

To maximize efficiency, he and his wife, who is also a senior postdoc at Uppsala, planned their research around their respective portions of parental leave after the birth of their daughter, now aged 8 months. They each arranged to finish laboratory projects before taking leave, and planned to use nap times and evenings at home to work on data analysis, manuscripts and grant proposals.

In their house, mornings at the breakfast table are sacrosanct family time; so are the hours after their 6-year-old daughter's school day and until the children's bedtime. The couple typically works side-by-side in their home office for three to four hours after that. "It is a little bit sad, but better than not seeing each other at all," Wicher says.

WORKING LATE

In the absence of parental-leave or childcare policies, scientist parents turn to other strategies to accommodate lab obligations and family time. Many with young children split up their days and nights, returning to the lab during the late evening and working remotely when possible. Anthony Barry, an associate research fellow at Pfizer Biotherapeutics in Andover, Massachusetts, takes his laptop home every evening.

"I get incredibly frustrated if I get home so late that I'm not getting to see my kids," says Barry, whose sons are aged 7 and 10. Dividing his duties into work that must be done at Pfizer versus what can be done from home helps him to complete 8–10-hour workdays without missing prime family time. "Although people may say it's horrible to have to take work home with you, I've found that to be the most enabling," says Barry.

Others see the evening hours as the perfect time to head back to the lab. Amy Pandya-Jones, a postdoctoral researcher in RNA biology at the University of California, Los Angeles, splits her days to get quality time with her 5-year-old and 2-year-old. She goes to the lab early in the morning and comes home in the early afternoon. About three nights per week, after her husband gets home from work at around 7 p.m., she returns to the lab, working for another four hours.

She is careful to waste not a second, and estimates that she squeezes what would normally be a full 8–10-hour workload into about 6–8 hours. "You cannot underestimate the planning," she says: she slots in time on the weekly calendar even for a trip to the supermarket.

Parents who manage to carve out minutes for themselves and their partners relieve some of the stress. One practice that helped Wigginton to stay sane was stealing an hour or two for herself, sometimes for a manicure or a pedicure. "I needed just a moment away, with nobody sitting in my lap and no pager going off."

Wicher and Pandya-Jones both reserve

one night a week for dates with their spouses — even if it is just a dinner of tacos and beer. Wicher and his wife also take it in turns to go running on alternate days. "It helps to wash the brain," he says. Jaelyn Eberle, a palaeontologist at the University of Colorado, Boulder, recently finished a series of exercise sessions that started at 5:15 a.m. in the mornings. "I realize that if I don't get some me time — exercise or pottery lessons — then I'm not as creative at work," she says.

On Sunday evenings when the kids are asleep, Wertz and her husband serve themselves ice cream and sit down to look over their family calendar, plan, organize and talk. "We make a fun time of it — we get different Ben and Jerry's flavours and sample the new ones."

Some researchers hire house cleaners and sitters, ask neighbours to drive kids to activities or order groceries online to allocate their limited hours at home to family time rather than chores. It pays to ask for help from friends, relatives and even employers — especially for single-parent scientists who have less support at home. That could mean asking grandparents to babysit for a weekend so that the researcher can finish up a grant application or asking a boss for a month's notice before scheduling a business trip.

But it is not all about nappy duty, day care and drudgery. Researchers see benefits

"Cells don't care if you come in at midnight or at noon to take care of them."

for themselves and for their children from their work. When the children were older, Wigginton took one or two of them (and

her mother) on conference trips to Paris or Hawaii. Wertz enjoys "watching the joy and fascination, through the eyes of a child, of ice melting and water pouring" as her kids play in her lab on weekend visits.

Richards-Kortum believes that blending research and parenting strengthens both endeavours. Her experience as a mother has helped to shape her research agenda on life-saving technologies for premature newborns. And her work in Malawi influenced her decision to adopt her two youngest daughters from Ethiopia.

"You look at the world through very different glasses than before you were a parent," says Wigginton, a mother of six. "My children have greatly contributed to any success I've had and to my motivation and drive."

Both she and Richards-Kortum have evidence that the hours devoted to research did not leave their children feeling resentful towards their scientific research careers — all of their university-aged children are following in their mothers' footsteps, studying engineering, bioengineering or medicine. ■

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CAREER PROGRESSION

Consider all options

Research institutions should provide broader career guidance to their PhD students, and students should proactively assess their skills and options, according to a report by the Royal Society, an influential group of scientists based in London.

"Students must not be regarded as mere 'bench monkeys', but nor should they themselves be passive in seeking out what they need," wrote Athene Donald, who chaired the group that put together the report, in an accompanying opinion piece.

The Royal Society is certainly not the first science organization to highlight the grim chances of newly minted graduates and postdocs finding faculty positions in scientific research and to call for universities to provide better career preparation (see *Nature* 516, 7–8; 2014). A report from the US National Academies in Washington DC, for example, says that postdoctoral positions, often seen as the default step after a PhD programme, do not always help researchers to advance their careers, and that research institutions should inform PhD students that other types of work experience may be more beneficial (see go.nature.com/cxli6t).

Donald, a theoretical physicist at the University of Cambridge, says that the report, entitled *Doctoral Students' Career Expectations: Principles and Responsibilities*, aims to raise awareness of viable career options among students and their supervisors, and to bolster efforts by university career-guidance offices. Improving career awareness may require students and schools to arrange mentorships beyond a trainee's lab, department or institution. And PhD advisers should not imply that a future in academia is the only desirable career path (see go.nature.com/h9872d).

Lack of information is a serious issue, but merely highlighting careers beyond academia may not do much to help people to find optimal positions, says Sally Hancock, a higher-education researcher at the University of York, UK, who studied science PhD students at Imperial College London. Those who had been exposed only to academic research were likely to be purists who saw their programme as "a zero-sum game in which the objective is to achieve an academic position". Those who had already worked outside academia were more likely to view non-academic options favourably, be proactive about exploring other choices and feel less stigma about pursuing them. PhD programmes might serve students best by incorporating work outside the university, she says: "Experience is imperative."