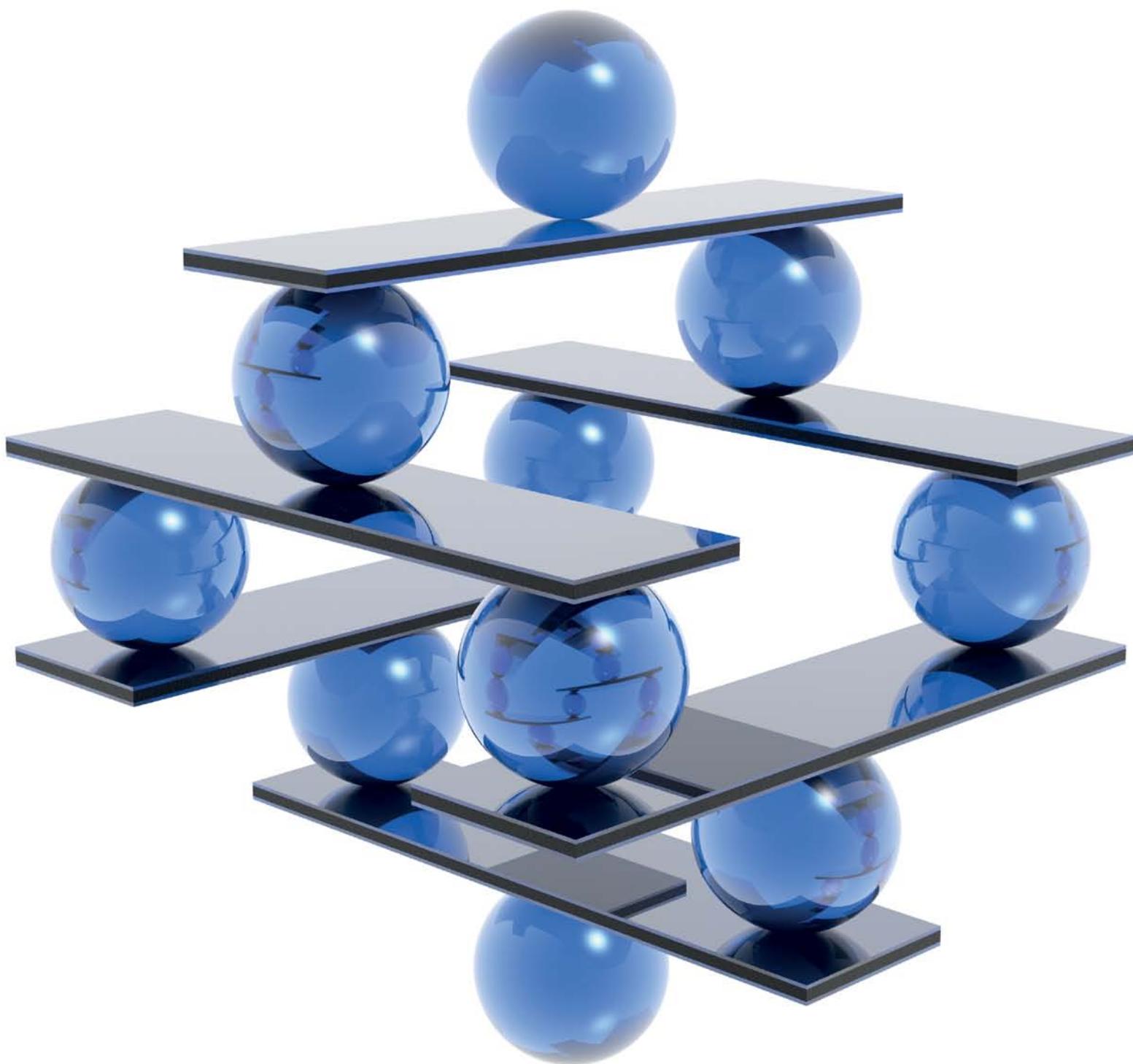


Equilibrium

A Physicist's Guide to Managing Career Breaks and Achieving Career Balance



Few would argue that a high level of commitment is required to be successful as a physicist, but there is a difference between being committed to your career and devoting every waking minute to it.

Sadly, this difference is not always accepted and many excellent, highly qualified physicists are lost to science, technology and engineering because they aren't aware of options that will allow them to balance their professional lives with other demands, or aren't supported to do so.

This guide has been written to demonstrate how career breaks can be managed effectively and how a better balance between work and life can be achieved.

Foreword

At some point in our lives, most of us working in physics will find issues of work-life balance come to the fore. Maybe we find ourselves facing the challenge of caring responsibilities, which can extend far beyond simply becoming a new parent. Or perhaps we just want time to explore other options for months or years, or rebalance our working life by reducing the hours worked to allow time for other activities.

This guide provides invaluable information on many aspects of how to approach such matters, designed to ensure that an individual has all the facts at their fingertips and also understands how best to approach their bosses or line managers to achieve a “win-win” situation. Even if your place of work has no established history of dealing with such requests, the information and interviews given here should help both sides of the dialogue find mutually satisfactory solutions.

The guide covers many useful topics, which may otherwise confound the best intentioned of us. Through interviews with individuals who have successfully navigated these waters it identifies relevant key factors that should be considered and explores the pros and cons of different strategies.

You may find one or more of these personal accounts particularly relevant to you or that they strike a chord with your own anxieties and situation. Additionally, it contains information about where to turn for advice, details and

resources that the Institute of Physics (IOP) itself provides for before, and during, any career break.

This guide can thus be seen as an excellent guide to have to hand as thoughts of stepping back from physics become uppermost in the mind. Moreover, it also makes many useful suggestions for how to maintain contact (mental and physical) during any absence and how to approach a return to full-time working. So, wherever you are in the path up to and during a planned stepping-back to fulfil other responsibilities and challenges, this guide is likely to prove invaluable. Taking control by being well informed can ensure that any career break is managed most effectively.

It always makes sense to plan, but it is also important to move ahead with confidence and insight. Reading this should serve all these purposes and facilitate decision-making for individuals for whom life may suddenly have stopped seeming quite so one-dimensional and physics dominated.

Taking control by being well informed can ensure that any career break is managed most effectively.

Professor Dame Athene Donald, DBE FRS

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Section 1

Career break, not broken

Once you are away from your workplace, faced with a new routine far-removed from physics, it can feel challenging to plan a return. However, the information and support that can help you to make a successful transition can be found by starting to build a new network and by using the support available from organisations and individuals who specialise in career-break returners. This section of the guide sets out the available support and gives you strategies to manage your break with minimal time commitment.

Planning a career break

If you are planning to take a career break, particularly an open-ended break without any commitment from you or your current employer to return to your job, you are probably focusing on the circumstances that have prompted the change. However, it is likely that at some point you'll consider a return and there are some simple steps that you can take before leaving to help any future transition back to work.

If you are planning to take maternity leave remember that you should contact the health and safety officer in your workplace if you have any concerns about the implications of being pregnant at work. They will help you to assess the safety of your working environment and to identify any improvements that need to be made. These don't have to be dramatic changes – it could be as simple as arranging a more supportive chair for the final months of your pregnancy.

As your leaving date approaches you might feel under pressure from your employer to complete projects and hand over work, but don't neglect your own future. It may only take a few hours to plan your exit more effectively and it could save you days, if not weeks, of effort at a later date.

Your CV

A good first step is to make sure that your CV is up to date, so that in the future you won't have to try to recall what you contributed to the workplace. As a first step, a few key questions that can help you to present your current activity in a positive light appear in **Activity 1** (see p8). Reading your answers to these questions in a few years' time will help you to tune back into your professional persona more easily should you see an opportunity that you want to pursue.

Once you have this bank of information you can start to update your CV even if it is in general terms. Remember that it will ultimately need to be tailored for any specific jobs that you might spot – there is lots of advice on this in the CV guides available on the IOP website. Updating your CV while still working is much easier than when you are away from the day-to-day routine of your work, although any additional ideas that you subsequently think of should be added. Finally, make sure that you keep a copy of your CV in both electronic and paper formats somewhere that you'll be able to find it even after a few years.

Before you leave, a good first step is to make sure that your CV is up to date, so that in the future you won't have to try to recall what you contribute to the workplace.

Activity 1: Bringing your CV or portfolio up to date

Answer each of the below questions, thinking carefully about how they apply to your job and your goals.

What have been my main achievements in the last year?

Why am I the best person to do my job?

What contribution does my work make in this field?

How would my colleagues describe me?

What skills do I use when I do my job?

How would I describe what I do to someone unfamiliar with my work?

What am I most proud of in my work?

What do I enjoy most?

What would I happily stop doing?

What would I be doing in the next year if I wasn't taking a break?

Using and building networks

Another step that you can take before leaving for a break is to engage with formal networks, many of which operate through social media sites. Identify the ones that are most in tune with your interests at this point and join online groups – the IOP has an active social media presence and can be found on all the major platforms.

These online networks and discussion forums enable you to keep track of topics and thinking in your field. If your time is likely to be very limited, tie in your physics updates with your personal web activity by connecting with the IOP and other organisations on sites such as Facebook (see **Box 1**). This can be a “passive” process if you don't feel that you have anything to contribute to discussions, but if you want to join in remember that social media is a very democratic environment. All contributions are welcome, even if you aren't currently working as a physicist.

Box 1: using social media to support your career

Register for MyIOP at www.iop.org/myportal/MemberSignIn.jsp

There are many forums on the site so it's a good place to find online support, to talk about physics and keep up to date with discussions and events in your specific field.

LinkedIn is a networking site where you can connect with former colleagues, keep your network active and join groups that represent your interests www.linkedin.com

The IOP has a LinkedIn group solely for IOP members and there are numerous other groups with a focus on specific scientific fields, technical areas and career balance. General groups include PhD physicists, Daphne Jackson Trust, UKRC-WISE and the Scottish Resource Centre, but there are many, many more.

Twitter is a micro-blogging site used by many physicists. Many of the individuals and organisations that feature in this guide are active on Twitter www.twitter.com

- The Institute of Physics @**physicsnews**
- Physics World @**physicsworld**
- Professor Athene Donald @**AtheneDonald**

- STFC @**STFC_Matters**
- Daphne Jackson Trust @**DaphneJacksonTr**
- The UKRC and WISE @**UKRC**
- Professor Cait MacPhee @**sciorama**
- Dr Marialuisa Aliotta @**m_aliotta**

A list of physicists and physics-related Twitter users can be found at <http://twitter.com/sarashinton/physics/members>

Facebook is a social networking site used predominantly by people to connect with personal contacts. However, if you are looking for ways to make physics part of a busy routine, using Facebook might be more accessible than formal discussions and groups – it will give you a route to information from IOP

www.facebook.com/instituteofphysics

There are also pages for the Women in Physics group www.facebook.com/pages/Women-In-Physics-Group-Institute-of-Physics/187850761253201 and for Lab in a Lorry www.facebook.com/pages/Lab-in-a-Lorry/16728343294

Handing over your role

If you are planning to return to work after an agreed period, some of your work may be put on hold, whereas other aspects will be taken on by colleagues. It is important for you to be at the heart of these discussions and it may be very useful for you to start thinking about how your work will be managed in your absence before you tell anyone your plans. This way you can help your manager decide who would be best placed to continue with your work and you will be ready to support your replacement so that the work continues. You can also identify the implications of delays to projects and think about how these will be dealt with. If you can reduce the burden on your manager, this is only to your benefit, particularly if you want the option of returning part-time. You should also ensure that all of your administrative duties are handed over if possible. If you sit on committees or have other roles, try to ensure that someone takes responsibilities for these. When you return you need to ensure that your time is not swallowed up by these tasks – try to negotiate a phased handing back so that you have time to tune back into your scientific or technical work first. If you are returning part-time make sure that your administrative duties are proportionate to your contracted hours.

You will also benefit from writing a guide to your work for whoever takes it on in your absence. This guide will be of great assistance when you return and need to pick up your work again. Consider being available to answer questions while you are away – you might benefit from goodwill when you return if you need support with the handing back of the project.

As your leaving date starts to loom, you need to start talking to people about your departure and to explain to them what you are planning to do. If you are leaving work for health reasons, or to take care of a child or family member,

colleagues can jump to conclusions about your future motivations. Taking a break, even one lasting for a number of years, need not be seen as evidence that you have turned your back on work forever – be clear both in your own mind and in your communication with others that it's just the right thing for you to do at the moment. Think of ways to keep in touch and ask colleagues for advice to minimise the difficulties of returning. Again, doing this BEFORE you leave makes it easier to keep in touch once you are off the daily radar, particularly if you anticipate being away for a number of years.

