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## The role and rights of postdocs

he postdoc's lament is a sad song heard in labs all around the world. It usually includes some variation of the refrain "overworked, underpaid, under appreciated and possibly working on an artifact". In the biological sciences, postdoctoral training is now a requisite phase of a research career. This was not always the case. The growth of the postdoctoral population was a late-twentieth-century phenomenon; in the biological sciences, the postdoc population more than doubled between 1980 and 1998. The assumption is that this trend will continue.

Although a postdoc is now considered essential, no uniform guidelines exist to spell out what is expected of any of the parties involved: the postdoc, the PI or the institution. Instead, *ad hoc* policies have developed that are often institution-specific and sometimes unique to a lab. This has caused gross discrepancies in the conditions under which postdocs are employed, notably their salary and benefits, and the level of training and mentorship that they receive. In many cases, postdocs occupy a bizarre no-man's-land between student and faculty and absurd disincentives exist, such as loss of benefits when a postdoc obtains competitive external funding. Nightmarish stories are told of labs in which postdocs are set against each other on the same project, of fights over ownership of projects and of abusive behavior. For some, enduring a difficult postdoc is a rite of passage. But for too many, it can be a period of immense dissatisfaction.

In part, this situation has developed from a lack of regulation and oversight of the process. Institutions have been slow to take responsibility for managing the growing postdoc population, as evidenced by the relative scarcity of offices of postdoctoral affairs on university campuses—only 20 in the US at this point. The simple fact is that, in the absence of adequate oversight, postdocs have come to be seen as a cheap form of intellectual and manual labor.

Clearly, awareness of this problem and attempts to address it are not new. In 2000, the National Academy of Sciences released their report "Enhancing the Postdoctoral Experience for Scientists and Engineers". It provided a cogent outline of the situation in the US and clear recommendations for addressing some of the prime concerns of postdocs. Three years later, the degree to which these recommendations have been implemented is unclear. Certainly, the postdoc's lament still resounds.

Of course, addressing the many issues involved in improving the postdoctoral experience cannot be the sole responsibility of the institutions. With varying degrees of success, postdoc organizations have been springing up on campuses around the US. These initiatives are, however, hindered by the inherent difficulty of sustaining themselves with a temporary work force. Thus, the establishment of the National Postdoc Association (NPA) should be a boon to these efforts. The NPA came into being in 2002 with the goal of coordinating local efforts and sharing resources. With their inaugural meeting held in March of this year, a newly appointed executive director, Alyson Reed, who will be based at the NPA's office in Washington, DC, and a membership drive underway, the NPA should provide the necessary infrastructure for continuity and a unified voice for postdocs throughout the US.

A key problem for the NPA and postdoc organizations in working with institutions to improve the postdoc situation is the lack of accurate data. The fact is that many universities are unaware of how many postdocs they have, how long they stay, how much they are paid and how they impact the research enterprise. To address this deficiency, Sigma Xi has commenced a postdoc survey. This survey, running through the first half of next year with a report due in late 2004, aims to collect these data on the total postdoc population of the US. This will deliver data that should drive significant change.

But there already exists sufficient information to move forward in addressing the myriad postdoc issues. The NIH has made some headway in establishing guidelines for the mentoring of postdocs and continues to work toward raising the starting salary for postdocs to \$45,000. These changes should trickle down to the institutions. Institutions should make it a priority to look internally at the plight of their postdocs. All institutions should create transparent and consistent practices in hiring postdocs. And at the very least, institutions should have a postdoctoral office that oversees the hiring and mentoring of postdocs and an ombudsman to whom grievances can be taken. Recent graduates contemplating postdoctoral positions would be well advised to look at the conditions and support infrastructure available at the institutes they are considering. Currently, these vary widely, and smaller, less prestigious institutes seem far more progressive in addressing the issue of improving postdoc conditions. This reflects a realization that what is good for postdocs is good for the institution and, ultimately, good for science.