Editorial: Mental Health for Everyone

As the year 2018 winds down, we have a lot to look back on and celebrate. Just think of the scientific successes, birthday celebrations, and festivals throughout the year. Just in time for the holidays, this issue of the newsletter invites you to party hard!

Are you skeptical? Think you’ll be spending Christmas in the lab (page 3)? Well, just because the holidays can come with some stress (pages 5 and 11), it turns out that taking some vacation is actually great for you (page 19). Just don’t hit the bar too hard, or be prepared to suffer the neurological consequences (page 13). Looking for inspiration? Check out some of our authors’ favourite holiday traditions around the world (page 8), or get inspired in ways to spice up your PhD defense (page 15). Thoughtfully select some gifts for loved-ones (page 10), or just take a shortcut and go with our suggestions (page 14). Or does having a holiday just mean that you finally get to rest a bit? Keep your mind active with some great books (page 17), a comic (page 25), a tricky crossword puzzle (page 16), or reflect about your New Year’s resolutions (pages 6 and 7).

Finally, let’s lift a glass to the first ever successful EDGE exhibit (page 22), the PhD retreat (page 24), and some successful recent graduates of MedNeuro (pages 18 and 20). However (and wherever) you choose to celebrate, we’re with you every step of the way!

Happy holidays, and enjoy this issue!

Constance Holman
Editor-in-chief

Contest

Like what you see? Interested in contributing? We are always looking for new authors and submission on anything related to the topic of neuroscience. Send us an article, some beautiful shots from your microscope, poems, short stories, critiques, reviews—anything! The best contribution will be rewarded with the book The Future of the Brain edited by Gary Marcus.

Come on and write like there’s no tomorrow! Send your contribution to cns-newsletter@charite.de to win. Deadline for submission for the next issue is Jan 25th, 2019.

This issue, we just couldn’t choose, and we have two winners: Jelena Brašanac, who explored whether taking a vacation is ultimately good or bad for your (page 19), and Ivette Martorell Serra, who gave us some tips for time management (page 5), as well as sharing an interesting tradition from her homeland (page 8).

Congratulations, and thanks to everybody for their contributions!
Setting up the cables, I peeked outside at the ashen December sky over Berlin. The other electrophoresis chamber fizzed and hummed gently, and the mice shuffled in their cage. It was Christmas day, and I was set on spending it in the lab where I was doing my Master’s thesis.

The sun was too bored to illuminate the quiet that was hanging soothingly over the lab benches, which would be bustling with activity in just a few days’ time. Frank, the security guy, poked his equally bored head in. “Oh, you’re also here. Again. Does your boss force you to be here?” I smiled and assured Frank that no, my boss was not forcing me to work on Christmas any more than the late evenings when he had encountered me there before, and that yes, I wouldn’t perform any dangerous procedures while working by myself. After he returned to his rounds in the building, I thought that Frank and I must be very different: him, forced to work on a holiday by his job requirements, and me, the little science hero (ha!), being there solely by my own volition. However, while I was preparing tubes to collect the gel pieces, I started an honest questioning of my motives of being in that slightly creepy empty building instead of back in Romania, with my parents.

I considered myself lucky to have been there by choice. Many young career scientists don’t have the luxury of choice, be it because of the infuriating power difference to their dictatorial lab heads, or simply because they don’t have enough vacation days for it to make sense to travel abroad to their families. However, for many of us, the pressure is not that evident, but hidden in messages such as “Well, doing science has to be a passion, and if so, you won’t mind the long and sometimes unpredictable working hours.” Consequently, many feel that working while the vast majority of society is feasting and celebrating is a logical choice in order to advance our careers, hanging by a thread as they are.

Cursing at the umpteenth PCR condition that hadn’t worked, I continued questioning my own motives for being in the lab. If I tried hard to believe in pure reason, I was in the lab because it was the logical choice; I had access to all sorts of devices that were otherwise overbooked and only usable in limited time slots. This was my chance to eliminate a large chunk of my to-do list for finishing my Master’s thesis, while also getting to analyze the phenotypes of the mutant mice I had generated in the process. However, that was not the entire truth, and the rest of it kept needling me from my subconscious mind. When I forayed into those depths, I realized that the real motivation came from my headstrong rejection of the value of taking holidays in general. The core feeling that I was trying to avoid was that holidays are just the sad travesty of a joyful time, all due to my memories of holidays with my family.

As a Romanian growing in a large-ish city, the holidays always meant a great deal of work for the sake of traditions that felt more like fulfilling a social expectation in front of random acquaintances than an act of community connection. All the grown-ups around me were stretched to their limits because of juggling all the festivity preparations along with tasks related to the end of the work year, which entailed plenty of paperwork deadlines, not just Christmas parties (see article on page 5 for how to handle things better – article on stress management around holidays). The situation was always particularly nerve-wracking for my mother, who was desperately trying to convince people to get life insurance in a time of the year where everyone is set on spending. Add to that the classical Eastern European expectation of the lady of the house to present squeaky clean premises and a zillion different dishes to guests, and you have a recipe for disaster. It usually all unfolded through that stage where everyone felt like unwilling actors in a play leading to catastrophe - wrong presents or forgotten crucial ingredients for cakes - and culminating with the refusal of different family members to participate in certain tasks (of which I’m not innocent myself). This brought about feuds for long after the fir tree had dried up and died.

Not the Most Wonderful Time of the Year

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My role in this was mostly getting yelled at for not putting up the Christmas decorations efficiently enough so that my mom could vacuum the glitter they’d inevitably drop before guests arrived, and to be chastised for not even trying to be appreciative of all we had and therefore in a good mood. All the while, joyful Christmas carols sung masterfully by the Madrigal Chamber Choir (https://bit.ly/2OZPDh7) were playing in the background, covering my parents’ generalized displeasure. This was symptomatic of the whole Christmas absurdity: the show we put up of being a perfectly happy, ideal traditional Romanian family. Visits were received, visits were paid, cakes exchanged, carols were sung, all while I did not understand a iota of why we were going through these motions and friction year in, year out, without ever reaching a moment of genuine contentment with it all. It should come as no surprise that I was left with a rather cynical view of holidays.

**Tweaking the Traditions**

Amidst cell culture and media bottles, I decided to skip the cynicism for once, and wondered: what is, though, the real value of taking holidays? Is it all about the psychological and physical rest? (see article on page 19). Do any of the traditions really make any sense? I started thinking of when and why they had been created in the first place: the small, closely knit community, where large families, unlike my own, participate in ritualistic activities, like enjoying particular foods at precise times during the year. These are, in a way, seasonal “scripts”, and they might not end successfully if somebody doesn’t play their part. Aside from the ancestral community team-building character, I reasoned that, these days, running the “holiday scripts” may just be the respite we need from our very dynamic work lives, in which we are pushed to be very creative in solving complex problems. This is why, in the best cases, having a good familial atmosphere on holidays may be the perfect complement to all the unfamiliar tasks and situations we face in scientific research.

I crashed on my lab desk chair, feet up, and sipped on a very forbidden-in-the-lab hot chocolate. I mused: Must one follow the holiday script to a tee in order to reap the benefits? I immediately started suspecting that one mustn’t, unless one lives in small and strongly religious communities. In that moment, I understood what I believe to be the crucial holiday shortsightedness in my family: the insistence on acting as if we were part of such a small traditional community, when, in fact, we had plenty of freedom to decide which parts of tradition we respected and which ones we didn’t. We are a small family that’s not tightly embedded in any precisely outlined community. In addition to that, my dad’s a convinced atheist, orthodox Christianity never did much for me, and my mom’s a one-time-a-year churchgoer. And all the while, we are surrounded by people who probably wouldn’t have ostracized us if we had decided to skip the Christmas roast one year or go on Christmas vacation somewhere other than to our few relatives. So I pondered: could I tweak the script for myself? After all, allegedly every family that makes zacusca, the traditional Romanian grilled vegetable spread, has their own secret recipe, so why not personalize one’s adherence to traditions as well?

I can’t say I made a fantastic plan and then jumped on the next flight to my hometown of Sibiu. There was still too much of the same old stress going on at home on Christmas for my taste, and I knew my folks would not immediately warm to tradition tweaking. However, every year since that PCR-laden Christmas day in my Master’s, I have organized Christmas dinner at my place for my expat friends, with the occasional German friend strewn in. It’s been quite wonderful for us to have no fixed rules about what to bring and what to do, and I delight in being creative in the kitchen when I have enough time. When I don’t, somebody else takes over, and we play games, and occasionally go to the cinema or order takeout in instead of cooking ourselves. Nowadays, I am thinking of using the leverage I have from my parents missing me on Christmas in order to organize a different kind of holidays for us, with less cooking, baking and cleaning and more ordered food and trips and outdoor activities. Ever since I decided to tweak my traditions, I haven’t spent a single Christmas in the lab, and I don’t think I will anytime soon. Even if it’s just in favor of letting my scientific creativity replenish while I read a book with my two cats curled up next to me.
5 Tips to Reduce Stress During Holidays

As scientists, we’re all accustomed to a certain degree of craziness in our day-to-day lives. We set our alarms to go off at the crack of dawn and race to the U-Bahn to catch the daily train that leaves us with just enough time to brew a morning coffee. In the break room, we humbly brag about the dozen projects and pending publications to our colleagues before bolting out to hastily prepare for the meeting we scheduled with our PI weeks ago that we totally forgot about. Leaving the meeting, we are overcome with an annoying feeling of imposter syndrome and engage in a match of tug-of-war between positive affirmations and crippling criticism. Finally, after a long afternoon of experiments, we clean up our lab spaces and mentally prepare ourselves for tomorrow...

Such is an example of a typical day in the life of a scientist. Between our numerous responsibilities and obligations, it’s natural for many of us to feel overwhelmed at various points of our careers. Holidays are meant to provide us with opportunities to relax and to avoid burnout. Research has shown that vacation is associated with increased productivity and job satisfaction [1, 2], suggesting that appropriate amounts of downtime can improve workplace performance. Unfortunately, with the advent of modern technology, it’s becoming increasingly difficult to leave work behind in the workplace. Still, there are certain principles that individuals can practice to manage stress during the holidays.

1. **Set Some Ground Rules**

With the prominence of social media platforms and email in today’s digital age, disconnecting from our work colleagues can be close to impossible. Rather than abstaining from checking our emails cold turkey, we should strive to develop healthy email habits by scheduling specific times during our holidays to check our inboxes. This will allow us to stay informed of things happening in the lab without obsessing over our emails on an hourly basis.

2. **Set an Out-of-Office Message**

Even though this might seem trivial, setting an automatic email response will help your colleagues refrain from trying to contact us over issues that can be handled without our assistance. It has the additional benefit of reminding everyone of our holiday plans.

3. **Prioritize and Plan Ahead**

Keeping a detailed schedule of work that needs to be completed before the holidays will not only make you more efficient, but will also alleviate the stress of incomplete work while you are on vacation. Aim to plan at least a month ahead to give yourself ample time to complete tasks over a longer period of time rather than all at once.