A small, but important detail is the way that you behave as you are actually leaving – remember to keep those doors open. Now is not the time to alienate anyone in your network with ill-advised comments about how pleased you are to be leaving them all to it, what you really think of people or anything that might damage goodwill that you need to call upon in the future.

Keeping in touch

A final act before you leave should be to plan a “date” with a colleague in your workplace. It's all too easy to leave without making firm plans to meet up, find six months has passed and feel that it's been too long to make contact. From your colleagues' perspective, they may hesitate to contact you if you are busy with a new baby, recovering from ill health or busy with caring responsibilities. With a date agreed well in advance you can avoid these difficulties and have time to make arrangements to cover any caring responsibilities.

This catch-up might be largely social, but you should also have a few key questions to ask:

- what are the current major projects that people are working on?
- has anyone new joined since I left?
- what's on the horizon?

Your main objective is to maintain a connection (however slight) with the activities in your old role, but also to be aware of any changes to staff or responsibilities. This is particularly key if you hope to return to your original workplace as you will need to slot into new teams and may need to adapt to a new role. All this information will enable you to focus on the job that you will go back to when you are ready – not exasperate your absence and time away by only being able to talk about the job that you left. Your intelligence-gathering might also lead you to ask questions about the personal circumstances of your former colleagues – if you do return to work you may prefer to do so part-time. Is there anyone who might consider a job-share with you?

In the early stages of a career break you might experience a period of mourning for the loss of your status as a professional individual. This can be a reaction to the stress and demands of full-time caring or recovering from ill-health. Conversations with former colleagues aren't always easy if they are talking about exciting projects, relative freedom and future developments – particularly if they view you as an “outsider”. If your break is to act as a carer, don't be demoralised in these early stages if you feel like this. You need to focus on learning how to manage your new responsibilities and it can be easier to let the past go for a while.

Although there is a lot to do in the run-up to leaving, don't be intimidated if you've already made your move. All of these things can be done from outside your former workplace – just pluck up the courage to start picking up contacts again.

Making the most of the IOP

The IOP offers support to members taking a break from the workplace. Special rates are available to help you maintain your membership on a reduced income. Tailored support is also available to help with the practicalities and a newly established Carers' Fund can help you to attend physics-related events. A grant of up to £250 can be used to cover childcare expenses, respite care or the expenses of an accompanying person. All the details are available in the Support and Grants section on www.iop.org/about/grants/.

More personal support is available from the IOP's regional and national officers and other staff. By keeping your membership, you can take advantage of many benefits during your break and when you are ready to return. As a member you can attend local meetings, events on specialist topics, receive training and you will be eligible for financial assistance.

See the profile of David Wilkinson, IOP regional officer on p19. You can make contact with David and the other regional and national officers via www.iop.org/activity/branches.

The IOP offers support to members taking a break from the workplace. Special rates are available to help you maintain your membership on a reduced income.

IOP member benefits

It doesn't matter if you are on a career break, a student, overseas or working part-time – the resources and support from the IOP are available to all members. This is just a selection of some of the activities, resources and opportunities that can help to keep your career on track, even when you are taking a break.

Use the mentoring scheme to find a mentor with whom you can discuss your plans to return to work, helpful things to do when on your break or just to keep in touch with your field.

- www.iop.org/membership/prof-dev/tools/mentoring/index.html

Keep learning with one of the online transferable skills courses developed exclusively for IOP members. You can develop your skills at your own pace, in a way that fits around your schedule. All courses are free of charge – you just need an IOP login username and password. Courses include leadership skills, managing workload, thinking strategically and communicating complex ideas.

- www.iop.org/membership/prof-dev/index.html and follow the link to online learning courses.

Keep track of the skills that you are developing while away from employment with the MyPath Continuing Professional Development (CPD) tool.

- www.iop.org/membership/prof-dev/tools/mypath/page_51446.html

To keep track of recruitment trends and understand the jobs market even in the midst of a break, a regular look at the BrightRecruits website will help you to understand what employers are looking for and keep you tuned into “CV speak”.

- <http://brightrecruits.com/>

For a more general insight into physics, remember that all members, even those taking advantage of reduced rates during a career break will receive a personal copy of *Physics World* every month and you can keep in touch online via the physics.org website.

- <http://physicsworld.com/> and www.physics.org/

There are also a whole range of activities run by the IOP's groups and branches that give you local opportunities to hear the latest thinking in your field, to network, to engage with outreach opportunities, to attend conferences, contribute to seminars and workshops. Contact your national or regional officer for more details.

Managing your career break

A career break can be just that – you don't need to invest a lot of time or money in keeping your technical or professional skills current, but remember that you are still going to develop as a person during the time away and that these new skills or attitudes are still of value in the workplace. Many people feel that their time management is never better than in the years when their children were small – every minute has to count and they become experts at prioritising. Be positive about your decision to take a break and focus on the positive outcomes.

If your break is for a set period and you will return to the same employer, they may have a scheme that helps them and you to “keep in touch” during your time at home. These schemes usually consist of a small number of days that you or they can use to answer questions, catch up with developments or prepare for your return.

If your break is open-ended and you don't have a job to return to, you can design your own career management programme while you are away from scientific work.

Activity 2 suggests a few ways in which you can use easily available resources to do this.

This is also a great time to try something new. As a volunteer you can be asked to help with many different roles and activities, and this could open your eyes to new possibilities when you return to work.

The point of return

At some point you will be in a position to consider a return to work. In **Activity 3** (p14), there are a number of questions that can help you decide what form your new career will take and what information you need to make the best possible transition back into employment.

Activity 2: Career break toolkit

List the social media sites that will help you to keep up to date with discussions in your area

List the skills that you have and which local organisations could benefit from. Note how much time you can offer and what you could contribute in this time

Skills

Valuable to

Time I have

Who do you know and what do they do? Could your skills be useful? Do they know people who could offer opportunities?

Name of contact

Their expertise

They know

List any local events or organisations where you could volunteer

Upcoming event

I could help by

I need to talk to

Assess the skills that you are developing and keep adding them to your CV. Think about what has happened as a result of your interventions and initiative and list these as achievements on your CV

Date and circumstances

What I achieved

Skill developed

Activity 3: Keeping control of your return to work**How much time do you have available for work?**

Is this in normal working hours or are you more available during evenings and weekends?

How much time do you want to spend at work?

Think about what will feel comfortable and won't compromise your other responsibilities.

What support will you need to go back to work?

Do you need to arrange childcare, support for a disability, respite care?

How much notice do you need to arrange this support?

Is there a waiting list for nurseries or support? Will you need to apply for financial support?

Do you want to return to your previous employer?

Who could you contact to discuss possibilities?

Does your prospective employer offer flexible options to employees with other responsibilities?

Who can help you identify these options?

Do they run any re-training or re-entry schemes?

Do you have a particular employer in mind?

Do you know anyone who could talk to you about their employment policies?

Could you work from home?

What skills or services can you offer?

Are you ready to go straight back into work, or do you need some re-training or refresher courses?

Which skills or knowledge do you need to add to your CV?

Which skills are you going to emphasise in your application?

Who can help with identifying and articulating your skills?

Do you want to try something new?

Who could advise you about alternative options?

Self-employment can offer a more flexible working option. Could you start your own business?

Do you have skills or knowledge that could be the basis of a consultancy business? Could you work for a previous or potential employers on a freelance basis?

If you are ready to return, ask for help at the start of the process. If you have a specific job in mind and have the support of your prospective employer, the best step for you might be to look at schemes that fund your return for a fixed period (see the profile information for the Daphne Jackson Trust). If you need to bring your skills up to date through retraining, a local college or university might be the best starting point.

If you are interested in returning to the workplace, but moving into a different field or role, it will be helpful to talk to a careers professional about your preferences, interests and strengths. The IOP career changers' guide *New Directions* includes a process for career decision-making, many stories from career changers, an action plan for career change and advice on networking.

After a few years away from the workplace it is important to be realistic about your re-entry point. You will need to demonstrate that your skills are still current and that your time away from employment hasn't reduced your effectiveness. Some employers might want to see you start in a more junior position so that they can evaluate your skills for themselves. This doesn't mean that you should settle for a lowly position in the long-term. Once you've proven yourself as competent, apply for promotion or move on.

When the time is right for you to return to work, either on a full-time or part-time basis, your IOP membership will give you access to the support and resources mentioned above. There are also a number of other organisations that focus on helping physicists return to science, engineering and technology (SET) roles after a break. Amongst these is the Daphne Jackson Fellowship scheme, which will provide two years of funding to give you breathing space to start building up your research niche, publish work and start applying for funding or jobs. The fellowships can be taken in academic or industrial settings.

Daphne Jackson Trust

The Daphne Jackson Trust is an independent charity that offers flexible, part-time, paid fellowships to scientists, engineers and technologists who have taken a career break of two or more years for family, caring or health reasons. Their success rate for returning their fellows to scientific, engineering and technology careers is an astonishing 96%. More than 200 men and women have been awarded fellowships and the trust works with academic and industrial partners.

Dr Katie Perry, chief executive officer explains more about the trust in her profile on p20.

To contact the trust visit www.daphnejackson.org or by phone on 01483 689166. One of their fellows, Tzany Kokalova talks about how her career has been helped by the trust – see her profile on p21.

Scottish Resource Centre

There are other support mechanisms to help returners and some organisations offer programmes to help a return to work in a structured supported way. One example is the Scottish Resource Centre for Women in SET (SRC), which supports women considering a return to scientific work. Sam Pringle works with the SRC as an associate coach and runs courses aimed at returners – see her profile on p22.

Although they offer a high level of support, you don't need to enter a structured programme to make a successful transition back into work – many of the benefits of these schemes can be "home-spun". Ask former colleagues and other people in your network for the advice offered by careers advisers – there might even be someone at the school gate with a background in human resources. Start contributing to those online networks to build up your confidence and awareness of current issues. Consider voluntary work to bring your CV up to date, being aware that this is more likely to be available for administrative posts rather than scientific. If nothing else, work out how to describe your time away and how to articulate the broader personal development that you have gained from your break.

The most important thing in the returners' toolkit is confidence – don't apologise for the interruption to your career. For most people it represents a small fraction of their working life and you probably have many years in the workplace ahead of you.

Another organisation that can help you to keep in touch during your break and provide opportunities to enhance your employability is WISE. Helen Wollaston, director of WISE Campaign, explains more in her profile on p24.

Although the circumstances behind most career breaks relate to family responsibilities, you may have a very different motivation for stepping away from your career for a time. Organisations such as Voluntary Services Overseas (VSO) offer professionals the opportunity to contribute to life-changing projects in developing countries and are always keen to recruit scientists, teachers and engineers. Sandra Fee had been a physics teacher for over 20 years when she applied to work on a VSO project in Guyana – see her profile on p25.

Career breaks are not always planned and if you need to stop work suddenly, particularly for health reasons, it can be impossible to make any plans or to think about a future return. If you are in this situation, don't be discouraged by the emphasis in this guide to prepare and plan – you can still make a transition back into work and although it might need a little more effort in the early stages, you are sure to regain your momentum.

As with anyone who takes a break from their career, your principle assets are your skills and experience. Focus on these and on what you have to offer. Be honest about what level of commitment you can give to an employer, but also be positive about the contribution you will make. If you enjoyed the job you had before taking a break, start by contacting your old workplace. Even if they can't offer you work, they might be willing to support you in other ways with references, access to networks and give feedback on other applications.

Hopefully, any hiatus to your career because of poor health will be temporary, but as with those who return to work with childcare responsibilities, don't be afraid to be honest about the need for part-time or flexible working if it will help you to be more effective when are able to go back to work.

Whatever the motivation behind your decision to take a career break, there is a common theme to the stories in the profiles presented here – everyone is positive about their decisions to step back from their careers to focus on someone or something else when they needed to. Whether it is to care for children, to recover from illness or just to pursue a burning ambition to contribute something different to the world or to travel, if you feel that taking a break is the right choice, be reassured that there are organisations and individuals who will help you manage the break and return to work when you are ready.

Don't be afraid to be honest about the need for part-time or flexible working if it will help you to be more effective when you are able to go back to work.

