

Accelerated Cure Project for MS

July 2018



Accelerating research towards a cure for multiple sclerosis

Dear Friends,

This month we bring you some of our most popular articles from 2018, as well as updates on the latest topics in MS research from Dr. Farren Briggs and a spotlight on one of our monthly donors.

Of the more than 200 types of cells in the human body, stem cells are the most versatile. They can replicate and develop into every organ and tissue in the body. A stem cell therapy is a treatment that uses stem cells, or cells that come from stem cells, to replace or to repair a patient's cells or tissues that are damaged. Researchers are making significant progress in their work to better understand the use of many types of stem cell treatments for slowing MS disease activity and for repairing damage to the nervous system. However, there is still a lot to learn about stem cell treatments. Our first article, previously published in our [April 2018 newsletter](#), covers the basics of these [pioneering treatments](#), their potential benefits, and limitations.

Richard Cohen's network television news career spanned 20 years, during which he covered wars and politics for ABC News, CBS News and CNN. He received numerous awards in journalism, and is a New York Times bestselling author. Richard was diagnosed with MS when he was 25 years old. The lack of effective treatments for progressive MS and caring physicians over the course of 4 decades left him with little to anticipate other than a steady decline. In 2014, Richard received an autologous stem cell injection for his MS alongside a clinical trial. This, coupled with a caring

neurologist, has enabled him to have hope for the future. Richard shares his experience with stem cell therapy, and insight into the concept of “hope” and its relationship with chronic illness in his new book, [Chasing Hope](#). Our second article, also published in our April 2018 newsletter [sheds light](#) on the author and his latest literary work.

MS research is a dynamic field, with many brilliant minds working to better understand the mechanisms of MS so we can treat it more effectively and ultimately find a cure. Legislative changes can affect funding for these important studies, as well as other critical issues for people with MS, such as access to quality, affordable healthcare and health insurance, and the rights of people with disabilities. There are many resources available to help people with MS live their best lives, with new programs starting up regularly. Do you ever wonder how you can possibly keep up with it all? From our [March 2018 newsletter](#), learn more about [RealTalkMS](#), a weekly podcast that can help you stay up-to-date on the latest news and topics relevant to the MS community.

New this month, Dr. Farren Briggs discusses other medical conditions in people with MS, specifically [hypertension](#). These comorbid conditions, especially modifiable ones, may add substantially to the difficulties people with MS encounter on a daily basis.

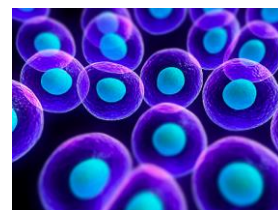
Donations from individuals are an essential source of funding for ACP. They can be made on a one-time or a recurring basis. Those who choose to give regularly are known as our Accelerators. Our Partner Spotlight this month highlights one of our Accelerators. It’s our pleasure to introduce you to [Jane](#).

We hope that you enjoy our newsletter and invite you to share it with anyone you think may be interested.

The Accelerated Cure Project Team

Stem Cells – The future of medicine?

There are more than 200 types of cells in the human body, for example blood cells, muscle cells and nerve cells, to name a few. Each cell type has a different makeup that is appropriate for its function. Stem cells are the foundation for every organ and tissue in the body. There are many different types of stem cells that come



from different places in the body or are formed at different times in our lives. Some only exist prenatally (embryonic stem cells), while others are found during fetal development and remain in our bodies throughout life to repair tissue damage and replace lost cells (adult stem cells).

Stem cells are defined by two characteristics. They can self-renew (make copies of themselves) and differentiate (develop into more specialized cells). Beyond these two things, stem cells differ a great deal in their abilities and function. Embryonic stem cells are pluripotent, meaning when cultured they give rise to all of the body's cell types. Others (adult stem cells) are referred to as multipotent, meaning they can generate a few different cell types (generally in a specific tissue or organ).

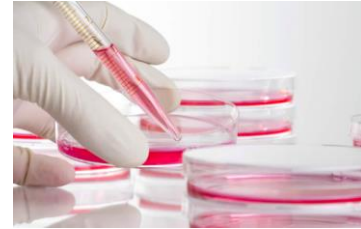


Embryonic stem cells, as the name implies, are the cells of the developing embryo. They are obtained from the [blastocyst](#), a ball of cells that forms three to five days after an egg cell is fertilized by a sperm. When scientists extract embryonic stem cells and grow them under special laboratory conditions, they retain the ability to give rise to all tissues and organs in the body. These cells are incredibly valuable as a renewable resource for studying normal development, disease processes, and treatments. However, the ethical considerations surrounding their use are considerable.