4. **Do Something New**

To completely switch off from work, doing something different from our day-to-day routines may clear our minds and give us new perspectives. Of course, it is not necessary to climb a mountain or to learn how to surf, but simply trying out that yoga course or going on a day trip could be enough to help us break free from the monotony of our lives.

5. **Be Realistic**

While we should try our best to follow these tips and disconnect over the holidays, it’s important to be realistic with our expectations. We all know how difficult it is to put aside our lab problems and obligations, especially when unexpected complications and deadlines arise. In these instances, instead of avoiding them and getting overwhelmed, we should schedule a time to address them properly. By setting a limited amount of time to solve an issue we will increase our productivity and enjoy the rest of our time off free of guilt.

Disconnecting and managing stress over the holidays might not be an easy task. Starting with these simple tips may help us improve the quality of our time off and fill us with positive energy for the return. As the saying goes, “all work and no play makes Jack a dull boy”!

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New Year, New Lab Routine?

The beginning of a new year seems like a promise: twelve fresh, blank, shiny months, waiting to be filled with adventure and happiness. Christmas refilled energy stores, now it’s time to start the new year! But what about the past twelve months? What happened, good or bad, which goals did we achieve and which did we miss? Is there anything we want to change or start anew in the next year? A new year is always a good time to reflect one’s life, to think about self-improvement and to find new motivation to start things.

Promises, Promises...

Around the world, many people choose to make New Year’s Resolutions. People use it to become a “better version” of themselves. They plan to start doing more “good stuff” – more sports, healthier food – and stop “bad things” like smoking or drinking too much alcohol. Historically, the origin of this tradition lies in different religions. At the beginning of a new year, promises were given to the respective god(s), like paying back debts or giving back borrowed objects. One of those gods, by the way, was the Roman god Janus, the eponym of the month ‘January’ [1].

Very typical new year’s resolutions are the ones I already mentioned: lose weight, do more sports, quit smoking. More creative ones could be “reducing plastics in every day’s life”, “run a marathon”, “learn how to order a beer in Gaelic”. In Germany, DAK/forsa-surveys of the past years show that the trend for most famous resolutions is changing. The top three goals for 2018 were “reducing stress”, “having more time for family and friends” and the classic “more exercise/sports”. Additionally, some persons also planned to reduce their media consumption via smartphone, computer and TV [2].

Reflecting Critically On Your Lab Life

If we now think about our daily lab life, what resolutions could we make? Maybe you already are the perfect scientist and colleague: ambitious, successful, well-organized, always friendly, well informed about what’s going on in the scientific world, cooperative. Well, then just stop reading. But maybe you sometimes feel that there is room for improvement.

Some of the above-mentioned resolutions would also work in lab life: reducing stress (organize your workload better), have more time for family and friends (go home at one point – or invite family and friends to the lab), do more sports (take the stairs, do lab yoga). But there are also more lab specific ones: read more, drink less coffee, take well-chosen breaks, plan your experiments well, keep your lab book well-organized, smile at your colleagues (even in the morning!), come earlier, stop procrastinating, take a short walk outside during the day, hand in your paper/thesis. I’m sure you have a lot more ideas for yourself and others...

More An Art Than A Science

Although the tradition of making goals is quite popular, there are many people failing to fulfill them. Different studies have shown different percentages of failure, ranging from 50% to 88% [2, 3, 4], which is, no matter which source you given to the respective god(s), like paying back debts or giving back borrowed objects. One of those gods, by the way, was the Roman god Janus, the eponym of the month ‘January’ [1].

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Why do we bother making resolutions at all?

So why bother having resolutions at all? Although the chance to succeed is not too high, it is higher than at any other time point of the year. This was the result from a study, in which two groups of “resolvers” were compared. The first group made their resolutions at the beginning of the year, the second group at any other time. From all the participants in the first group, 46% were successful. In contrast, only 4% of the second group succeeded to fulfill their goals [5]. So, if you want to change something in your life, tell Janus and start right away in January.

But how can you be part of the twelve to 50% of successful resolvers? Here are some tips: If you decide for resolutions (like ~40% of Germans and Americans do [1, 2]), you should only pick the most important ones. If you chose more than one, they shouldn’t be too tough, when combined. For example, if you want to give up smoking, you shouldn’t also plan to reduce coffee at the same time. Also, the goals should be well defined and doable. Instead of having the goal “write my doctoral thesis”, you could break it down into smaller pieces and plan for a few pages a week. Next step: keep track of it! It might help you to have an app, which supports and reminds you with your goals (have a look in your trusted app-store). Also: tell others about it. Or plan to do things together, if the goals are similar. See lots of other tips in our article on the next page.

In my opinion, it is good to reflect on our own life every once in a while and to think about motivating goals. Maybe you cannot cure cancer in the next year. Or Alzheimer’s disease. Or something else that is big and important. But probably you can do something for yourself, to be a happier, healthier scientist, which, in the end, might lead to being a more successful one. So why don’t you just choose a few goals, maybe one or two, to improve your daily lab life? One of it could be: bring cookies more often for your lab mates. Of course, make them healthy ones.

Felicitas Brüntgens
PhD Student, AG Schmitz


[4] https://on.wig.com/ZPQK1Sr
A Practical Guide to Sticking to New Years’ Resolutions

Many people take Christmas and/or New Year’s Eve as a reason to reflect on their lives and the year passing, including both what was great and what wasn’t whatsoever. Usually, this comes together with the realization that we would wish the upcoming year to be different from the current one. Quite often this involves wishes like “quit smoking”, “exercise more”, “eat healthy”. However, most resolutions are prone to failure. What does it actually take to stick to them? It seems so simple! Unfortunately, what is simple is not always easy. Maybe we can help you with this article on your way to reach your goal beyond February.

Be Specific!
What exactly do you want to change? While “quit smoking” seems pretty clear already, does it mean the regular, everyday cigarettes, or does this also include omitting the occasional “social” smoke? What exactly does “more” mean in terms of exercise? Is it taking the stairs instead of the elevator or hitting the gym every day for 2h? Define precisely what your game is!

Be Honest with Yourself!
Why do you want something to change, and what makes it really worth it? Do you rely on others too much? Are you likely to have your confidence boosted by others over your ambitious plans to lose weight/quit smoking/become healthy? Then you might want to keep your ambition to yourself, since people might reward your efforts long before reaching your goal. Do you need social control to battle your inner couch potato? Or would you rather be entirely demotivated if people knew about how you did not quite withstand those bad old habits on a single day? Are you bored when doing sports all alone? Then find company to make it more fun and make yourself stick to your training plans. The key is to do a critical self-evaluation, and figure out how to best incorporate your social circle into your plans.

Be Realistic!
By no means you are going to do 30 min exercise every day from now on. Believe me, you will not. Maybe over the first one to two weeks, but this “new routine” is very likely to disintegrate as soon as holidays are over and day-to-day business hits your timetable. Try to consider your current life and try to figure out what kept you away from having your New Years’ resolutions already implemented in the past. Do not enthusiastically overestimate what you will be able to accomplish in a busy and stressful week. Smaller and more realistic goals keep you on track.

Find Words for an Immediate Positive Outcome Instead of Avoidance of Long-term Problems
The human mind is able to imagine really long-term outcomes. If you engage your cortex, you can think of all the positive consequences sticking to your New Year’s plans will have in the future; However, instead of telling yourself how quitting smoking will decrease your risk for lung cancer, rather think of something positive and immediate like how great your food will taste all of a sudden, or how much easier it will be to keep your breath when while climbing the stairs.

Talk About It! ...and...

Do Not Talk About It!
In terms of being realistic and honest with yourself, try to figure out what kind of a person you are: Do you rely on others too much? Are you likely to have your confidence boosted by others over your ambitious plans to lose weight/quit smoking/become healthy? Then you might want to keep your ambition to yourself, since people might reward your efforts long before reaching your goal. Do you need social control to battle your inner couch potato? Or would you rather be entirely demotivated if people knew about how you did not quite withstand those bad old habits on a single day? Are you bored when doing sports all alone? Then find company to make it more fun and make yourself stick to your training plans. The key is to do a critical self-evaluation, and figure out how to best incorporate your social circle into your plans.

Prioritize!
Do you start out the year really well, but suddenly, find that there is no time to fulfill your resolutions because you have too many appointments? Simply consider the time it takes to stay on track (beforehand!). Consider this an important, not-to-be-cancelled appointment with yourself! Many people tend to take others’ issues and problems more seriously than their own. Yet, you should be the most important person for yourself.

Have a Backup Plan Ready!
Couldn’t make it to the gym because of appointments? I bet you knew beforehand that it was going to be a busy week. Plan ahead and go twice the week before to make it count! And seriously, create a “repository” rather than a debt you owe yourself, but which you are unlikely to repay. Be prepared for occasional unforeseen inconveniences by coming up with alternatives that are still compatible with your aims. No time to shop and cook healthy? Choose a pre-packaged salad over pizza! Deadline stress? Go outside for 5 min walks instead of having a smoke! Caught a cold? As long as it’s not too serious, do short low-cardio body weight workouts. Try to have such back-up strategies in mind before you need them!

Enjoy Yourself!
Be prepared that some laxity might be necessary from time to time. With all motivation and effort and discipline, you’re still human after all. Breaking the “rules” occasionally does not mean you have to quit the race, but only that you’ll finish a bit later. Get back on track and continue! And after all, make sure you still enjoy yourself to make the next year no less than awesome! Happy New Year!

Bettina Schmerl
PhD Student, AG Shoichet

Stick to your New Years’ Resolutions by:
- precise goals
- self-reflection
- realism
- good feelings NOW
- finding support
- preparation
- priorities
- self-care and fun

www.medical-neurosciences.de
CNS Holiday Traditions From Around the World

Christmas Means... Scaring the Bejeezus Out of Your Neighbours

I am from Canada, and my family celebrates the holiday in a fairly secularized manner like many others. We usually visit friends or family on the evening of the 24th, and open gifts the morning of the 25th, with a big turkey (or vegetarian equivalent) dinner that evening. On Boxing Day (December 26th), we traditionally take a walk on the (freezing!) beach to shake ourselves out of a food coma. Not terribly exciting, but lovely nonetheless.

However, in Newfoundland and Labrador, the neighbouring province to mine, there's a pretty weird Christmas tradition called "Mummering". During the 12 days of Christmas, groups of people disguise themselves and go out calling on their friends and neighbours. We're talking face coverings, gender-switched costumes, and efforts to disguise one's voice. Sometimes the Mummers will put on a little skit, but more usually they will barge into someone's kitchen to play traditional folk music and/or dance. The hosts have to guess the identities of their guests, and the evening usually ends with everyone sharing snacks and liquor.

It's pretty wacky and fun, but in my opinion Mummering costumes are extremely creepy. Whatever makes the holidays fun, I guess!