If you do nothing else

Your career break countdown

- Update CV and put it somewhere safe.
- Plan a catch-up with a friendly colleague and have a date fixed.
- Look into social media as a way to keep in touch.
- Switch your IOP membership to a reduced rate.
- Have an appraisal before you leave.

Tips for career break management

- Follow the IOP on social media sites that you use regularly and sign up for the WISE newsletter.
- Try to keep track of the skills that you are developing during your break, even if just scribbling a few notes on your CV every few months.
- Look for interesting organisations or events to volunteer for – the skills you develop and contacts you make will be just as valid as those from paid employment.
- Develop your network by asking people about their work and who they know.
- Use your time away from regular work to reflect on what you enjoy and gain satisfaction from – this might help you to make more informed career choices when you are ready to return.

A career returner's checklist

- Look into local IOP support through national and regional officers.
- Check eligibility for formal schemes such as those from the Daphne Jackson Trust.
- Contact previous employers to advise them of change of status and to ask about opportunities if relevant.
- Look out for courses and workshops to help returners.
- Tell everyone in your network that you are ready to return to work.

Organisations and resources

As many of the issues in this section have a particular impact on women, there is support available during your career break and on your return to work from the following organisations and resources:

The Daphne Jackson Trust

- www.daphnejackson.org

WISE – Women in Science and Engineering

- www.theukrc.org/wise

The Scottish Resource Centre for Women in Science, Engineering and Technology

- www.napier.ac.uk/src

Chwarae Teg – the professional agency for the economic development of women in Wales

- <http://chwaraeteg.com/>

Women in Technology and Science Ireland

- www.witsireland.com



David Wilkinson

Regional officer, Institute of Physics, Midlands. David is one of nine national and regional officers of the IOP in the UK and Ireland. He is based in the Midlands region.

“ A large part of my role is to support members in the Midlands region by helping them to access the many services offered by the IOP. A lot of these are based centrally in London, so I am able to identify the right person or department to talk to and help them make contact more easily. I also have a strong network in the region, so I can ensure that members are aware of local activities and opportunities.

For members who have taken a career break, there are a number of ways in which this network can help. We have a strong public engagement programme and there are ALWAYS opportunities for volunteers. Helping us to engage the public with the excitement of physics is a great way to start tuning yourself back into science and physics. You will get to meet new people, have some fun and be a role model for physics. If you have been out of the workplace for a while, it's also worth knowing that outreach work is a great confidence booster – I've seen very shy people go from not wanting to talk to anyone to approaching the public and demonstrating experiments with great flair – in just a few hours! Critically, this is also a flexible, accessible way to add valuable, current experience to your CV.

For members who are working part-time or seeking flexibility these opportunities are also great as they can broaden your skills and connect you with a different group of people – something that can be challenging if you are working reduced hours or have limited responsibilities.

I can strongly empathise with members who are looking for a more family friendly approach to work as this is what motivated me to move into this role from the South East! I'm a great fan of flexible working models and understand the challenges of balancing the needs of kids with a career.

My knowledge of the region can also help people who are looking to re-enter the workforce as I'll be aware of the major institutions and employers locally who employ physicists. I've helped younger members locally to arrange work-shadowing and short-term placements and I'd be very happy to discuss these options with any member who would benefit from an introduction to a new workplace or career.

I'm also here to develop our local membership, so I will often talk to people who have let their membership lapse during a break from physics. I can usually convince them that it is worth rejoining as I can point them to resources or people that will have an immediate impact.

Put simply, the best thing that the regional and national officers offer is local knowledge and a direct route into the support from the IOP in London. While we won't always be able to answer all of your questions, we'll never leave you without lots of suggestions to help you move forwards.





Dr Katie Perry

Chief executive, Daphne Jackson Trust. Katie has a background in physics and works to reduce the barriers experienced by individuals returning to a career in science.

“ Our central objective at the Daphne Jackson Trust is to reduce the barriers faced by people who have taken career breaks when they are ready to return to a scientific career. We offer fellowships that consist of both a challenging research project and an individually tailored retraining programme over a two-year period. It is possible for applicants to use the retraining element of the fellowship to move into a slightly different field if it will increase employment prospects. Traditionally, the fellowship applicants identify and secure the agreement of their host institution and write a proposal for a suitable project to work on during the fellowship. We then offer support, guidance and mentoring throughout the application process ensuring that the returner's project will give them the best opportunity to achieve a return to a scientific career. Near the end of the application process we will then match the applicant with a suitable sponsor.

Increasingly, we are working with host institutions and sponsors who have identified that they wish to work with us and offer a great opportunity to returners and in these cases we will advertise the “sponsored fellowship” in a similar way to a job vacancy. The eligibility criteria, retraining programme and ongoing support is the same for both mechanisms of entry, but the increasing number of sponsored fellowships demonstrates the commitment across the sector to ensuring that we can retain skills and talent that can so easily be lost. We are working hard to increase the number of sponsored fellowships available and that they are advertised on our website.

As soon as you feel that a return to science is an ambition, contact us – even if it is some way off. Our fellowships support people who have had a break of at least two years. We look for people who have lost competitiveness in the job market because of their time away and we aim to make them competitive again. They must be able to articulate a clear need for retraining and be able to

convince us that this will boost their employability.

We understand that people will often work part-time during a break and we won't discount people who have worked up to two days a week whether this is paid or voluntary. However, the critical factor is the retraining element, so you must clearly present what career path you want to be on and how additional training will position you for success. In order to manage the scheme more effectively we have recently introduced a more structured application process and we have deadlines for individual opportunities and the general fellowship scheme. Everything you need to know is on our website and if anything isn't clear, call us – we are a really friendly team and happy to explore options with you.

It's important to stress that the scheme is open to anyone wanting to return to a SET career. We are looking at the potential that you showed before your break, the career trajectory you were on and what you will define as a successful return. The scheme is competitive and we are looking for people to achieve a certain standard, but don't assume that we only consider the academic track or that you need to demonstrate potential to be a future professor or director of research. Basically, don't hesitate to contact us.

We understand the challenges of balancing a scientific career with a family, health problems or other commitments and will always look at your individual circumstances and career aims.

We are working hard to find new sponsors and new opportunities all the time so keep checking our website and please call us to discuss your plans.





Dr Tzany Kokalova

Research fellow, Birmingham University. Tzany works in the field of exotic nuclei and has successfully managed and completed a career break.

“ My research career began in Germany where I completed my PhD and started a postdoc. I met my husband and about a year after my PhD discovered that I was pregnant. At this point my intention was to balance my career with my child, to take a short maternity break and quickly return to work. Sadly, there were problems with the pregnancy and I lost my son at six months. My outlook changed completely, and when I became pregnant again I decided to focus on my children. I had twin boys and spent over three years at home with them.

I took my life as a mother as seriously as I had taken life as a scientist. There were also a lot of other things that I had to take responsibility for – my husband got a great job in the UK and we moved to Birmingham. After about a year, even with my very energetic approach to motherhood, I felt that I needed more to do and started to think about the projects that I had been working on before. I didn't disconnect completely – I was involved in eight publications, discussing ideas and editing manuscripts, and even when I was changing nappies I would have ideas for future projects. When my boys started pre-school and began to develop their independence, I made contact with the Daphne Jackson Trust and began the application procedure. It can take a while to develop your proposal but the timing worked out really well for me and when the boys were nearly four I started my fellowship. At this point things should have been straightforward, but there were even greater challenges ahead. My dad was diagnosed with stomach cancer and it became clear that he and my mother needed my support. They moved in with us and I cared for him with my mother for the final months of his life. Even though this put a huge strain on me, I kept working and found that having a physics world that I could retreat into really saved me. My colleagues and supervisors were magnificent, giving me time and space to talk to them when I needed to. Their support made a huge difference.

The flexibility that is built into the Daphne Jackson Trust Fellowships meant that I was able to work from home and to adapt my hours. I can't think about how things would have been if I'd had a more traditional job at that point.

Even though losing dad has been awful, knowing that I was able to make things as comfortable as I could in those final months really helps. During all the challenges that I've faced, my career has slowed down at times, but it has never stopped – even in the years that I was away from a lab.

In this regard, the expression “career break” is a misnomer – I was developing as a person, building new skills and coping with some very difficult situations in that time. All of these things have strengthened me and will benefit my career.

I was recently at a collaborative event where there were other women scientists and PhD students. The students said that it was really wonderful to see and speak to women who were balancing science with families and I realised how important it is to see that you can have both – you don't have to sacrifice one for the other.

There are still challenges ahead. The two-year fellowship seems like a long time when you start, but the research cycle takes time and competition for research funding is fierce. I'm on my second round of applications and may need to be supported by the university for a few months until funding decisions are made. The time to retrain, do experimental work and interpret data eats a big proportion of the fellowship time, so you need to focus and work hard.

Everyone at the Daphne Jackson Trust has been excellent – Katie Perry is brilliant and I've been able to talk to her about all kinds of things. Their training courses are wonderful and it's been great to meet the other fellows at them. I'm very fortunate and happy with their support and what you get from the fellowship. The money is only part of the package.

Finally I must mention my husband – he has been through everything with me and always supported me. If he wasn't behind me, none of what I've achieved would be possible.





Sam Pringle

Founder of Beeleaf Coaching. Sam started off her career as a marine biologist that was followed by a 10-year management career in pharmaceuticals. After the birth of her son she established Beeleaf Coaching and has since undertaken numerous professional development courses and qualifications.

“ The Scottish Resource Centre (SRC) is just one of the organisations that I work with who want to support employees and help them manage other commitments. Companies are thinking quite differently about how they keep in touch with their employees who are on career breaks – arranging childcare for the “keeping in touch” is a real trend among employers of not wanting to lose qualified staff and recognising that they have to be flexible to keep them.

The mentoring and coaching scheme run by the SRC has only recently re-opened after receiving funding directly from the Scottish Government, so it is worth looking around your local area as other schemes may also be available. I also run SRC workshops for returners and help people achieve work-life balance.

If you have been away from work for some time, the importance of social media in recruitment might come as a surprise. I always advise people to set up a LinkedIn profile and to keep it up to date as it will be one of the first things seen in a Google search of your name. You also need to run a search of your name and look at the things that come up – do they give a good impression?

Useful as virtual networking is, there is no substitute for face-to-face contact. If you start to explore your own network, you will probably find that there are many people who have returned to work after a break or who are working in flexible ways to manage children or family caring responsibilities. These people will have developed their own strategies to manage these competing demands and they will be able to help you. The isolation that you might feel when you try to return to work on your own can be eliminated if you surround yourself with people who have done it – so start asking questions.

One of the things that you can do more of when you are on a career break is read. There is a wealth of information that you don't need to go on a course to access. Blogs, books, notes from conferences – there is an unimaginable amount of advice and information available.

Don't be frustrated about losing out while you are on a career break – see it as an opportunity to catch up with the reading that you've always wanted to do and research your future options.

You will have to make decisions about the type of work you want to return to and the level of commitment you can make. Most returners need a career that can accommodate flexibility, so you should be looking for jobs that offer autonomy – being able to make your own decisions about how and when to do your work. It is much more challenging in traditional industries with rigid hierarchies or when you are in a customer-facing role. If you previously worked in a position when you were working for someone who dictated your diary and expected you to be available all of the time, or involved a lot of travelling you need to think carefully about whether that job still suits you. Technology means that many of us can work away from a traditional workplace, so discuss your options and don't be afraid to suggest solutions.

If you are returning to work after a few years away, it can be challenging to re-enter at the same level. If you are offered a job with a lower status or salary, it is really important to negotiate the terms. Be very explicit about your expectations and make it clear that you are overqualified for the position. Explain why you are still prepared to take the job, and what you would want to see in the future. There are other ways to make these offers work for you. I recently interviewed someone who told the employer, “I am overqualified for this position, I have more experience than you wanted, the rate of pay I am looking for is more than you can afford to pay me, but you can have me for four days a week and not five”. She wanted a day off each week to care for her parents and she negotiated it on those terms. Alternatively you could say “I am prepared to work on your terms, but in six months I would like to have an appraisal and if I can provide you with evidence that I am exceeding what you were looking for, I'd like my position to be re-considered”.





Avril Manners

Director, Scottish Universities Physics Alliance Graduate School. Avril made a career change into education, after starting in medical physics. She took a break from her secondary school teaching post after having her daughter. When her son was 18 months old, she decided it was time to go back to work.

