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Trinity Writing Test
June 27, 2018

1. Interview questions for Alison Jefferies

1. What is your background/area of interest in research?
2. What made you want to study the connection between sleep deprivation and appetite?
3. How was the Sleep Institute of America's grant able to help you conduct this study?
4. What was the most challenging aspect of conducting this study?
5. Did anything happen during the study that surprised you?
6. How do you think the results from this study would be helpful to the general public? How would it be helpful specifically to a student body?
7. How do you plan to build upon the results from this study? What are you going to research next?
8. What can students learn from helping conduct long-term research projects like this?
9. How does doing intensive research projects contribute towards Trinity's initiative of experiential learning?
10. Could you explain the significance of a student being published in a national journal for working on a study like this?
11. What was the most rewarding part of working on this study with Trinity students?

2. Other potential sources

1. Any/all of the rising seniors (Katelyn Rogers, Clarisa Andrew, Roger Gatlin) that worked on the study with Prof. Jefferies.
2. Dr. Sarah A. Raskin, Director of Neuroscience dept. and Professor of Psychology and Neuroscience
3. Dr. Marianne Jacobs, DO, a neurologist working at the Hartford Hospital Sleep Disorders Centers
4. A representative at the Sleep Institute of America

3. Story

We all know that sleepless nights are bad for us, but most of us justify pulling all-nighters for the sake of a grade or because we just have to know what happens in the next episode of our new favorite Netflix series. While we know this isn't a healthy habit, sleep deprivation can actually affect us more than just making us feel groggy and tired the next morning. According to

a two-year long study conducted by Trinity College Associate Professor of Neuroscience, Alison Jefferies, we are increasing our appetite by staying up extra late.

Jefferies says that her interest in the connection between sleep and hunger began when she noticed the normally nearly empty café she frequents for breakfast was packed with students during midterms and finals seasons. “I’m usually the only one there, so the fact that I couldn’t even get a table was crazy,” she recounts. Jefferies brought up this issue to her Principles of Neuroscience class and immediately three students expressed interest in joining her research effort.

With the help of a $400,000 grant from the Sleep Institute of America, Jefferies and her three students, Katelyn Rogers ‘19, Clarisa Andrew ‘19, and Roger Gatlin ‘19, were able to survey over 300 Trinity students. Of those surveyed, it was found that 89% of participants ate an average of 340 calories more on nights where they stayed up at least two hours later than usual. 97% of participants confirmed feeling some level of hunger pains when staying up late into the night, and 72% said they ate a larger breakfast than usual after having a night with little sleep.

Dr. Marianne Jacobs, DO, a neurologist at the Hartford Hospital Sleep Disorder Centers, finds the results to be interesting, noting “at the Sleep Disorder Centers we’ve found that those who suffer from chronic insomnia to have a higher BMI on average than those with regular sleeping habits.” She attributes this to boredom snacking as well as an abnormal alteration of the body’s internal clock for meal times. Jefferies’s study validates these conclusions, adding that while it isn’t harmful to lose sleep every once in a while, that doing so regularly can lead to weight gain in addition to other detrimental effects of sleep deprivation.

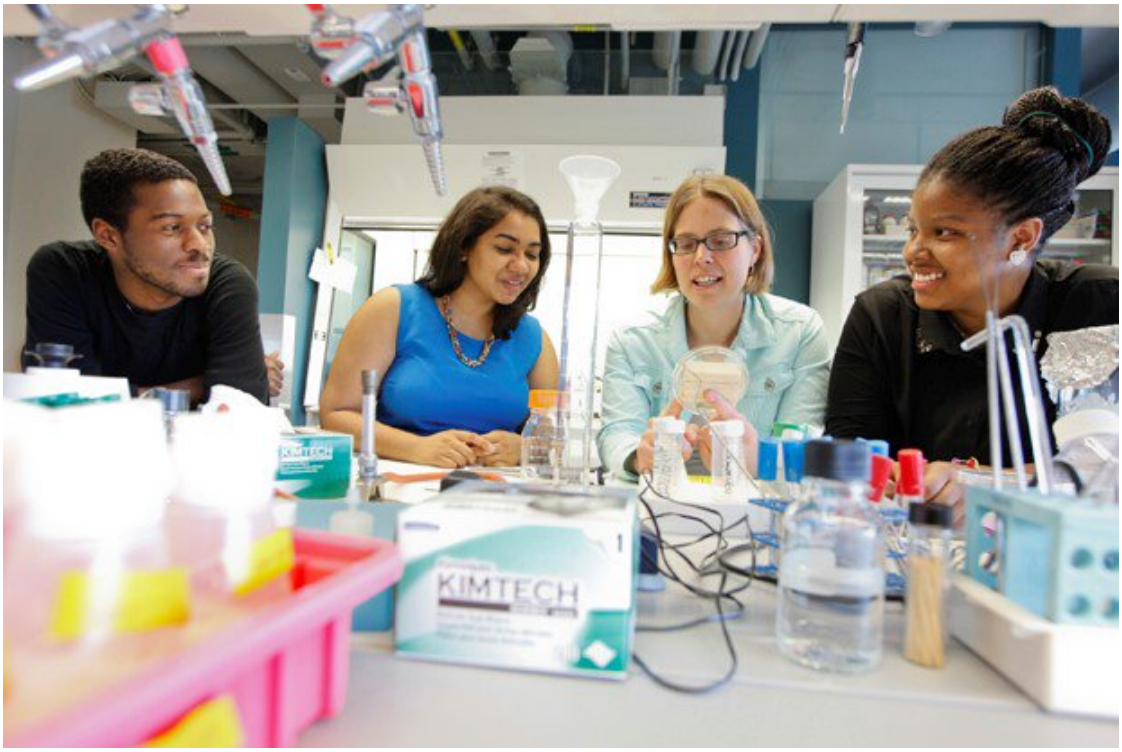
Jefferies plans to continue her study by seeing how sleep deprivation affects what type of food choices we make. She remarks, “we noticed the majority of those who were eating late at night were eating calorically dense foods high in sugar and fat.” As for the student researchers, Rogers cites her involvement in this long-term study as the reason she plans to pursue a PhD in neuroscience after graduating. She proudly explains how seeing the study through from being just an idea to being published in the July 2018 issue of *Sleepy American* helped teach her patience, perseverance, and a sense of accomplishment.

“We always encourage students to put their work in a public forum, be it in a journal, at a symposium, or even submitting it to the Hartford Courant,” elaborates Dr. Sarah A. Raskin, Director of Neuroscience and Professor of Psychology and Neuroscience. “Being published in a scientific journal is an honor for any researcher, but to achieve that while still an undergraduate student is a phenomenal accolade,” she continues.

Intensive research projects like this are a part of Trinity’s push towards experiential learning, where students are encouraged to be more hands-on in their learning and to get outside of the classroom. This also includes internships, study abroad opportunities, volunteering, and other experiences in which students can engage the world on both local and global levels. Jefferies

emphasizes the most rewarding part of working with the students was “to see them grow as scholars, as researchers, and as people.”

4. Caption to accompany photo of Prof. Jefferies and her 3 student workers



Above: Associate Professor of Neuroscience, Alison Jefferies (center right), discovered a link between sleep deprivation and increased appetite with the help of students Roger Gatlin ‘19, Clarisa Andrew ‘19, and Katelyn Rogers ‘19.