(Poland) Constance Holman
PhD Student, AG Schmidt

Persian New Year's – Taking the Seasonal "Spring Cleaning" Too Seriously

I am Iranian, but was born in Germany. From my family, I know that Iranians love to celebrate. The best example is their extensive way to celebrate the entry in a new year, which goes on for three weeks. I experienced this the fullest when I visited my family in Iran during so-called Norouz (Persian New Year's Eve, which coincides with the spring equinox).

One week before, we begin preparing a table called haftsin, or ‘seven S’s': Seven plant-based items beginning with an “S” in Persian are placed on a table, each one with a specific symbol: Senjed (dried fruit of the oleaster tree) for love, Sib (apple) for beauty and health, Sir (garlic) for medicine and taking care of oneself, Samanu (a sweet pudding made from wheat germ) for affluence and fertility, Sumac (a Persian spice made from crushed sour red berries) for sunrise of a new day and Serkeh (vinegar) for patience and wisdom. But probably, the most important item is Sabzih (lentil sprouts growing in a dish), which symbolizes rebirth and is used for Sizda Be-dar, also known as Nature Day thirteen days after Norouz. Painted eggs, candles, hyacinth, goldfish, sweets, and a book of the Persian poet Hafez are also included in the display. Some of my numerous aunts usually send pictures around to show their nicely arranged haftsin table.

Chaharshanbe suri (literally meaning red Wednesday) is the most exciting part of Norouz, which I never got to experience in Germany with my parents. When I visited Iran during Nouruz, we set off fireworks and jumped over large bonfires in my uncle's backyard on the eve before. However, Iranians don't do that only because it's fun and exciting. While singing "Give me your red color (a red face colour is the symbol of healthiness) and take back sickly pallor", we aimed to purify ourselves for the coming year.

On the thirteenth day after Norouz, on Sizdah Be-dar, Iranians must go outdoors, ideally to the water. In fact, it's bad luck not to. Since my family lives at the Caspian Sea, we went to the beach, which was flooded with families playing badminton or throwing frisbees, barbecuing, making the traditional âsh soup, and of course, drinking plenty of tea. While couples knot the green Sabzih sprouts from the haftsin table to solidify their unity, single girls do it in hopes of finding a spouse by the following year.

(Germany/Iran) Anahita Poshtiban
PhD Student, AG Plested

Tió de Nadal (Christmas Log): Feed, Poop, Repeat.

In my family and many other Catalan families, the gift-giver on Christmas day (or Christmas Eve) isn't a friendly looking guy with a red suit and white hair, but a friendly looking log called tió de Nadal or simply caga-tió. If that doesn't sound bizarre enough to you, the story gets even weirder when I say that this log "poops out" little presents for the children after being beaten with a stick at the pace of the caga-tió song. To be able to poop out the gifts, the kids feed the caga-tió with a little bit of food every night starting from December 8th (Feast of the Immaculate Conception). Strangest (or most magical) of all, the children do all of this without any hesitation or doubt.

(Catalonia, Spain) Ivette Martorell Serra
MSc Alumna, Medical Neurosciences
Navarathri: Celebrating The Power of Women

Growing up in India means lots of school holidays (one or two every month!) for festivals of every religion: Hinduism, Christianity, Islam, Buddhism, Sikhism, Jainism, and Zoroastrianism. One of my favorite festivals, which I cherish from my childhood days, is called Navarathri or Durga Puja (in South, East India) or Dussehra (in North, West India), a 10-day long Hindu festival. Dussehra/Navarathri is observed all over India in celebration of the victory of Lord Rama over the demon called Ravana (in North, West India) or the victory of Goddess Durga over a demon called Mahishasura.

In my family and in other south Indian families, we celebrate Navarathri by worshipping the Hindu Goddesses Durga, Lakshmi and Saraswathi, who all together symbolize the power of women. Durga is the Goddess of courage and valour; Lakshmi is the Goddess of wealth and Saraswathi is the Goddess of knowledge, art and music. Many families display colorful dolls, figurines of Gods and Goddesses called Golu in their homes, similar to the nativity scene during Christmas. As kids, we used to have a kid’s corner at golu, where we could be creative and have an elaborate display of miniature city streets, zoos, markets, etc. Usually, families, friends and neighbours visit each other’s homes to admire the golu, exchange sweets and gifts. Kids dress up as Hindu gods or goddesses or mythological characters. On the 9th day of the festival, which is dedicated to Goddess Saraswathi, everyone is supposed to place their books and musical instruments in front of the golu, and avoid reading, playing music, or practicing any art form. The next day of Vijayadasami (tenth day of victory) is when we are supposed to open the books, play music, and perform art symbolizing the auspicious start of new things. As is with all the other Indian festivals, Navarathri is all about getting together and having good food and sweets!

Walk the Goat: Not-So-Christian Winter Traditions in Romania

Modern-day Romania suffers from a schizoid split in that many Romanians believe themselves to be profoundly devoted to Christianity, but inadvertently practice some pretty obscure, superstition-laden rituals that are of pagan origins. And while we’re not talking anything involving blood sacrifices, one ritual in particular used to scare me badly when I was a kid: walking the goat (mersul cu capra), which is performed every year between Christmas and New Year’s.

For starters, a spoiler alert: there is no real goat involved in walking the goat. It is merely represented by a human-sized puppet made of a clattering wooden mouth jutting out from a pile of rags with eyes, under which a man hides in order to operate the mouth and sing the part of the goat (see picture). The goat is traditionally accompanied by most men of the village, who play loud music and sometimes also wear costumes. They form a procession through the settlement that ends up in the courtyard of one of the largest houses in the community. There, the goat’s play is enacted. In contrast to the negative symbolism associated with the goat in Christian tradition, Romanian tradition views it as a mythical harbinger of good fortune for the year to come. For that, though, it has to be metaphorically killed (just like the year that passed), then mourned, then revived, which is all accomplished by singing and playing region-specific songs, all while the goat noisily taps and clatters. You can see one version here: https://bit.ly/2QUE1xY and here https://bit.ly/2yV56jn.

While small villages used to have only one capra procession, settlements nowadays have several of them due to the difficulties in organizing too large groups. To top it off, just like many other Romanian village traditions, this one has been brought into the cities and persists to this day. Of course, there are even more people willing to participate in goat walking in the cities than in any village. Now try to imagine several of these very loud processions (https://bit.ly/2yG2W2X), with all of their music and yelling and clattering, moving about in a communism-era maze of blocks of flats, and you might understand why the day of mersul cu capra was not exactly likely to give children a feeling of safety.

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We all have this one person in our family for whom it is hard to find a gift - for me, it's my dad. No matter how much in advance I try to find the perfect gift, I always end up buying it in the last minute. At this point - one week before Christmas - I am usually past asking him for wishes (“No, nothing specific”), asking his girlfriend (“I hardly came up with a gift myself”) or googling “gifts for men” (alcohol or electronics). However, recent research suggests my struggles can be solved a lot more easily.

Try to Find a Present for Yourself.

While I writing this, I can imagine you wondering about this unconventional idea. A giver-centered gift transfers something about you (the giver) such as a book by your favorite author or tickets for your favorite band. A receiver-centered gift on the opposite focuses on the wishes, the personality and the hobbies of the gift receiver, such as a book by his or her favorite author [1].

Commonly, people prefer giving receiver-centered gifts. They give the giver the option to show their interest in the person and demonstrate how well they know the receiver. In other words, it enables to show a certain level of caring about the receiv- er. In contrast, gifting something giver-centered can seem like an easy pick and less personal. This perspective is not only true for the giver, but transfers to the receiver. When asked what type of gift they favored, receivers showed clear preferences for something focused on them [1].

So, Where is the Tricky Part?

Receiver-centered gifts are only preferred if they actually represent the receiver. More drastically, a gift that fails this purpose can cause the relationship between giver and receiver to worsen. Gifts are seen a representation of the relationship quality. So, a good gift shows understanding and similarity in the relationship, while a bad gift can cause the receiver to question these things. However, this may only be true if the receiver is a man [2].

What is the Solution for This Dilemma?

Despite being less popular at first sight, giv- er-centered gifts can promote relationship close- ness and even satisfaction. In this context, gift-giving can be seen as an act of self-disclosure or bonding. By giving someone a book of his or her favorite author, the giver shares a part of them and invites the other person to engage in this hobby together [1]. This kind of gifts certainly helps to find a gift for someone complicated, however you might want to be even more creative.

Going Away from Classical Gifts

Most givers prefer material gifts, as they are seen as something stable and conform to the general idea of a present [3]. In contrast, gifting experiences is seen as more unconventional and thus less popular amongst gift-givers. Despite this fact, experiential gifts have been shown to have a more positive impact on relationships than material gifts. The authors argue that emotions evoked during consumption of a present outweigh emotions while receiving a present. This can extend to material gifts if they cause strong emotions for example by relating to a memory or shared experience such as a hand-made photo album. While I hope you are slowly getting more open for alternative gifts, there is usually one central question left before the final decision.

How Much Money Should I Spend?

It is a common belief that more expensive gifts are also more appreciated by the receivers. These presents seem to reflect the value of a dear person more and are seen as more thoughtful in the eyes of the giver. However from the perspective of the gift receiver, the anticipated price of a gift plays a less important role in judging its value. One very simple explanation for this mismatch is the comparison with alternative gifts. The giver usually chooses between many options and in the end might pick the more expensive one. The receiver however does not know about these alternatives – from his or her perspective it is either

Finding a gift can be easy - if you pick for yourself


W A N T E D: The Perfect Present
Why You Should Think About Giving Unconventional Gifts

Mental Health Around the Holidays

According to popular culture, the Christmas holidays are supposed to make us all feel warm and cheerful. But unfortunately, for many individuals, it can be a difficult time for managing mental health. Why is this the case? The arrival of the holiday season represents a time of higher stress and exposure to sometimes difficult situations. But does this directly correlate with mental illness? Interestingly, studies have found two major patterns. First, there seems to be an overall mood worsening during this period of the year. However, contrary to popular belief, there is simultaneously a decrease in the overall utilization of psychiatric emergency services and admissions [1].

Yet most can agree that the Christmas season seems to offer a unique combination of factors, ideal for the appearance or worsening of psychological symptoms or disorders. Among the most discussed are:

1. Depression

It is a myth that suicide increases worldwide during the holidays [2]. However, it is thought that some factors could promote a dysphoric mood. One factor is loneliness. For many people, the holidays are a chance to spend time with family and friends. It can be difficult for those who are alone to enjoy this time, especially for older individuals, when mobility and health issues make it more difficult to travel to be with their loved ones. Another common stressor is grief. Again, this can have large effects on seniors, who can see their inner circle reduced. Furthermore, unemployment, financial hardship and the social expectation of spending large amounts of money on gifts and celebration is often compounded by shame or unnecessary debt. What’s more, marketing and over-commercialization warp perceptions of a “normal” life, depicting images of perfect families and setting unrealistic expectations.