Adult stem cells are more specialized than embryonic stem cells. Typically, they produce the different cell types for the specific tissue or organ in which they are found. For example, hematopoietic stem cells, which are found in bone marrow and blood, are capable of producing all of the cells that make up the blood and the immune system (red blood cells, white blood cells and platelets). Neural stem cells from the central nervous system give rise to neurons, oligodendrocytes (myelin producing cells), and astrocytes (support cells). Mesenchymal stem cells (MSCs) are adult stem cells from stroma, the connective tissue that surrounds tissues and organs (sometimes called stromal cells). They are found in several places in the body, including the bone marrow, skin, and fat tissue. MSCs can differentiate into a variety of cell types. Some tissues and organs in the body contain small reserves of stem cells to replace cells from that tissue that are lost through normal day-to-day living or injury.

Induced pluripotent stem cells (iPSCs) are adult, tissue-specific stem cells that have been modified in the lab and converted into cells that behave like embryonic stem cells. While iPSCs share many of the same characteristics of embryonic stem cells, including the ability to give rise to all the cell types in the body, they aren't exactly the same. Researchers are studying these differences and various ways to create iPSCs to learn more about their function and potential use.

A stem cell therapy is a treatment that uses stem cells, or cells that come from stem cells, to replace or to repair a patient's cells or tissues that are damaged. The stem cells might be administered intravenously, via lumbar puncture, or transplanted into the damaged tissue directly. An

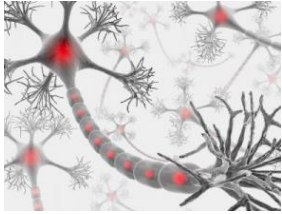


autologous stem cell treatment is one in which stem cells are harvested from a person, stored and given back to that same person. An allogenic treatment is one in which the donor and recipient of the stem cells are different people. The list of diseases for which there are approved stem cell therapies is extremely small. There are no approved stem cell treatments for MS at this time, however there is exciting progress being made as researchers study the potential of different types of stem cells to slow MS activity and to repair damage to the nervous system. It's important to note that much more research is needed before cell based therapies become a viable MS treatment option.

Several stem cell-based approaches to treat MS are being tested in clinical trials.

Autologous Hematopoietic Stem Cell Transplantation (HSCT) is an anti-inflammatory therapy. The goal of HSCT is to reset the immune system, which is responsible for damaging the brain and spinal cord in MS, and stop the inflammation that is responsible for disease activity. A person undergoing HSCT to treat MS is given some form of chemotherapy to stimulate the production of bone marrow stem cells and promote their release into the blood. Stem cells are then obtained from a blood sample and stored for later use. During the next step of treatment, the individual is usually hospitalized, and given a powerful mix of chemotherapies to kill or suppress immune cells throughout the body. The individual is usually also given antibiotics to help combat infection. The stored stem cells are then infused intravenously in hopes that the immune system will rebuild itself (a process that usually takes 3 to 6 months). After recovery, it is hoped that the newly formed immune system will function more normally. The studies to date suggest

HSCT has potent, durable benefit in relapsing MS. However, there are substantial safety issues that need to be resolved and financial costs involved.



Clinical studies are currently underway to test the benefit of MSCs to repair the nervous system, specifically the myelin (a process called remyelination). This approach is similar to HSCT, except that the individual's immune cells are not destroyed or replaced. Instead, a person's own MSCs are isolated from their bone marrow or blood, multiplied in the lab, and then re-introduced in greater numbers into their body, either intravenously or via lumbar puncture. MSCs promote repair by stimulating oligodendrocyte progenitor stem cells (which develop into cells that make myelin) that are already present within the nervous system. They also have the ability to stimulate the formation of new blood vessels. There are some [theories](#) that one of the processes that may contribute to progressive MS is insufficient blood supply. Clinical trials with MSCs have had promising results. However, a number of important questions have arisen concerning the type of cells that work best, delivery methods, technical aspects of cell production, safety issues and actual effectiveness. More research is needed before this approach can be used more generally.

