What to expect (from your PI and yourself) when you are expecting

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Having children during the early stages of an academic track (as Msc/ PhD students and postdoctoral scholars – all called students from now on) is natural and wonderful but also adds a lot of challenges in combining family life with a scientific career. The challenges from the side of parents are numerous – from fatigue, health issues and lack of time and energy to financial worries, emotional turmoil and self-doubt. Some of the complexities arise from the pregnancy and childbirth itself and therefore are unique to female students. Yet many challenges revolve around raising children making this piece also relevant to partners of pregnant women and those fostering or adopting children.

One aspect of the journey to parenthood that is little discussed is the fact that it also affects the mentor or principal investigator (PI) of such students. Reduction in students time, focus and availability can have implications on the capacity to complete projects, reach deadlines, be competitive and secure funding. This is true for all labs and especially for young PIs before their tenure. Failure to effectively communicate with a PI during pregnancy and following childbirth often lead to mutual frustration and a decrease in the capacity of students to succeed in an academic track. On the other hand, when both sides work together to ensure success of both the student and the lab – the journey can deepen the trust and appreciation between both sides and increase productivity. *Hence the best way to get through this complex time successfully is by working together in the best possible way for both the PI and the student.*

Careful planning, as well as good communication and collaboration between the expecting parent and the PI can be a win-win situation by highly increasing the wellbeing and success of the students, and therefore the productivity of the lab. *However, pregnancy and childcare are often thought of as personal or complex issues that should not to be discussed, leaving students (especially first-time parents) with the burden of managing the challenges and making decisions on their research and career path without the advice of the people who can help the most and creating an uncomfortable situation between the PI and the student that can affect both in the future* . Overcoming the awkwardness and discussing the topic in a constructive manner, while taking into consideration the needs of the student, the PI and the lab, will help students expecting a new addition to their family to travel this journey in a more prepared and supported way and will increase their chances of success in the academic track.

We are three PIs from the Weizmann Institute of Science – we each have three children that were born at all stages of our academic journey – MSc, PhD, Postdoc and tenure-run. We now mentor pregnant students and expecting parents all the time. *We know that combining family with a scientific career is challenging – it was so for us and is so for our students. However, we also know that it is possible (no, you do not have to be a "super woman" to make it work) and rewarding.* The secret to making it work, we have found, starts with great communication between PI and student but also requires a lot of support, learning to balance your new roles, self-compassion and patience and most importantly - having faith in yourself. *We have put together some suggestions and ideas to enhance your capacity to combine the transition to parenthood with a successful academic track.*

Before arrival of the child

1. **Be forthcoming**: Often students find it quite stressful to approach their PI to announce that they are pregnant (or are soon to become parents). This may be because there is still a "stigma" in academia that if you decide to establish a family alongside a career than you might not be as dedicated enough to succeed. We know for a fact that this is not true. *Wanting to have children and be dedicated parents is in no way telling of your capacity to be a successful scientist.* It may also stem from the fact that clearly your choice to become parents also has implications for the PI yet they are only "told" about this quite late in the game. *Despite these difficulties it is essential to communicate the change in status as early as possible to allow for a collaborative process.* We have three main suggestions – first consider sharing with your PI that you are starting to plan having children from an early stage. This may sound strange but it will allow both of you more time to prepare for the change and allow the PI to be supportive in case things are not easy (need for IVF, loss of pregnancy etc…). Second, let them know as soon as possible and before other lab members – if they find out about it by chance they may be insulted and less helpful at this time. The sooner you share the news with your PI the sooner you can start discussing preparing for the change that is about to happen and the more likely you are to do it in a helpful and supportive way. Third, tell them outright that your choice to have a family does not mean that you do not take your scientific journey seriously. Ensure your PI that you are still highly motivated to continue and succeed in your academic career. Emphasize that you will do your very best to combine these two passions in the best possible way. You may choose to acknowledge that this change also will affect the PI and that you want to work together to make sure that the coming months are spent in the most productive way for both yourself and the lab.
2. **Set up a meeting to discuss strategies:** Your initial meeting of "sharing the news" must be followed up by actions. *You can increase your chances of success during the period until the child arrives by taking the time to think, plan and discuss strategies with your PI to make sure that you are using your, now limited time, well.* Also, discussing this topic helps to set correct expectations on both sides. The best time to talk about strategies for the period until delivery is in a dedicated meeting – about a week after you share with them the news so that both of you have time to prepare. Ask the PIs for a meeting to plan strategies for success as well as the time remaining until the arrival of the new family member.
3. **Prepare for your meeting:** Before the first meeting, think what <u>you</u> would like to happen until the child arrives. Remember that pregnancy (and other procedures, for example having a child by surrogacy or adoption) can be unpredictable and you may suddenly become less available for work due to medical conditions or other reasons. Taking those potential unexpected events into mind, try to think with yourself how you see the situation focusing on issues such as: *Do you wish to use this time to work really hard and complete your project? Is the project likely to be finalized in a short time frame (few months?)? Is there a chance that if you do not wrap up the project that you will be scooped or sidetracked? Are there other lab-members that you can maybe mentor to integrate them into the project? Do you prefer to take the time to slow down and prepare for the changes in your life?* All options are OK as long as they are openly discussed between you and the PI.

