POSTDOCS WITH BENEFITS

Eugene Martin

For a postdoc, a conversation with Human Resources is often a conversation about money. It is the money saved when visiting a museum or dropping your child off at the Child and Family Center (cfc), the money potentially collected for retirement, and the money that ebbs and flows with taxes and tax breaks. From the employee side, what Human Resources offers is part of the reason we chose to work here, and, depending on the individual, part of the reason we can afford to work in New York City. From the University side, the benefits are a financial commitment that brings people here but have to be contained. That being said, the Postdoctoral Association (pda) recently met with Human Resources to discuss their rationale for how benefits money is spent at Rockefeller University (ru) and how it can help address our needs.

Although ru provides retirement benefits to most of its employees, ru does not provide Postdoctoral Associates or Fellows with either a matching contributory or non-contributory (where there are no deductions from one’s salary) retirement annuity. The primary reason that ru gives for not supplementing retirement is the fact that on a national level, postdocs are considered in training, and not long-term employees. Research Associates, after a two-year waiting period (which can be waived with prior postdoc service), receive a non-contributory annuity.

Human Resources was asked to consider a plan that would give postdoc employees a non-contributory annuity, with the cost being offset by not giving postdocs a salary increase for one year. Enacting this plan faces one significant hurdle: pension law is strict, and it requires all university retirement plans to pass non-discriminatory testing. As such, ru is legally required to either put all postdocs in the retirement plan—which, according to ru’s plan, would require withholding one year’s salary increase—or withholding the plan from all postdocs. As there is a significant push against the plan from foreign postdocs (and it is unknown how many other postdocs would want to forgo a year’s raise), the plan is unlikely to get the ground-swell of support necessary to enact it. Financially, following detailed consideration, it was also determined that this approach was not fiscally feasible: the cost of pension contributions is significantly greater than the savings derived from not giving postdocs a salary increase for one year. Despite not receiving a contributory matching or non-contributory retirement annuity, many postdocs are within the age range that is critical to retirement savings; all postdocs can contribute a portion of their salary to an individual annuity plan via tiaa-cref or through their bank, and are encouraged to do so.

In years past, the Child and Family Center had a flat, subsidized rate for postdocs. This ended when families (predominantly former postdoc families who had lost their subsidy after being promoted) questioned the fairness of the system, citing anecdotal evidence of postdocs with wealthy spouses getting bargains from the system. Although the anecdotal evidence proved to be the exception, the administration decided that it was unfair to be charging postdocs a flat rate while other employees were charged according to a tiered system based on household earnings. The current dynamic of pricing for the cfc is based on a few principles: 1) The cfc University subsidy has increased each year, and although Rockefeller is willing to share in the cost of running the cfc, it wants to maintain the current subsidy/revenue ratio. 2) There is a desire to keep it affordable for those who earn lower salaries. The latter point is kept in check with the reality that, if the cfc increases costs for high-wage households; those households may choose to find other options. Although cutting services is an additional option to reducing cost across all tiers, so far those who bring their children to the cfc have been vocally against any such cuts.

The current tiered pricing system was designed with postdocs in mind. The lowest tier is meant to be affordable for a postdoc in a single-earner household; the second lowest tier is meant to be affordable for a household with both parents earning a typical postdoc salary. While tiered systems are a hardship to those who earn into a higher pay-scale and charging people a flat percentage of their salary may alleviate this, unfortunately, this is not administratively feasible. Upon request of the pda, Human Resources considered breaking the current system into subtiers but it would not meet the targeted subsidy/revenue ratio. As the administration meets annually to evaluate the system, we highly encourage postdocs and others to contact Virginia Huffman at huffman@rockefeller.edu via email (note: she had helped establish the earlier subsidized rate and does try to help) to voice any other concerns they have with the pricing of child-care.