One exciting avenue of research is the use of iPSCs for therapeutic purposes. In this approach, cells are obtained from an individual, for example from a skin biopsy. Using a series of genetic reprogramming techniques, they are turned into stem cells that can generate any type of human cell needed. A potential advantage of this approach is the reduced possibility the cells will be rejected by the person's immune system. This approach also bypasses possible ethical concerns surrounding the use of human embryonic stem cells. However, this research is still in its early stages.

Researchers are also exploring how neural stem cells might be used to replace the neurons and oligodendrocytes (myelin-forming cells) lost during the course of MS. This method shows promise, but there are a number of practical issues that need to be overcome. In addition, neural stem cells are typically harvested from embryonic or fetal brain, which raises the ethical issues surrounding the use of this tissue.



Exciting research is underway and significant progress has been made to better understand the potential of many types of stem cell treatments for slowing MS disease activity and for repairing damage to the nervous system. However, there is still a lot to learn about them. The media sometimes exaggerates the benefit of stem cell treatment and clinics often promote [unapproved treatments](#) to chronically ill or seriously injured patients. Patient testimonials and other marketing provided by clinics may be misleading. Beware of clinics that broadcast this language to market their treatments, instead of science-based evidence. It's important to watch for stem cell treatments offered without regulatory approval, or outside of a legitimate clinical trial. The National Institutes of Health maintain a [database](#) of clinical trials that patients and families can search for approved, actively recruiting studies. As stem cells come from different places in your body and have different functions, be wary of clinics offering treatments with stem cells originating from a part of your body unrelated to your disease or condition, or that offer the same cell treatment for a wide variety of conditions or diseases. Unless they are related, different diseases would be expected to have very different treatments. Be wary of claims that stem cells will somehow just know where to go and what to do to treat a specific condition as they require careful instruction to become the specific cells needed to regenerate diseased or damaged tissue. If not properly directed, these stem cells may overgrow and form tumors. It's important to remember that autologous stem cell infusions or transplants are not automatically safe. Even though the risk of rejection is lower, the processes by which the cells are acquired, cultured, and then reintroduced into the body carry risks. Steer clear of clinics that gloss over or minimize these risks.

If you are considering stem cell therapy, it is important to discuss it and other options with your physician and other trusted members of your healthcare team before deciding on a course of treatment. Confirm that there is good scientific evidence that the treatment is safe and effective. Be sure that the providers have approval from an



independent ethics committee, such as an Institutional Review Board (IRB), to make sure the risks are as low as possible and are worth any potential benefits, and that your rights are being protected. There should be a protocol that outlines the treatment in detail, and

a consent form that clearly explains the details of the process, including the risks involved. You should have the opportunity to ask questions, should you have any, and only proceed with treatment when you are satisfied with information provided and have given permission to proceed.

Stem cell research holds tremendous promise for medical treatments, but scientists still have much to learn about how they work in the body and their capacity for healing. Numerous clinical trials are underway to determine what the optimal cells, delivery methods, safety, and actual effectiveness of these current experimental therapies might be for people with different forms of MS.

Richard Cohen – “Keeper of My Own Flame”

Richard Cohen’s network television news career spanned 20 years, during which he covered wars and politics for ABC News, CBS News and CNN. He received numerous awards in journalism, including three Emmys, a George Foster Peabody and a Cable Ace Award.

Richard learned that his father and his grandmother had multiple sclerosis (MS) when he was 19 years old. A few years later, he suddenly became disoriented at work and dropped a coffee pot. The same day, he tripped off a curb and his leg went numb. He learned that he, too, had MS when he was 25.

"There's an expression ‘diagnose and adios’ because really there were no treatments of any kind," says Richard. His father advised him to “suck it up and keep going.” Since his MS diagnosis, Richard has also had two bouts of colon cancer, both of which required invasive surgery.

Richard is married to journalist, Meredith Vieira, with whom he has three grown children. When he met Meredith in the early '80s, his MS symptoms were barely noticeable, except for his failing eyesight. On their second date, he told her about his condition. They decided long ago that, while MS may affect their life together, it would not define it. Their ability to look at things with a sense of humor has carried them through many hardships in their journey together with MS.