“ Although I took a career “break” I didn’t feel like I had switched off. I was still a person who was developing skills and having useful experiences particularly as I continued to tutor from home when my children were very small. My first steps back into work were managed within the amount of childcare I had, so I looked at the hours I had available and what was possible in them. Although I’d previously worked in secondary education, the flexibility of further education (where there are morning, afternoon and evening sessions) made it an easier option.

I wrote to all the local colleges explaining my experience, my availability and asking to be considered for any opportunities. It was actually a family friend who put me in touch with someone who needed a part-time lecturer.

My entry back into work was gradual – a few sessions a week that roughly equated to a half-time post. I was able to make use of the college crèche facilities that made my return more straightforward. Flexibility was key, as it always has to be as a working parent.

When both children were at primary school, I took up a full-time further education post and continued to work in further education for about eight years. During this time I was seconded to the Scottish Qualifications Authority for two years during which time I was able to work completely from home. An important issue in further education is the need to provide education in a range of accessible ways so I learnt a lot about flexible and distance learning. This experience enabled me to make a move into higher education where my understanding of e-learning secured a position working for the Institute for System-Level Integration.

My role at the Institute, a pan-Scotland collaboration between the universities of Edinburgh, Glasgow, Strathclyde and Heriot-Watt, was to develop an online MSc course for the partner institutions. The success of this programme led to responsibility for the on-campus Masters

programme in Computer Chip Design, which added to my experience and understanding of the HE sector.

In 2006 I saw an advert that brought together all the themes of my career – education management, collaboration between universities and physics – and applied successfully to become the director of the Graduate School of the Scottish Universities Physics Alliance (SUPA).

I now manage the development of the postgraduate education and training across the SUPA partners for over 500 post-graduate students.

Changing career tack has had a very positive impact on my career and has enabled me to do some really interesting things.

By doing these things I have been interesting to employers and when the SUPA role came up it needed a really diverse set of skills that I was able to demonstrate because of the way in which my career has developed. If I had stayed on any of my previous career paths I’m sure that I would have been successful, but by being able to take a few risks (which can be facilitated by having children and taking a break) I’ve been able to follow interesting leads.

Being a parent, particularly being the principal carer, can affect your career, but it is for a relatively short period. The working lives of current students in SUPA may well extend into their seventies, so a few years to focus on a family, followed by a few years of working in a flexible way represent a small proportion of their careers. My advice to them is that they need to be diverse in what they do and how they do it. If they can be flexible and develop lots of skills, alongside their physics knowledge they will be significantly more employable in the long run, particularly if you can develop a unique profile.





Helen Wollaston

Director of the WISE Campaign, which works with organisations in the science, engineering and technology sectors to recruit and retain female talent.

“ Our activities are focused on three areas: campaigning for change: creating a compelling case that will increase the scale and effectiveness of programmes to attract and retain women into science, technology, engineering, and mathematics (STEM) jobs; building the pipeline: inspiring girls to see maths and science as stepping stones to a wide range of exciting and rewarding careers; and sustaining the pipeline: we advise employers on practices that may unintentionally put women at a disadvantage and present real examples of positive practices that have worked for other organisations in their sector. In many cases, initiatives that help women actually benefit men too – such as family friendly policies for example.

We have a growing mailing list of women (and men) who are passionate about science and engineering. We produce a regular free e-bulletin that you can sign up for at our website, which details all manner of courses, jobs, funding opportunities and awards. This is a great resource for anyone who wants to take a career break as it gives them a way to keep in touch with developments in a straightforward way. By reading the e-bulletin over the months or even years of your break you will start to build up an awareness of the organisations and schemes that can support you and of employers who have adopted family friendly policies and of those who have an active commitment to supporting women to advance their careers. The newsletter is a good way to keep in touch with WISE campaign activities that could have a direct impact on the companies or sectors that you are interested in returning to.

As well as being a conduit of information, we also offer a number of career-enhancing opportunities to women. The first is the chance to join our database of role models. We are frequently asked to provide speakers, volunteers for events and examples of women working in science and simply can't meet the demand. Whatever the level or stage of your career, please get in touch and we can build your profile through our blogs or events.

We also run the annual WISE awards – a high-profile event that celebrates the achievements of women in science, engineering and technology. You can nominate yourself, your employer or an inspiring female colleague or friend. The awards are presented by HRH The Princess Royal and will have a great impact on your career and recognition in your field.

Put simply, our vision is that the UK economy will be driven by the talents of a critical mass of talented women working within the STEM workforce – we are aiming for 30% of the STEM workforce that is in the UK to be female by 2020. Contact WISE to find out how we can help you balance your personal life with success in your chosen career.





Sandra Fee

Physics teacher, Ardee Community School; lecturer at NUI Maynooth; and mentor for the IOPI. She took a career break to pursue her lifelong goal of volunteering overseas.

“I've always been fanatical about instilling a love of physics to as many students as I possibly can. I introduced physics to Ardee Community School, Co Louth in 1986 and since then the uptake of the subject has gone from strength to strength.

The seed for change in my career was sown in 1999 when I was taking a masters degree in medical and radiation physics at Birmingham University, having applied for one year's study leave. I heard about the wonderful work done in education by VSO in third-world countries and dreamt that one day I would become a volunteer. Six years later, I was listening to the radio on my way home from school and I heard the following comment during the discussion... “Little thoughts and wishes that niggle and niggle and refuse to go away should never be ignored...for in them lie the seeds of destiny”. I realised that the one thing that niggled at the back of my mind was my wish to do voluntary work overseas. I made the decision then, to apply for a career break and to apply to VSO – it was the best decision that I have ever made.

I applied for a second period of leave, which was again granted and after a fairly intensive application process was offered a work placement in Guyana, South America. I was excited, thrilled and so, so happy. At no stage was I in doubt and after attending three VSO training workshops in Birmingham, I felt armed and ready for a whole new chapter in my life.

In Guyana I was appointed as a lecturer in physics at the largest teacher training college and helped to train teachers, prepare examinations and update the physics curriculum. I also did a lot of fundraising with the support of friends and family to ship equipment from Ireland to Guyana and organised workshops for staff to explain how to use all the new equipment. It was a great day for the college when all the new equipment arrived and great to see the impact that it would have.

Moving abroad for a year wasn't trivial, even with the support of VSO. I had to rent out my home, sell my car, raise funds for the trip, attend training weeks in England

and arrange insurance and pension payments for the year away. Once I arrived, my main challenge was the climate. Guyana is on the equator and working in the dreadful humidity was unbearable at times. I lost 14 lbs during my first six weeks in Guyana and at first found the food difficult to eat. After a month or so I settled in, my appetite returned and I was never homesick at any stage. Perhaps I knew I was in the right place at the right time. In fact, my biggest challenge was probably returning to Ireland. It took around a year to settle back in – a longer period of culture shock than I felt in Guyana.

My outlook on life was dramatically changed by my experiences – things rarely go “according to plan” but I soon began to relish the daily challenges and chance to be flexible and adaptable.

The year I spent away has had a positive impact on my career in many ways. When I went away I took a risk and had to ask my employer to accommodate my wish to spend a year with the VSO. Since returning, I've taken up new opportunities that echo this – I've taken risks and found again that my employer is willing to accommodate new opportunities for me. I have been job-sharing for three years, which enables me to teach physics at second level (in my old school) and to lecture in physics methods at third level at NUI Maynooth. I am also a physics mentor for the IOPI (I mentor newly qualified physics teachers) and have represented Ireland as a female physicist at the International Conference on Women in Physics held in South Africa – the highlight of my career to date. I've just been appointed as a member of the IOPI Committee and am really looking forward to this new experience.

If you feel like a change of career, my advice is very clear and very enthusiastic – you should go for it. My motto for my year in Guyana sums up my attitude now – be brave and bold and mighty forces will come to your aid.





Dr Barbara Montanari

Senior research scientist at Science & Technologies Facilities Group (STFC). She has experience of both a planned and an unplanned career break.

“ I spent the early part of my career as a full-time research scientist at STFC, reaching the position of senior research scientist in 2008. Since then my career has incorporated two periods of leave, for very different reasons. I've had experience of a planned and managed break when I had my child and one taken at short notice with no preparation, when I was diagnosed with cancer.

Preparing for and negotiating these breaks was straightforward because I have always been very open with my line manager. In turn, he has always been very understanding of my need for flexibility in my working hours and working pattern as my personal circumstances evolved. It never came as a surprise to him when I requested a change (except for the unexpected cancer diagnosis). So it was easy to sit down with him and explain very openly and honestly just what I needed and why.

When I returned from each of my breaks, there were some projects that I was involved in that had been paused, so I was able to pick these back up and they came to fruition. There were some projects that had been taken on by others, so I was able to sit down with them and talk through the developments and establish where these were now leading. With my planned maternity break, I'd carefully documented my work so it was easier to pick back up and there had been “keeping in touch” days while I was away when my line manager had kept me up to date with developments. My other career break was very different – everything had been dropped and it was difficult at first but going through the data brought it all back. It took a little longer, but even if you don't have an exit and return strategy for a break, don't panic. Your scientific brain is still there and will thrive once you are back at work – the nappy-changing brain soon disappears.

Some of my work was in a fast-moving field and I realised that I had to find a creative solution to the problem of catching up when all of the conferences and meetings were far away – not an option with a breast-feeding baby. Instead, I organised my own conference, brought all the

experts to me, listened to the innovations, caught up with the network and was able to maintain my family routine. The conference also put me back on the map. People knew that I was back from my break and the event had a real impact.

By finding ways to make every working minute count, the first 12 months after my family break was my most productive year. I was full of energy and my writing and research came very fluently, even in reduced hours. My theory is that motherhood is GOOD for a scientific career – the break refreshed my scientific brain.

I've never been put under pressure to work more or less than I felt was right, so I've been able to find the right balance between being a mother and being a scientist. After my illness, I felt very strongly that I wanted to spend the school holidays with my kids, because I would regret not having done so should the cancer come back. The fact that I could do this meant that I didn't have to choose between work and private life and I have been able to continue to work despite the turbulent time that I've been through.

Working part-time and taking career breaks has been essential for me and enabled me to continue working as a scientist. However, there is a price to pay for this flexibility. Anyone who chooses to work part-time or takes career breaks will have a reduced average level of productivity. In the academic arena this is measured in terms of papers published, grant proposals funded and projects completed. This is exasperated by the timing in your career when children come along – often at the point when your work is established and starts to have real impact. Frustratingly, this understandable drop in outputs is rarely taken into account during competition for academic positions – the “raw” figures are the basis of decisions rather than the

system looking at what has been achieved often under challenging circumstances and the potential for future success that this demonstrates.

The collaborative nature of research brings other challenges. When faced with a deadline, a full-time employee can pick up a task when it becomes urgent and work full-time on it for the last few weeks/days to meet the deadline. As a part-time worker I have needed my collaborators to factor in my availability and to be willing to deliver on their tasks earlier than the deadline suggests. The strategy for this is again to communicate clearly and honestly with those around you, although this doesn't help if meetings are called at very short notice or an urgent task is flagged up late.

As an individual you can develop a good communication style and this will help you hugely, but there needs to be a wider understanding of flexible working from your employer and colleagues. There need to be systems for communicating if people miss meetings or informal discussions and a firm policy of only scheduling meetings during the working hours of the whole group, including part-time staff.

A positive attitude will help you manage any challenges. See the glass as half full and don't bring your worries about unfinished work home, or take your guilt about neglecting your family to work. Don't compare yourself to full-time colleagues – over the whole length of your career, you will reach your potential and find that the impact of a break will shrink away. You will also have the satisfaction of knowing that you gave time to your family when they needed you.

A number of very different factors have enabled me to make the right choices for me and my family. The STFC has excellent policies regarding flexible working, but as importantly my line managers and colleagues have always been supportive. Reduced hours mean a reduced salary, but

with two incomes we've been able to manage financially. On a more practical level, our childminder supports us by offering childcare on an ad-hoc basis, with family and neighbours able to come to the rescue occasionally.

Even if you are going to be the first employee to ask for flexibility or a break, you must ask. Work out what you can offer and stress the benefits of keeping you and your skills rather than apologising for a reduction or temporary loss. If you are concerned about being perceived as less committed, then demonstrate your commitment during your working hours. Time with my children is precious, so time away from them can't be wasted – I want to work hard and productively.

If you feel the same, you must manage your time and workload to avoid constant "fire-fighting". Don't let your hours be filled with urgent tasks at the expense of important, career-developing activities such as keeping up to date with literature. This will help to you remain on track for promotion when your work has reached the appropriate level – discuss this with your manager and find out where you need to be focusing. Talk to people who have managed their career balance.