When a Postdoctoral Associate becomes a Postdoctoral Fellow, from the standpoint of the irs, they are no longer considered an employee of Rockefeller. As such, postdocs who become Fellows lose certain benefits afforded to employees of Rockefeller, including the trip benefit (which most do not use because postdocs generally live in ru housing and do not have commuting expenses) and the supplemental retirement annuity. While trip is a non-recoverable loss of money (contact your Congressman today), one can recover the other benefits by either signing up for them individually (as in the case of retirement benefits) or deducting the costs at tax time. While Human Resources can assist people in knowing what their options are, they do recommend that Postdoctoral Fellows consult a tax advisor.

Finally, Human Resources is aware that financial hardship can strike anyone at any time. Two scholarship funds intended to help postdocs who have financial hardship are available. One of them is specifically intended to help single wage earners while the other is a general fund. If you are in need of financial assistance, approach Human Resources knowing that your request will be confidential.
Lopsided Health Care Punishes the Righteous

Engin Ozertugrul

At the time of this writing, President Obama’s health care plan is on its way to becoming the number one hottest topic nationwide. Historically, the great enemy in politics is insincerity. This single entity is one of the greatest challenges facing the Obama administration in the healthcare debates. My purpose in this piece is not to judge politics or politicians’ motives but to bring a more fundamental and understated health issue out into the open.

Gladys, a patient of Dr. Siegel1 had suffered chronic intestinal inflammation for about fifty years. The family who took care of her looked sicker than she did, since a family member had to wait on her twenty-four hours a day. Even when they hired a nurse to care for her, Gladys would awaken the family and let the nurse sleep. Over and over she developed severe pains while at home which mysteriously disappeared each time she was admitted to the hospital.

I present this example not to underestimate the gravity of genuine diseases, but rather to expose psychological underpinnings of the common sick role. Since physical illness usually brings sympathy from friends and relatives, it can be a way of gaining attention, love, and nurturing. It can become a patient’s only way of relating to the world; the only control one has over life. The broad implication of this example is not trivial to the current healthcare debates facing the Obama administration.

My colleague, F. Walden Navarro, has spent over twenty years exploring the impacts of person-centered construct on all kinds of health and health care issues. As per an online discussion with him, he stated that in his research, he witnessed ‘time after time that care-seeking propensities are just as important as disease prevalence in generating health care costs.” He reported that “even controlling for perceived health status, care-seeking propensities lead to higher demand of many health care services, independent of perceived health state or health risk factor levels. The costs associated with this care-seeking is unwarranted and unnecessary, yet medical providers are only too happy to open the door to those types which display avid care-seeking, and health plans such as Medicaid and Medicare keep paying the claims. One health plan study examined three years of claims data across the path types. The spread in total median claims dollars exceeded $4000 per member per year. That level of cost difference is right on par with the medical costs associated with morbid obesity. When care seeking propensities are combined with morbid obesity, the costs double. After controlling for perceived health status and self-reported health risk prevalence, the impact of care seeking is equivalent to the power of the SAT to predict college grades.

In plain language it boils down to this: current health policy does not invest in policies that promote sound health behaviors. Quite the contrary, it robs those who take responsibility for their health (e.g., those who do not smoke or drink, but eat healthy and exercise) and gives it to those who don’t. Health legislators did not establish effective incentives or deterrents for good or bad health behavior; nor do they show any signs of investing or supporting scientific inquiries despite the fact that health disciplines are sorely in need of an assessment in these areas.

We should not be quick to buy into claims that health officials are responsible for their deliberate lack of support of preventive medicine on the basis of their unwarranted support of pharmaceutical giants or tobacco companies. On the other hand, we stand helpless before this problem. We should not be naive as to dismiss these officials entirely. The truth of the matter is that neither the health officials nor those who continue to adopt unhealthy behaviors have any real incentive to make changes to reverse the current trend. Health officials, just like other policy makers, are just as much social units as are the ruled, and are distinguished only by the fact that they give voice to the State Doctrine. They do not need to be personalities capable of judgment, but thoroughgoing specialists who are unusable outside their business interest. State health policies decide what shall be thought and studied. Therefore, change must come from within; those who take responsibility for their health should stand their ground and say no for paying for those who don’t. Unless Obama’s goals for health care reform include these overlooked health psychological dynamics, we stand helpless before this problem.