Major Depressive Disorder with Seasonal Pattern (also referred to as winter depression or Seasonal Affective Disorder) is identified as a type of depression that occurs in line with seasonal changes. The symptoms usually occur during the months with less sunlight (i.e. around the Christmas holidays in the Northern hemisphere) and improve with the arrival of spring.

2. Social Anxiety

The factors that trigger social anxiety are so varied that it is difficult to describe a typical patient in terms of symptoms or personality traits. This time of year is difficult for many people; however, those with social anxiety can obsess to the point of disability. There are plenty of triggering situations to be found during Christmas, the most obvious being the high number of social events, but also large crowds in public spaces.

3. Compulsive Shopping

Compulsive buying disorder (CBD) is characterized by excessive buying behavior that leads to distress or impairment [5]. CBD occurs year round, although it may be more problematic during the holiday season. The classification of CBD continues to be debated and the DSM-5 does not recognize it as a behavioral addiction.

4. Alcohol and Substance Abuse

All the seasonal stressors added to the continuous presence of alcohol at social events represent a challenge for alcoholics in recovery (see also our article on page 13). However, alcohol consumption is also cited as a stress reducer around the holidays. It is an important time for those who need help with their drinking behavior to reach out for extra help. Interestingly, according to some studies, the illicit substance most used at Christmas events is cocaine [4].

What Happens After “The Most Wonderful Time of the Year”?

A rebound in psychiatric consultations following the Christmas holiday often accompanies the preceding decrease [5]. And though some people may experience “holiday blues” that fades at the end of the season, others will have profound feelings of sadness or anxiety that will not simply disappear with time. Talking to a mental health professional can help understanding how well someone is coping with recent events. Luckily, mental health services don’t stop during the holidays and often help is just one phone call away.

In Berlin, we have, for example, the Berliner Krisendienst. This is a 24/7-available hotline that offers service in times of psychosocial crisis, free of charge, in many languages.

Further information can be found under:
www.berliner-krisendienst.de/en

[1] Deisenhammer et al., Neuropsychiatr 2018
What are your first memories of the holidays? Usually, when it comes to our early childhood, we have to blindly rely on our family members to tell us about our lives. Only a handful of occasions remain as “snapshot” memories, where we can remember a single event, but can’t normally place them into a specific context. But even here, it is unclear whether those sparse early memories are true memories or a kaleidoscope of family anecdotes and photos. False memories may be insidiously recalled from infancy due to the reconstructive nature of memory [1].

Fake First Memories
Would you believe individuals who claim they remember the moment they started to walk for the first time? Researchers are skeptical whether this is even possible. According to several studies, a first memory date encoded earlier than three years of age is improbable. But a result from a very recent study shows that 40% of subjects claim to remember events from age two to three [2]. For researchers, these subjects have most likely fictional first memories, because of something described as childhood amnesia. This phenomenon refers to the inability of adults to remember episodic memories from early childhood of the age of three and earlier.

A Memory Like a Sieve
At the age of two years, children are able to recall recent events, although they need gentle encouragement to retrieve their memories. Over the next four or five years, children become better at recalling and describing important events in their lives. By the age of seven or eight, most children have well-developed autobiographical memories with the same levels of recall and forgetting seen in adults. It was observed that as children grow and mature, their autobiographical memories mature as well. By the age of eleven, autobiographical memory shows the same level of development as seen in adults [3]. Although young children can remember events before the age of three, they won’t retain those memories into adulthood. This loss of early autobiographical memories is commonly thought to happen at age seven to nine. In a research study, younger children appeared far more vulnerable to forgetting than older children [4]. However, the underlying reasons for childhood amnesia that occur in this supposedly critical age period of seven to nine remain a mystery in spite of decades of research.

Memorable Theories
Research on how childhood memory develops is a particularly nascent and controversial field. This is probably due to the complex nature of memory formation as it is sub-divided into encoding, storage, consolidation and retrieval of information. Furthermore, it is also influenced by the level and focus of our attention, our emotions and social environment. Whereas some models focus on neurobiological and developmental factors, others view social aspects to be more influential on the ability to form and store memory during childhood. For instance, older theories posited that children are only able to store generic memory and overwrite their old memories with fresh ones [5]. Generic memory provides a scheme based on experience resulting in general knowledge such as “on New Year’s Eve people set off fireworks”. Other ideas hypothesized that cognitive schematic reorganizations of memory retrieval occur toward adulthood due to gained social and linguistic competencies [3]. However, newer and more scientifically-grounded findings cast doubts on both mentioned development-based theories. Firstly, because the hypothesis that young children have generic memory only has not stood up to empirical tests, and secondly, the basic ways of structuring, representing, and interpreting reality are consistent from early childhood into adulthood [4].

Are All Memories Created Equal?
Looking at the cognitive demands involved in memory retrieval tasks, researchers divide the recognition of a memory stimulus into two different mechanisms: familiarity and recollection [6]. While familiarity reflects a more global measure and is context-free, recollection reflects the retrieval of qualitative information and is context-dependent. Imagine you are on holidays and lie on the beach. You notice a couple next to you. Immediately you have the feeling that you have seen the couple before but cannot remember who they are. This automatically elicited feeling is familiarity. While trying to remember who these people are, you begin retrieving specific details about your previous encounter. For example, you might remember that they were sitting next to you on the airplane. This search process is recollection. Familiarity and recollection rely on different networks of brain regions that still develop as children grow to adolescence [7]. Interestingly, dissociation of these two mechanisms has already been seen in 7-8-year-old children, although it is not clear whether this occurs already before.

Another interesting theory that has gained attention recently is the social interaction model which focuses on the parenting style regarding the narrative construction of memory [3]. Two styles of mother talk, one described as elaborative, the other as more pragmatic, support different types of memory narration from children. The pragmatic style of mother talk is more driven to extract relevant information for ongoing activities and associated with less responding by the child during memory-related conversations. In contrast, “elaborative parents” ask for the when, where, with whom and what provides the basis for storytelling and constructing narratives. Since narrative retelling allows us to rehearse important memories and retain them longer, memories that are not rehearsed become inaccessible over time and can be quickly forgotten as a result.

Efforts to Make Lives Memorable
At present, a multitude of theories exist about how childhood memories stick with us, ranging from inevitable and unalterable developmental effects to how parents brought us up. Thinking about the story of how I fell into a stinging nettle bush while learning to bike on two wheels, I am happy not to remember everything from my childhood. But if there is a chance that we can really make the happy moments of our children’s early lives more memorable, I think we should strive to preserve and cherish those events that are otherwise quickly forgotten.

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Your Brain on Booze

To what extent are the different "types" of drunk from different drinks genuine chemical effects, or simply social dynamics?

Huzzah, the festive season is fast approaching and it's time to revisit the delightful memories of last yuletide. For many of us, the certainly mature and in no way irresponsible decisions made during our winter celebrations might have had a little ethanol persuasion. What of it?

Gearing up to Silvester, you're much less likely to start on the red wine before 5 PM if you want to make it to the fireworks, or whack out the gin if you want to avoid tearing up in front of your supervisor, declaring your undying love for them, or confessing you have no idea what you're doing at the Christmas party. But what exactly is it about these particular poisons that affect our brain and behavior?

Well, according to a study by Ashton et al. 2017 [1], who investigated the feelings associated with consumption of alcohol from 29863 respondents from 21 countries, different types of alcohol do indeed affect how we feel and act.

The Juice with Your Gin
Alcohol has long been known for its supposed relief of negative emotions, and boosting of positive ones. This is not surprising, for as soon as the alcohol crosses the blood-brain barrier, it is thought to cause a release of dopamine in the mesolimbic (reward) pathway. Its inhibitory effect in the prefrontal cortex lowers inhibitions in the "rulemaking" center, but ends up reducing the body's natural serotonin levels leading to altered mood states in the long term.

The percentage of alcohol, the amount of sugar and other ingredients found within the drink, and the volume consumed over time all have important roles to play on how it makes ones feel. The liver can only process so much ethanol in one go, so the excess travels around your bloodstream via small intestine, and eventually up to the dome where your mood is regulated.

Spirits (>40%), have a higher percentage of alcohol than wine (~12%) or beer (~5%) and are often consumed fast, or with a sugary mixer. This will contribute to a faster, stronger feeling of intoxication. Additionally, drinking a stimulant (such as an energy drink) can mask your feelings of inebriation, allowing you to drink more.

Getting to the juicy details, sugary mixers spike blood glucose levels, whether they be a lemonade or sweetened pineapple juice in your piña colada: this causes the body to rush to reduce blood sugar. Alcohol impairs regulation of blood sugar levels, especially in acute consumption, as glucose cannot be as easily mobilised for use. This means that sweet extras are more likely to lead to hypoglycemia and a low mood state [2].

Dancing with Demographics
Ashton's study further unearthed a stark demographic variability: the likelihood of feeling more emotional after drinking was most increased in those who were heavier drinkers and who had not attended/completed high school. Women and those aged between 18-24 also reported having a higher incidence of all emotions, except aggression (and tiredness in the youngsters) [1]. It is interesting to note that women are more susceptible to the (negative) medical consequences of alcohol use in general [3].

Those from South American countries Brazil and Colombia associated alcohol consumption with more positive emotions such as feeling sexy, energized and relaxed. On the other hand, participants from Norway reported feeling more aggression, and the ones from France more restlessness (author's note: this study had small samples sizes - a cause of cultural stereotypes?) [1]. While it's from media, our friends or family, we have grown up with stereotypes and expectations [4], and the "proper" way to respond to alcohol is embedded in many cultures around the world.

Social Dynamics
Being able to consume calorie-rich fermenting fruits without dying led to tolerance of ethanol in our evolution, known as the "drunken monkey hypothesis" [5]. Yet, our individual "cocktail" of expectations does affect how we respond to the chemical onslaught in general. For example, even though participants of Sayette's study [2017] reached the same level of blood alcohol content, the degree of impairment varied greatly along with reported expectations [6]. Behavioral outcome from alcohol is time-, situation- and human-dependent. Our expectations often have larger effects than the drinks themselves. Simply put, the more you think a drink will make you energetic, sad, chatty, relaxed, or sexy, the more it will.

In Ashton's study, about a third of people reported feeling angry or aggressive on spirits, while 40% of people said they felt sexy while consuming this form of alcohol. However, spirits were, in general, more likely to elicit positive emotions than white/red wine and beer. Red wine drinkers were more likely to report tiredness than white wine drinkers [1]. It has also been found that participants expect wine to have positive effects on relaxation and sexuality [7]. Perhaps not surprising we have retained this culturally, as "enotherapy", or "treatment with wine", stretching back to the ancient Egyptians [8].

Last Call
All right, so now we are beginning to understand how alcohol differentially affects our brain and behavior, depending a tad on who you are, where you come from, what you've grown up with, and what else is going on. The authors note, however, that "respondents may have also undertaken other activities while consuming specific drinks such as dancing, socializing and drug use, which may have affected emotions reported to be associated with each drink type". Alcohol consumption does not occur in isolation!