When I became a parent, I was adamant that the parental responsibilities would be shared equally between me and my husband. Having him committed to his role as a father was crucial to maintaining a good balance in my career. This isn't just lip-service – he has turned down a promotion that would have given us a higher family income, but required me to take on all of the family responsibilities. For our family, balancing the career progression of two partners who share childcare and chores equally, is essential.

Life is short and time is precious. Make sure that you reflect on how you want to use it and seek opportunities that let you use it as you want.



Section 2

Achieving career balance

The need to balance a demanding scientific career with other responsibilities can be felt at any stage of life. Although many of the profiles that you'll read in this section relate to childcare responsibilities, the advice given and the process of negotiating can be applied to any circumstances that you face. As with the career break section, the aim here is to present a range of different examples of career balance. Each individual has found a balance that works for them and their families, so even if the solutions wouldn't suit you, the fact that career balance can be achieved in so many different ways should inspire you to investigate and find your own answer.

Preparing for the transition

When you find out that the change in your work/life situation is imminent whether you are expecting a child or will be responsible to care for a relative, it can seem challenging, even daunting. Many questions come to mind about the administrative formalities that you will need to take care of. You may wonder who to turn to for help and be unclear about your options. On top of these concerns you may worry about how you are going to perform to the professional standards expected while coping with additional demands in your life.

Don't panic. Even if you work in an environment in which flexible working is unusual, there is information, support and options available and this section will point you towards useful resources, give you some tips on how to manage extra responsibilities and give you insights into possible solutions through the profiles.

As soon as you find out that a change to your working pattern is necessary, there are people who you need to turn to for advice and support:

- Your immediate line manager or research group leader.
- Human resources staff in your organisation.
- Equality and diversity representatives.
- If you are a union member, they will also be able to explain your options and may be willing to attend meetings with you.
- If you have a mentor, you might also want to discuss your options with them – their perspectives might be very useful if you need to choose between different options.

Some of the environments that physicists work in are very traditional and there may be little experience among managers and colleagues of part-time working or other options. Don't be discouraged if the first reaction to your request isn't positive – it may be that your managers need support from the wider institution or organisation to help. Take the initiative and find the people in your organisation who can help – visit human resources or an equality unit to find out what you are entitled to ask for. It might be useful to read some of the comments given by managers and department heads before you approach your own boss. These assessments of the benefits of supporting staff might help to reassure your manager if they haven't dealt with a flexible working request before.

Don't panic. Even if you work in an environment in which flexible working is unusual, there is information, support and options available.

Some physicists face the additional hurdle of being on short-term fixed-length contracts (perhaps as a postdoctoral researcher). This might make you feel particularly vulnerable when trying to negotiate for leave from work or more flexible hours, but the belief that you can't be a successful scientist without working long hours is outdated. Most, if not all, funding bodies will be happy to discuss reducing the weekly hours worked by a researcher while extending the contract to ensure that the work can be done. However, they need to be contacted at the earliest stage possible so that the best solution for funder and researcher can be found.

If you are trying to negotiate for more flexible arrangements before going on maternity leave, particularly with your

first child, you might have concerns about committing to a work pattern before you really know how many or how few hours you will want to work. Don't worry about this, as your return from maternity leave will have a degree of flexibility to it. Read the maternity benefits policy of your organisation and talk to human resources staff about whether you will have the option to extend your leave and be able to negotiate different working hours when you are ready to return. Remember though, that the changes to your working patterns will have an impact on your manager and colleagues so think about how they will handle these amendments. Try to see this as a joint responsibility and volunteer your own solutions. **Activity 4** gives a template that might help you to think through your ideas before discussion with a manager.

Activity 4: Flexible working template

My roles and responsibilities

List of individual tasks

Things I really want to hold onto

I like them or they boost my career

Things only I can do

Do I have ideas about how to pass on ones that aren't helping my career?

Things that could be done by ...

(and they would benefit/be great because...) (and how I'll support them to do it)

Negotiating flexible working

Employers are increasingly recognising the need to offer flexible working hours and conditions that contribute to a healthy work-life balance. “Flexible working” is a phrase that describes any working pattern adapted to suit your needs.

Common types of flexible working are:

- part-time;
- flexi-time;
- annualised hours (i.e. not working in school holidays)
- compressed hours (working a full working week in four days);
- staggered hours (starting and ending early or late);
- job sharing;
- working from home.

Before discussing the options with your employer you need to think about the working pattern that will be most helpful in your situation and will give you the time or flexibility to manage both work and home responsibilities. The profiles throughout this section illustrate this – the options chosen by each person suit their situations.

To help make the right decision you should

- Study the flexible working policy available from the human resources department at your workplace.
- Plan how you are going to take care of all your current responsibilities and be honest about the amount of flexibility you need and can realistically ask for. The template in **Activity 4** might help with the work side of this, but you also need to think about other commitments – how will you manage these when you need to focus on your work?
- Once you have an idea of how a more flexible approach might look from your perspective, make an appointment to discuss with your manager or department head. They can discuss the practicalities with you and help you to apply for flexible working if applicable.
- If you are having a discussion before taking maternity leave, you might be surprised by the waiting lists for some nurseries and childminders. Give yourself time to view and choose the best option for you and your family well in advance of when you are planning to return to work.

Once you have a clear picture of your responsibilities at work and have thought through some potential solutions to any problems created by flexible working, it is time to approach your manager. Although this section is written to help you

make a compelling case, you shouldn't assume that there will be resistance to your request. Most employers will understand the pressure you are under and will want to alleviate it if they can.

Even if it seems that your role isn't compatible with flexible working, there might be innovative solutions. Dr Catherine Smith and her boss Andy Wreford from Alcoa Howmet Castings give both sides of the story of her transition to flexible working – see profiles on pp40–41.

A collaborative approach between individual, manager and organisation will help to find the most effective outcome to a request for flexible working. It is common to find a variety of approaches offered by the same employer, so don't feel that the options you see around you are necessarily the only ones that will be considered.

The STFC (Science and Technology Facilities Council) is a major funder of physics research and also employs many physicists in its laboratories and facilities around the UK. It has a very positive attitude towards flexible working and a number of their staff explain how they have adapted their working patterns to balance demanding scientific roles with family commitments. Sarah James and Matthew Wild explains how this works for them on p42.

Although the majority of staff asking for flexible working patterns are women, there is no reason why men can't apply as well. As Craig MacWater's profile explains (p43), reduced hours don't have to mean reduced career prospects. If you are working part-time it is important to discuss how your promotion criteria will be adapted to reflect your working patterns.

While the supportive and flexible culture at STFC might not be universal among employers, all sectors are equally able to offer staff more flexible ways of working. Universities, public sector and private sector organisations are all subject to the same equal opportunities legislation, but more importantly, all of them rely on highly skilled staff, many of whom have years of experience in highly technical areas. There has been a distinct cultural shift in recent years to recognise that the loss of these skills is a huge waste of resources and potential, and since 2007 the IOP has worked with university departments to help embed good management practices that benefit all staff, with the aim of improving the proportion of women in academic positions. Read Professor Robin Ball's, head of physics of University of Warwick, profile on p44.

Many other university departments are involved in the Juno programme and you can find their details at www.iop.org/policy/diversity/initiatives/juno/supporters/page_42627.html.

One of these is the University of Liverpool, where Professor Ronan McGrath, head of the School of Physical Sciences looks positively on requests for flexible working. “If someone has external or family circumstances and it would help them to work part-time, she or he will undoubtedly be more productive if an appropriate arrangement can be made. This is especially true in research, where imagination and creativity are crucial to success. I believe that people will best fulfill their potential if they are comfortable with their work-life balance. We do have a number of examples of this at Liverpool, though for contract researchers this is less common as they are often funded on time-limited grants.”

As Professor McGrath's comments illustrate, the situation for staff employed as postdoctoral researchers on project grants is more complicated than for academic staff because their individual needs have to be balanced against the timescales of the projects that they are working on. Major funding bodies, such as the UK Research Councils will usually financially compensate institutions for the costs of providing maternity, paternity or adoption leave to staff working on their funded projects. From 1 October 2012 it is possible to extend grants by 12 months as a result of research staff having taken maternity leave. For individual funding, such as personal fellowships, as Katharine Hollinshead from the STFC explains: “Fellowship awards support individual career development, so we would be happy to discuss with any individual the possibility of putting their fellowship on hold during a period of parental leave and to extending the length of funding to allow them to find a more flexible working pattern. We take the issues of diversity and equality very seriously and offer fellowships that are targeted at returners who have taken career breaks. We recognise that the process of developing a fellowship application in itself is a huge challenge and provide bursaries to support people so that they can develop proposals that fully reflect their potential.”

Professor Cait MacPhee and Dr Marialuisa Aliotta both work in the School of Physics and Astronomy at the University of Edinburgh, but have taken different approaches to balancing research and their families. See their profiles on pp46 and 48.

The head of school, Arthur Trew sees this approach as a key part of finding a solution that works for both individual and employer. “My immediate response to anyone seeking part-time or flexible working would be to be accommodating. This, of course, would have to be commensurate with the work that they had to do: it would not be possible to have an arrangement that permitted home working to the exclusion of their teaching commitments, for example. This means that every case is likely to be different and each individual should be treated on their merits.”

The many different options that are presenting in the profiles in this guide have hopefully given you a clearer idea of what you can expect to negotiate and how to make the best application for flexible working. **Activity 5** summarises the best advice from the profiles and gives you a template to use to help you prepare for a more effective discussion with your manager or head of department.

As well as agreeing the new conditions with your employer, it is important to ensure that your colleagues, particularly those who will be affected by a change in your working hours, are also involved in the transition process. You may need to ask for their patience and support at times, particularly if they need to make decisions about your work in your absence or if their schedules are affected by your absence. The support of your colleagues can make it far easier to work to a different pattern, as Nadya Plotnikova's experiences demonstrate – see profile p50.

To summarise, there are many ways to find flexible solutions to the challenges of managing family commitments and professional responsibilities. A collaborative approach is best as it helps managers, organisations and individuals to balance the needs of different people and their colleagues, usually by taking personal circumstances into account. There is increasing recognition of the need to offer more flexible working patterns in order to retain high-level skills and years of valuable experience and to ensure that promotion and career progression can continue.

Remember that skills are a valuable resource and your discussions about flexible working give your manager a chance to retain you and your experience. Equally, they will have other responsibilities and demands, which you need to be aware of and have an understanding of as a solution is found.

Activity 5: Negotiation template**What is your ideal outcome?**

Write a summary here of what you hope to agree to.

When is the best time to speak with your manager?

Book a time and place where you can discuss your options with plenty of time and without interruptions.

What do you need to tell your boss in advance so that they can prepare and do their research?

Advance notice also allows them to get their initial reactions out of the way and hopefully to have started to accept flexible working as an option.

What concerns might they have?

What will be difficult if you aren't always present at work? What implications might there be for your colleagues? Explain how you will manage these.

Note down here how you will present your ideas.

Would a timetable be useful that shows when you will be available and what will happen when you aren't?

What will you need to do to support colleagues and managers so that the transition is straightforward?

Might you need to do some training or improve communication procedures?

Are there any things that you could offer as compromises if you need to negotiate?

This will depend on your circumstances, so be realistic and very careful about making concessions about being contactable on days off.

Be clear on what you can't accept – what will make your life untenable?

What are your alternatives if flexible working is not an option?

Managing your work and finding balance

Once you are working to a pattern that helps you to manage competing responsibilities, sadly the challenges don't all evaporate. If you have reduced your working hours you may feel under pressure to deliver results and projects in the time that you have at work. This section presents some simple strategies to help you boost your productivity and achieve your professional goals in the time that you are contracted to work.

In addition to the good practice you will find in the profiles here, it is also important to look around and see how people who seem to be effective and in control of their careers manage. They may have tactics for time management and prioritising that they will be willing to share with you. This could also be a good topic for discussion with a mentor.

In order to become more productive you need to have a strong focus on what is important and what really counts towards your career success. This doesn't mean that you should over-commit, but that you should feel that everything you are involved in has a potential benefit for your career. You also need to be sure that you have the time to do your duties properly, so don't set yourself up for failure by agreeing to take on roles that you will struggle to do well. It is better not to get involved with something and be able to do other things to a high quality, than to immerse yourself in lots of exciting possibilities and fail to deliver on any of them. **Box 2** includes a decision-making process that might help you to agree to the best things for your career.

