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CORBIS

MONEY

What it takes to nurse a nest egg

Saving for retirement is not easy for most early-career academic scientists. But they do have options.

BY KAREN KAPLAN

Jon Yearsley fears that he won't have enough money to retire on, even though he has been saving and investing in various retirement plans and pension schemes since his early 20s. During a series of short postdoc stints around the United Kingdom and Europe over a 13-year period, Yearsley, now a lecturer in ecological modelling at University College Dublin (UCD) in Ireland, was forced to forfeit part of his pension account each time his postdoc ended and he left the university that had administered it. In most cases, he was able to claim or collect what he had paid in himself, along with a small bit of interest. But because of the brevity of his postdocs — all two years or less — he never earned vesting rights to the universities' contributions, and thus was not entitled to collect them. Yearsley, 41, doesn't like to think about how much money he has lost over the years.

Although he has been a full-time faculty member at UCD for two years, Yearsley is once more mired in the same dilemma. Considering a return to his native England, he is reluctant to boost his contributions to his UCD retirement plan in case he has to forfeit again. "It is very frustrating — in academia, you're almost forced to move around, and that's also part of what science is about," Yearsley says. "Yet the regulations force you to keep your pension scheme within a certain country for a certain period."

Yearsley isn't alone in his worries over navigating the rocky road of retirement planning. A 2008 report by the Organisation for Economic Cooperation and Development in Paris confirmed that younger workers and people with low incomes — such as early-career scientists — are less likely to be members of a self-funded pension scheme than are older or higher-income workers. The report suggested that countries including France, Germany, Britain and the United States should devise ways to encourage this group to invest in personal pension schemes.

"In academia, you're almost forced to move about. Yet the regulations force you to keep your pension scheme within a certain country for a certain period."

It won't be easy. Early-career professionals in many fields find it hard to save. But academic scientists' long training periods, late entry into full-time permanent employment and frequent international job moves combine to make retirement planning a particular challenge. Increasingly, many don't secure permanent posts until their mid-30s, owing to multiple postdoc stints and job scarcity. And although they may have partners and families by this time, rendering pension planning a higher priority, it remains difficult to actually make those plans.

There is no one-size-fits-all solution, and those who want to save often need to search outside their institution to find a plan (see 'How to save for retirement').

WHO QUALIFIES?

In the United States, portability isn't as big a problem as it is in Europe. Participants in a US employer-sponsored retirement plan can 'roll over', or transfer, funds from one plan to another, or to a self-administered retirement account, without incurring a penalty or tax, as long as the money remains in a tax-qualified investment plan in the United States. However, participants who leave an institution before

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acquiring vesting rights to the employer's contributions — which takes 5 years of employment on most US plans — won't be able to claim those funds, only their own contributions plus interest or dividends.

For international postdocs and junior faculty members who contribute to a US pension plan or retirement account but then return to their home countries and wish to withdraw their funds, several factors come into play: the requirements of the plan itself; the tax treaty between the home country and the United States; and the home country's regulations governing supplemental retirement plans. In some cases, experts say, it may be best to leave the money where it is in the United States until the participant reaches retirement age.

Employee status is the root of most pension problems in the United States. Many postdocs funded by an external agency or grant are categorized as trainees of the funding organization, not employees of the university, and so are ineligible for institutional pension plans. The University of California (UC), for example, which is among the largest university systems in the United States, divides its 6,500 postdocs into three categories — stipend fellows, paid-directs (those funded by an outside agency or country) and employees. As might be expected, employee postdocs get the best deal: they can participate in all UC pension and voluntary retirement plans (except the defined-benefit pension plan, which is open only to faculty and staff who meet certain criteria). Stipend fellows and paid-directs can't join any UC plans.

Such divisions are unfair and punitive, says Cathee Johnson Phillips, executive director of the US National Postdoctoral Association (NPA) in Washington DC. "There are few institutions that provide good retirement plans for postdocs, and that is because they're looked at as temporary employees," she says. "It is especially disheartening for dedicated scientists who see people with bachelor's degrees earning more than they do and getting far better benefits."

M. SCHUPP/EMBL

"A private plan gets around the residency requirements of certain countries."
— Jan Taplick

There is potential for change. On-campus advocacy movements, including some from postdoc associations, are seeking to permit postdocs to join institutional retirement plans. In at least one case, university administrators have taken note. The governing board and the human resources department at Iowa State University (ISU) — where postdocs can currently join only a state retirement plan — hope to adopt a new ISU retirement and pension plan that will let all postdocs participate.

