**Brain Research Interview**

NAME: Jeremy Flint, Ph.D

Profession: Research Assistant. Been at UF since '99 working at brain institute ever since.

Room : L1131

**1. In your research/job, are there any problems you are trying to solve dealing with Parkinson's.**

Not particularly Parkinson's but general improvements in diagnosing for all/most diseases and disorders in the brain.

The problem is that clinical imaging hardware isn't strong enough to detect small cells that start the diseases/disorders and once they are detected by the clinical hardware, it can be too late.

The way of solving this problem is though imaging research: looking at imaging data (CTPET, MRI, XRAY) trying to look at tissues at resolutions that are not visible to see in clinic to see disease better. Catch diseases before they get too intense, and deliver proper therapy/treatment to improve chances of wellbeing in patients with brain.

**2. Are there any tools you need that you don’t have that might help you?**

#1 issue is machine *time*.

Jeremy says the If there we're enough personnel and hardware things would be different. Two other issues are grant funding and hardware time.

Very hard/impossible for independent research groups to use hardware of high magnitude

And they located at very few places on earth, Gainesville being one of them.

"Too many of us want to use the giant magnet at AMRIS and there isn't enough hardware for everyone to use it at once."

Clinical imaging at the level of research labs would be key to getting them to where they want to be. Current level of hardware in clinical systems can get down to .1 millimeter. However they need pictures of cells (10 microns and under) to be able to deliver effective treatment. "Huge gap regarding what we can do from the bench." said Jeremy.

**3. What is a problem you have identified that you aren’t actively working on currently?**

"There are always different avenues of research regarding different diseases and disease states." Some examples of problems that can be worked on are being able to tell differences between 2 diseases by getting models in place to differentiate between different pathologies.

Places to visit: National High Magnetic Field lab in Gainesville - AMRIS facility.

**Worksheet 2.b. Capture Your Learnings.**

Immediately after interviewing, be sure to capture your learnings. Capture one observation, story highlight or quote. Use the following prompts to guide you.

**WHO DID YOU MEET? (PROFESSION, AGE, LOCATION, ETC.)**

**Jeremy Flint, Ph.D, research assistant at McKnight Brain Institute since '99. Works in room L1131.**

**WHAT WAS THE MOST MEMORABLE AND SURPRISING STORY?**

**Jeremy mentioned that the UF AMRIS facility was one of only 3 in the southern part of the nation, the others being in Tallahassee and San Antonio. It surprised me because I did not know I was living on a campus that was making this big of a difference in the medical industry as I thought it was. With this level of equipment, it is unquestionable that the conclusions, innovations and results coming out of that AMRIS facility will be saving hundreds of thousands of lives in the near future.**

**WHAT DID THIS PARTICIPANT CARE ABOUT THE MOST? WHAT MOTIVATES HIM/HER?**

**Flint was most concerned with his ability to help people enjoy their lives to the fullest, saying, "It keeps me awake at night realizing the impact we are actually working to make in this field of work". He is motivated by the effects his research has on society.**

**WHAT WAS INTERESTING ABOUT THE WAY HE/SHE INTERACTED WITH HIS/HER ENVIRONMENT?**

**It was interesting that he has been working at the brain institute since '99 yet he is still a research assistant. For somebody who hasn't even been alive for as long as he has served at a facility, it confuses me how he has maintained the same position throughout his career the past 20 years.**

**WHAT FRUSTRATED HIM/HER?**

Flint seemed quite lax. The only thing that seemed to bother him was the fact that there is so much work to do and not enough resources to do it with. Personnel, hardware and funding were this three bullet points when I asked him to list them off, apart from that, things were casual.

**WHAT QUESTIONS WOULD YOU LIKE TO EXPLORE IN YOUR NEXT CONVERSATION?**

**In our next conversation, he will be showing me around the AMRIS facility and explaining in detail what the large magnet does. I am very interested in hearing what he has to say about it. Questions I would ask would be: What are some personal projects on brain research that you think the school should sponsor to be fully executed?**