Box 2: decision-making process

Do not say yes to the offer until you have considered each step.

- Step 1** What is the benefit of this opportunity to your career?
- Step 2** Are these benefits in line with your career goals?
- Step 3** What time commitment is required? Do you have this time available?
- Step 4** How will you make this time available? Can you pass on other responsibilities?
- Step 5** Is there a clear end point to this commitment?

Having effective time management will help you to make better decisions. A simple way to start controlling your time better is to set weekly goals. If you concentrate on achieving these, you are more likely to be able to switch off from work when you are away. If you set goals and struggle to achieve them, it may be worth doing a little bit of time analysis to see where your time is going and whether some simple reorganisation can help you to be more productive.

Once you have a clearer picture of the tensions, some solutions might be obvious and others more difficult to overcome. **Box 3** identifies some common time-management issues and suggests things that might help. Again, this is a great topic to discuss with a manager or mentor.

Developing a strong career while working flexibly

A number of the people profiled in this guide have achieved promotion while working part-time or without having to work very long hours. It is possible to continue to progress with your career while managing family duties, but you will need to ensure that you deliver outputs that are recognised and rewarded by your employer.

As with promotion under any circumstances, you will need real clarity about the criteria against which you will be judged and to understand how the impact of your flexible

working will be taken into account. You should discuss your objectives to secure promotion with a manager and get their feedback about which areas you need to focus on.

Look for opportunities to raise your profile, perhaps looking for prizes or awards in your area (such as those awarded by the IOP), by writing reports or publications that will have particular impact or by being involved in committees or activities that bring you to the attention of more senior staff. Balance this extra commitment against your work-life balance and be sure that you don't obligate yourself to things that you don't have time to deliver.

Box 3: time-management problems and potential solutions

Problem	Solution
Colleagues or students interrupt me when I am at work	Analyse your responsibilities and identify which could be done away from the office. Negotiate to work partly from home
Expectation to travel to and attend distant meetings	Explore the use of Skype as an alternative for some meetings
Time away from family to attend conferences	With very young children apply for funding to take them and a carer. The IOP's new career fund would support this
Travel to overseas facilities to carry out experiments	Delegate the experimental work to a colleague or student and contribute to the project by analysing data or writing papers
Overwhelmed by information and e-mails	Schedule time to deal with e-mails at the end of each day and give your planned activity for each day priority
No extended periods of time to focus on writing or creativity	Try to write from home or look for another location at work where you can be left in peace for a few hours (a seminar room or library, even a coffee shop). Additionally, always try to break down the things on your "to do" list into 15–20 minute "chunks". You are likely to get these periods of time even during the busiest day

IOP member benefits

If you are working part-time, from home or to a non-traditional schedule it can be difficult to take advantage of support from your employer. The IOP understands this and has developed a substantial library of online, flexible resources to help members develop their careers in a way that suits their busy schedules.

Even if you have a great relationship with your manager and colleagues, it can be difficult to discuss your career development with people who are making decisions about your role and workload. The IOP has a well established mentoring programme that can connect you with someone who will be neutral but supportive and can help you to find and maintain your work-life balance.

- www.iop.org/membership/prof-dev/tools/mentoring/index.html

Staff-training opportunities can be limited for part-time staff. You might feel uneasy spending time away from your workplace or the timing of courses might be outside your working hours. There is an easy way to keep learning with one of the online transferable skills courses developed exclusively for IOP members. You can develop your skills at your own pace, in a way that fits around your schedule. All courses are free of charge – you just need an IOP login username and password. Courses include innovation, managing from within the team, project management and professionalism and ethics.

- www.iop.org/membership/prof-dev/index.html and follow the link to online learning courses.

Keep track of the skills that you are developing at work and by managing an effective work-life balance with the MyPath Continuing Professional Development (CPD) tool.

- www.iop.org/membership/prof-dev/tools/mypath/page_51446.html

Demonstrate your commitment to your career by following the structured programmes towards higher levels of membership. You can progress towards Chartered Physicist, Chartered Engineer and Fellow of the Institute while working flexibly.

- www.iop.org/membership/prof-des/chartership/page_51450.html

You can also keep in touch with a much broader network of physicists and similar professionals by using social media. The Institute has its own password-protected community called MemberTalk, which is only open to members and a LinkedIn group, again only open to members. On MemberTalk you can join branch/group discussion forums, contact other members and create your own discussion groups.

- <http://mt.iop.org/> and www.linkedin.com/company/institute-of-physics

The IOP has developed a substantial library of online, flexible resources to help members develop their careers in a way that suits their busy schedules.

Coping with the demands of work and family

There is a general level of understanding and acceptance that parents, particularly mothers, can apply for flexible working patterns while their children are young. However, you may be less aware that these rights also apply to people who are the principal carers of adults. Sadly, many of us will need to provide care and support to elderly relatives and the same right to flexibility is there to support these carers and enable them to remain in employment. Peter Hutson at STFC has been able to take advantage of these rights after his employer suggested that he apply to work from home – see his profile on p49.

Legislation and employment rights change regularly, so if you want to explore your options, visit the government's information pages. If you find the advice confusing, do discuss it with your employer's equality and diversity representative, a union official or human resources.

- [www.direct.gov.uk/en/Employment/ Work and families section or search for "flexible working"](http://www.direct.gov.uk/en/Employment/Work_and_families/section_or_search_for_flexible_working)

Whatever choices you make to help balance your work and life, the consistent messages from everyone interviewed and involved in this guide are:

- You are an important asset to your employer and it is in their interest as much as yours to help you find a way to work that enables you to be your best.
- Help and support is out there, but it is usually tailored to your circumstances so you need to think about what will make the most difference to you and to be explicit with your requests.
- The best solutions are worked out collaboratively between employer and individual. Try to think about their situation and the challenges of balancing the needs of all their staff as you develop your own flexible working plan.

If you do nothing else

Decide if flexible working is best for you

- Check your eligibility on your employer's website and the Open Government information pages.
- Work out your finances and identify what your ideal and minimum positions are.
- Discuss possible changes with childcare providers or other carers.
- Analyse your job activities and check if your working hours could be reduced or changed without negative impact on your work or your colleagues.
- Think about the longer-term implications for your career.

Plan an effective negotiation and transition to flexible working

- Make a detailed plan of your current tasks and which you want to adapt or pass on to others.
- Understand the circumstances under which an employer can refuse a request for flexible working and make sure that you aren't affected by these.
- Find out the timescale for any application, gather the paperwork and evidence you need to present.
- Explain to your manager that you want to apply for flexible working and ask for an appointment to discuss your plans.
- Seek advice from other people on flexible hours about how to present your case.

Stay in control and keep the right balance

- Insist on regular appraisals and the same supervision or management as other staff.
- Ensure that the proportion of your time spent on different tasks is not unfair and still gives you an opportunity for promotion.
- Develop strong time-management skills and work out what your professional priorities are.
- Be honest and consistent about your availability for meetings and work – don't try to please everyone at the expense of your balance.
- Look for opportunities to develop your career that can be fitted in with your other commitments, not forgetting the many IOP resources that can be accessed flexibly.

Organisations and resources

Flexible working information from the UK government

- www.direct.gov.uk/en/Employment/Employees/Flexibleworking/index.htm

Flexible working information for citizens of Ireland

- www.citizensinformation.ie/en/employment/types_of_employment/part_time_employment/part_time_workers.html

Productivity for scientists

- [http://olgadegtyareva.com/ Resources to boost productivity](http://olgadegtyareva.com/ Resources_to_boost_productivity)



Mhairi Taylor

Equality and diversity officer, University of Glasgow. She assists and supports staff across her institution to understand and implement flexible working.

“ My role as the equality and diversity officer is to promote and embed all aspects of equality and diversity at the University of Glasgow. I'm involved in developing and implementing policies to support staff across the institution, so much of my work is with managers and heads of schools. I will help individuals prepare their applications for flexible working by explaining what they are entitled to ask for and what factors are considered when decisions are made. I also keep track of applications to ensure that everyone stays within the legal timeframes for decisions.

There are clear legal guidelines surrounding flexible working that are published on the government's website. Your own organisation may go beyond the legal minimum, so it is important to understand your employer's policies. Legally, you are entitled to ask for flexible working if you care for any dependent under 17 years old or are the carer of an adult living at the same address as you. You need to apply in writing and it is a really good idea not just to put in a blunt request, but to think carefully about how your request can be accommodated for your situation. Think about the challenges that it might raise for your manager and present your own solutions. The more solutions that you can present, the more likely your request is to be accepted.

Under the legislation there are six reasons for rejecting requests.

- The burden of additional costs, (for example it is more costly to employ two people to job share than one)
- A detrimental effects on ability to meet “customer demand” (if your role is tied to activities at certain times and your request means being absent for some of these)
- An inability to reorganise work through existing staff (if you have a very specialist role that no-one else can cover)
- A detrimental impact on quality or performance (being absent for part of the time stops you performing well at other times)
- Insufficiency of work during periods that an employee is

available to work (i.e. term-time only if this is a quieter time in your workplace)

- Planned structural changes (if a restructure is planned and there may be changes to your role and that of other workers)

For many people the nature of their work means that there can be flexibility but it can be more challenging with “front-line” services. If your employer allows you to take a more flexible approach, they need to understand how this might impact on your colleagues and be able to either allow everyone the same opportunity or to be able to defend your special case.

A good manager will be aware of the potential for tensions between staff if they aren't treated fairly, so they may treat your request cautiously until they can take into account this bigger picture.

In order to help your manager or employer support your application, you can explain the benefits to them in business terms. If you apply for staggered hours, you are increasing the availability of staff over a longer period each day. If you can work from home and are more productive without distractions, you can increase results and outputs. Working from home might free up office or lab space in a busy workplace and could be a cost-effective solution to having to relocate or expand premises. Remember that your manager will have to take these things into account when they make a decision, so present as many pieces of supporting evidence as you can.

When you submit your application you also need to be aware of where your flexibility lies because there is likely to be some negotiation about the details. Could you work on particular days to help your employer manage their demands? Could you help to train the staff who will take on elements of your role? Could you be available on

occasional evenings in return for starting later? Again, these compromises will help to demonstrate to colleagues the benefits of the changes to your working patterns.

You also need to recognise the normal working patterns of others. If no-one tends to take a lunch break, but you want to work a nine-day fortnight in return for losing yours, this is likely to cause some resentment from colleagues. Think about the consistency and fairness that your manager needs to give to all staff and make your request in the context of this.

You can ask for some time to consider any offers made by your employer – in fact it is important to discuss these with a partner, other family members, childcare providers or respite care as they could all be affected by what you agree to. Again, bear in mind the timescales and find out how long you have to consider your decision and communicate these to your partner's employer if you are trying to come to an agreement with them as well.

Before you agree to any changes you also need to take a step back and think about the longer-term impact of your decision. Moving to a reduced contract might suit you now, but you need to be aware that your employer doesn't have any obligation to return you to a full-time post in the future. Reduced hours means a reduced salary, but also reduced pension contributions and may require insurance payments if you wish to work from home. Most importantly,

you need to ensure that your reduced hours reflect the responsibilities, variety and prospects of your current role. Don't fill up your hours with activities that slow down your career progression. In my environment this means finding the right balance between teaching and research. If you take on additional teaching, perhaps feeling guilty about the burden on colleagues, it will be difficult to be promoted in the future.

If you maintain a balance of teaching, research and administration that is consistent with a full-time post, there is no reason why you can't continue to be promoted while working reduced hours – the expected outputs will be scaled to match your working hours.

Think about the promotion criteria as you negotiate your new role and don't take your eye off the ball with regard to career-boosting opportunities.

To summarise, put together an application written from your manager's point of view as much as your own. Making a good business case for your decision will also help to reduce any guilt about asking for a flexible pattern as it should make sense for everyone involved.





Dr Catherine Smith

Process engineer (metallurgist), Alcoa Howmet Castings. She successfully reduced her working hours while maintaining her professional career in a project-based role.

“ I've worked at Alcoa Howmet Castings for 14 years in a variety of technical and manufacturing roles. We make castings for the turbine section of aeroengine and gas power generation turbine engines. For the last four and a half years I've worked part-time in a variety of flexible ways.

