

TOP TEN ACTIONS WHICH WILL HELP SOLVE THE OVERSUPPLY PROBLEM FOR PH.D. PHYSICISTS

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10. Disallow the use of the term shortage, until the starting salary of Ph.D. physicists is increasing at a rate of twice the national average.
9. Require that at least 50% of graduate students in physics departments be U.S. citizens or have permanent visa status.
8. Develop a course or seminar series called “Physics for Potential Millionaires” which gives students a basic understanding of how the knowledge and application of physics can be used to gain wealth, power, influence (and compassion).
7. Require that all physics faculty take every other sabbatical leave in a work area outside the traditional fields of physics. (In most cases faculty sabbaticals are musical chairs in which professor A goes to B, B to C, C to D, D to A etc.) By taking a sabbatical outside a traditional physics field, the faculty member would; a) learn the difference and difficulty (and perhaps excitement) of other career fields, b) gain valuable information to broaden their teaching and horizons, c) help develop networks outside traditional physics careers and d) not consume physics related money which could be used to support younger physicists.
6. Publicize very successful non-traditional careers by individuals who earlier obtained a Ph.D. in physics. Articles and picture stories should feature the physicists in expensive cars, clothing, houses, etc. Perhaps PHYSICS TODAY should have a special “Physics People” section.
5. To demonstrate concern for the plight of the unemployed or underemployed physicist, each senior Ph.D. producing faculty (in times of oversupply) should renounce taking summer salary from grants under the following condition: the faculty member has reached the age of 50 or more and his or her children have finished college. The faculty member should continue performing research over the summer, but the summer salary (2/9 to 3/9 of the academic year salary) would be used to support postdoctorals and younger physicists.
4. In times of oversupply, the NSF should be encouraged to shift grant fund allocations from supporting graduate research assistants to supporting postdoctoral students. Less research funds for research assistants will reduce the number of graduate students and the output of Ph.D. students.
3. The profession should develop a quality rating system for all old and new Ph.D. department programs. Over each 5-year period those departments which average in the bottom 10% should be closed down.
2. When the oversupply of Ph.D. graduates reaches the 20% level for 3 years in a row, then physics departments should be required to temporarily suspend faculty tenure. All faculty jobs in every U.S. physics department would be open to the best qualified physicist (even if it is a new Ph.D. graduate).
1. Ph.D. recipients who do not find suitable jobs which make use of their physics skills nor pays an appropriate salary should be allowed to move in with their thesis advisors.