References

Apple Picking a Day Keeps the Doctoral Student Away (from the city)

Anna Magracheva

Crisp air means fall is back, and if you have kids, that means back to school—but if you want to feel like a kid again, then it’s apple picking season. The greater New York area offers an abundance of pick-your-own apple farms for those who have a car, can mooch a car, or are willing to rent one for the day. Apple picking doesn’t just mean wandering through row after row of fresh apples, sampling every variety you come across and taking a bushel home to feast on apple pies for a week (at least). It also means corn mazes, hay rides, festivals, pumpkin patches later in the season, and fresh pressed cider for the ride back through the fall foliage.

Corn mazes are a sort of cross between the difficulty in navigating downtown New York due to a complete inability to gauge where you are and ... corn. Hurd’s Family Farm near New Paltz offers a maze so extensive that if you Google their address, the maze can be seen in the satellite image. The maze can be walked in twenty to thirty minutes, and there is also a mini-maze for children.

Hay rides are available at many farms including Prospect Hill Orchards. Many farms also offer kids’ events with face painting, scarecrows, crafts, and even petting zoos. Hurd’s Farm has Kids’ days on October 10, 11, and 12. Weeds Orchard and Wilklow Orchard both offer petting zoos. Prospect, Weeds and Wilklow are...
all near each other in the New Paltz area. Some farms offer festivals based around earthy themes, such as the Pumpkin Festival and Grapes Galore Festival at Duboise Farms near Poughkeepsie. Other farms invite bands and feature music, sometimes at additional cost. An hour and a half outside the city in Poughquag, Barton Orchards occasionally features music, and has kids’ activities every weekend.

If you’re not looking to cozy up to a farm animal or to pick your fruit to the tune of loud music, there are tamer options. Dressler Farms and Minard Farms are both in the New Paltz area and offer a quieter apple picking experience. Minard also boasts great views of The Gunks and the Catskills.

Depending on how far you are willing to travel for your personal fall harvest, there are farms in Westchester and Rockland counties, only 45 minutes away from Rockefeller University. However, these tend to get very crowded—often the commute and local roads can get backed up. Lines also become fairly common on fair weather weekends. The next two counties out of the city are a better bet. Farms in Orange and Putnam Counties are on average only one hour away. The farms in Ulster and Dutchess Counties are one and a half to two hours away but offer the best apple picking in the area.

The New Paltz area is well worth a day trip. If you decide to visit a farm in the area you will probably pass another half-dozen farms and produce stands on the way, many selling already picked produce, as well as flowers and preserves. There are also two parks in the area: the Catskills and Minnewaska State park offer an opportunity to walk off the apple pies and enjoy the brilliant fall foliage. Minnewaska has particularly beautiful walks (come early, as it can get backed up at the entrance on weekends). New Paltz is a big enough little college town to offer you coffee shops and international dinner fare should you choose to eat off a plate instead of a tree. You’ll have plenty of time to decide if you want Thai or pizza, as you crawl along Main Street on your way back to the city.

However, if fall is when you normally head to the Hamptons, there are farms out on Long Island too. Most are located in Suffolk county, at least one and a half hours out of the city, weekend traffic not included. The closest is Richter’s Orchard, in East Northport.

Most area farms offer fuji, gala, crispin, macoun, empire, idared, cortland, McIntosh, and honeycrisp apples which you are welcome to try for free as you pick apples to take home. Some also offer several varieties of pears. Call ahead to check for availability of different varieties and to reserve tickets for events.

For a full(er) listing of orchards and varieties surf over to www.nyapplecountry.com.

Through the Looking Glass with Da Vinci and Carroll

Zeena Nackerdien

Have you ever started a project with great gusto only to be distracted, or to switch to something else midstream? Fear not. You are in good company when it comes to attention deficit disorder. Leonardo Da Vinci, arguably the world’s most famous polymath, needs no introduction in terms of his achievements, but was also known for having great difficulty completing tasks. Then again, few people would quibble with having a painting like The Adoration of the Magi on their list of unfinished works.

