**Potsdam Fibromyalgia Support Group**

**Newsletter**

# April, 2015

# I Am Back!

 As many of you know, I was on sabbatical from Clarkson University from September, 2014 through March, 2015. My husband and I were in Adelaide, Australia, though we actually lived in a beachside suburb called Glenelg. I worked at the BodyInMind Institute (<http://www.bodyinmind.org/>), which is part of the University of Southern Australia. I worked with a PT-scientist, Dr. Lorimer Moseley, who studies how chronic pain remaps the brain. It was an awesome experience as the team is made up of people from all over the world who have come there to study pain – people from Italy, Switzerland, South Africa, Canada and US.

I was able to work on 4 research projects while I was there. One looked at whether pain could be a conditioned response. If you remember Pavlov’s dog… a bell was associated with food that made the dog drool and eventually the bell made the dog drool without food present. Our question was “if pain is consistently paired with a non-painful sensation, will that sensation eventually trigger a pain response?” My research colleague is analyzing the most recent data and it isn’t clear whether we can show that this does or doesn’t happen.

My second project related to the vestibular system and body awareness. It turns out that the vestibular system does a lot more than just keep us balanced (or make us dizzy when it doesn’t work properly). It helps us know where our body is in space. Knowing where your body is in space, in turn, may contribute to the mapping of pain in the brain. As a result, stimulating the vestibular system can have some unusual effects, such as decreasing phantom limb pain for several days. So, we were testing whether vestibular stimulation shifted whether people relied on visual or sensory information to know where, in this case, their hands were.

The third project looked at whether we can figure out why people with fibromyalgia experience sensory overload – often all senses (e.g., smell, sound, visual) as well as pain. The brain normally has methods to filter sensory information by having the brain inhibit information coming up from the body. One theory about FM is that people with FM are not able to do this inhibition properly, so too much information gets to the brain. We were using a technique with sound bursts that cause a blink due to the startle response. When 2 sound pulses come one right after the other, the second pulse is typically inhibitted. We wanted to see if people with FM didn’t have as much inhibition. We had just gotten to the point where we were recruiting subjects when I left, so one of my colleagues will continue with data collection while I am gone.

My fourth project looked at whether we can predict which people with acute low back pain will develop chronic low back pain. If we could predict this, we could provide additional services to people more likely to become chronic to try to avoid it. This last project is a systematic review, where we carefully find and review research that has already been published to determine whether there is strong evidence for or against.



**Proof that I really was in Australia!**

I also learned about other research happening within the group. One very interesting study looked at how our visual perception of how much we move contributes to our experience of pain. This clever study used virtual reality to trick people into thinking that they were rotating their head more or less than they really were (because it looked like they were rotating more or less). If they thought they were rotating more, they experienced neck pain sooner in the motion and, if they thought they were rotating less they were able to move more before feeling their usual pain. This research shows that what we see contributes to pain as much as an actual ‘painful movement’.

My last focus area was not research but in teaching about chronic pain. I worked with Dr. David Butler who, together with Dr. Moseley, wrote the book called **Explain Pain**, which helps to explain why pain exists and persists. They just recently came out with the **Explain Pain Handbook** for people with chronic pain, to help people understand the factors that contribute to chronic pain. (The handbook is available in the US at [www.OPTP.com](http://www.OPTP.com)). I hope to share some of these ideas with the support group as we get going again.

#### Explain Pain, Part I: The Protectometer

C:\Program Files\Microsoft Office\MEDIA\CAGCAT10\j0300840.wmfThe first concept I’d like to share about the Explain Pain Handbook is what they call “the Protectometer” – your brain’s method for protecting you from danger. Normally, our brain considers what information makes us feel like we are in danger. The hot sensation when you touch a hot burner, for example. Maybe the numbness in your foot after you have sat too long in a squishy chair. Or the swelling in your ankle after you have twisted it. But the brain also considers emotional factors, such as the argument you just had with your spouse, or the nurse who treats you like fibro isn’t real. And your thoughts play a role as well. Remember the research that showed if a person perceives, through vision, that he has rotated his neck further than he has, the pain comes on sooner. If the doctor shows you an MRI with a bulging disc, you will feel more back pain.

On the flip side, there are the factors that make us feel safe (and therefore have less need for pain). If the swelling in your ankle decreases, you will feel like the ankle is healing. If you know that certain stretching or yoga exercises always make you feel better, then doing them will make you feel better because you feel safe doing them. A pleasant cup of tea with a friend or a hobby you enjoy will both help you forget your pain for a while. Having the doctor tell you that your test results are good and there is no permanent damage to your back or neck might reassure you and makes the pain decrease.

It is a bit more complicated that this, but the general idea is that the danger experiences are balanced by the safety experiences and if danger outweighs safety our pain alarms fire. But sometimes we focus so much on the danger signs that we fail to see the safety signs. Or we don’t do enough of the things that would make us feel safer (e.g., spend time with friends, do things we enjoy, gradually increase our activity so we see that we actually can do more). The idea of the Protectometer is to better understand the factors weighing on each side and to find a better balance. Come to the first Support Group meeting and learn more! The Handbook is terrific!

#### Help PT Students Learn About FMS

Each year, Clarkson Physical Therapy graduate students learn about fibromyalgia by meeting with volunteers who have FM. This year I am looking for 7-8 people with FMS to come in **Friday, April 24th, 10:30-Noon**. It involves about 60 minutes of talking with 2-3 students and about 30 minutes of allowing them to do a few tests that a PT might do on an initial visit (you do only what you are comfortable doing). If you are available and willing to help, please contact Leslie at 268-3761 or Lnrussek@clarkson.edu. Help make the next generation of health care providers more aware of and sensitive to FMS!

# May 4th Support Group Meeting:

The Potsdam Fibromyalgia Support Group will meet on **Monday, May 4th at 7 pm**. The topic will be “**Explain Pain, Part I: The balance between safety and danger in our bodies**.” Leslie will be there at 6:30 pm if anyone wants to see some slides of her time in Australia.

This newsletter is a joint effort of Clarkson University and Canton-Potsdam Hospital. If you would prefer to receive these newsletters electronically, please send your email address to [lnrussek@clarkson.edu](mailto:lnrussek@clarkson.edu). You can access current and previous Potsdam Fibromyalgia Support Group Newsletters on our web site: [www.people.clarkson.edu/~lnrussek/FMSG](http://www.clarkson.edu/~lnrussek/FMSG).