

**Science/AAAS** 15 February • Boston, MA DETAILS

**CAREER FAIR** Hynes Convention Center, Exhibit Hall D, 11 am – 4 pm

**Science Careers**  
From the journal *Science* AAAS

**Science** AAAS Magazine News Signaling Careers Multimedia Collections

**Science Careers** From the journal *Science*

- Jobs
- Funding
- Meetings and Events
- Career Development
- For Advertisers
- About Science Careers

[Science Home](#) > [Science Careers](#) > [Career Development](#) > [Previous Issues](#) > [2008](#) > [2008-02-01](#) > [Franzen](#)

**CAREER DEVELOPMENT : ARTICLES**

- E-Mail This Article
- Print This Article
- Share This
- Related Articles



**Learning to Manage**

Harald Franzen  
Germany  
1 February 2008

"Scientists just don't think about money," said Christina Schütte, presenting at a November workshop on project management in Berlin. "They figure, 'Oh, I'll just let my Ph.D. student do it; that doesn't cost me anything.'" Her audience, about 30 Ph.D. candidates, nodded knowingly. But that is flawed thinking, Schütte says. Perhaps there is a multimillion-dollar piece of scientific equipment in the lab that sits unused because the young researcher is filing invoices. That isn't money saved but opportunity--and very real money--wasted.

Schütte, a consultant with [ProSciencia](#) and a former research associate at the [Max Planck Institute for Biophysical Chemistry](#) in Göttingen, gave her lecture during a daylong workshop on research project management that's part of a series called [TRAYSS PRIME](#) (shorthand for Training of Young Scientists in Project and Innovation Management). The workshops aim to give young scientists the skills they need to run labs efficiently, manage research projects, and turn scientific discoveries into financial profit--in short, skills young scientists need to survive in a science world in which business and management skills become more important with each passing year.

"Project management isn't an integral part of any degree program ... as far as we know," says Henner Willnow of the consulting firm [Steinbeis Team Northeast](#) and one of the workshop lecturers, speaking about degree programs in natural sciences. "At this stage, most of these students are obviously managed rather than to manage themselves in their daily lives in the lab. But at some point that changes. Students become postdocs, they become group leaders or professors, and then they are still missing the necessary tools to guide and lead one or even several groups and projects."

**LEARNING THE BASICS**

"At this stage, most of these students are ... managed rather than to manage themselves. But at some point that changes. Students ... become group leaders or professors, and then they are still missing the necessary tools to guide and lead one or even several groups and projects."  
--Henner Willnow (pictured above), project manager of TRAYSS PRIME

The TRAYSS PRIME workshops, like similar events from the [European Molecular Biology Organization](#) (EMBO) and other organisations, aim to provide these tools. Beginning last fall, six TRAYSS PRIME workshops held in Gdańsk, Hamburg, Copenhagen, Berlin, and most recently Turku, Finland, have covered topics such as project management, intellectual-property management, and management of the E.U. funding application process. The Framework Programme 6-funded project will culminate this May with a [5-day management training course](#) in Berlin.

The Berlin workshop started out with a look at aspects of scientific work that set it apart from "regular"

**BUSINESS OFFICE FEATURES**

Faculty Positions: Seeking the Skills for a Successful Career in Academia  
25 January 2008

Interdisciplinary Research—Building Bridges, Finding Solutions  
23 November 2007

Diversity—Opening Doors for Scientists with Disabilities  
16 November 2007

[More](#)

**CAREER TOOLS AND RESOURCES**

**Current Employers**

Learn more about the employers advertising positions on our site.

**Science Careers Forum**

Post a question, get an answer on our online community

**Graduate Programs**

Browse our database of program profiles

**How-To Guides**

- [Writing a resume/CV](#)
- [Beating the interview](#)
- [Getting funding](#)
- [Managing a lab and staff](#)
- [Building your network](#)

**Salary Tools**

Find out how much you're worth with our salary

business endeavours. "Since you seek a new discovery, there is no clear guaranteed outcome," said guest lecturer Undine Stricker-Berghoff, a coach and consultant with [ProEconomy](#). "And it's often hard to set clear timelines or milestones."

[calculator](#)

[To Advertise](#) [Find Products](#)



**Participants at a November project-management workshop** in Berlin, part of a series called TRAYSS PRIME, broke into groups to apply what they'd learned to a sample project plan.