4. **Make a joint decision:** Once you have thought things through with yourself, it's time to share your thoughts with the PI. Bear in mind that there are issues that you may be unaware of such as time and money restrictions of the lab (like grant renewals, upcoming meetings and competition) so make sure to allow your PI to share such considerations. Openly discuss your options to enable you both to make a good decision about the upcoming months. Then, decide together on your near-future strategy. For instance: *Do you want to try and push for publication before the arrival of the baby? Would you like to add another person to the project? Do you want to give up the project and have someone else take over it?.* Do not be pressured into a decision that is wrong for you but be open to hear the perspective of the PI – they have a lot of experience and you want them on your side. Reaching a decision that is agreed on by both of you, even if it is not exactly what you had hoped for, will allow both of you to create an effective trajectory for the future months and make sure that you are working together to make this as successful as possible.
5. **Treat the due-date as a positive deadline:** Whether you jointly decide to try and push for submission of the paper before delivery or simply wrap things up in a way that will be productive, you can start planning towards the extended leave. *Make a realistic time-plan, and meet regularly to assure the plan is on track.* The best way to keep to your plan is by discussing and communicating with your PI through each step of the way.
6. **Make plans for the future:** Long absences from the lab make it hard to remember how things were done before – so leave your projects organized (for example, put your codes in a clear place, write down your current calculations in a way that you can understand when you return, keep careful notes in the lab notebook, freeze strains and organize reagents). If a project is not at a writing stage, try and do the main experiments before the arrival of the baby. This way, upon return it will be possible to focus on analysis and writing and not on setting up experimental systems that are more difficult and time-sensitive. *Make sure you have things that you can easily pick up on when you return – starting from scratch can be really hard.*
7. **Consider bringing another person into the project**: If you decide, together with your PI, to bring another person into the project, discuss all implications of this at length with your PI. Remember that bringing another person into the project can be highly beneficial for both of you (*in the end you are both on the same side – you both want the project to succeed and be published*!). However, it can also be demanding for you and raise complications regarding authorships. *If you are to get into this you must be sure that the PI understands the effort on your side and will protect your authorship on a future manuscript*. There have been multiple cases where lab members spent months setting up an experimental platform only to find out that someone has used that platform to create nice data while they were on maternity/ paternity leave, and that they have become a secondary author on another person's paper. Make sure to get assurances from the PI that this will not happen or discuss potential scenarios.
8. **Think of asking for technical assistance:** *If you have experimental projects, part time help from a technician during your maternity/ paternity leave, can be very helpful*. Some labs have technicians that can be used for such a matter. Discuss this openly with your PI and explain that for the lab, this promises that the projects will continue during the leave. Ensure your PI

that you understand that you must mentor the new person into the project and if required keep in touch with them during the leave to make sure that they are on track.