But young scientists may not want to wait for such reforms to come to their institutions. US-based and international postdocs in the United States who are unable to take part in an institutional scheme should consider setting up their own retirement plans to set aside funds and reap tax benefits (see 'Investment options in the United States and Europe'). "We believe everyone needs a plan that starts at a very young age," says Mark Fraser, vice-president of tax-exempt business at Fidelity Investments in Boston, Massachusetts. He adds that early-career scientists in their 20s or early 30s can be more aggressive in choosing investments. Most financial advisers suggest that younger investors with ample time to ride out market gyrations choose higher-risk/higher-reward stocks, mutual funds or other financial products.

Of course, low income presents a barrier to saving. The NPA administers an annuity open to all postdocs — US-based or international — but so far only a few of the association's thousands of members worldwide have signed up. Phillips blames low pay. "They have such little disposable income, it is really hard for them to pay in on a regular basis," she says. "Even the minimum, $50 a month, is a lot of money."

Funding an individual retirement account doesn't always require thousands of dollars. Some plans allow for contributions of as little as $25 a month — or about $6 a week, equivalent to the price of a couple of Starbucks lattes.

International postdocs in the United States on a J-1 exchange visa can be reluctant to invest in a retirement plan, says Phillips, because they fear that doing so may violate the visa's requirements. Immigration attorney Elizabeth Goss of Boston-based law firm Tocci, Goss & Lee says that J-1 visa regulations don't ban investing outright, but because the visa holder can't be categorized as an employee, he or she is ineligible to participate in an employer-sponsored plan. (H1-B visa holders are considered employees and do not fall foul of the visa's regulations by investing, Goss says.) Most J-1 visa holders don't pay US taxes on any monetary compensation they may receive; Goss suggests that they learn the provisions of the tax treaties between their home countries and the United States before establishing tax-deferred retirement investment accounts. If the visa holder plans to take the account out of the United States, investment experts suggest investigating early-withdrawal restrictions.

YOU CAN'T TAKE IT WITH YOU

Early-career scientists in Europe face further barriers because they're often moving between countries. Some occupational pension plans impose waiting or vesting periods, and not all allow the transfer of rights to other schemes in the same country or another European Union (EU) state. Such regulations and requirements often work against postdocs and other early-career scientists — as a result, many choose not to participate.

Jan Taplick, deputy director of the European Molecular Biology Organization (EMBO) in

TOP TIPS
How to plan for retirement

- **Institutional plans:** find out from your institution's human-resources department whether you are eligible to participate in pension and retirement plans. If you qualify, contact the plan administrator (the company offering the plan) to learn about the contribution, vesting, withdrawal, portability and payout options and requirements.
- **Individual options:** postdocs who are ineligible for institutional plans should contact an investment firm that works with academic clients (such as Fidelity Investments of Boston, Massachusetts, TIAA-CREF of New York or Vanguard of Malvern, Pennsylvania) to discuss an Individual Retirement Account or similar plan. Tax-deferred contributions of as little as US$25 a month will grow considerably with compound interest. Financial planners recommend a diverse portfolio — mixing stocks, bonds and mutual funds — and shifting to lower-risk investments as you age.
- **Immigrants in the United States:** international postdocs ineligible for institutional plans should contact an immigration attorney to learn what their home country's tax treaty with the United States allows for tax-deferred investments, then consult an investment company to open a self-administered account.
- **Immigrants in the United Kingdom and Europe:** international postdocs ineligible for institutional plans should consult a financial planner and consider offerings from science societies or other organizations. For example, current or former fellows of the European Molecular Biology Organization in Heidelberg, Germany, can participate in its plan. International faculty members in Europe who are eligible for a retirement plan, and who will have deductions made from their pay, should contact their plan administrator to learn about the contribution, vesting, withdrawal, portability and payout options and requirements. K.K.

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SOURCE: FIDELITY; EFRP; OECD

OPPORTUNITIES

Investment options in the United States and Europe

Each of these options allows the individual investor to reap tax benefits.

United States

- **Traditional Individual Retirement Account (IRA):** investors can deduct contributions from their taxable income and pay the taxes on withdrawal of the funds at a certain age. Interest and dividends accrue tax-deferred.
- **Roth IRA:** contributions aren't tax-deductible, but interest, dividends and withdrawals are tax-free. This may be the better IRA choice for early-career scientists who don't earn enough early on to benefit from the tax-deductible contribution provision.
- **Treasury bonds:** investors buy bonds at face value and pay taxes on the interest upon withdrawal.