Today, Da Vinci has been immortalized in the world of fiction by the author, Dan Brown, as a code-writer rather than immersed in scientific, engineering, and artistic endeavors. Who knows? Maybe Brown subconsciously drew some of his inspiration from Da Vinci’s well-known mirror writing skills. Mirror writers, mostly left-handers or ambidextrous people, are able to write in the opposite direction and backwards to that of normal writing, so that the text can only be easily read when held up to a mirror. Some people, mostly children in the early developmental stages, or patients with neurological or psychological disorders, may engage in partial mirror writing, i.e. letters or numerals written in reverse appear occasionally in otherwise normal writing. There are also anecdotal reports of possible genetic links and a surprisingly high prevalence of mirror writing among normal people.

Habitual mirror-writers like Da Vinci have been the subject of numerous scholarly works on neurological phenomena. They are often compared with transient mirror writers like Reverend Charles Dodgson aka Lewis Carroll, author of the children’s classics, Alice in Wonderland and Through the Looking Glass, and What Alice Found There. Carroll occasionally penned “looking glass letters,” as in the poem, Jabberwocky, presumably as an artistic device to entertain children. Carroll’s contrived writing appears far removed from the faithful mirror images emblematic of Da Vinci’s writings in his notebooks, and probably involved different neural mechanisms or other causes.

It may be fashionable to group unusual behaviors of famous figures in categories marked “disease” or “disorder,” however, there is no doubt that the origins and content of Da Vinci and Carroll’s writings will continue to fascinate scholars and laymen alike.

References
I first became aware that there was much to look at with *The White Horse* when I read an essay by Kenneth Clark featuring the work and related paintings by Constable. I began to devote more time to it when visiting The Frick. By the year 1819, the arts of Europe were emerging from the destructive powers on painting and sculpture forced on them by the 18th century. It is my personal belief that from prehistoric times forward, the 18th century features art at its low point (except perhaps for painting and sculpture in 2009). The rebound begun by the likes of Constable at the start of the following century culminates in the birth of Impressionism at its end, which acts as if a light has been turned on that will never be shut off again.

The best feature of *The White Horse* is in its ability to suggest so many dimensions so effortlessly to the viewer. The water stretches out placidly and the sky is well-placed far beyond the shimmering trees. One can almost hear the soft rustle of the rich and luminous foliage, painted in meticulous detail.

There is one curious thing that occurred to me on a recent viewing. I’ve begun to take an almost Marxist view of the horse itself. The horse is in the painting’s title, and yet it really serves as a detail. I believe that the Lord Clark essay that I read twenty years ago brought this to my attention. But it’s a workhorse after all and it has got to be suffering in the midst of all of this beauty. Perhaps the human figures could also be called workhorses. The 18th century portraits of aristocrats are made to look pretty with their white wigs and flowery clothing when compared to these countryside laborers and even the white horse itself. As per Wikipedia, Marx lived out his life in London and was influenced by Engels’ *The Condition of the Working Class* in England in 1844. Not knowing much about Marx (the man), I can’t speculate on his knowledge of painting (as perhaps related to the predicament of the proletariat).

The Frick Collection is not far from Rockefeller University, located at 70th Street between Madison and Fifth Avenue.

This is the second in a three-part series on major works of art in NYC museums, focusing on *The Metropolitan Museum of Art, The Frick Collection, and the Museum of Modern Art.*
When I open my eyes, a flight attendant with perfectly swept-back hair, wearing a navy suit is leaning over me, placing a plastic-wrapped tray on my lap. My contacts are stuck to my eyeballs, but I blink a few times and stare down at the little label stuck to the top. "Kosher Meal B," it says. This is the extent of the description offered.

My Excedrin PM is still in full swing and I make slow, groggy progress through the packaging. Inside, I find more packaging, until at last I uncover a little plastic dish containing a suspicious-looking brick of turkey (?) meatloaf resting quietly on a bed of oil-soaked noodles and drooping green beans.