The students then got a crash course in project management, starting with a look at how to define, structure, and plan a project. As part of the planning process, the course looked at both estimating the work needed and creating a schedule and a budget for the project. "Consider nonworking days in your planning," warned Hans-Wilhelm Berghoff, also a consultant with ProSciencia, who taught much of the nuts-and-bolts business aspects of the workshop. "This may sound strange to someone in a Ph.D. program because there are no nonworking days, but in real life, there are." Lecturers also touched on some standard planning instruments such as Gantt charts that illustrate a project's schedule and PERT diagrams that help to analyse and illustrate the interdependencies of tasks involved in a project.

Project control was next, and Berghoff earned some laughs with an illustrative example: "There is a problem with your project planning if you don't finish your Ph.D. on time." After a pause, he added: "I haven't met anyone who finished his Ph.D. on time." Willnow looked further into such perils with his presentation on risk management during which he explored ways to assess and reduce risks within a project.

The workshop covered issues related to teamwork and finding a suitable partner for academic or business co-operation. It also touched on communication and other interpersonal issues related to running meetings, conferences, and collaborations smoothly. Students then got a hands-on opportunity to test their skills by breaking into small groups and planning a sample project.

#### FURTHER OPPORTUNITIES

The hands-on approach has also been the cornerstone of the [laboratory management courses](#) offered by EMBO. EMBO workshops, some of which are offered only to EMBO fellows while others are open to all scientists, avoid classroom-style teaching. "Otherwise, one might as well read a book," says Gerlind Wallon, who manages the program. Groups are small, topping out at 16 participants, with two instructors who cover the basics of management in 4 days. The idea of the workshops,



usually held in Heidelberg, Germany, but also offered elsewhere upon request, is to keep the theoretical input relatively short and constantly follow up with exercises in small groups so students can apply what they have learned.

The [Center for Science & Research Management](#) in Speyer, Germany, also offers workshops and modules. The Junior Professional Management Program consists of six modules of 3 days each (over the weekend), covering topics such as communication and conflict management, time management and dealing with stress, personnel, project management and negotiations, and leadership.

Professional organisations, universities, and national research agencies throughout Europe also offer periodic courses on similar topics, either regularly or as a one-off. The point of these courses is to arm students with the right skills before they actually need them, says Schütte. "Right now, none of them manage budgets or labs. But after they are done with their Ph.D.s, they will need these skills," she says, referring to the skills covered in the TRAYSS PRIME workshops.

## MEETING A NEED

The TRAYSS PRIME project was spearheaded by [ScanBalt](#), a life sciences and biotechnology organisation that includes members from Scandinavia and the Baltic Sea region (hence the name), in co-operation with ProSciencia and Steinbeis Team Northeast. In September, there will be another TRAYSS PRIME workshop during the [ScanBalt Biomaterial Days](#) in Vilnius, Lithuania, and ScanBalt expects to add additional training seminars throughout the year.

The workshops have been well-received by students. "I found this workshop very useful," said Anna Gwizdek-Wiśniewska, a biotechnology researcher at the [University of Gdańsk](#) in Poland, who attended a TRAYSS PRIME workshop in Gdańsk in December. "It was prepared exactly for people like us who work in biotechnology and medicine. The lecturers were very well-prepared for the workshop, from both a theoretical as well as practical point of view, and presented their material in an interesting manner. Despite the fact that it was Saturday and a very tight timetable, nobody was bored."

Willnow notes that it's impossible for any workshop to cover all aspects of project management, but the goal of the TRAYSS PRIME workshops is to make the students aware of the possibilities. "They know now that it is possible to structure work and calculate costs. They know where to look for E.U. funding and what they have to put in the application for it."

Harald Franzen is a freelance writer and photojournalist based in Berlin.	Comments, suggestions? Please send your feedback <a href="#">to our editor</a> .
Photos: Harald Franzen	DOI: 10.1126/science.caredit.a0800018

## RELATED CONTENT

### Special Feature: Laboratory Management

9 November 2007,

### Project Management and Discovery

13 September 2002,

### Project Management in an Uncertain Environment

23 August 2002,

### Project Management for Scientists

12 July 2002,

 [E-Mail This Article](#)  [Print This Article](#)  [Share This](#)  [Related Articles](#)

[Magazine](#) | [News](#) | [Signaling](#) | [Careers](#) | [Multimedia](#) | [Collections](#) | [Help](#) | [Site Map](#) | [RSS](#)  
[Subscribe](#) | [Feedback](#) | [Privacy / Legal](#) | [About Us](#) | [Advertise With Us](#) | [Contact Us](#)

© 2008 American Association for the Advancement of Science. All Rights Reserved.  
 AAAS is a partner of HINARI, AGORA, PatientInform, CrossRef, and COUNTER.