Richard and Meredith didn't tell their children about Richard's diagnosis until the night they witnessed their father fall down a flight of stairs and their oldest son started asking questions. They openly talked about MS with their children, but focused more on normal activities. In Richard's words, "We were very understated, as reassuring as we could be without being dishonest. Once you create a culture of openness in the house, they're not afraid to ask questions ... it all becomes very casual and second nature."

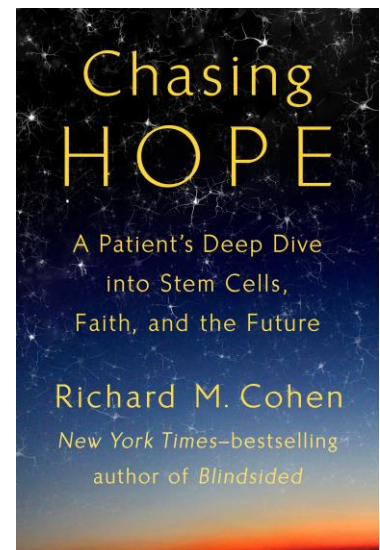
MS has affected Richard's vision, voice, balance, strength, and coordination. After living with MS for more than four decades, he is legally blind, has trouble walking, and difficulty using his right side. For the Cohen's, MS is a "family affair." In Richard's words, "everybody in the family is affected by MS. Everybody in the family somehow shares MS. Because it can be so limiting for the sick person, very often the rest of the family tries to help as best they can and everybody gets involved." Reflecting on the nature of chronic illness, Richard states, "it's an odd thing because, even with a loving family surrounding you... there's something very solitary about illness. I'm not contradicting myself here, it is a family affair, but there's something very lonely about being sick. It is not anybody else who is going to suffer with it, only you feel the physical effects. Only you feel the fatigue, or the pain, and in the end we really are alone with it. Having said that, it's still wonderful to have a family around you just because they become part of the battle." Now that his children are grown, Richard shares that his children watch over him. "They're just very tuned in to it ... on the one hand you don't wish it on your children, and on the other hand I really do believe that kids become better persons for growing up in a family with illness. They learn very early that life is not fair. They understand, on a very basic level, that it can be painful. They're fully aware that they are in a position to help and I think it just becomes second nature to them... So, it's not entirely just the 'down' side you've got to deal with. I think there's an 'up' side, too."

When asked how he best copes living with progressive MS, Cohen states, "There's an inevitability to the journey because it's a one way trip. You don't get better and slowly get worse, so I think you've just got to come to grips with the fact that things are going to deteriorate. It doesn't mean that it's going to happen at any particular rate of speed. It doesn't mean that tomorrow is the end of the world. It's just a fact of life you've got to deal with ... You've got to learn to rise above the difficulties, the physical impediments that lie before you and find a way to soar... to lift yourself up ... to be bigger than your disease ... to do something with your life ... to live gracefully ... to be a good person."

This may all happen more because of the illness than anything else.” According to Richard, another aspect of MS is learning to live with how people perceive him. In his words, “I use wheelchairs at airports or very large places and people don’t want to deal with you. People don’t see us. They see the wheelchair. They don’t see the person in the wheelchair.”

Richard is the author of two New York Times bestsellers. [*Blindsided*](#) is a revealing memoir detailing his struggles with MS and cancer. [*Strong at the Broken Places*](#) follows the lives of five individuals living with serious chronic illnesses, delivering the message that we are all stronger than we think.

Even though Richard found ways to cope with and rise above illness, he rarely thought of himself as having “hope.” The lack of any meaningful treatments for progressive MS and the lack of caring physicians left him with little to anticipate other than a steady decline. In 2012, Richard and his wife hosted and chaired a stem cell conference in Rome where scientists gathered to discuss stem cell therapy for autoimmune diseases such as MS. At the conference, Richard met Dr. Saud Sadiq of the Tisch Multiple Sclerosis Center of New York. Meeting Dr. Sadiq enabled him to look at his future differently. Dr. Sadiq’s work focuses on how to utilize the potential of stem cells in trying to repair diseases like MS. He received approval for a clinical study in which stem cells would be collected from patients, transformed into brain stem cells and injected back into patients’ spinal fluid in hopes of repair and restoration of function. Richard was invited take part in the trial, which opened him up to the possibility of hope that he might get better. In the end he didn’t qualify for the trial, but he received the same treatment as those that did.



