

Grant Writing

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<http://www.ahrp.org/infomail/04/06/28.php>

This article gives insight into how the Psychology Department at the University of Pittsburg receives millions of NIH dollars each year. Helpful tips include, "You need a T-shirt" and speaking to mentors of reviewers, among others.

Kotok, A. Special Feature: Grant Writing for Tight Times. Sciencecareers.sciencemag.org. July 27, 2007.

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Interviewing

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Most efforts to improve STEM education start with recruitment. But working with those teachers already in the classroom may yield a bigger payoff.

Teaching

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Writing lab reports in science classes can be more productive and engaging if the experience is structured well.

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A physics professor describes his evolution from lecturing to dynamically engaging students during class and improving how they learn.

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Jobs/Tenure

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Tenure has been eroded by structural pressures, but remains vital to universities that value creativity.

Dean, C. Women Bridging Gap in Science Opportunities. *The New York Times*. June 2, 2009.
<http://www.nytimes.com/2009/06/03/science/03discrim.html>

Kolata, G. Women Atop their fields dissect the scientific life. *The New York Times*. June 6, 2011. <http://www.nytimes.com/2011/06/07/science/07women.html?pagewanted=all>

Scudellari, M. 2010. Life Sciences Salary Survey. November:53-57.
Creative and resourceful folk, scientists are making the most of their careers despite dropping salaries and rising lab costs.
<http://www.marketwire.com/press-release/the-scientists-life-science-salary-survey-2010-results-announced-1345458.htm>

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<http://www.unm.edu/~devalenz/profs.html>

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Research

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“Certain systematic methods of scientific thinking may produce much more rapid progress than others.”

This article written in 1964 by John R. Platt provides a foundation for formulating logical trees, hypotheses, and proof by disproof. This is definitely worth an Inter-Library Loan request!

Forscher, B.K. 1963. Chaos in the Brickyard. *Science* 142:339.

An editorial written in 1963 that relates scientists to brick makers.

A worthy read to protect you from becoming a brick maker.

Clery, D. Russian Science: Waking from hibernation. *Science* 330:1036-1042.

Russia's Ministry of Education and Science recently announced the first results of a novel attempt to revitalize science in the country's universities. It had offered "megagrants" of up to \$5 million to attract top researchers from around the world to set up new labs at Russian universities. How much the megagrant winners can boost Russian science remains an open question, however. Foreign winners are only required to spend one-third of each year in Russia, and the program notably failed to lure two big fish: this year's winners of the Nobel Prize in physics, Andre Geim and Konstantin Novoselov. The discoverers of graphene were both born and educated in Russia but are now working at the University of Manchester in the United Kingdom. Indeed, the Nobel Prize announcement last month generated much debate in Russia about why many of the country's best and brightest scientists—tens of thousands of whom fled abroad during the economic crises of the 1990s—are still now gracing foreign universities and their work benefiting other economies.

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Mone, G. 2009. Faking the Results. *Popular Science*. October 2009: 29.

“Scientists consider new ways to prevent and spot research misconduct.”

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Hooper, J. 2006. Mr. Hard Cell. *Popular Science* 269(2):64-69 & 89-91 .

Scientist Jerry Schatten became very famous for his collaboration with South Korean scientist Woo Suk Hwang, but his career has been irreparably damage by the revelations of Hwang's fraud. Their collaboration on stem cell research and the subsequent fallout from Hwang's fraud are discussed.

Zielinska, E. 2011. Poster perfect. *The Scientist* September: 55-57.
“How to drive home your science with a visually pleasing poster.”

Pain, E. 2007. ‘Dr. Hustle’ sells his dream for Italian medical research. *Science* 316:1118-1119.

Funding can come about in some of the most surprising ways. Dr. Antonio Giordano had a chance encounter with the owner of a fast-food chain that lead to the funding of his research dream.

Writing

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Weiss, M.R. 1995. Editor's Viewpoint: Do you know the way to San Jose? Research Quarterly for Exercise and Sport 66(1):iii-v.

Iyengar, R., Diverse-Pierluissi, M.A., Jenkins, S.L., Chan, A.M., Devi, L.A., Sobie, E.A., Ting, A.T., Weinstein, D.C. 2008. Inquiry Learning: Integrating content detail and critical reasoning by peer review. Science 319:1189-1190.

"Classroom lectures by experts in combination with journal clubs and Web-based discussion forums help graduate students develop critical reasoning skills."

Fine, M.A. & Kurdek, L.A. 1993. Reflections on determining authorship credit and authorship order on faculty-student collaborations. American Psychologist. 48(11):1141-1147.

PDF online at apastyle.org: <http://www.apastyle.org/manual/related/fine-1993.pdf>