Although not all cocktails were created equal, dependency, liver and cardiovascular disease, fetal alcohol syndrome, mental illness, and memory loss are just a few of the medical risks of alcohol. In the end, ethanol is ethanol. Friends, drink responsibly!

Amelia Elizabeth Young
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Neuroscience Gift Guide

Having a hard time picking out something special for your friends (or enemies) in the lab? Well, you can dive deep in to the psychology of finding a perfect gift (see page 10) or you can take it from us. We’ve performed a highly non-scientific survey of brain-based gifts available online. From weird to wonderful, a few of our favorites here. Note: all artwork is subject to copyright and belongs to the artists credited on accompanying links.

**Thoughtful Gifts:**

- **The Brain Made (Very) Beautiful**
  - [https://bit.ly/1DdLj2m](https://bit.ly/1DdLj2m)
  - For the very luxurious gift to your favorite art-loving neuroscientist, Greg A. Dunn’s etchings are a safe (and wallet-emptying) pick.

- **Molecular Jewellery**
  - [https://bit.ly/2OJO0d0m](https://bit.ly/2OJO0d0m)
  - Pick your favorite molecule and wear it with pride!

- **Eureka: Coffee**
  - For those (like me), who tend to make discoveries due to a combination of serendipity and caffeine.

- **Clever Stickers**
  - Never get challenged on your scientific views again.

- **Histological Cell Phone Case**
  - For when the Nobel committee calls ...

- **Scientific Pins and Buttons**
  - Do you want the world to know that you are a mean pipetter? Now they will.

- **Women in Science Book**
  - For the smart ladies (or budding feminists) in your life.

**Questionable Gifts:**

- **“World’s Okayest Neurologist” T-Shirt**
  - [https://etsy.me/2R8DMe3](https://etsy.me/2R8DMe3)
  - Ah yes, that’s what I look for in my medical professionals. The bare standard of professionalism.

- **Human Head Keychain**
  - [https://etsy.me/2CzAZXp](https://etsy.me/2CzAZXp)
  - I can only imagine that this would be useful for solving arguments about anatomy at a party. But then I can only conclude that it would be a really awful party.

- **“I’m Studying Neuroscience, Pray For Me”**
  - [https://etsy.me/2yVJ2KE](https://etsy.me/2yVJ2KE)
  - For your career choice, no. For your choice in t-shirts, maybe!

- **Brain-Shaped Bowl**
  - [https://etsy.me/2S9EaKJ](https://etsy.me/2S9EaKJ)
  - For serving strawberry Jello or Rote Grütze.

- **Neuroscience Diva Puzzle**
  - Almost all women neuroscientists I have met have been amazing, hard-working people and this puzzle just seems like an insult to their intelligence. What’s more, it only has 30 pieces.

- **Dopamine Thong Underwear**
  - … with matching prolactin bra?

- **Brain-Shaped Sealing Wax**
  - [https://etsy.me/2AnJ6Vz](https://etsy.me/2AnJ6Vz)
  - For thee finishing touches on ye olde Publications

- **Sh-- List Sticky Notes**
  - [https://amzn.to/2ENXpXQ](https://amzn.to/2ENXpXQ)
  - The amazing thesis NSFW tags work like a charm while reading papers and marking important stuff. Just don’t bring them to lab meetings.
PhD Graduation Traditions Around The World

It’s that glorious time of the year again. After years of hard work, toiling away in the lab or behind computers, and literally burning midnight oil while writing grants, paper(s) and your dissertation, the time has finally come to appear before your PhD thesis defence committee. In Europe and the US, the usual rite of passage is to suit up or don formal attire on the day of the thesis defence. The post-defense celebration usually involves going out with family friends for dinner, and quite frequently hitting a bar after that and getting (very) drunk.

But wait. Is that it? What about grandiose ceremonies, larger-than-life PhD regalia and fancy speeches? Or is it that in most countries, dissertation defense days are more about expression and verification of what one has learned, and less about pomp and splendor? Let’s take a look at how PhD defence days go down across different countries, though of course, some differences exist between regions and schools.

Finland

In my opinion, nothing can top the grandeur of the Finnish PhD award ceremony. Where else in the world can you claim that you received a sword in addition to a top hat while defending your PhD? The sword actually symbolizes the graduating fellow’s right “in rigorous research...[for what is considered] good, right and true”. Oh, and both men and women are required to carry a sword on that day [1].

Netherlands

A PhD defense ceremony in the Netherlands is quite a formal affair. In addition to a proper protocol that needs to be followed for the ceremony, professors are addressed as hooggeleerde opposonen (rough translation: highly-learned opponents) while people who only hold a PhD are addressed as hooggeachte opposonen (highly respected opponent). The external examiners are ushered in by a pedel (beadle) who carries a ceremonial mace.

The person defending their thesis is also accompanied by two paranimfen. A fitting analogy for the paranimfen would be a person’s best men or bridesmaids at a wedding. They are there to answer questions on behalf of the soon-to-be-PhD in case this person gets unwell and can even defend him/her physically. They also assist in taking care of practicalities in the days leading up to the PhD defence. One hour after the PhD defence begins, the pedel declares Hora est and leads the examiners out of the venue. Then the supervisor delivers a speech called laudatio followed by a reception and the day usually culminates with a party [2].

Germany

No formal ceremonies exist that involve students or their supervisors wearing robes or hats. One reason could be that not all doctoral students finish at the same time even if they are part of the same PhD program. The PhD candidates are, however, required to write their dissertation and publish it as a book after their PhD (unlike the Netherlands where candidates have to do it before the dissertation defence). The freshly minted PhDs frequently wear a black mortarboard hat that is adorned with details from their thesis topic, and usually prepared by friends or lab mates [3]. The mortarboard is often called dokturnut and is an old tradition that has picked up over the years. Lab colleagues and friends would, sometimes, spend days diligently working on the mortarboard whose preparation only requires creativity [4]. From quirky to downright hilarious, these hats may serve as a great conversation starter post-PhD defence and an amusing keepsake.

UK

In the UK, the defense dissertation is usually called a viva voce and usually requires one internal and one external examiner. The supervisors and members of the public are usually not present during the viva voce and it can be anywhere between two to four hours long. After the oral exam, the candidate has to leave the room briefly and is then updated on the outcome of the viva (pass, pass with minor revisions, pass with major revisions or fail). Usually, post-viva celebrations come with the usual hanging out with families and friends and going out for drinks/dinner [5].

Italy

Step aside gowns, hoods and mortarboards! Italy has a very interesting tradition of awarding laurel wreaths to graduating students. These wreaths symbolize wisdom, victory and success and are reminiscent of the way they were conferred to Greek Olympians, Roman conquerors, orators like Cicero and poets/philosophers like Dante. From quirky to downright hilarious, these wreaths may serve as a great conversation starter post-PhD defence...

Photo credits:

continued on page 16 >>
Sweden
As if you weren’t already wowed by swords and laurel wreaths, allow me to present “the nailing” tradition in Sweden. This just refers to the nailing of doctoral theses to a wall approximately three weeks before a candidate’s defense is due. (For folks who thought this was a reference to ceremonial nailing of the candidate himself, sorry for the disappointment). The thesis advisor also signs the thesis with the words Må spikas which translates to “may be nailed” before the nailing [8]. Swoon-worthy much?

The actual PhD defense involves an opponent (external examiner) and an examining committee. The candidate speaks for 10 mins and introduces his/her topic and the key methods used during their thesis. Then the opponent explains the candidate’s research for 30 mins (or puts the research in a broader perspective) followed by the opponent questioning the candidate for an hour. Then the examining committee asks a few questions for 10 mins and after some deliberation decides whether the candidate has passed or failed [9].

What do you think? Are graduation ceremonies at Charité too understated for your taste? Have you seen (or participated in making) any great hats lately? Have I missed any fun traditions from your home country (I know I certainly have)? Let us know! (cns-newsletter@charite.de)

Zara Khan
MSc Alumna, Medical Neurosciences

Crossword Puzzle

1. Which animal model did Eric Kandel use for his famous experiments to understand how memory works?
2. How is the chemical synapse between motor neuron and muscle fiber called?
3. Which hormone is produced in the pineal gland and regulates sleep and wakefulness?
4. Name the reflex that can be used to identify diseases of the spinal cord and brain in adults but also exists as a primitive reflex in infants.
5. Which sense develops first in a fetus during pregnancy?
6. One of the main pathological characteristic of Parkinson’s disease is a loss of neurons in the substantia nigra that contain which neurotransmitter?
7. Name the most common type of brain tumors?
8. State the method that uses electrodes placed along the scalp to record electrical activity of the brain?
9. Which animal has the longest neurons?
10. Which nerve tract connects left and right cerebral hemispheres, enabling communication between them?

References:

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___ continued from page 15 ___
Your CNS Editorial Team

Your newsletter team is changing! During our last planning meeting, we decided to shake up the editorial team. Claudia (far left) has left for a career in professional scientific publishing. Constance (second from right), currently the editor-in-chief will be stepping back over the next few issues to focus more on writing (and actually working on her PhD). The extremely talented Bettina Schmerl (second from right), Alex Masurovsky (middle) and Ioana Weber (far right) are taking over.

We look forward to working together in the coming year, and putting together exciting new issues of the CNS!

The Editors

The CNS Book Review

Great Myths of the Brain

- Christian Jarrett

This book, first published in 2015, was written by Dr. Jarrett who holds a PhD in Cognitive Neuroscience and has worked as a postdoc, science writer and editor. This casual introduction to Neuroscience has a very friendly tone and comes with literally hundreds of cited studies. It is divided into several subsections: there’s the defunct myths (like the idea that thought resides in the heart and not the brain), the myth-based brain practices, myths that won’t die, myths about mental illnesses and disorders, myths about the structure of the brain, myths about food and technology and so on. The first chapter guides you through beliefs once held true, such as whether the brain is the cradle which pumps spirits around the body. Mind you before you roll your eyes at some of these myths, know that their proponents were extremely accomplished scientists and philosophers of their respective times, including Golgi, Da Vinci and Aristotle.

The section on myth based brain practices talks about trepanning (creating holes in the skull to dispel spirits or intracranial pressure), phrenology (deducing one’s personality based on measurements of the skull), and leucotomy (cutting part of the healthy tissue of the brain to relieve mental illness symptoms) among others. The first chapter guides you through beliefs once held true, such as whether the brain is the cradle which pumps spirits around the body. Mind you before you roll your eyes at some of these myths, know that their proponents were extremely accomplished scientists and philosophers of their respective times, including Golgi, Da Vinci and Aristotle.