Richard shares his experiences with stem cell therapy and insights into the concept of “hope” in his new book, *Chasing Hope*. This latest work is an easy and touching read that includes interviews with doctors, scientists, and religious leaders, all with the goal of understanding the relationship between illness and hope. As revealed in the epigraph by Paul Tillich, Richard feels that hope has to be sensible, “Hope is easy for the foolish, but hard for the wise. Everybody can lose himself into foolish hope, but genuine hope is something rare and great.” In Richard’s words, “I think hope as a word is thrown around

and it means a lot of things to a lot of people ... I think if you're going to hope, you've got to be smart about it. You've got to be realistic about it and not waste your time hoping for things that will never come to be." Richard's close-knit family is a major source of support and hope in his life. He also makes it clear that while many find hope through faith, he does not. In his words, "I think hope is something that you have or you don't have. I don't much believe that it has to be tied to anything in particular ... I think hope is organic. Hope sort of feeds on itself and it's a way of approaching life." *Chasing Hope* delivers the strong message that, no matter what the source, it's crucial not to lose hope. When asked how he keeps his sense of hope alive, Richard replies, "I don't think it's something you consciously do. I think it's something burning inside of you. Sometimes the flame is high and sometimes it's a low flame. Generally it endures and is not extinguished. I'm happy that I'm the keeper of my own flame."

Richard generously allowed us to tape the interview for this article. If you'd like to listen to him share his experiences and perspective, please click [here](#). Richard also writes about his journey with MS on his blog, [Journeyman](#). When asked the reason for this title, he states, "I'm on a journey like everybody else. The drawing at the top of the blog is someone with a cane walking toward the skyscrapers of New York. That's sort of how I see myself. I'm a member of a big city, a large community and at the same time I'm on a solitary journey."

Chasing Hope is available now in bookstores and on [Amazon](#).



RealTalkMS – “News, Views, Interviews and Breakthroughs”

[RealTalkMS](#) is a weekly podcast well worth listening to for anyone who is affected by MS. Hosted by Jon Strum, it provides a platform to stay up-to-date on the latest information about multiple sclerosis. Jon packs a wealth of information into each 30-minute podcast. He covers a wide range of topics, from groundbreaking MS research to legislation surrounding healthcare issues.



RealTalkMS also features interviews with neuroscientists, MS activists, MS caregivers and others who work to improve the quality of life for those living with MS. Dr. Robert McBurney and David Gwynne of the Accelerated Cure Project were guests on the podcast in March. In this [episode](#), Robert and David talk about some of ACP’s major initiatives and ways that you can be a part of MS research. In addition, the RealTalkMS website features a list of helpful [MS resources](#) for those living with MS. According to Jon, “My goal is simple – to keep our conversation going until there’s no longer a need to talk about multiple sclerosis, except in the past tense.”

Since its inception 10 months ago, RealTalkMS has gained an audience of over 3,400 listeners. Jon’s podcasts are intended to benefit people with MS, their caregivers, family members and friends, but everyone will find interesting content when they tune in. According to Jon, “I started the podcast in the beginning of October and I was hopeful that somebody would want to listen to it. I’m amazed at how fast it’s growing. I think it helps everybody understand at least a part of the MS journey a little bit better.”

Jon and his family have had a difficult journey with MS. His wife was diagnosed with secondary progressive MS in 1997. Prior to her diagnosis, she was an avid cyclist, riding her bike 40 miles every day. Within a few short years, she became a quadriplegic, no longer having the use of her arms or legs. Her MS has continued to progress, affecting her vision, cognitive abilities, her ability to swallow and even speak. In Jon’s words, “What we’ve gone through has been incredibly difficult. I try to be involved because my hope is that maybe through the work that I and a zillion other people out there try to do every day, maybe one less family will go through what we did.”

