the advisory committee for the School of Engineering’s Innovation Center and the Department of Engineering Technology. She also serves on the UD Promotion and Tenure Committee and has served as a University Faculty Mediator for the Associate Provost.

Having previously served as PI for a $200k NSF grant, Professor Blust is currently Co-PI on a $500k NSF RET grant and two significant grants with the Kern Family Foundation, KEEN Network. Prof. Blust has published on topics including: K-12 engineering education, design & industry, activity-based learning, advancing women in engineering, and international topics, such as the cultural integration of Chinese students into engineering design teams.

Prof. Blust is dedicated to community service, having developed and participated in the Lunch Buddies program, which pairs college female engineering students with 6th and 7th grade girls every Friday to do STEM activities. In addition, she integrates service learning projects directly into classroom projects.

Prior to coming to UD, Prof. Blust had a extensive career with the Goodyear Tire and Rubber Company and served as Business Center Manager of Automotive Products in St. Marys, Ohio as well as the Production Manager of the World’s largest conveyor belt facility in Marysville, Ohio.

Professor Blust received her undergraduate and Masters degrees in Engineering from the UD. In addition, she also has a Masters of Business Administration from Wright State University.

What are your current professional interests?

“My primary interests are in project-based learning. I’m specifically interested in educating K-12 teachers to implement project-based learning in science, technology, engineering and math (STEM) fields.”

What do you like most about being an engineer?

“The students. Watching the students evolve from the time they are freshmen to the time they are seniors—that’s the best part!”

What would you say to women considering a career in your field?

“Go for it! Engineering is a discipline that enables you to do so many different things, not just design, not just education and not just getting your PhD in areas of research. You could go on to become anything you want once you hone the skills necessary to become an engineer and have the discipline to succeed and to learn.”

Each month, we spotlight a leading female faculty member in the STEM disciplines from across our consortium. To nominate a female faculty member who is leading the way in your STEM department, send the nominee’s name along with a brief explanation to: leader@wright.edu.
As the first signs of spring appear, the longer days and warm temperatures remind us all that summer is just around the corner. Yes, summer. The time of year when faculty plan to catch up on all of those pesky projects that just didn’t seem to get finished during the regular academic year. Summer is a time of optimism, hope, and for many faculty, the “most wonderful time of the year” when it comes to productivity. But for some, summer flies by too quickly and the optimism of spring may turn to frustration and disappointment rather than productivity.

Having a successful summer starts with good planning. Scientists who study time management, goal-setting, and achievement have a number of tips to offer the faculty member looking ahead to summer:

Tip 1: Have a written plan. Although people are generally good at noticing the work that needs to be done (those piles on our desks are hard to ignore!), the functional limits of our memories make it difficult to remember more than a handful of items at any one time. Yes, even professors have limits to cognitive function and capacity. When it comes to having a successful summer strategy, it is important to start by developing a written plan that is goal driven. What are your goals for summer when it comes to writing, research, teaching and professional development? Start by thinking of your various roles (e.g., scientist, instructor) and list all of the goals you would ideally like to accomplish in the summer. Don’t forget those “other” roles, like “parent” and “fitness buff.” Failing to plan for personal roles and interests can leave faculty feeling burned out at summer’s end, even when they are highly successful at achieving professional goals.

Tip 2: Be realistic. Once you’ve identified your goals, step back and consider your list. Is it realistic to expect to write 6 manuscripts, 2 grant proposals, and analyze 4 data sets in under 12 weeks? Cognitive scientists have noted a basic human tendency to underestimate the amount of time it takes to complete tasks. This phenomenon, dubbed the planning fallacy, can trap people into trying to do too much in too little time, leading to feelings of frustration and guilt when unrealistic expectations are unmet. Before you say to yourself “This summer will be different,” keep in mind the research also suggests we don’t learn from our previous mistakes when it comes to planning fallacies. If it took 60 hours to write a manuscript last time, it probably will take at least that long the next time. So, be brutally honest with yourself about the most important goals for summer, and focus only on those top 3 or 4 goals. If you find yourself half-way through the summer with time on your hands, you can always go back and tackle other goals.

Tip 3: Identify the steps to achieve your goals. Okay, maybe it seems silly to list all of these details, but research on goal-planning suggests we will be more realistic and more effective when we accurately identify the steps we need to take to complete a specific goal. Consider each goal on your list and write down the steps you’ll need to take to accomplish them.

Tip 4: Add your goals and tasks to your planner/calendar. Now that you have a clear sense of your goals and the steps to achieve them, it is important to schedule time for these tasks. Add deadlines to your calendar and plan the steps to achieve your goals working backward from the deadline. Be sure to schedule extra time in the summer for personal activities, and don’t forget to schedule your vacation time.

Tip 5: Create accountability. For many people, telling others about goals and sharing deadlines creates the accountability necessary to stick to a summer plan. Setting deadlines with collaborators and colleagues to share draft manuscripts and review draft grant proposals creates external accountability that can keep you on track.

So, go on now. Summer’s just around the corner—let’s get planning!
The Keys to Academic’s Success: Faculty Development
Save the Date: Thursday, April 12, 2012

STEM faculty, Department Chairs and Administrators are invited to save the date for the LEADER Consortium’s Keys to Academics’ Success: Faculty Development event. This one-day mini-conference, the third in this year’s series, will be devoted to faculty development, including presentations and workshops on mentoring, writing and work-life satisfaction (aka “balance”). Presentations and workshops by nationally-recognized speakers will be held at CSU, including:

Keynote Presentation & STEM Luncheon Speaker

Dr. Donna J. Dean

Former President of AWIS and co-author of “Getting the Most Out of Your Mentoring Relationships: A Handbook for Women in STEM.” Dr. Dean’s presentation will focus on strategies for successful mentoring in STEM.

Effective Work-Life Satisfaction: Faculty Workshop

Ms. Cindy Simpson, M.Ed., CAE

Director or Programs and External Relations, AWIS.

Writing Workshops

Dr. Paul Silvia

University of North Carolina-Greensboro
Author of “How to Write A Lot: A Practical Guide to Productive Academic Writing.”

Ms. Meghan Rehberg, JD
Grants Administrator
UD Office of Grants and Contracts.

Registration for this event is free and open to all STEM Faculty, Department Chairs and Administrators at AFIT, CSU, UD, and WSU. Look for an invitation to register for the event and reserve a spot at the Keynote Luncheon in your e-mail soon!
Wouldn’t You Like to be a LEADER Too?

The LEADER Consortium is developing a number of policy initiatives, programs and activities. Participation and inclusivity are key to our values and mission, and to that end, we welcome participation and suggestions from across the academy.

Lend your talents and be a leader for equity in the academy by joining a committee, suggesting programs/events, or just voicing your concerns. We’re here to help you make a difference. For more information, contact the LEADER Office at: leader@wright.edu.

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