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The most interesting section in the book is “immortal myths”. Not to be confused with vampires, zombies and the like, but rather about pervasive myths that do not seem to die. However, most of them, like the ever-so-popular myth that “we use only 10% of our brains”, are utterly false. No, Albert Einstein did not say this. No, Dale Carnegie’s claim about it in the “How to make friends...” is wrong. No, movies like “Lucy” with Scarlett Johansson and Morgan Freeman or “Limitless” with Bradley Cooper, are just wrong when their characters proclaim that somehow using more than those basic 10% of your brain will make you smarter, sharper, more adept at languages and so on. The author also covers other popular myths such as that right brained aka left-handed people are more intelligent, creative and tend to die early. The part about gender differences in brain wiring is thoroughly entertaining and informative. There are tons of other interesting myths debunked here and should you only read a single part of this book, let it be this one.

Forthcoming chapters are equally intriguing with Jarrett providing a balanced analysis of the hype around mirror neurons and explains the rather novel concept of an enteric nervous system. He discusses glia cells, being much more than something that holds the brain together and whether the brain is the pinnacle of biological engineering. The final section deals with myths about mental disorders and illnesses including popular misconceptions of stroke, amnesia, autism, Alzheimer’s disease and (my personal favorite) that chemical imbalances in the brain can lead to anxiety and depression.

The text is accompanied with a series of delightful images featuring MRI scans and tech devices, photographs of lesioned brains preserved in museums and also images of surgeons performing lobotomy on patients. Jarred provides all references at the end of every chapter, should you want to read up more. This may or may not be slightly annoying to you, especially if you are reading it as ebook. This is a perfect book to give away to a friend or family who is interested in Neuroscience and Psychology but wants a gentle account of myths and folklore associated with Neuroscience (free of the jargon). I would whole-heartedly recommend this book. It’s a fantastic read!

Zara Khan
MSc Alumna, Medical Neurosciences

Image: https://amzn.to/2LVhuv

www.medical-neurosciences.de
10 Facts About Networking

Getting a job without proper networking is possible, but not very likely. After earning my MedNeuro PhD in 2017, I decided to go a different path than anyone I knew. So it was clear I needed to make new contacts. I was actually not a fan of online networking and even wrote an article about it (December 2016 CNS Volume 9, Issue 4, Networking in the Digital Era). Let’s cut the story short: I changed my mind. Here I am, sitting in the Cambridge offices of Cell Press, living my dream as the Editor of Trends in Molecular Medicine!

1. Online Networking is a Must
Online job portals are an invaluable tool for networking. Joining online discussion groups will help you find like-minded people and mentors. This is especially important if you are aspiring to break into a field you are not familiar with. I made a number of contacts via discussion groups, sending invites to people with interesting job descriptions and sending invites to conference speakers. Chatting with them helped me define my goal and strategy and find the perfect job.

2. Get Invited to Conferences
Your networking contacts will be able to draw your attention to meetings, you would have missed otherwise (again, this is especially the case when breaking into a new field). I was invited to meetings via LinkedIn contacts that turned out to be a great source for new contacts.

3. Go to Conferences That Are Outside of Your Expertise
Whenever you see an announcement for a meetup, hackathon, or conference that is for free or at a low cost: Go! You do not need to be a specialist to take part in the meeting, but you will meet a lot of people. Ask for their business cards, or note down their names. Follow up with them after the conference (e.g. via email or a LinkedIn mail). I got an invitation to a company after following up with a speaker. After a hackathon, I made several new LinkedIn contacts. When I later applied for a job, I was asked during the job interview how I know this particular person and it was important for them that I had that contact.

4. Ask Foreigners to Read Your CV And Give Feedback
Networking will also enlarge the pool of people that can give you input on your CV, or even proofread your CV and cover letter. Each industry has its own standards and getting feedback from someone in the field is tremendously important.

5. Get Contacted by Headhunters
Online platforms work by certain algorithms that basically shoot your profile onto the desks of headhunters. All you have to do is log in to the platform on a regular basis, be active (in discussion groups or by posting articles) and make a lot of contacts. Half a year into my job hunting on LinkedIn I got contacted once a week by headhunters.

6. Get Referrals From People You Have Never Met
Believe it or not, I got my current job via a referral by someone I had never met before! How did that happen? I went through my contacts and looked for their LinkedIn connections that had a similar background to me and were holding jobs that I was interested in. I wrote "cold call" emails, many of them led to conversations (online or phone) and eventually one served as a referral for a job application.

7. Get Job Interview Invitations!
You might not only get referrals, but even job interview invitations! While I was browsing job advertisements to get more information about the job, I searched all people that worked in that company division, invited them into my network and wrote LinkedIn messages. It was great seeing their CVs (so I could estimate my chances), chatting with them on the phone (to get more information about the job and the boss). The group leader was especially impressed by my courage, so he directly invited me to a job interview even though I hadn’t even applied for the job.

8. Ask Your Alumni For Advice
Online platforms are an easy way to contact alumni with whom you have not been in contact on a frequent basis. You will be surprised how many invitations will lead to fruitful conversations. People love to help, because they were often in your same position at some point, too. Don’t be afraid to ask!

9. A Job Refusal Can Open New Avenues
Remember to be polite when you get a refusal from a job application. Say thank you and send a LinkedIn invitation. They might get back to you if they have a position which they find might be a better fit for you. Also, you will have access to their network, thereby you can get more insights from the specific field. One of my job interviews led to a refusal, but that didn’t stop me from contacting them. I wrote a thank you letter (they invested time in me, by evaluating my CV and inviting me to the interview), and asked for feedback. Thereby I learned how I could improve my CV and hear their opinion about which kind of job would be a better fit for me.

10. Networking Builds Confidence
First, it might seem awkward to you to contact strangers. At the beginning I was reluctant to send networking invites - why would they care about me? After a while I learned that many people care because everyone wants to build their network. You don’t need to be afraid, you have nothing to lose! By networking I built confidence about myself, which is something I didn’t realize at the beginning. Having built this network and confidence made me a better applicant in the end!
Does Having a Vacation Make You More Productive?

When we think about increasing productivity, we usually focus on the obvious – longer working hours and life hacks that will keep us awake and going. Fewer people ask whether there are other ways to improve performance and quality of life overall. Growing data from happiness research, organizational psychology, sleep research, and neuroscience may show us the way. And that involves being mindful not only about work but about rest as well.

Doing good work and being productive is an effortful activity. It requires focus and deliberate practice that our brain can sustain only for a limited time period, around 4h per day. By working too little, you will never master something, and by working too much, you risk mental and physical drain. To succeed, you need to avoid exhaustion and recover from work. Sabine Sonntag, professor of organizational psychology at the University of Mannheim, finds that inability to detach from work comes with the symptoms of burnout, which in return impacts productivity and well-being [1,2]. Disconnecting from work, when we are not working, makes us not only more productive and energetic but also more resilient in face of stress (PhD life in general). Even short weekend trips can provide recovery from work-related stress, while longer journeys bring more relief and energy [3].

Getting to the Top - Rest and Sleep

A lot of how we think of work and high performance comes from a famous study by Ericsson, Krampe and Tesch-Römer on deliberate practice in violin students at the conservatory in Berlin [4]. The study laid a foundation that 10,000 hours of practice are necessary for becoming world-class in anything, from artist to scientists to software engineers. While this study was looking at how long participants practiced, Ericsson and colleagues also questioned how they arranged the rest of their life. When asked how they spend their free time and how they rest, researchers found out that average performers underestimated their rest time, while top performers knew exactly what they did. That is because they took their free time and how they rest, researchers found out that average performers underestimated their rest time, while top performers knew exactly what they did. That is because they took time to plan, not only the way they practice but also the way how they rest and how they recover from high mental and physical engagement. The top performance takes not only 10,000 hours of deliberate work, but 12,500 hours of deliberate rest and 30,000 hours of sleep.

Rest is important also because some of the most creative works happen when you are outside lab taking breaks. However, not all leisure is equally important for rest and productivity. Real rest, the one that makes us more creative, energetic and resilient, requires complete detachment from work and unplugging from devices. It is the oldest life hack - rest from the daily hustle.

Pack Your Bags and Go on Vacation!

Happiness researcher Michelle Gielan, from The Institute for Applied Positive Research in San Antonio, Texas finds that taking time off from work can make you happier, healthier and more productive when you return: but only certain kinds of travel give such results. Poorly planned and stressful vacations eliminate the benefit of the time. On the other hand, if you plan wisely, connect with other people, feel safe and travel far away from work, 94% of vacations have a positive impact on work performance upon return [5].

Vacation is not the time to idly sit or stroll around, being mindless and shallow, going with the flow with what other people are doing, or being consumed by all that television and internet have to offer. Find and do what is meaningful to you, spend time in nature, enjoy time with friends and family, hone a new skill, hike the mountains or retreat into the cabin and read books.

Take Care of Yourself so You Can Take Care of Your PhD

Those are the vacations and experiences that will not only increase your productivity but your personal growth as well. Then you will see that person embarking on a vacation is not the same one that returns back to the lab.

Besides the culture of busyness we live in, pursuing PhD means stretching your physical and mental boundaries over the limits more than often. We all have experienced it, and the mental health crisis among graduates is no secret [6]. How much we rest shows how much we value ourselves and how much we take care of our own health. So don’t forget to take care of yourself. Taking vacation will not only make you more creative and productive, but it will also make your life happier and more fulfilling. When you rest properly, you will be ready to level up at work, and in all other aspects of life.

Are 12,500 hours of rest the key to greatness?

- Sonntag, SJ Appl Psychol, 2003
- Sonntag, J Appl Psychol, 2006
- Sonntag and Bayer, J Occup Health Psychol, 2005
- Ericsson et al., Psychol Rev, 1993
- Evans et al., Nature Biotech, 2018

Jelena Brasanac
PhD Student, AG Paul/Gold

How much we rest shows how much we value ourselves and how much we take care of our own health. So don’t forget to take care of yourself. Taking vacation will not only make you more creative and productive, but it will also make your life happier and more fulfilling. When you rest properly, you will be ready to level up at work, and in all other aspects of life.
Some of our readers may remember Helge Hasselmann as a MedNeuro Alumnus and former editor-in-chief of the newsletter. But these days, in addition to wrapping up formalities associated with his PhD on the immune underpinnings of major depressive disorder with AG Otte/Gold, Helge has begun an exciting new job as a senior business analysis at A.T. Kearney. He took some time out of his busy schedule to talk to us about switching from academia to strategy consulting.

Changing from lab work to business is a big leap. What made you realize that you didn’t want to stay in academia?

There are several reasons why I figured out that academia might not be the ideal place for me. First of all, I have always liked learning new things and meeting people from different disciplines, which is really why I went for neuroscience over psychology (my BSc is in psychology). This “interdisciplinary” nature is even stronger in consulting. I think. During the relatively short time I have been with A.T. Kearney, I have met physicians (not a big change from neuroscience), people with degrees in biotechnology/biology/chemistry (again, not a big change), and engineers, historians and mathematicians (big change). It’s cool if you can talk about other things than “the brain” with your colleagues...

Second, I have always been curious about economics, although I have never had the time to go beyond layman’s knowledge. I think it is a field that is really relevant to everyone.

