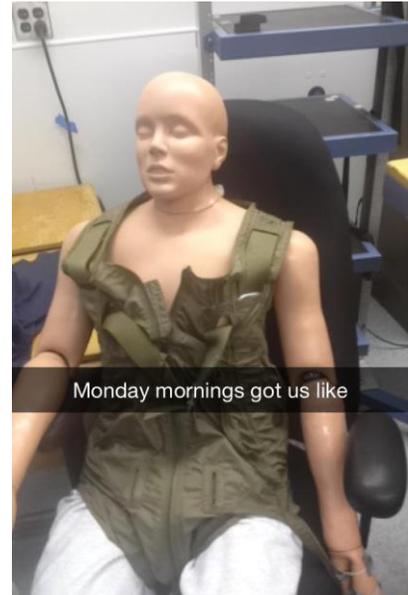


Monday:

We awoke Monday, as we do every day here at Ames, to the sound of Saumalu's knock on the door and the pleasant aroma of cranberry muffins that he had woken up early to bake for all of us. "Good morning, children!" he called from our balcony, with a voice like a songbird from heaven. "Rise and greet the day!" I had just poured myself a glass of fresh squeezed orange juice and unwrapped the most delicious muffin this side of the Ellis Street Gate, when my iPhone alarm went off and I awoke again, tired and hungry.

The smell of patriotism hung in the air as memories of Independence Day fireworks and the United States Women's National Team's historic defeat of Japan to win the 2015 FIFA World Cup lingered from the preceding weekend. This week was to be our busiest and most challenging yet, with poster and presentation due dates rapidly approaching and GeneLab work escalating quickly.



After a few solid hours of work in our respective labs, the SLSTP group headed over to N221 for a tour of the 20G human centrifuge. Designed in the 1960s and located directly under the wind tunnel, the 20G centrifuge has a radius of 29 feet with a maximum G of 20 g (50 RPM!). It has been used to conduct research on the effects of acceleration on systems, including human subjects. Upon entry into the facility, the first thing we saw was a pair of feet sticking out of the wall, with the ominous word "HELP" written below. Still not totally sure why it was there, but an interesting visual, to say the least.



The centrifuge itself filled up the next room, with a metal frame-like structure and thick wires running along the edges to relay signals and output data to the control area. A few brave SLSTPers stepped onto the (stationary) centrifuge and took the chair/throne located at one end of the arm, looking slightly like a

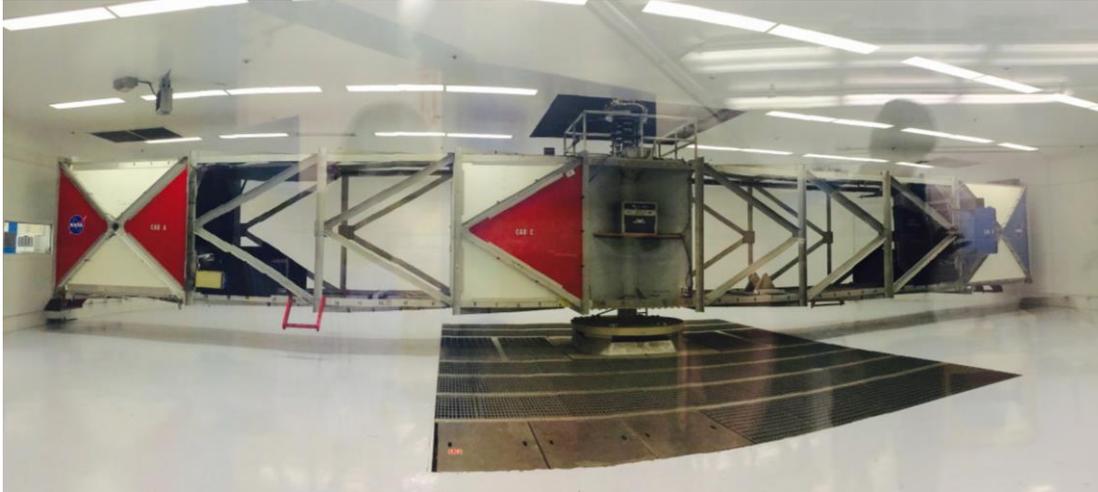
in Game of Thrones...

We, unfortunately, did not get a chance to experience centrifuge rotate, but we all got a good idea of what it like, thanks to the numerous anecdotes provided by Rask. Apparently a lot of fainting - or, as he said, "to of fainting, but not actually" - and feelings of nausea anxiety. Not the most pleasant of feelings, but still on bucketlist to try one da



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Monday Night Live - lots of updates and reminders for the next two weeks, including poster deadlines, midterm presentation dates, lightning talks...these next couple weeks are looking to be stressful and challenging for the SLSTPers. And we didn't even get cookies tonight :(.



Tuesday:

Tuesday would go down in history as the most industrious day so far this summer. We rose early and slaved away in lab until the late hours of the evening, not even pausing to attend the Summer Series speaker Chuck Duff. Though tired, a few of us managed to get a game of Horse and then pickup basketball going out on the courts next to the lodge.