Jon has his finger on the pulse of MS research through his role as a lay member of the Scientific Steering Committee of the [International Progressive MS Alliance](#), a growing global initiative to end progressive MS. The Alliance, founded by a number of international [MS organizations](#), awarded \$15 million dollars in research grants in the last year to support promising MS research around the world. This level of international participation and collaboration is unprecedented and holds great promise for groundbreaking discoveries. The Scientific Steering Committee oversees the peer review process of projects and recommends projects for funding. Jon states, “Through my participation in the Progressive MS Alliance, I’m able to hear firsthand some of the amazing research going on right now. The lay members of the committee are there to represent the interest of families that are living with progressive MS and to make sure that, when we’re talking about science and research, it has a really constructive application at the end of the day... Part of the reason I started the podcast is that I’m hearing about all of the amazing science going on, information that makes me personally hopeful, and I want to share that. I thought if I could break this information down into easily understood language, a podcast might help other people living with MS feel as hopeful as I do.”

Jon is an active member of the [National MS Society’s MS Activist Network](#). As such, he has discussed healthcare issues that are of prime importance to the MS community with legislators and advocated for change. In early March, at the [Public Policy Conference](#) in Washington, D.C., Jon spoke with elected officials from California about things like access to affordable medication and transparency in prescription medication pricing. In Jon’s words, “... if not life and death, and sometimes they are, these are certainly quality of life issues that are profound.” Jon’s deep involvement in MS advocacy was part of his inspiration to launch RealTalkMS. According to Jon, “When living with MS so many of the things that happen to you are out of your control, but deciding that you’re going to advocate on behalf of yourself and your own self interests – that’s 100% within your control. And, when you exercise that power, it feels great. We use the podcast to not only provide information, but also to make listeners aware they can play an active role in advocating on their own behalf. Personally, I find that incredibly empowering. So, I would think that others would be equally empowered.”



When asked what he enjoys most about his podcast, Jon states, “There’s not a part I don’t love. It’s provided me with a wonderful opportunity to meet some of the people who are leading the charge when it comes to research or activism or legislation or whatever we happen to be talking about that week. It’s put me in touch with the individuals who are the heroes of the story. I also enjoy the emails that I receive from people who seem to like what I’m doing or want to let me know that a particular episode meant something to them.”

RealTalkMS is packed with information and inspiration for people living with MS. Its podcasts are interesting and easy to understand, a perfect resource to help educate more people about what life with MS can be like, and to help those that suffer from it. Consider sharing it with someone today!



Hypertension in those with MS

By, Farren Briggs PhD, ScM

Multiple sclerosis (MS) can be very challenging at times, and it is increasingly evident that persons with MS (PwMS) commonly have other medical conditions. These comorbid conditions, especially *modifiable* ones, may add substantially to the difficulties PwMS encounter on a daily basis - thus, comorbidities in PwMS is a very hot research topic. Some research questions include investigating the role of comorbidities on the progression of MS, on the effectiveness of disease modifying therapies (DMTs), on the adherence of PwMS to DMTs, and on incurring healthcare debt. This month there were several studies looking at comorbidities in MS, but there were two studies that focused on characterizing *modifiable* comorbidities in MS.



The first study is actually a study I conducted with data from the Accelerated Cure Project (ACP) Repository, where we sought to describe the burden of cardiovascular conditions in MS, neuromyelitis optica and transverse myelitis – all demyelinating diseases.¹ The rationale for this study was to determine how common cardiovascular conditions are when accounting for various factors that might influence cardiovascular

disease risk and demyelinating disease risk (i.e. smoking). We call these factors confounders because differences in the distribution of these factors between the groups being compared may generate false results – therefore we need to *adjust* for these factors. There have been several prior studies



looking at how common cardiovascular diseases were in PwMS, but the results were mixed – and one reason for the variation in results may have been the inability to *adjust* for *confounders*. Here is where the ACP resource is invaluable, as detailed information for several possible confounders were collected, including smoking history, history of obesity, socioeconomic status, and family medical history. For this study, there were 1,548 PwMS, 306 neuromyelitis optica cases, 145 transverse myelitis cases, and 677 controls (individuals without a demyelinating disease). After *adjusting* for the possible confounders, the burden of **hypertension** was approximately **30-50%** higher in PwMS than in the control population. Other cardiovascular conditions (heart disease, high cholesterol, and type 2 diabetes) were *as common* in individuals with demyelinating diseases as the control population. Interestingly, we observed no differences in the age of cardiovascular disease onset across the groups. This study was unique for it is one of the first studies of cardiovascular diseases in neuromyelitis optica and transverse myelitis, and the first study to comprehensively adjust for established cardiovascular risk factors – therefore, we are more confident that the observed association is a true relationship.