The famous “steep learning curve” is real

Third, I really like the fact that in consulting, your work has a (more or less) immediate impact. During the second year of my PhD, I attended several recruiting events from companies as well as job fairs just to see what was out there. I liked what I saw and decided, I guess based on gut feelings, that this job fulfills most criteria on my wish list. So far, I have been right.

Did you do anything during your PhD to help you formally prepare for a career in consulting?

If you didn’t, I don’t think this would be the right field for you! I attended several career events by the bigger companies (including by my current employer, A.T. Kearney), but also others. What is more, I practiced case studies and interviews both offline and online. In total, I must have done around 40 dry runs, which was a great preparation for the real interviews. I also took several online courses to get a basic understanding of the most important economic concepts to be prepared and to show that I was interested. A fact that is often underrated is mental arithmetic and being comfortable with millions, billions and so on – I practiced calculating with bigger numbers and not mixing my zeroes up.

What are the most important things that you picked up during your PhD that were ultimately useful in the business world?

I think as a PhD student you learn many things that will be helpful for consulting. For example, you learn (or should, in any case) how to organize yourself and be pro-active. Just like in academia, consultants often only have limited time and thus you need to plan pro-actively. This also affects the way in which you present information and data.

You will obviously be confronted with issues that you will not understand right away or that are not working for some reason. You will need to figure those out. Sounds familiar to most people, I guess? Persistence and not being afraid of failing and making mistakes helps, too. On the other hand, you need to be careful to strike the right balance between asking for guidance when you’re lost as opposed to giving up too easily. I think this last point is what, in my mind, helped me most.

Do you think that writing for/editing the newsletter helped in any way?

It definitely helped me to read long texts in a short period of time. Also, I think it was a great opportunity to practice critical thinking when reading articles on topics I was not familiar with. In my job, it is important to precise, concise and to-the-point when you communicate, so editing and proof-reading experience was a plus here! Last but not least it was a great way of learning project management and organization, obviously.

What does your job title ("Senior Business Analyst") actually mean? What are your day-to-day responsibilities?

Good question! Currently (September), I am working on an Excel model that updates product prices based on several factors, including quality and costs. I cannot really say that there are everyday tasks – it can vary a lot between days. One day, you might be working away at a complicated Excel model, the next day you are at a client workshop and another day you prepare PowerPoint slides for meetings. Add the number of trainings A.T. Kearney offers and you can easily see that there is no “average day”.

PhD or consulting: what’s more stressful? What has a better work-life balance?

Good question again! I think both jobs have more and less stressful phases. However, because as a consultant you will need to travel during the week (and likely have more consistently longer hours), I’d say consulting. But this is a personal experience and opinion, I guess. What is more, the deadlines in consulting are a lot more short-term, which will not come as a surprise to many readers. Your everyday work is not termed in months, but usually more a matter of hours and days. While this might seem like extra pressure, it does not have to be, because you get a lot of feedback early to put you back on track.

What has surprised you most in your new job?

The “warm-up” period is quite short and especially if you don’t have a background in economics and the necessary consulting skills yet, it can be quite a lot to pick up (in addition to the project work). I think it is very normal to feel overwhelmed in the beginning. At the same time, I was really surprised by how quickly you manage and learn (even the hopeless cases like myself). Really the steep learning curve is what surprised me most!
What do you like the most? What do you like the least?

As I said, the thing I like most about consulting is definitely the fact that the famous “steep learning curve” is real! You pick up on a lot very quickly! One of the things you have to get used to, however, is not being at home for four days a week. After a while, it does not feel that strange anymore. I do miss seeing friends and family more often, but I think this is something you know before starting so there is little reason to complain. Also, I have the (personal) impression that it makes me enjoy the time that I am home even more!

What advice would you give for PhDs interested in following a similar trajectory to yours?

I would try and get in touch with people who have already made this transition (like myself…) and try and get as many insights from them as you can. If like you like what you hear, and you can imagine working in this field, then the next step would be to get to know companies in person. My impression is that there really are differences between them (and the people who work for them of course). So you should probably try and attend a recruiting event from one of them at least. The next step is to start preparing for the interviews. These can be tough, but in reality, they are a sound check of the skills that you will need to have to succeed in your new environment. I did not have a clue about either case studies (a major part of the interview) or economics, so I bought some books on how to prepare. Also, I took online courses to get some knowledge on economics terms and show that I was really eager to “make the change”. Also, I can’t stress enough how important it is to practice live interviews with friends or other possible applicants. Job interviews are stressful and it is always a good idea to try and mimic the actual interview situation as closely as possible! If you have checked these points, the last thing on your agenda is to, well... go for it!

Thanks Helge for your continued support of the newsletter, and best of luck at your new job! We look forward to hearing updates from you in the coming years.

Constance Holman
PhD Student, AG Schmitz

What Have We Learned, Dr. Brown?

Skill #2: Analytical Thinking

Academia is becoming increasingly aware of the fact that only a minority of doctoral candidates will succeed in pursuing an academic career. The rest of us need to face the question of what else to do with our lives and how to make a living out of it. This series aims to direct your attention to all your skills that may seem trivial to you solely as prerequisites to perform your research, yet are incredibly precious outside of the lab!

Can you remember this experiment which you performed a million times and that (after a learning curve) always worked like a charm? Can you also remember that time when that same experiment suddenly didn’t work anymore? Most (if not all of us) faced this unpredictable and sudden crushing of self-confidence as a capable researcher. Do you also remember what you did back then? Well, there are actually plenty of good things that can come out of a situation like this! First of all, you actually realized that your experiment did not work as it should have. You recognized that your outcome was not just a quirky quirk of biology, but rather an actual problem with the assay, which you figured out because you included some crucial controls. At that point, I bet you wracked your mind to remember the exact moments when you were performing the experiment. You recalled each and every step you took, reconsidered every solution you used, double checked your protocol. You gathered information, came up with putative problems, and set out to test them. Eventually, you might have identified the origin of the error.

Guess what? All of this is exactly what is meant when people talk about analytical thinking! People do not actually expect you to have become a Sherlock Holmes during your PhD, deducing the origin of a person based on a weather forecast, but they expect you to figure out proper solutions for future problems. Luckily, the most annoying experiences in your lab life teach you the most important life skills: problem-solving abilities!

Thinking about it with that perspective does not make it a surprise that employers value analytical thinkers: the modern working world rarely requires precision only. Instead, everything has become more complex, especially the problems that need to be solved. Who wouldn’t want to hire someone who has proven over years that she/he is capable of solving problems efficiently and independently? (even if it sometimes doesn’t feel like it)!

Let us know which abilities you learned during your PhD that prepared you for a non-scientific job if you are PhD Alumnus and/or recently reflected on yourself: contact@cns-newsletter.de

Your Dr. Brown Team

Mental arithmetic
is an underrated skill
In August I attended the Gordon Research Seminar (GRS) and Conference (GRC), “Neurobiology of Brain Disorders” near Barcelona. I wasn’t too familiar with the Gordon meetings before, and there were only few researchers from European institutes, giving me the impression it isn’t that well-known here. After attending one, I feel like everyone should know about that seminar and conference, so please allow me to introduce them to you:

The Gordon Research Conference is an American concept, responsible for organizing over 300 conferences each year, in the field of biology, engineering, chemistry and physics [1]. They organize almost 40 conferences on neurobiology as well, that take place in a 2-year cycle. Themes include neuronal development, glial biology, cognition, synapses and the auditory system.

What’s really exciting about the GRC is that they are set up to allow maximum interaction between attendees. There is a maximum of 200 participants, that all apply and are selected by the chairs. This selection provides an equal distribution of women and men, both for attendees and speakers. The conferences are located in nice venues in remote locations, guaranteeing attendees stay on site. All meals are taken together, the atmosphere is informal and every evening ends with a social event. On top of that, they promote sharing of unpublished data – that most people actually adhere to – and participation of junior scientists; they select presenters from abstract submissions for short talks, have daily poster sessions and reserve the first question after each talk for a PhD or Post-Doc. Of course there are famous speakers, like Bart de Strooper who gave the keynote lecture, but they also invite a wide range of younger PIs.

The GRS is a 2-day event for PhD students and Post-Docs proceeding the GRC. The GRS gives PhD students and Post-Docs the opportunity to present and discuss their data with their peers before the GRC starts. It was a very worthwhile meeting, full of exciting scientific talks, in-depth poster discussions and a great occasion to network both with peers, as well as well-known professors in the field. I highly recommend participating in a GRS and GRC when you can!

Judith Houtman
PhD Student, AG Heppner

[1] www.grc.org

A Breakdown of EDGE:

The multimedia art exhibition, which featured works from students of the Medical Neurosciences program at the Charité, Max Delbrück Centrum Berlin, and fantastic collaborators, was displayed for 3 days at >topLab in Neukölln. There was electricity in the air that mid-July Monday. Those who had braved the sweltering heat of the U-Bahn, certainly did so in some numbers! From 7 until 10 it was not unusual to see up to 80 people at any one time milling amongst the colorful pieces...

“Are those the real colors?”

As you walked into the ground floor gallery and its basement (if you could squeeze in through the crowd congregating outside), a broad variety of works were displayed: photography, watercolor and oil paintings, multimedia projections, a soundscape, a hologram, graphite sketches, light-boxes, and more. Scientific themes were evident in the pieces, with microscopy images, magnified blowups of biological tissue and lab equipment – but there were also many important personal and human elements in the art. Many depicted friends and colleagues at work, while others showed the human side of clinical neuroscience, highlighting mental disorders. In this way, visitors explored what the artists had to say about neuroscience as a whole field. Why did they do research? What was it like? Who were they? What did they find beautiful about it?

The closing night featured talks by each artist about their process and intentions.
Debriefing a Division-Defying Debut

“Did you have a theme in mind?”

Our intention was to communicate scientific knowledge, provide insight into the scientific experimental process, and humanize and individualize researchers in the eye of the public, using art as an alternative communication medium. The intense and thoughtful discussions that could be overheard at any moment were fueled by artwork, and passion (and perhaps the delicious beverages from the bar). Collaborations sprouted from inspired individuals becoming a community. The feeling of connection was palpable and electric.

“The curating must have taken ages!”

Astoundingly, the pieces curated themselves, little direction was given to the sci-artists, and they delivered the most varied, stunning pieces. The layout lent itself to a comfortable clockwise stroll around the works: For example, there was Sharhyar Khorasani’s surrealist wall of sketches. These were often revisited by attendees, and every time, a new theme could be discovered in these intricate and absurd works.

People were also invited to descend into the cellar, where we had incorporated the feeling of closeness to create an inviting full sensory experience. The dark certainly complemented the other-worldliness of the fly brain hologram project by Hamish Logan and Tatiana Lupashina. A regular queue of curious attendees awaited to enter a nook tucked away. One by one, you could have a triggering and nearly claustrophobic, 3D sound experience in the “Panic Room” created by Robyn Cunningham and Ben Wegert.