Surprise basketball

enthusiast Chris DeMatteo shocked the world by winning the game of horse in a huge overtime upset and then going 0 for 2 in two on two games following thereafter. While his career may have hit a rough patch the young star vows to make a quick comeback and also to actually learn the rules of basketball.



Wednesday:

Anna gave her midterm presentation today, since she arrived at Ames 2 weeks before the rest of the SLSTP crew. She presented on improving water recycling on the ISS through the BEB, with the goal of increasing the current water retention rate of 75% to at least 85%. Her talk was professional and informative - good job Anna! Several SLSTPers sat in the audience, giving us a glance into what our midterm presentation day might be like next week.



Following Anna's presentation, we trekked over to N247 for a brown bag talk with Sidney Sun, Deputy Chief of the Space Biosciences Division here at NASA Ames. This brown bag was especially captivating because not only did Mr. Sun talk about his own journey and career path, but he also invited each one of us to share our childhood and current aspirations as well as our questions and concerns regarding our future. We found out that many of us shared similar childhood career dreams: becoming a chef, musician, astronaut, artist, etc. As each one of us shared our past and current aspirations, we were able to learn more about one another. Mr. Sun gave us great advice on life and our future, emphasizing that there is no rush to decide on one specific career path - our future may not turn out to be exactly how we think it will now, and that's completely okay. There's always room for exploration and additional opportunities to pursue. Thanks for all the wisdom, Mr. Sun!



Thursday:



Thursday we awoke a nervous excitement that could only mean it was time to practice our midsummer presentations with Beccalu[®]. One by one, we filed into the trailer conference room and nervously gave our presentations to our wonderful leaders. We received feedback and then went back to work on our presentations, set to take place on the following Tuesday.

After a long day of work, we had a Genelab meeting with Jon Rask, who has been of great help throughout our project. Over the course of an hour, he helped us clarify our plan, goals, and timeline, as well as informed us about the best places to eat in Mountain View and the best bar in town (where his band would play the following week).

Feeling reinvigorated about our project as we always do after a productive meeting, we hopped into cars and headed out for Team Dinner as planned by Joe! We went to Iguanas, a well-decorated Mexican restaurant with big portions and low prices (students get 10% off!). All agreed that it was a great choice of restaurant and that we should return. Though many of us fell into deep food comas thereafter, a few gathered for some late night videogame bonding in The Swag Pad® (room 324).



Friday:

But the real excitement of the week was Friday, Family Day! We awoke early to greet our families which showed up at the wee hour of 7:30 AM. From there we embarked on a day of tours, exploration, and memories.

First up was the Space Shop, where any NASA employee or intern can be trained to operate any of several shop machines, including an army of 3D printers as well as some more old-school lathes and band saws.

Next we headed to McMoon, the abandoned McDonald's restaurant here on base, which is currently the headquarters for a project that is recovering original camera tapes from the 1960s lunar orbiter. Hundreds of reels of tapes piled up in the kitchen have led to incredible reconstructions lunar images, including the famous earthrise. How about one of those in your Happy Meal?





Soon we were on our way to the Vertical Motion Simulator, one of the most advanced motion simulators in the world. The system can be configured to simulate a shuttle, helicopter, commercial jet, and more. While we weren't able to try this one out, there was another simulator in the tour that allowed several of us interns to try our hand at a takeoff of a 747. After years of practicing on Grand Theft Auto, I nailed a smooth takeoff over San Francisco and can safely say I'm ready for my pilot's license.



A tour of the Space Shop was another one of the day's highlights. For many of us, it was the first time seeing a 3D printer live in action, and the whole facility was filled with a variety of equipment, including a laser cutter, milling machines, and vinyl cutters. It was a refreshing



reminder of the innovation that occurs every day here at Ames, from research laboratories to mechanical shops. Each of the families walked away as happy customers with a 3D printed NASA logo gifted by the tour guide.

We revisited the 20G centrifuge and the smaller floor centrifuge, which was really fascinating for many of the visitors. While some parents were eager to sign up for a ride on the 20, many others were happy to be out of there and on to lunch, before they themselves could reach presyncope and faint.



Next up was lunch with pizza from Megabytes, where Brad, Christina, and Desi spoke to us about our programs and what goes on here at Ames. After introducing the three programs (SLSTP, Space Academy, and Marty), Brad laid out the merits of summers spent at Ames and the boundless opportunities that follow them, closing with a heartfelt thank you to all the parents and families that helped get us where we are. We can't say thank you enough, families, we love you!

After that, we headed to our individual labs with our families to show off the work we do every day. It was a great opportunity to let our parents know exactly what we've been up to and even teach them a little science in the process.

Finally, it was time to relax and enjoy the true treasure hidden on Ames's campus: happy hour at Tee Minus One. Families relaxed and bonded over \$9 pitchers and free appetizer trays, enjoying the perfect weather that is the San Francisco Bay Area. It was a perfect end to a perfect day.



Saturday and Sunday:

In light of the visiting family members, no activities were planned for this weekend. For those of us that were able to spend the time with our families, it was a nice break from work and a great time to catch up with them. That said, many of us spent a significant portion of that time working on our final posters, which were due Sunday. With the additional burden on midterm presentations and lightning talks coming up, there was no shortage of work to be done this weekend.