After the birth of my son I negotiated a reduction from full-time to 2.5 days a week. I work in an environment where production is running almost 24/7. It is a male-dominated engineering environment and I think that I was the first female engineer to ask for part-time work. In my request to work flexibly I tried to demonstrate how my previous role could still work on a part-time basis and I also gave other options of more project-based ideas to help my manager see how things could work. I highlighted how my strongest personal skills were in team working, good communication and organisation abilities – the ideal skills set for making this work.

I had been working for Howmet for 10 years at that stage so I had a lot of knowledge and experience that takes years to develop. In the end, I was very lucky and my boss developed a mainly project-based role for me that supported the work of the department. If you are trying to negotiate something similar, you have to recognise that it has to be a win-win situation for both parties. When an increase in engineering resource was needed a year later, I felt that it was important to help out and increase my hours by half a day. I said then that I would try and increase again once my son had started school if the business needed me. Once he was heading towards school age I realised that it was not appropriate for him to go to before- and after-school clubs or holidays clubs, so I had to solve the problem of school pickups and covering long holidays.

My organisation skills were critical to finding a solution. I put together a detailed calendar showing how my work days would look. I wanted to do full-time 6.00 a.m. – 2.00 p.m. during term-time but could work two days a week 2.00–10.00 p.m. during school holidays, needing 24 days unpaid leave to make this work. The calendar showed how I intended to take annual leave and where school holidays lay so he could see what impact it would have on the

department and workload. In the end it was agreed that I could have the school summer holidays off and do a few 2.00–10.00 p.m. days during other school holidays and was allowed 32 days unpaid leave in total. I had to demonstrate how this could work for my manager and the business, so I came up with lots of ideas rather than letting him have to think about it. The HR department said it was the most detailed plan they had seen.

Throughout the whole process, my manager has been fantastic. I'm lucky that he has a young family too and understands the needs of young children, which I think you only truly understand when you become a parent. I certainly was oblivious beforehand.

Working in a project-based role has worked really well for me as it would have been difficult to change my hours if I had provided a service to others on a daily basis. Even on days off I have always been contactable if the need has arisen. Generally, no problems have arisen but it's important to keep everyone happy. Flexibility is helpful too and it's always useful to have childcare plans in place for days when you might be needed at work. It can be challenging to keep things ticking over on your days off – again those essential communication and organisational skills keep things running smoothly. Before every day off I try to anticipate what needs might arise while I'm away and put plans in place to address them. I try to keep projects moving by planning ahead and requesting information or work from others so it is ready on my return.

The key to a successful request for flexible working is to think about the company and your manager as well as yourself and to put as much detail into your plan as you can. I thought long and hard about how to fit my working hours around school days and term times while still meeting Howmet's needs. My initial back-up plan was to re-train as a science teacher but I'm so glad that we have managed to come up with a mutually beneficial arrangement.





Andy Wreford

Manager, Alcoa Howmet Castings. He has successfully supported staff members to adopt flexible working practices.

“ Alcoa is an incredibly specialised technical industry, where there is a shortage of experience and skills. If we have high-performing people with the experience and skills available who would not be able to support standard working, flexible working gives us the opportunity to utilise these skills.

The benefits of retaining these skills and staff outweigh the challenges that flexible working can present. Staff who are involved in the medium-volume production of highly technical components need to be able to respond quickly and to work full-time to meet the daily requirements of their roles. However, there are other roles in areas such as continuous improvement that are project-based, allowing the employee to complete the tasks when they are available.

Another challenge is ensuring that there is good communication within the team to cover for each other including the flexible working employee. This allows critical decisions to be made by other team members to keep the project moving when the flexible working employee is not at work.

We would only reject a request for flexible working if it wasn't compatible with an individual's role. In these cases, we will move people into areas that suit their circumstances so that they can continue to work for us.

My advice for managers facing requests from their staff is to identify any project-based work, such as our continuous improvement activity. In most cases this is integrated into the current job responsibilities of a number of staff.

If this type of work can be separated and completed by the flexible worker it has the dual benefit of reducing the workload required from the other team members while retaining the skills of the flexible worker. It is also important to explain these decisions and the motivations behind them to the team, to ensure that they appreciate the overall benefit to everyone.





Sarah James and Matthew Wild

Sarah is a data specialist and Matthew manages a data centre at RAL Space. Both have successfully modified their working hours and patterns to cater for childcare commitments.

“ Our motivation was to keep our interesting jobs, while having some time at home with the children and some time for ourselves. We were able to negotiate our reduced hours in discussion with our managers – it was straightforward.

A number of people in RAL Space work part-time, sometimes with different patterns in and out of school term time so it is not viewed as weird to work flexibly. RAL Space uses a matrix management system where staff book their time across different projects. This means that it is unusual for someone to be full-time on one project all of the time, so the department copes very well with people being available for a day or two a week on a project. Everyone juggles here, even if they are full-time.

The benefits to us are that we've still got good, interesting jobs and income. Even when Sarah was only working a small number of hours she was able to build back up to more challenging roles without feeling totally out of touch.

The challenges for any working parents are the usual juggling of life and work priorities that affect anyone. Having a day a week at home each makes this much easier than it could be.

If you want to apply for a more flexible working pattern it's good to have a plan to present to your manager. Think through how it will work for you and your work.

In our area there is a lot of collaborative work that means that August is generally avoided for major deadlines and meetings – someone vital is bound to be away. This is probably a fairly common phenomenon so it's a useful argument if you would like to reduce your hours in the summer holidays.

Even if no-one works the pattern that will suit you best, it is definitely worth asking for your request to be considered. The worst your manager can do is say no. If they say yes the task of balancing life with work becomes much easier, and consequently life more enjoyable.

It is much easier and more enjoyable to work like this if your workplace culture trusts staff to work hard and get on with the job. Staff here are assumed to be highly motivated and I think that confidence is reflected in the effort that we give back.





Craig MacWaters

Electronic engineer in the technology department at RAL. He has adopted flexible working throughout his career and is an advocate of the benefits that it can bring, whatever your circumstance.

“ I've worked part-time for many years, but initially it wasn't in response to a particular situation – simply that I applied for a three days a week position at RAL. Prior to this “flexible” is a good way to describe my career – I'd done an HND and worked in manufacturing. I had a strong ambition to complete a degree and my employer was happy for me to spend alternate years working and studying. After getting my degree I worked full-time for three years, but then decided to step back and travel. I spent 18 months on this adventure before returning to the UK.

Although I'd been offered a three day a week post, it was soon clear that I needed a slightly higher income and RAL were happy to increase my contract to four days. A few years later I really felt the benefits when I had children and was able to share parenting responsibilities with my wife who also worked part-time. Even though my children are now at school I've maintained my 80% contract and it's a great credit to my employer that I've never felt any pressure to increase my hours.

The benefits now are that I get to increase my weekend by 50% and that I'm available to go into my children's school to support events, help in the classroom and generally play a much bigger role in their lives. I am also able to demonstrate to their peers that men as well as women can work flexibly and with relatively few men working as primary school teachers I think my presence, even occasionally gives some variety to their experiences at school.

Friends, who still view my part-time status with some bemusement, had suggested that my chance of progression would be reduced, but I've been promoted and don't feel that my reduced hours have had a negative impact.

My job is structured around the hours that I am available, my responsibilities and objectives are based on this and I've performed well enough to make promotion a straightforward process.”



Professor Robin Ball

Head of physics department, University of Warwick. His employer institution is a supporter of flexible working; recognised through its JUNO Champion status, which encourages better working practices for both men and women.

“ We support flexible working because we want to give everybody the best opportunity to do his or her work. The key guiding principle to making the flexible working arrangements is as follows: if it works for them and it works for us – this is what we should be doing. We have kept some excellent staff in our department precisely because we could offer them a flexible working arrangement.

And although at many places offering the flexible working option is a normal practice, in a physics department we have an extra consideration. The statistics clearly show that the proportion of women studying physics and working professionally in physics is relatively low. This tells us that something is wrong and we should be trying to rebalance it.

If there were magic bullets to solve this, then everyone would adopt them. But there aren't. For it to work we have to take a holistic approach that incorporates our interaction with schools, student recruitment, encouraging students to stay on in academia and promoting those who secure academic positions.

Relatively few of our academic staff are affected by circumstances that require flexible working, and in any instance every case is dealt with on an individual basis.

There is a danger that this creates a perception that anyone needed to take advantage of any schemes that we offer is pleading for special treatment. We work hard to communicate that although the arrangements might be “special” it not very special to take them up. The word “special” needs to become obsolete.

One of my challenges is to ensure that the merit-based system that we operate for recruitment and progression is in tune with an equal opportunity approach. There

is never any question of compromising our academic standards, so this can be a complex balancing act. The statistics show that all women are disadvantaged, even those without children so it isn't as simple as taking into account time on leave or working reduced hours. Female staff who have taken career breaks don't bring up equal opportunities when promotions are being considered, but this is something that the sector as a whole is starting to recognise. The next Research Excellence Framework has a strong equal opportunities element taking the impact of maternity leave on research outputs into account.

We ensure that our promotion criteria are clear and fair and we support staff so that the decisions are transparent. Those who are unsuccessful understand why and have feedback on how to improve their performance. New academic appointments are based on merit and open competition. We can't compromise on this, but we look for quality of research, which can be recognised even if someone has taken some time out of their career.

The situation for postdoctoral researchers is complicated by the nature of their funding, which is fixed-term and project based. A postdoc who gets pregnant has the right to full maternity leave, but what they don't get is the additional six months contract extension. I would be willing to support any researcher who wanted to suspend their contract for six months and then take it up again after maternity leave. We haven't had a case like this yet, but I am fairly sure we would get co-operation from the relevant research council to do this.

If the contract wasn't suspended it wouldn't be easy to extend the grant to enable the woman the same research opportunity, but again in individual cases we would look for a mutually beneficial solution. The sooner we can start to explore these, the better chance we have of finding a way forwards.

There is some good news, with respect to the PhD students, as we have been able to change our policies and

give them a continuation of their stipend for six months of maternity leave and corresponding extension of their studentship for six months. With respect to applications for new funding, all postdocs, recent mothers or otherwise, have a clear right to be considered first in-line for the succeeding funding, should the research group obtain it. If a research group has an outgoing postdoc and funding for a new position that really matches the skills of that postdoc, then the law is quite clear on our obligation to give them prior consideration.

As a department I'm proud of the work that we have done to promote equality and I hope that our staff and students feel that they could discuss the best options for them with their supervisors and managers.

Even though our positive approach is obvious at Warwick, partly through our Juno Champion award and through the promotion of positive role models, there is also an onus on individuals to ask for the support that they need. This is the case for anyone wanting a more flexible working pattern wherever they work. Take the initiative and work out what will make it possible for you to continue with your physics research, then ask for it to be considered.

My advice to other senior managers is to take the "whole life" view that we have adopted at Warwick. For every stage of a physics career from school to retirement we look for evidence that we are giving the people the right flexibility and fairness of opportunity.



IOP | Institute of Physics **Juno Champion**

Warwick is one of only six UK physics departments to be awarded Juno Champion status. The aim of Juno is to recognise and reward departments that can demonstrate that they have taken action to address the under-representation of women in university physics and to encourage better practice for both women and men.

Further information

- www2.warwick.ac.uk/fac/sci/physics/equality/staff_profiles/
- www.iop.org/policy/diversity/initiatives/juno/



Dr Marialuisa Aliotta

Senior lecturer in nuclear astrophysics, University of Edinburgh. Marialuisa took six months maternity leave after having her first child and returned to work full-time spending three days a week at home. She now works two days a week from home.

“ I knew that I wanted to return back to work and teaching as soon as possible after the baby was born, but I also wanted to spend some time with my child, as I was keen to enjoy maternity to the fullest. I just did not know how I could achieve both, until a secretary in the department told me about flexible working options and encouraged me to investigate.

As it turned out, my employer, the University of Edinburgh, has clear guidelines on flexible working arrangements and I made sure that I investigated possible options before going on maternity leave so that I could find a solution that was most suited to my choices.

I worked out how I would cover all of my responsibilities, such as supervising my research students, lecturing and demonstrating, and explained my plans to my head of school and head of research group. Both accepted that my proposals were workable and we agreed a six-month initial period.

I returned to teaching before my maternity leave had finished – this was my choice and allowed me to retain my teaching commitments and meant that my school didn't need to replace me. The course that I taught was familiar and required very little preparation. I simply had to be careful not to exceed the limits to how many hours I was allowed to work while on maternity leave. Now, almost two years later, I'm still enjoying the opportunity to work flexibly and regularly review arrangements with the head of school.