For two nights, the exhibition opened with a performance piece called Nomen Nescio, in which dancers and scientists collaborated to immerse the audience into the experience of hallucinatory psychosis. On the last night, a “meet the artist” round was held; each scientist had a chance to share their intentions, motives, and materials behind their individual works. The audience heard specifics of the process and thought involved behind each piece, which were imbued with details of intent and personal connection.

“Why >topLab?”

Our venue, >topLab has been attracting attention before all the works in our exhibition were put up. This beautiful Altbau gallery is not only much loved in the biohacking community, but is also frequented co-working space and local hub for citizen science, regularly hosting workshops of all flavours. Check out their website (top-ev.de) for more events ranging from physics in music to post-humanist reading groups. It’s never a dull week there!

Thank you to the ECN and BCCN for their generous contributions to our printing and production costs, Tante Frizzante for the scrumptious drinks provided, to the artists for their hard work and dedication, to >topLab for their patience and welcome, and to all our guests!

From us, the organizers of EDGE, thank you to all of those who came to support this event that aimed to tear down the walls we build between art and neuroscience! We are working on making the exhibition a yearly event, and will soon be making a call-out for interested artists to participate in the next iteration.

Stay in touch through Facebook https://www.facebook.com/create-neuart/ and visit our website for a photo gallery and an uploaded version of our catalog or to find contact details for us organizers:

https://sites.google.com/view/edge-exhibition/home

PhD Student, AG Poulet | Ian Erik Stewart
MSc Student, MedNeuro | Amy Young
MSc Student MedNeuro | Tatiana Lupashina

Some of the sci-artists at the exhibition, in front of work by Lisanne Schulze.
PhD Retreat 2018

...where you can be Marie Curie or parafilm in one weekend!

Just a short train ride North of Berlin is the little town of Fürstenberg, where this year’s PhD retreat took place. The 16 MedNeuro PhD participants and 2 office members arrived Friday afternoon and walked to our final destination. The venue was surrounded by nature and directly next to a beautiful lake, so we took advantage of the scenery and played a little game outside to get to know each other. By the end, I knew that Tadhg plays different instruments and loves jazz, I was finally able to properly pronounce Rafaela’s name (hint: it’s not pronounced with a German ‘r’ in the beginning but an ‘h’), Stephie told me about her trip to Canada last year, and Anahita gave a little demonstration of her martial arts skills. I learned many more facts about the people I would spend a few days with.

Am I Parafilm?

In the evening we had a nice BBQ and revisited childhood memories while roasting marshmallows. As the night grew darker and colder, we took shelter in our very cozy social room for a little game of ‘Who Am I? – The Science Edition!’. In this game you get a sticker with the name of a famous person stuck on your forehead and have to guess who you are by asking yes/no questions. As there are not so many well-known science celebrities, we extended the game to lab stuff, organisms, cells, organs etc. Let’s just say, it’s not easy to guess that you’re parafilm or a bunsen burner!

The next day was packed with workshops. In the morning, Julia Baumeister from Scienza came by to teach us about body language and a proper voice for scientific presentations. We learned the difference between signs of boredom and tiredness. Who hasn’t been there: the conference party is on Friday, but an ‘h’), Stephie told me about her trip to Canada last year, and Anahita gave a little demonstration of her martial arts skills. I learned many more facts about the people I would spend a few days with.

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The next day was packed with workshops. In the morning, Julia Baumeister from Scienza came by to teach us about body language and a proper voice for scientific presentations. We learned the difference between signs of boredom and tiredness. Who hasn’t been there: the conference party is on Friday, but an ‘h’), Stephie told me about her trip to Canada last year, and Anahita gave a little demonstration of her martial arts skills. I learned many more facts about the people I would spend a few days with.

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After a lunch break Martina Michalikova told us how to start and maintain a good scientific lab book. I would have desperately needed this workshop during my bachelor when I first started working in a lab, but better late than never! A complete lab book is very important, as reproducibility is a major issue in science and small details in your experimental protocol can make a big difference. She also told us how to use our lab books to train our writing skills at the same time.

Do We Want Public Lab Books?

We also talked with Martina about open data and open science. This started some lively discussions, as we did not all agree on the amount of unedited data and information we want to give to everyone. We agreed that open access publishing is important but publishing your lab book with all your failures can put a lot of pressure on you.

Saturday evening was free for everyone to do what they wanted, but most of us joined for a round of table tennis or stayed close by playing board games.

And How About a Little Science Innovation?

On Sunday, we concluded the group work we started on Friday when we were split into groups according to our research experience and interests. We had to concisely describe our PhD project to the other members of our group and our task was to come up with an imaginative collaborative project. The project could be completely crazy and did not necessarily need to be feasible with our current knowledge of things, but it had to be in line with the laws of physics. Every group was given an empty flip chart poster, pens and 5 minutes to present their idea. Finally, we voted and Mem-Boost was the winning project! Congratulations! You can see the winning submission below (and runners-up on the CNS blog!). Every group found their own way to handle the task and in the end, we had some very imaginative, interesting and diverse project proposals.

On my way back home, I had some fresh ideas for my lab book, knew how to act confidently for my defense (should it ever happen), met 16 (more or less) new people, and added Fürstenberg to my list of possible short weekend trips. However, I was also a bit sad, since this was my last PhD retreat.

Larissa Kraus
PhD Student, AG Holtkamp

Mem Boost: Uses optogenetic manipulation of the hippocampus to boost good memories and help learning or suppress bad memories and protect from traumatic memories. Like this the device controls the consolidation of memories (c) Aline Ragot, Ahmed Alfaar, Anahita Posthiban, Christian Ebner)
+++ New PhD Course: Improving [Your] Science +++

A couple of months ago, the Career Development Initiative (CDI) designed a questionnaire to ask MedNeuro MSc and PhD graduates what they felt was missing from their education [1]. The aim was to enrich the program curriculum with training that would improve employability of graduates in academia and beyond. Interestingly, the majority of respondents asked for better training in experimental design. Members of the CDI and the MedNeuro office responded to this by designing the “Improving [Your] Science” course. The pilot course was offered this autumn to first year PhD students. Experts discussed key topics of good scientific practice such as open science, reproducibility, and bioethics, and gave practical tips on how to better generate, track, analyze, document and publish results. The course was very well received by both students and instructors and the plan is to offer the course on a yearly basis from now on. In the meantime, the course material and the course toolkit are available online [2]. A big thank you to everyone, especially Karina Lyras, Ahmed Khalil and Constance Holman, who invested their time and energy to build content, organize and instruct this course. It was amazing!
+++ Master’s Graduation 2018 +++
The graduation ceremony of the 2018 master’s students took place at the Lecture Hall Ruin (Hörsaalruine) of Charité. The spacious room was filled with excitement from the very beginning. The master’s thesis presentations kick-started the ceremony at Humboldt Graduate School. Equally exciting were the poster presentations, which were well-received as an interested crowd gathered around them. Each oral and poster presentation was a masterpiece, with experts asking deep, thoughtful questions. None of the presentations lacked any enthusiasm and, more importantly, they made us proud. Two of our graduates successfully applied to the PhD fellowships of the Einstein Center for Neurosciences Berlin: Melina and Majed. We congratulate all of the graduates and wish them all the best for their future careers!

+++ Junior Master’s Students +++
Transitioning mostly from a Bachelor’s degree, 23 new Master students from around the world joined our Welcome Week this year. As usual, the week started with personal introductions that served as icebreakers before the introduction to the program and the enrollment process. One of the highlights was the guided tour for the newcomers through the Berlin Museum of Medical History at Charité as well as a campus tour at Campus Charité Mitte. Yet another event was the tour around the center of Berlin, covering the history of the city during the Cold War, with our guide Sam Noble. With his British charm and humor, he led the students through Germany’s darkest history on a sunny day in a fun and accessible way.

+++ PhD Students Admitted +++
We warmly welcome Ashraf Abdo (Kramer), Coline Lemâle (Dreier), Kangbo Li (Bader), Hung Lo (Johenning), Laura Monni (Fidzinski) and Rafaela Vieira da Silva (Infante). Ashraf, Hung and Rafaela are PhD Fellows of the Einstein Center for Neurosciences. Welcome to our program!

+++ Call for Master’s Applications +++
The Medical Neurosciences Program invites bright and interested students to apply for our program. We await your application starting in December. Ideally, candidates should already have some laboratory work experience, e.g. having worked in a lab for a Bachelor’s project, or other types of work experience such as a residency as a medical doctor.

The program’s rigorous and comprehensively structured education in basic neuroscience provides and trains students to approach questions concerning the central and peripheral nervous system. In addition to the in-depth theoretical training, our program emphasizes state-of-the-art practical lab experience, preparing graduates for continued research as PhD students. Closing date for applications is January 15th, 2019 [3].

+++ Change of Top Journal Definition for PhDs +++
It has been decided that a top journal has to be in the top 25% ranked by impact factor – of the corresponding category, if you published after July 4th, 2018. This means that the Eigenfactor score is not taken into consideration anymore. In case your journal is outside the 25%, make an informal request to the doctoral committee (Promotionskommission). Send the request to the thesis office (Promotionsbüro). Feel free to contact the MedNeuro office for more information on general procedures.

+++ Einstein PhD Fellowships +++
The Einstein Center for Neurosciences Berlin (ECN) calls for applications for its PhD program started in winter 2017. The ECN member institutions promote cutting-edge neuroscientific research across a wide range of different disciplines and approaches. The ECN provides an umbrella structure that specifically fosters interdisciplinary and collaborative research by facilitating cooperation between institutions and by promoting interaction on all levels. With more than 100 internationally recognized research groups, the ECN offers outstanding interdisciplinary training and research opportunities for national and international scientists, with research spanning from synapse to behavior, molecule to disease, and brain to mind. Closing date for applications is January 15th, 2019 [4]. Final interviews will take place in March 2019.

+++ Michael Hörner (†) +++
We are sad to report that Prof. Dr. Michael Hörner has recently passed away. Michael had been the coordinator of the IMPRS Neurosciences since 2005, and program speaker of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences (GGNB) PhD Program Molecular Physiology of the Brain since 2009. Additionally, he established the electrophysiology training lab at the European Neuroscience Institute in Göttingen and was an active organizer of international courses, summer schools, and symposia in the field of neurosciences. Moreover, you all know him as a strong “Neurasmus Supporter”. We will cherish the memories of his kind and generous personality.

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[1] www.ecn-berlin.de/CDI.html
[2] osf.io/9348q/
[3] medical-neurosciences.charite.de

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### Imprint

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### WhazzUp?

#### January

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<td>31 - 3</td>
<td>Transmediale Festival of Digital Art and Culture, Berlin</td>
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#### February

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<td>Berlinale International Film Festival, Berlin</td>
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#### March

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Wenn „verpennt“ zu „gescannt“ wird.

Mit der Online-Studienbescheinigung für unsere Versicherten.

Fortschritt leben. Die Techniker

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