9. **Find people to be inspired by:** Although it sometimes feels that way – you are not the first person to try and combine family with an academic career. Many students have done it before you and have learnt, in the process, ways to make it work. *Look around you and find people that can be your role-models – these can be other students, family members, PIs or friends.* Try to see what helped them succeed in this mission. Consider approaching them to discuss their success strategies - you are not alone!
10. **Have realistic expectations:** Maternity/ paternity leave is not a holiday - in many cases, it is one of the most difficult and exhausting times in a young parents life. Post pregnancy hormones, health issues related to the pregnancy and giving birth, lactation and sleepless nights are a few of the challenges young parents need to deal with. *Therefore, parents and especially women following child-birth cannot and should not be expected to work during this leave.* Do not promise your PI to "finish up your manuscript" or "analyze data" during these months. Although it sounds good before the baby arrives, most likely you will not do it (or not do it well) leading to mutual frustration. This is especially true for first-time parents who may still not appreciate beforehand the demands on their time and psyche.
11. **Seek emotional support:** One of the hardest aspects of the months before a family change are the fears, doubts and worries that accompany the process – often amplified by the pressure of an academic track. While these are normal and experienced by all expecting parents, they can be exhausting and keep you from focusing on the practical things that you can do to improve your chances of success. *One way to deal with the psychological effects of the change is to find emotional support – this can be through a coach or a psychologist, a peer support group or spouse, friends and family.*

<u>Following the arrival of the baby</u>

12. **Keep in touch with the PI and the lab**. Keeping in touch with your PI and lab members following the arrival of the baby is important. *A lab that feels part of the process will go out of its way to help and support you.* Make sure to notify the PI and lab members when the baby arrives. Try to write to them at least once a month during your leave as a way to keep in touch. Ask to be kept on all group emails and WhatsApp messages so that you can stay in the loop – but notify everyone in advance that you may not answer or at least not at a rapid turnover. Consider inviting the lab to visit the new addition to the family. If you feel up to it and you live close to work, consider coming to visit your PI and lab members with the new child.
13. **Keep your options open but share your decisions:** It is important to note that it is extremely likely that first time mothers will want to take more than the minimal maternity leave allowed in their country, even if before delivery they felt differently. Having never had a baby before it is hard to comprehend the change you will experience. *Remember that by allowing yourself more time and flexibility to adjust to your new situation, you will likely be much more efficient and engaged when you are back to work.* Having said that – it is important to discuss the return date with your PI so that they, too, can make plans for progress in the lab and research.

14. **Live a life of gender equality:** Men now have the amazing privilege of taking paternity leave in most countries and institutions. The relationship that is formed with a young child in their first weeks makes a big influence on the relationship in years to come. True gender equality will only occur when both male and female students take m/paternity leave, care equally for their young children and share the burden of family upkeep. *We encourage all students expecting a child to take the legal opportunity afforded to you and start building a deep bond to your new child.* Parents that decide not to be the primary care givers or take official leave should still consider to take some time off when their baby arrives as the first weeks are extremely challenging for young parents and two parents can do better than one.
15. **Ask for help:** Ask or pay for as much help as you can get. *There are many support systems that can help you during your leave such as family, close friends or babysitters.* You will be surprised at how happy people are to help if you just ask and although it is hard to be on the receiving side, the first months in a baby's life are extremely challenging and near impossible to handle alone.
16. **Slowly start reconnecting to your scientific activity**: As the pains of childbirth slowly heal, the lactation becomes easier and the baby grows you may have a tiny bit more time on your hands. Consider taking this time, if possible, to slowly rebuild your connection to the lab and to your scientific activity. You can consider short scientific visits, having some short discussion with your PI, joining group meetings by Zoom or taking on small tasks. This can balance a bit the demanding period where your full commitment is focused on your baby, keep you updated with the scientific activity of the group and send your PI a message that you are still committed to your academic career. *However, it is important to remember that readiness to return is very personal and depends on many factors (including your health and the temperament of your baby) and does not reflect on your dedication to science.* The will to return to work may come sooner for some parents and take longer for others. Do not compare yourself to other parents or to how you thought you would be before the baby arrived. Do not feel guilty - accept your pace and communicate with the PI that you are looking forward to coming back to the lab, that you did not "forget" the lab or your project, but that you need a bit more time to be ready to go back to doing scientific work.