The second study aimed to describe the impact of hypertension on brain integrity in PwMS.² The researchers recruited 95 MS patients seen at a neurology clinic in Argentina. Blood pressure was measured; brain magnetic resonance imaging (MRI) images were used to determine the number of lesions, lesion volume load, and brain atrophy; and diffusion tensor imaging assessed brain white matter integrity by measuring the diffusion of water in myelinated tissue (white tracts). 71% of the patients in the study had above normal blood pressure. In a statistical analysis *adjusting* for age, gender, smoking status, DMT use, anti-hypertensive medication use, and serum vitamin D levels, increased blood pressure was significantly associated with reduced integrity in the white matter of three regions of the brain: precuneus, middle cingulate gyrus, posterior cingulate gyrus. Similarly, increased blood pressure was associated with brain atrophy in three frontal areas: orbital gyrus, medial frontal cortex, and subcallosal area. Interestingly, blood pressure was not associated with lesion number or size.

The underlying mechanisms mediating these findings are not yet known, but we can say that hypertension is elevated in those with MS and that hypertension *may* impact brain integrity and brain atrophy. There is evidence that elevated blood pressure increases blood flow in the brain, which may play a role in promoting inflammation.³ We also know that high blood pressure impacts the blood-brain barrier, which in MS is disrupted – which may allow for damaging immune cells to cross into the central nervous system. There is much work that can build on these two studies, but in the least, hypertension is modifiable and can be well managed through the use of many anti-hypertensive medications. So, in any event, it's further evidence to skip the salt in the kitchen.

1. <https://www.ncbi.nlm.nih.gov/pubmed/30014877>
2. <https://www.ncbi.nlm.nih.gov/pubmed/29988562>
3. <https://www.ncbi.nlm.nih.gov/pubmed/23760630>

Accelerating the Cure

Donations from individuals are an essential source of funding for ACP. There are numerous ways to make a donation, including check, credit card or wire transfer. They can be made on a one-time or a recurring basis. Those that choose to give regularly are known as our Accelerators. This month we'd like to introduce you to one of our Accelerators, Jane.

Jane has been involved with ACP since its inception. She was diagnosed with relapsing remitting MS in January 2004. The period surrounding her diagnosis was a scary time. In Jane's words, "I wasn't feeling well for about 3 months, then took a trip to New York City in December 2003. While in New York I suddenly couldn't walk -- it was extremely frightening." After one provider was unable to help her, she found her current neurologist at Beth Israel Deaconess Medical Center. Under his care her MS symptoms are currently well managed. Jane thinks alternative medicine, plus Reiki and prayer play a role in her current state of wellbeing. In her words, "A friend sends Reiki, along with a few others on her team. Also a few pray for me. Whatever one's faith (or lack of it), prayer can be powerful. I rarely think about



the Reiki or prayer but know they play a role.” A supporter of clinical research, she participated in the ACP Repository, is currently enrolled in a clinical trial at Beth Israel, and plans to donate her brain to the [Rocky Mountain MS Center’s tissue bank](#). Prior to her MS diagnosis, Jane worked at the Massachusetts Institute of Technology (MIT) for 20 years. She read an article about ACP’s founder in MIT’s magazine, [Technology Review](#). Jane states, “I thought he was brilliant and admirable. He decided to take the bull by the horns... I connected him with 2-3 knowledgeable, seasoned people in MIT's fundraising department. As I recall, they were able to offer some advice.” Jane has been giving to ACP for thirteen years and on a monthly basis for the last three. When asked why she donates to ACP, she shares “because ACP is worthy. I’ve checked out a lot of other non-profits that are not. I think what ACP is doing is so important. They’re trying to put the pieces of the puzzle together and figure it out. Also because they want to help and I think it’s important to help other people.”

While ACP is continually seeking to expand our sources of support, we rely on general donations (both large and small) to continue our work at ACP. A major donation can finance a specific project, as can a number of smaller donations. If you’re interested in becoming one of our Accelerators, contact Lindsey Santiago at lsantiago@acceleratedcure.org or (781) 487-0013 to set up donations on a recurring basis. All contributions, regardless of amount, enable ACP to achieve its mission to improve diagnosis, optimize treatment outcomes and find a cure for MS. We give thanks for the generosity of all of our donors, and look forward to your continued support in the future.

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