In my real life on the ground, I don’t keep Kosher. I’m what I call a “Holiday Jew”—Jewish on holidays and not discernibly on the days in between. But today I’m en route to Tel Aviv, courtesy of Taglit-Birthright Israel, an organization that provides free first-time, educational trips to that holiest of lands for young Jewish people from all over the world. The idea is that these trips will strengthen participants’ personal Jewish identity and connection to the Jewish people and to the land of Israel itself. I’m interested in this idea of connection to a place I’ve never been. And so, with an open mind, I unwrap my plastic fork, and plunge right in.

A few days later, I find myself watching as two steaming candles—one yellow, one blue—emerge from a couple of tubs of hot dye. A woman in a white head wrap twists them together, forming one braided "Havdalla" candle, to be used only at the conclusion of Shabbat, to welcome a new week. We are in Tzfat, the birthplace of Jewish mysticism, or Kabbalah, but not "Madonna’s kind," we are repeatedly told. I am straining to feel this mysticism, and, more generally, to feel some sort of personal tie to this place I am culturally linked to. Like others on my trip, I take in the exotic beauty of the country, with its fields of fig and olive and pomegranate trees. I am impressed by the energy of the jostling crowds in the outdoor market of Jerusalem on a Friday afternoon before sunset and the start of Shabbat, and I am similarly struck by that same marketplace—shuttered, empty, filled to the brim with stillness—on the following morning. At Yad Vashem, Israel’s Holocaust memorial and museum, I wander through the Children’s Memorial, a darkened hall dotted with glowing candles that seem to hover in the air overhead. A recorded voice reads out names of the young dead and their ages. I listen, and try to remember a few.

But my reaction to all of the sights and sounds of Israel feels like an intellectual one, and I can’t force it to be anything more.

Perhaps it is the pace, I think. The week rolls steadily along, and we, conveyed by charter bus, roll along, too. The days go something like this: charter bus, rest stop, canyon hike on the Golan, charter bus, rest stop, charter bus. Sleep. Rafting on the Jordan River, charter bus. Observation point and former Syrian bunkers (also a rest stop), charter bus. Israeli folk dancing. Sleep (lovely, lovely sleep.) Charter bus, boat ride on the Sea of Galilee, charter bus, rest stop, Old City Walking Tour of Jerusalem’s Jewish Quarter. Charter bus, colorful Jerusalem marketplace, charter bus, festive Shabbat dinner. Sleep.

Also: camel riding, overnight stay in a Bedouin tent, nature walk in the Carmel Mountains, relaxation time on the beaches of Haifa, shopping on Ben Yehuda Street, tree planting, climb up Masada (an ancient mountain and fortress, with, oddly, a functional restroom), nature walk to desert waterfalls and floating in the Dead Sea. We go...
Imagine Woodstock, as designed by urban planners, with set design from Mad Max.

This isn’t exactly like Burning Man—truthfully, nothing is, but it will at least give you a mental picture to start with.

Burning Man (http://www.burningman.com/) is a city of participatory art that rises out of the Black Rock Desert for one week a year. For one week, it is among the largest cities in Nevada, with a population of 45,000, at least three radio stations, an airport—and not a single store.

It is almost impossible to know where to begin in describing Burning Man because everyone’s experience is different. Unlike a festival, where a few people put on entertainment for the masses, at Burning Man everyone is encouraged to participate, and most do. One minute you may be giving out cold lemonade to the neighbors, the next waiting in line for the delicious bacon being fried up by the Bacon Research Institute (complete with Powerpoint slides on the walls detailing the results of last year’s research—apparently Miss Piggy would make the best bacon.) Some people get up at dawn to do yoga and take advantage of the steam bath at the yoga and take advantage of the steam bath at the best bacon.) Some people get up at dawn to do search—apparently Miss Piggy would make the walls detailing the results of last year’s re- поиск, the next waiting in line for the delicious bacon being fried up by the Bacon Research Institutes, the next waiting in line for the delicious bacon being fried up by the Bacon Research Institutes in piece by piece by individual members. In many participants at Burning Man are scientists, geeks, or IT people. One camp sets up an “ask the physicist” hour, and another gives away “open source” SMS messages. Practically every camp has its own space-usage plan made in Google Sketch-up. But most of the technology is devoted to sound, construction, and fire. Sound camps blast away, some all night, with giant sound systems that have to be brought in piece by piece by individual members. Ingenious construction methods go into keeping cool and defeating the wind, from centrifuge packaging used to cover a shade structure to more geodesic domes than you can imagine. One group has developed open source, slotted furniture that packs up flat, so you can down-load the plans, cut your own, and have a fancy bike rack or bench to make you feel right at home. And the fire—car- and bike- mounted fire, stationary fire, dancing fire, colored rock- et, fire in art pieces, carbon flowers spitting fire, parachuting fire, and just plain enormous fires