<u>Coming back to the lab:</u>

17. **Plan the return**: It is very difficult to return after a long absence to something vague, such as starting up a new project. *Make the return easier for yourself by making a clear working plan.* One month before the return from leave suggest to meet once or twice with your PI to discuss what work will look like after the return. Make sure to also discuss ways to overcome missed courses and other study related commitments where applicable.
18. **Learn to prioritize tasks:** Take into consideration that the first year of parenthood is often quite difficult – the baby usually is still not sleeping, babies in daycares suffer from many viral infections in their first year leading to days off for parents – so the new life requires adjustment to create a good work-life balance. *You can be productive during this time by discussing goals and prioritizing tasks with your PI.* To prevent frustration of both sides, the

flexibility of the academic system can be taken into consideration, for example working during the evenings instead of mornings when kids are sick or having one long work day a week.

19. **Learn to be "good enough":** Many scientists are highly ambitious individuals that often see the world in a binary fashion (0/1). Once children come along you have to start seeing the world on a continuum. You cannot be the most successful scientist and best parent at the same time but you can be a happy and fulfilled scientist making important discoveries hand in hand with being a fantastic parent. *You can be an outstanding combiner of a scientific career and a parent if you just learn to be "good enough" in each.* Remember that young children grow up very quickly and scientific careers last tens of years. Make your goal to stay in the game rather than win the match. Remember that a good work life balance does not mean that it has to be set at a fixed point – rather that sometimes you will invest more in your family and at times you may need to invest more in your science – over many years this will even out.
20. **Learn time management techniques:** Following the addition of a new child to the family, time becomes a major limitation. Time management techniques can help you maximize your time and lower your stress levels. *Many such techniques exist – take time to find one that is right for you!* One great way to preserve your time is to learn how to say "no" to things that are not helpful or important to you but you find yourself doing just because you do not want to let people down. Learning how to say "no" nicely and politely but being a protector of your family time and lab time is an important part of combining the two worlds.
21. **Create a strong support system:** It is very hard to balance children with an academic career if you attempt to do it all by yourself. Start talking to your spouse ahead of time about their involvement in child rearing. Discuss ways that they can help you balance your work and your parental role (for example stay with the child one evening by themselves to allow you to work until late that day). *Your child will also gain a lot by having two dedicated parents rather than having a tight bond with only one parent.* Some spouses cannot or will not contribute to child-care. In such cases the support system can be close friends or family that are willing to help out in the first, most difficult months. If there is no one that can help consider hiring help. It is a financial investment but one that will allow you to stay sane and fulfilled in the long run.
22. **Continue to discuss with your PI how they can support your academic growth:** It is not easy but it is doable to combine family with a productive scientific career. *However, to succeed it will be crucial to have your PI continue to support you.* Therefore, ask them not to forget you when thinking of opportunities such as attending a conference (Conferences may offer remote online participation, childcare or travel fellowships for spouses). It is normal that after birth some parents will feel that they are ready to get back to science faster and some will feel that they need more time – do not feel forced into acting differently than you feel is right for you.
23. **Put everything in proportion:** An academic career is not a 100m race – it is not over that quickly. It is more like a marathon and you can take pit-stops and still make it to the end. The most difficult time with a new child is the first year – after that things start to get easier. So brace yourself and remember that it is all temporary and after that you can go back to enjoying two things that you very much value in your life – your family and your own success.

Taking responsibility for the changes ahead, good and open communication with your PI and proactive learning of new skills will help get you through this period and will increase your capacity to succeed. When you combine scientific work with family life you become a role model for others after you and help ensure a more sustainable future for science.

GOOD LUCK!

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