



Bleep! Bleep! Bleep!

6:45 AM Lisamarie Moore starts her day by rolling over and hitting the snooze button on her alarm. Then again, she can use the rest.

7:15 am Moore, a PhD candidate at UMDNJ-Graduate School of Biomedical Sciences (GSBS), is out of bed and preparing breakfast. By 8 am, she and Wynter, her 8-year-old daughter, are on their way to school. Moore drops off Wynter and then hits the gym (30 minutes of cardio, 30 minutes of weights). Time to head to the lab.

Biomedical research wasn't Moore's first calling. A Queens native, she attended Old Dominion University, in Norfolk, VA, where she received a bachelor's in business administration, with a concentration in information technology. After jobs with Yahoo! and Mercedes-Benz, she returned to the New Jersey Institute of Technology (NJIT) with a plan to pursue her master's degree in computer engineering. While flipping through the graduate studies book, she happened upon a program in biomedical engineering at UMDNJ-GSBS. "I have a masters from NJIT and studied part time at UMDNJ while completing the masters. Then, I enrolled at UMDNJ as a PhD student. I had always liked biology," she says, "but I didn't want to be a physician." That was five years ago. She hasn't looked back since.

10 am Moore begins each morning by looking over her notes from the day before and then double-checking her plan for the day ahead. Around 10:30, she'll go upstairs to the vivarium to breed rats. (Who knew the life of a PhD student could be so glamorous?) Rodents are essential to her work, and one of Moore's duties is to play cupid.

After serenading the lucky duo—Barry White is a popular favorite—Moore collects any new pups from her previous love con-

nections and goes back downstairs to the lab. "It's a sad part of my job," she says. "But I have to sacrifice them to get their stem cells." The pups

are euthanized, and then dissection will take roughly half an hour.

11:30 AM A time of day when—let's be honest—most people are just finishing their email. For Moore, however, it's time to process the brain tissue she's collected. Two steps—enzymatic digestion and chemical mechanical dissociation—cleave the bonds between the cells, which allows Moore to break apart the tissue into single cells. The process takes about 60 minutes, time which Moore uses not to grab a cup of coffee (she seldom touches the stuff), but to make the culture medium into which these stem cells will be grown. Afterward, they'll go into an incubator for the next 7 to 10 days.

12:45 PM Lunch time. Or, for Moore, time to attend a seminar during which one of her fellow students will give a presentation on their work—anything ranging from immunology to breast cancer research. She cuts through the cafeteria on the way from her lab in the NJMS-University Hospital Cancer Center to the Medical Sciences Building. Usually, she'll grab a turkey and Swiss or some sushi. ("Anything I can eat without a fork.")

2:15 PM After the seminar—and assuming she doesn't have a class to T.A. (teacher assistant), or a meeting of the Stem Cell Education Society (of which she's vice-president)—Moore will head back to her lab to begin a Western Blot (or Western, for short), an assay that removes proteins from cells and tissues. She begins by taking cells from a minus-80




degree Celsius freezer, where they've been, thawing them, and breaking them apart. The Western, which requires literally dozens of steps, will take the rest of the afternoon and continue into the following morning. While it progresses, Moore takes the opportunity to put cells from another experiment on glass slides, retrieve still others from the incubator, and explain the day's work to a rotating master's-level student in the lab. As a PhD candidate, that's part of her job.

4:30 PM Moore's day is winding down, kind of. It's time to write up the results of the day's work, do some data analysis, and check out the relevant literature online. She'll also make a plan for tomorrow. By 5:30, she's in her car and on her way to pick up Wynter who (perhaps not surprisingly) has a schedule of her own affixed to her bedroom door.

6:30 PM Wynter does her homework, and Moore begins preparing dinner. While it cooks, she'll log back on the computer to finish her day's work from the lab. Her studies completed, Wynter practices piano, and then reports on her "Mommy Assignment"—a kind of special homework of her mother's own devising. It could be anything from reading and analyzing a short story, to looking up vocabulary words, to doing an extra page of math problems. Mother and daughter go over the Mommy Assignment together before they eat.

9 PM Bedtime for Wynter. Moore, however, will be up a few more hours, working, answering email, or, she sheepishly admits, sometimes even watching "Survivor." Around midnight, her head finally hits the pillow. That alarm is less than 7 hours away. ●



A Day in the Life of Lisamarie Moore

By Tryon Baldwin

Photos by Andrew Hanenberg