During pregnancy, maternity leave, and for a few months after the baby was born, I've had to stop travelling to do experiments at large international facilities, but I've been able to continue supervising my PhD students. This worked

well using Skype and through specifically arranged face-to-face meetings at the department. Correcting the thesis of one of my PhD students remotely also worked very well. My PhD students were very involved in the experimental work, and I felt that I made a good contribution by working on other aspects such as discussing the data analysis and writing the papers.

I'm helped because my partner is also an academic and he is equally flexible. He did not formally apply for the flexible working arrangements, but between the two of us we managed to look after our baby continuing with our working commitments without too much of a problem.

After maternity leave, I decided that I wanted to have a mentor and I started to work with one on a regular basis. It's been a great success: I got clear on what matters most to me and started achieving it. I now feel much more positive as a result.

My productivity and achievements have continued – six months after going back to work I started writing two PRL papers, one has now been published and the other has just received very positive referees reports and should be published soon. Of the three other articles that I've written during this time, one has been published and two accepted. I have also submitted a research grant proposal with the Leverhulme Trust and helped a colleague write a personal fellowship application with the Royal Society.

Working from home has been very productive as the distractions I faced working in a busy department are removed and I have the huge benefit of being able to spend so much time with my child while continuing to get on with my work.

Becoming a mother has made me realise that I needed to prioritise my time much more strictly. Anything that was unimportant, which I had been doing out of goodwill or that wasn't progressing my career has had to go. I'm much more focused these days. I also have a much better perspective on life and don't get as upset if things don't go to plan – I have things to care about that are far more important.

This increased focus has created time with which I've been able to achieve a long-standing ambition of developing a mentoring scheme for PhD students and early career researchers to help them become academics. I started a blog "Academic Life" (<http://marialuisaaliotta.wordpress.com>), which is flourishing. I've been invited to write a guest post on *Nature's* blog, which brought over 1000 visitors to my blog including enquiries from students about my writing workshops and programmes.

The last two years have been a fantastic time for me, but there are challenges. Now that my child is growing up I find it much more demanding to work from home, as toddlers

need a lot more attention than babies. It is challenging at times to keep with the pace of research and also going to facilities to conduct experiments still requires a lot of planning. So far, I have been travelling to experiments or conferences together with my partner so that he can look after our child while I am working – this requires a major level of organisation. Next month I'll be going to Italy for an experiment without my partner for the first time and I have already made arrangements to take my child to a local nursery. I hope it goes well.

I think that it is important to give current PhD students the message that it is feasible to have a family and to work in academia. There is a lot of flexibility because you have so much control over your working hours. It is up to each individual to be proactive and find the best solution for themselves and their families.

I would also encourage anyone to enjoy the maternity experience – it is a fantastic time, so do not worry too much about your career. Yes, it is true that for 1–3 years your career may progress a bit slowly and you may not have the level of flexibility to achieve the things that you want. But a scientific career evolves over 30–40 years and if you take off even five years to establish your family you can still accomplish a lot in your career. Starting a family is well worth it and extraordinarily rewarding.





Professor Cait MacPhee

Professor of biological physics, University of Edinburgh. Cait became pregnant with her first child while on a Royal Society funded fellowship and relocated to Edinburgh during her maternity leave to move closer to her husband.

“ I was a “trailing spouse” and followed my husband to Scotland, as I was able to move my fellowship funding. After four years in a long-distance relationship, becoming pregnant gave a real focus to finding a better long-term solution. We tried very hard to find my husband a job close to mine, but the industry he works in has very few options in the UK. So shortly before my maternity leave I found a new job, moved to Scotland and found somewhere to live. I was able to negotiate a position as a reader because of the funding that I brought with me.

I took six months maternity leave with my first child and a year later had another child and took maternity leave of about five months. The best solution for our family was for both my husband and I to remain in full-time work, so my children went into full-time child care. Even though my first maternity leave was somewhat frantic, my advice is if you take maternity leave, really TAKE it. Don't feel guilty about it and don't try to “just fit a little work in” during that time. Really take a break. The world is not going to end if you take maternity leave.

Making the transition when I did meant that the complication of covering teaching duties was eliminated. I had finished teaching in England before the move and didn't start teaching in Scotland in my first year. I was on maternity leave by the time my teaching at Edinburgh was due to start, so only started when I returned to work.

Everything has gone well, with my family all in one place, having two children and being able to develop my career. Four years after starting at Edinburgh I was promoted to professor. The mobility of fellowship funding meant that when a job came up in the right institution at the right time, I was able to move. My husband and I have no local family support to call on so we've relied on childcare and done everything else by ourselves.

I've also made lots of adjustments, particularly to my working hours. Before children I worked six days a week, from 8.00 a.m. to 7.00 p.m. Now I work five days a week

from 9.00 a.m. to 5.00 p.m. This is probably a change for the better. Despite working fewer hours, I've remained effective and competitive, as my promotion demonstrates. I've learnt to say “no” and can better discern between what is important and what doesn't really matter. In the early years of an academic career you try and do absolutely everything because you think that you have to, but with a family, your priorities change.

There are challenges, particularly with keeping my profile high as I have had to reduce my international travel. I have also had to make further adjustments since my children started school. The length of the school day and school holidays, which are out of synch with university ones, gave us the added challenge of finding a reliable childminder who could manage the wraparound care that we have all needed. We now manage as many of the school holidays between us, either by taking leave or working from home. Again, taking more holidays is a positive outcome.

It might look as though the timing of my children in my career was ideal, but when I meet people who are agonising about when and how they will fit children into their career, I tell them there isn't a right time. Whatever your plans, there is a lot of uncertainty – both in academia and in starting a family – and trying to control something as important as having children to fit with a career is not necessarily the right way forward.

Having said that the decisions about how to manage a family and career are deeply personal. Everyone finds their own solutions, so there is no prescribed way of negotiating a career path and a family.

Don't read this or any of the profiles here and think “That's how I should do it” because there is no right or wrong way. Your decision will be based on your own circumstances and if it works for you and your family then that is the right way.



Peter Hutson

Electrical design engineer, STFC. He has had experience of flexible working and the benefit this can have to someone with carer responsibilities.

“ I've worked at STFC for over 40 years. I'm now in the final stage of my career and for six months have worked from home for three days a week to provide 24-hour care for my mother who is 91 and suffers from dementia. Her condition means that she can never be left alone, so my son Barry and I alternate to ensure that she always has a carer present.

For two years I used my holiday provision to care for my mother when my son wasn't available until this became unsustainable. My supervisors explained the “working from home” option and helped me to make the transition – I wasn't aware that I could work from home with my circumstances. I now only spend one day based in the workplace and we've been able to manage my responsibilities so I can continue to work full-time.

Working from home has gone better than I could have expected, enabling me to provide 24-hour care for my mother at the same time. There are challenges – I'm managing the finances of two households, my mother's medical requirements and two houses and gardens, but working from home means that I've kept working. I've been

able to avoid choosing between two very unpalatable alternatives – finishing work altogether or putting my mother into a care home, which would have made her dreadfully unhappy.

It is difficult maintaining a career balance in my particular circumstances, but now that I am able to work from home when required I can use my leave allowance for a break one day per week (between 7.00 a.m. to 5.00 p.m.). The flexi-time system that operates at STFC means that I can organise my working hours to suit my particular circumstances.

My advice is to ask and apply for your legal right to work from home if you are faced with similar circumstances.

Your skills and experience are valuable to your employer and they could be more willing than you might think to explore ways to retain you, even with a very different working model.





Nadya Plotnikova

Nadya has two children, four and three months, and is on maternity leave. She has worked at Intel for 11 years as a software engineer.

“ My role at Intel is in the Software Solutions Group where we liaise with customers to ensure that their coding will work effectively and as efficiently as possible on new platforms as we introduce them. This involves some time spent on-site with the clients but because of communication technology means that much of my work can be done anywhere. The group is structured so that teams work with specific groups of clients – my area of specialism is bioinformatics, life sciences and materials so I find that my background in physics is really useful as it helps me to understand the science behind the models that my clients use.

When I had my first child I didn't feel that part-time working would be the best solution for me and my job, but I realised that the way that I had worked previously (often working 12-hour days and tied to production schedules) wasn't going to be easy. As soon as I felt my pregnancy was advanced enough to start to tell people about it, I sat down with my manager and we both spoke honestly about the challenges ahead. The corporate culture at Intel has always been really supportive and I knew that I wanted to continue working here. The main challenge was therefore to find someone to cover my projects during my maternity leave that lasted for 11 months. I discussed this with colleagues in other teams and put together a small team to cover the projects then worked closely with them for the months in the run-up to my leave to ensure a smooth handover. This involved structuring my work in a way that others could follow and understand, introducing them to the clients and ensuring everything was presented in an accessible way.

During my leave I did keep an eye on my e-mails, but there was no expectation from Intel for me to do this – I could have kept it completely switched off for the duration of my leave. However, there is a “safety net” for the company if they need to contact me in an emergency as my leave included 10 “keep in touch” days that were actually used to support the new engineer who substituted

one of the team members after he left Intel. The lines of communication were also held open for me and I always felt that if I had needed to get in touch, that this would have been easy.

A lot of the support for my return came from colleagues and again says much about the culture here. My colleagues were very supportive in the early days, helping me to learn about the technological changes that had happened during the time that I was away.

They were very patient and allocated a lot of hours to help me get back into work. This wasn't a formal programme and they didn't need to seek any approval or work to a particular scheme – it was just the culture to support me and to understand the new challenges that I was balancing alongside work. It is great to work with people who are happy to help and encourage me with my work – they see my child as my most important accomplishment.

Although I went back to work full-time when my daughter was less than one, I didn't want to put her into nursery at this point so my childcare came from family members. As I'm Russian, this wasn't a straightforward option. Luckily, I come from a very close family and my mother was able to come over to the UK to care for her when I returned to work. My daughter also spent a few months in Russia with my family – everyone has to find their own solutions to childcare and when you are back at work it is essential to feel comfortable about who is caring for your children. This was the best option for me.

Once my daughter was two she started at a local nursery and has settled well. One of the biggest challenges that I've faced has been the unpredictable childhood illnesses

– my role is customer focused, so I can't always take time away from work at short notice and my husband has had to share these responsibilities – his employer is a little less understanding. Sometimes it has been very difficult for both of us and we've had to rely on friends – luckily our network is supportive and people are willing to visit knowing that they will be part of our childcare solutions. Asking for time off to care for a sick child is still difficult to ask for, as it is for any parent, but working on fast-moving projects makes it particularly difficult – again supportive colleagues are key.

The things that have enabled me to achieve a work-life balance are the flexibility offered by my employer – outside specific appointments with clients I can work from a variety of locations, working flexible hours and splitting my working day; I often work in the evenings and take time off in the afternoon.

The supportive culture that I work in is also key, but this is something that I also contributed to for many years.

I've been with Intel for 11 years so I've developed a good network and given lots of support in this time. It's been important for me to recognise that this is my time to need support and not to be afraid to ask for it. The open exchange of knowledge and information with my colleagues really accelerated my return to work and I'm sure will help me return after my current break.

Family is really important to me and an important part of my survival as a working parent. Their support is important and helps me to solve problems as they occur. This also extends to friends who have been willing to help as they understand our situation. Again, it's about asking for help and realising that it's a sensible thing to do – and sensible friends appreciate this and step forward.

My career balance is achieved through strong relationships – I've worked on these relationships for years at home and at work, and they are now working for me.



Section 3

Resources and further support

This guide has been written to inspire you to take control of your career and find a balance that suits you and your family. In this final section there are links to websites and resources that will help you to manage your career break or achieve a healthy balance.

Resources and further support

Finding a mentor

The mentoring guide: Working Together

- www.iop.org/careers/mentoring/index.html

Learn more about chartered physicist

Guide to chartered status

- www.iop.org/membership/prof-des/chartership/page_51450.html

Change of direction to a career with more potential for flexible working

New Directions with more profiles and advice on mid-career transitions guides to CV writing, interviews and raising your professional profile

- www.iop.org/careers/

Getting involved in public outreach events

The IOP has produced *A Guide to Good Practice in Public Engagement with Physics* to help you work through the steps for developing and delivering high-quality and effective public engagement activities

- www.iop.org/publications/iop/2011/page_50862.html

Lab in a Lorry

- www.labinalorry.org

Flexible learning and development courses

- www.iop.org/membership/prof-dev/index.html and follow the link to online learning courses

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