In his editorial on academic ronin (Breithaupt H (2004) EMBO Rep 5: 831), Holger Breithaupt discussed the bleak status of young researchers, also known as postdocs, research associates or research scientists. Regardless of how their job title changes, one characteristic of the job remains the same: it is cheap labour in today’s research environment.

Many young postdocs lament that they were born too late and might think that there were once ‘good old days’. As a matter of fact, this was probably not the case and is certainly incorrect with respect to female scientists. After World War II, the scientific community was still dominated by male scientists. Even brilliant women had to complete unusually long postdoctoral jobs before becoming independent and establishing their own laboratories. The Nobel laureate Barbara McClintock obtained her PhD in 1927 but only became an assistant professor at the University of Missouri in 1935 (Comfort NC (2002) Science 295: 440). Mildred Cohn, an eminent biochemist and a member of the US National Academy of Sciences, did postdoctoral work for nine years. She wrote in retrospect, “Should one yearn for the past, for the days when the pace was slower and probably less stressful, when time was spent making routine compounds and building standard equipment rather than writing grant applications and reports? Does the satisfaction of having done it all alone compensate for the slower rate of attaining answers? Should one yearn for the days when young investigators could do independent research only if they were in the good graces of chairmen who controlled all the funds? Should one yearn for the ‘good old days?’ Old, certainly; good, arguable” (Cohn M (2002) J Biol Chem 277: 10747–10752).

Apart from the difficulties in securing a long-term position, many an eminent scientist has preferred the status of postdoc because it gives them the freedom to pursue what they are interested in. Sydney Brenner, one of the pioneers of molecular biology, has always been curious about new things. He said, “I think my real skills are in getting things started—that’s gone through my whole life. In fact, it’s what I enjoy most, the opening game. And I’m afraid that once it gets past that point I get rather bored and want to do other things. So being a permanent postdoc is really very attractive to me, and I think the exciting part of intellectual life in science” (Brenner S (2001) My Life in Science. BioMed Central Ltd, London, UK). In an interview in 1998, James Watson said about Francis Crick, “He never tried to promote himself. He was just interested in solving problems” (Wade N (2004) The New York Times, July 30, pA1). The Japanese Nobel laureate Koichi Tanaka, a salaried worker without a doctorate degree, refused to take the promotion exam in Shimadzu Corporation (Kyoto, Japan) so that he could continue the experimental work that he liked. “Promotion to a higher position would keep me from research,” Tanaka explained. “I wish to continue pursuing my research” (Asahi Shimbun, 11 Oct, 2002). The legendary Hungarian mathematician Paul Erdös, who was famous for his nomadic lifestyle, spent four years (1934–1938) at the University of Manchester, UK, as a postdoc; surprisingly, this was the longest time he ever spent in one place.

Although encouraging in terms of their scientific spirit, these cases are unusual. For the vast majority of postdocs, who work long hours without adequate compensation, the reality is discouraging: they are cheap labour and easily replaceable. In the long run, it will probably turn young people away from science.

For those who want to know more about the tragic life of a ronin, I recommend the classic 1962 film Seppuku, directed by Masaki Kobayashi. The story takes place in seventeenth century feudal Japan, and starts with a ronin requesting permission to commit seppuku (ritual suicide, also known as harakiri, depending on the pronunciation) at the mansion of a rich and powerful Daimyo (warlord). The film ends with the ronin disembowelling himself. Of course, the word ronin is only borrowed from the Japanese language to use as an analogy; postdocs should not be forced to take such drastic measures.

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