

NEWS

Specialized grants allow ex-scientists to restart careers

BY NALA ROGERS

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Morag Maskey had been a full-time mother for three years when her son Ben was diagnosed with autism. Ben responded to therapy, learning to control his outbursts and connect with other children at his nursery school. An environmental scientist by training, **Maskey** was fascinated by her son's progress. It inspired her to return to research — this time in a new field.

"I became passionately interested in early intervention, because I could see what a difference it was making to my own son," says Maskey.

For a year, she volunteered one day a week at an autism research lab at Newcastle University in the United Kingdom. But with a hole in her resume and little background in autism, she had no clear path to conducting her own research. Then she discovered the **Daphne Jackson Trust**. The trust offers fellowships for scientists to return to work, either in their former field or a new one, after a break of two or more years.

The trust arranged a two-year, part-time fellowship for Maskey at the same lab where she had been volunteering. During her fellowship, Maskey developed a new **virtual reality treatment** for phobias that she tested in nine children. The pilot study won her a grant for a larger trial from the U.K. National Health Service.

The Daphne Jackson Trust is one of only a few programs worldwide devoted to helping scientists reenter research after an absence of a year or more — perhaps to care for children, recover from illness or relocate with a spouse. **The Wellcome Trust** also has a prestigious reentry fellowship for U.K. researchers. In the U.S., the **National Institutes of Health** (NIH) tops off existing grants with additional money that provides for one more person to work on the project.

These career on-ramps vary in detail, but all offer returning scientists a chance to publish, reconnect with colleagues, and catch up on advances in a field.

“We look to take somebody who at the start of their fellowship is not competitive, and at the end of the fellowships we make them competitive,” says **Katie Perry**, chief executive of the Daphne Jackson Trust. Then, she says, “they can really fight the good fight for the research money that's out there.”

Playing catch-up:

Statistics are lacking on how many scientists aim to get back in the game after having left for personal reasons, but women seem to make up the majority. One study using data from the 1980s found that women are **twice as likely as men** to leave science careers. More recent research suggests that female scientists **pay a career cost** for having children, whereas male scientists may actually get a boost. The Daphne Jackson program was developed specifically for women, though it now accepts male applicants.

No matter their gender, scientists can quickly lose their competitive edge after a work leave. Employers and funders place a premium on frequent, consistent publications, and they are likely to view career breaks as liabilities, says **Connie Kasari**, professor of human development and psychology at the University of California, Los Angeles. Even a standard maternity leave can force someone to play catch-up.

“Each time I've had a child, I can categorically say that a whole new method has come out while I've had that child,” says **Angelica Ronald**, director of the Genes Environment Lifespan laboratory at Birkbeck, University of London, and mother of three. After a seven-month maternity leave, Ronald is learning a genetic analysis method that debuted while she was home with her baby.

Confidence boost:

Perhaps the biggest barrier for returning researchers is lack of confidence. “It seems to level everyone,” says **Karen McGregor**, trust manager for the Daphne Jackson Trust. “They're not as good at up-selling themselves as people who stayed in that environment.”

To rebuild confidence, the trust's staffers work closely with applicants to plot out research projects and retraining strategies. The application process can take up to a year, and if applicants make it to the end, staffers review the proposals and match winners with sponsors such as universities and funding organizations.

The sponsors typically pay fellows half-time salaries for two years, plus an allowance for classes, conferences and other professional development. The trust remains involved during the fellowships, tracking fellows' progress and offering a series of daylong classes on topics such as work-life balance and presentation skills.

Since its inception in the 1980s, the program has helped more than 300 researchers return to work.

Last year, it awarded 26 fellowships — the highest number ever, says McGregor.

Seeing success:

For **Caroline Taylor**, a dietetics researcher studying heavy-metal exposure during pregnancy, the Daphne Jackson Trust served as a stepping stone to the Wellcome Trust's more substantial reentry fellowship. The former arranges two-year, part-time fellowships, whereas the latter provides a full- or part-time salary for four years.

Taylor stepped back from her research career to care for her children, and she didn't start reapplying for research jobs until her children were teenagers. At first, she couldn't make it past the interview stage.

"I just kind of got stuck, really, and couldn't find a way out until I found out about the Daphne Jackson Trust," she says. Now, Taylor is two years into her Wellcome Trust fellowship at the University of Bristol in the U.K.

Unlike Daphne Jackson and Wellcome fellows, researchers who receive NIH supplements join projects already underway. The principal investigators of the projects serve as their mentors. Since its launch in 1992, the program has supported more than 145 researchers.

One of those is **Faith Hanlon**, a neuropsychologist at **The Mind Research Network** (MRN) in Albuquerque, New Mexico. Hanlon had completed two postdoctoral fellowships and published more than 30 papers when she left to care for her children and disabled mother-in-law.

During her three-year hiatus, she worked sporadically in **Andrew Mayer's** lab at the MRN, but Mayer did not have the funds to offer her a stable position. The reentry supplement enabled her to join Mayer's lab. It covers supplies, travel and publication costs, in addition to a salary at three-quarters time. Hanlon is in her second year on the supplement and has applied for her own NIH grant.

"Since I started the reentry grant, Andy and I have published eight publications together," says Hanlon. "It definitely has made it so that I can continue with my research career."

High performers:

About half of Daphne Jackson applicants weren't planning to return to work until they heard about the fellowships, says Perry.

"They don't realize that there's a way to return to the research that they loved to do," she says. "They come to us saying that they didn't know that we existed."

The trust publicizes its work and the achievements of its fellows. But the NIH does not promote its program, which limits its impact, says Carol Fishman Cohen, chief executive officer of a firm called **iRelaunch** that helps people return to various professions after a career break.

Reentry grants help curb what Perry and Cohen see as a tragic waste of talent. It takes years of training and investment to become a scientist, Perry points out. Those skills don't vanish when someone takes a break, and neither do the traits that drove them to succeed.

"That high performance can be achieved again," says Cohen. "The career break just shouldn't be a factor in whether or not that can happen."