United Kingdom

- **Personal pension scheme/plan:** investors can deduct contributions from their taxable income and have several withdrawal options, including taking out up to 25% of the account's value tax-free at a certain age. Funds are not subject to the United Kingdom's capital gains tax; interest and dividends are tax-deferred.
- **Individual savings account:** investors pay no income or capital gains tax on interest or dividends.

European Union

- **Privately managed retirement fund:** roughly equivalent to an IRA. Options for accounts vary. Nations that offer tax-advantaged retirement plans include Ireland, Sweden, Poland, Germany and Belgium. K.K.

Heidelberg, Germany, says that a survey conducted by the organization in 2006 found that just 8–9% of its fellows were participating in a pension or retirement scheme, although nearly all had health insurance and other social-security benefits. As a result, EMBO created its own transferable pension plan for fellows, implemented on 1 January 2010. So far, the plan — which matches contributions of up to €100 (US$128) a month — has 170 participants. "Because this is private, it gets around the [residency] requirement of certain countries," Taplick says. All current and former EMBO fellows are eligible to join — the minimum contribution is €25 a month — although former fellows won't get the matching funds.

P.JØRGENSEN

"Not only do you have to consciously save up your money, but you've got to invest it safely." — Guggi Kofod

But funding one's own retirement plan could have a downside. European and other countries don't have the rollover tax-umbrella provision that the United States offers, so highly mobile researchers who want to take their retirement savings with them could end up paying significant tax penalties each time they move. Even if retirement contributions remain intact, managing one's own investment plan is still time-consuming and complicated, and just providing the mechanisms for investment does not ensure a successful outcome — a caveat for all investors, not just scientists. "Not only do you have to consciously save up your money but you've got to invest it safely or semi-safely," says Guggi Kofod, a postdoc group leader at the University of Potsdam in Germany and chair of the Marie Curie Fellows Association in Brussels.

There are, however, early indications that EU lawmakers are to address the pension issue for scientists and others. Recognizing a need for widespread pension reform, the European Commission launched a public debate on 'the future of pensions' on 7 July, and will keep comments open to all until 15 November.

Already there is high EU-wide demand for a cross-border pension fund, according to a feasibility report from human-resources consultants Hewitt Associates, based in Lincolnshire, Illinois. But it will be a difficult path. EU pension-related regulations add up to "a very complex picture", says Leonardo Sforza, Hewitt's head of European research and EU affairs.

For now, postdocs and other early-career researchers should press their institutions to make all retirement-planning options clear, and should investigate their programmes' restrictions regarding eligibility, portability and the permitted level of contributions. And, despite often-scarce funds, they should seriously consider starting to save as soon as possible, whether through their institutions or privately. When it comes to retirement planning, the same mantra holds true for all professionals: start early. ■

Karen Kaplan *is the assistant Careers editor.*

SOUTH AFRICA

Fewer researchers

The number of research scientists working in government, academia, industry and the non-profit sector in South Africa fell slightly between 2008 and 2009, after half-a-decade of increases, according to a 9 September report from the South African government. The drop echoes a decline in the total number of science, maths, engineering and technology researchers. Tommy Makhode, spokesman for the South Africa Department of Science and Technology, says the government is committed to increasing the number of South African researchers and has created research chairs and specialized research centres to encourage scientists to remain in or come to South Africa. The government hopes to boost the number of trainees entering the workforce, as well as to draw scientists from elsewhere using initiatives such as the exchange of researchers between South Africa and the European Union.

EDUCATION

US applications up

Applications to US graduate schools rose sharply as the economy slipped into recession, reports the Council of Graduate Schools (CGS) in Washington DC. Applications jumped by 8.3% from 2008 to 2009, almost double the average annual increase of the past ten years, according to the CGS's 14 September report 'Graduate Enrollment and Degrees: 1999–2009'. Economic recessions have long been linked with a rise in graduate-school applications, notes CGS research director Nathan Bell. Of 11 fields surveyed, the highest growth was in applications to health-sciences programmes — 14.6% over 2008–2009 — a trend Bell attributes to a growth in health services for an ageing population.

UNITED KINGDOM

Immigration cap looms

The public consultation period for Britain's proposed cap on immigration by skilled workers from outside the European Union, which would include scientists and researchers, ended on 17 September. In June, new visas in this category were temporarily capped at 24,100 for the period until the end of March 2011. A permanent annual cap — whose total could change on the basis of public feedback — will be imposed on 1 April 2011. Whether to impose a similar cap for non-EU students will be decided after 17 September.

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