In Tzfat, as I walk along the city’s glittering galleries and ancient synagogues, I notice the smoothness of the stones that form its narrow pathways, worn sleek by the incessant footsteps of generations past. Perhaps this is the way one is meant to experience something ancient. You feel it underfoot.

Many years ago, in a newspaper opinion piece called “The Meaning of Home,” my mother (a psychologist and writer) presents the idea that as we launch ourselves on our summer sojourns, “it is midway through the trip before we are seized with it—the realization that adventure is really the challenge of leaving home, of seeing just how long we can stay away without losing ourselves in the strangeness of it all.”

I am “seized with it” upon reaching the top of a set of uneven stone steps at the edge of town in the mystical city of Tzfat. Someone is cooking soup, and the scent—salty, dill-heavy—is the smell of my grandmother’s soup. I picture her at home in New Jersey. Possibly, she is cooking her soup at this very moment, to freeze in advance of Rosh Hashanah, still a few weeks away. She’s peeling carrots, and maybe my dad is there fixing her checkbook, scowling as he takes a sip of flat Diet Coke, scolding her for never throwing anything away.

Tomorrow we venture on to Tel Aviv, to visit the memorial to Yitzhak Rabin and lay about on Mediterranean beaches for an hour of quick relaxation. I look forward to these stops. Israel tosses me its little gifts and I catch them eagerly, one by one, as I traverse its roads, hike its hills, breathe its scents, and take in the many other wonders it has to offer. But I also look forward to the moment when I will slip the key into the broken door lock of my apartment, and (after some jiggling) hurl my backpack onto the kitchen floor at last.

By then, I will have had enough magic for one summer. Madonna’s kind or otherwise.
when the large wooden sculptures burn. If there is a way to make fire better or more interesting, you can bet someone is already working on it.

But fundamentally, despite all the flash, Burning Man is about art, participatory art. Some of it is mobile, like the three-story Victorian house/art car called the Neverwas Haul (www.neverwashaul.com), and some of it is incorporated into the urban part of Burning Man, but some of the most impressive pieces can be found in the “deep playa,” out around the giant wooden figure week (hence the name). Many artists and artist collectives spend their entire year creating haunting, beautiful pieces. Out beyond “The Wedge,” a 30-foot tall astro-turf covered slide, (http://freetwodge.com/thewedgehome.html) is “A Nest of Recollection” (http://www.nestofrecollection.com/wp/), a twelve foot high, padded, human-sized bird’s nest made of driftwood, perfect for an early morning moment of reflection.

On Sunday night, the “Fire of Fires” temple burned while a crowd of thousands watched in silence. The temple was build by the Community Art Makers, from Texas. (http://communityartmakers.com/)
Photo courtesy of Amber Barger

If you hear about Burning Man in the popular media, you may hear about drugs and nudity, and yes, those options are available, but the truth is that Burning Man is an enormous, diverse population, with cooks, artists, children, dancers, doctors, DJs, and practically anyone else you can think of. It’s not any one thing to everyone, and what is beautiful is that you are not only able, you are encouraged, to bring with you exactly what you want. Your experience is up to you, and in general, what you want to find you will.

Visit Burning Man if you are interested in an intense experience, if you are open to chance encounters and serendipity, if you want to do something, not just sit back and experience.

Don’t visit Burning Man if you can’t stand heat and constant dust, if you want everything handed to you, if you need everything to always be just so, or if all you want to do is watch. This is an environment that will constantly challenge you, constantly push you—but in the end, that’s sort of the point. ®

Special Edition Illustrations by Rossana Henriques

Life on a Roll
Frontenac Castle, Québec City, Canada by Elodie Pauwels
Non-research Career Options

When I was a fairly new copy editor at the Rockefeller University Press, I received a routine phone call from the corresponding author of a paper. We had discussed the changes she wanted made to her paper and were wrapping things up when she suddenly asked “So, what is it exactly that you do?” She continued with more questions, asking about my science background and what was required to become a copy editor. “It’s just that I’m graduating soon, and I’m trying to figure out what I want to do.” It struck me as odd that a student would want to leave to do something like editing when they were already on a research path. Since that time, I have gotten to know many people who work in the research field, and I understand that just because they love science does not mean they love working in a lab. However, many students are unaware of what kinds of non-research career options are available to them. There are lots of jobs that are not straight research, but require the skills and knowledge of a scientist.

One field that is in need of scientists is teaching. Currently, there is a shortage of qualified science teachers, so when they are found, they are well compensated. Science teachers are needed at every level of academia, but what grade you decide to teach depends on your personal preference. Some people would like to work with children and teenagers, trying to help them understand and appreciate science, whereas others would prefer to work with college students who are learning more complex theories and who may choose science as their career. If you have already completed a bachelor or Ph.D. in science, to become a teacher you would need to complete a teaching certification program.

For those in the sciences who are talented writers, there are a variety of career possibilities. One of those is as a science writer. Science writers usually work for journals, newspapers, and websites. They produce content that their target audience (whether they are scientists or laymen) can easily understand and use to learn about their area of interest. Another writing career is a science copywriter. A science copywriter works for corporations or for the agencies that market these corporations to the consumer. Copywriters get to be more creative, as they are often part of ad campaigns that need to be unique and eye catching.

Another career possibility is a scientific/technical writer. This position usually involves writing handbooks, guides, and product manuals. Technical writing requires the ability to write clearly and accurately so that the reader can follow the instructions and carry out his/her task with the intended result.

All of the text produced by writers in the science field needs to be edited before it can be viewed by the public, so if a scientist has an above average understanding of grammar and style, they can become a science editor. Science editors are used for every kind of publication, ranging from journals to textbooks. Some companies require their editors to have a science background, and with a Ph.D., you can even rise to the ranks of editor in chief.

For those who aren’t interested in writing and editing, a career in patent examining or patent law should be considered. A patent examiner reviews patent applications for the government, and then decides whether they should be accepted. They usually have to reference patent databases and literature to determine whether the request is worthy of a patent. Patent lawyers represent those who are trying to file patents, and any cases involving patents (such as oppositions). This is a very lucrative career, but requires a Ph.D. and a law degree.

Another career opportunity is public policy. Scientists who work in public policy help policy makers understand the scientific ramifications of political decisions, among other things. They usually work for think tanks or governmental agencies. They help decide the allocation of government funding, and they give their opinions on hot button issues like chemical warfare and embryonic stem cell research. They work to ensure that the decisions made by the ruling bodies are best for the nation and the environment. A scientist can become involved in policy by making connections in forums and community outreach programs, or they can enroll in a university program in public policy.

For those who don’t mind repetitive testing, quality control work may be an option. Companies that manufacture products used by researchers and labs need to ensure that their product will produce the same results every time. This is where quality control comes in. A product is tested hundreds of times to ensure that it will work under varying conditions. Because the products will be used in experiments, scientists who know how to carry out these experiments are needed to test them. These experiments can range from testing types of media to performing real-time PCR.

There are many more jobs outside of research for those who are interested. Knowledge of science is valuable to many different kinds of businesses. Doing a little research may uncover a career path that was never considered, but turns out to be a great fit. ☺