

Misting Syndrome

By Stein Acker

Part 1: The Conference

At 4:57PM, the university's new conference room was filled with organized chaos. It was the last week of their undergraduate summer research program, and 100-odd palpably anxious college students were about to give their very first poster presentations. Taylor, with her poster declaring that "Patients with Early Misting Syndrome Do Not Show Significant Differences in Skin Conductance Tests," shifted her weight as the attendees started streaming in. Her results were not all that exciting; she had used preliminary data to show that patients with early misting syndrome did *not*, in fact, show significant differences in skin conductance tests. Her principal investigator had told her that not all scientific findings needed to be positive and that, in any case, summer undergraduate research experiences were more about professional development than actually putting new scientific knowledge into the world. She hoped the attendees agreed.

Her first audience member began approaching. On his name tag, she saw the name "James Nwoko, M.D." *Shit*, she thought. *Why is he here? Why is he, of all people, my first audience member?*

Dr. Nwoko hovered for a few seconds, reading her poster, then broke his silence.

"Want to tell me about your research? It looks quite interesting."

"Uhhhh, sure! First of all, Dr. Nwoko, it is such an honor to meet you. All your research on misting syndrome, your invention of the aerogel blanket – "

Dr. Nwoko cut her off. "No, today, I'm just another attendee. Tell me, what's misting syndrome?"

"Ah, okay. Misting syndrome is a medical disorder first documented eight years ago characterized by the patient slowly losing mass, becoming translucent, and eventually disappearing entirely – a state known as terminal misting, or more colloquially, 'misting away.' There are an estimated 5,000 cases per year in the United States, and it is always terminal, so care is palliative. Translucency is, of course, a

telltale sign, but earlier symptoms include weight loss with no change to physique, dizziness, a lack of energy, difficulty eating or drinking, and a tendency to feel cold. The last symptom has historically proven particularly problematic, as patients with advanced misting often cannot bear the weight of a blanket, but with your invention of the ultralight aerogel blanket, the quality of life of those with advanced misting syndrome has improved dramatically.”

“Thank you. Now, tell me about your research on the topic.”

“Of course. So far, the only proven diagnostic technique is specific gravity testing, wherein a milliliter of blood is obtained, and its weight is reported in grams. Prior research has shown that the specific gravity of blood is 1.06 with minimal variation, so any blood specific gravity below 1 is concerning, and any below 0.9 is adequate for diagnosis. Specific gravity is, so far, the only way to measure the progress of the disease. However, gathering the blood sample for a specific gravity test can be quite painful for people in late stages of the disease – it often takes multiple days to recover from – so we are currently looking into developing new testing modalities. One potential alternative was just tracking weight, but late-stage patients have such decreased appetites that it is difficult to differentiate weight loss due to malnutrition from weight loss due to misting. Currently, we are looking at using skin conductance testing to see if there are any differences in electrophysiological activity.”

“What did you find?”

Taylor tensed up. “We found some differences... but... the truth is, they weren’t very notable. Our results were approaching significance at $p = 0.06$, but our R-squared value was just 0.12. The test that we developed shows that there is some relationship between skin conductance and misting status, but it is not currently applicable in the clinic.” As she said those last six words, she began fighting back tears.

“What’s wrong? This is a great result for a first research project.”

“I know. It’s just... there’s so little known about this condition, and so many of the current tests and treatments feel so barbaric. I started this project after my mom got a specific gravity of 0.97, and I really just wanted to make sure she’d be comfortable if things took a turn for the worst. I thought I could show my love to her this way, but it turns out I can’t.”

Dr. Nwoko smiled softly. “I understand. It’s hard not to be able to help those you love. Ultimately, though, all we owe each other is what we are able to give. I’m sure your mom feels your love.”

Part 2: The Hospital

The bed appeared empty, save for an aerogel film gently undulating over a human-shaped cloud. The built-in scale stated that the cloudy patient lying in it weighed 1.7 pounds – a worrying decrease, it noted with a red exclamation point, from the 2.1 pounds he had weighed the same time yesterday. An iPad with a clunky piece of adaptive screen covering displayed an image of a young man hugging a slightly taller woman. He swiped between pictures, showing them trying to hold the pose but then breaking it to laugh at nothing.

Dr. Nwoko knocked on the doorframe and opened the curtain.

“Oh. I’m sorry, Chris, do you want more time to look through your pictures with Amanda?”

Chris switched his iPad to the Notes app.

NO, NOW IS FINE. WHAT’S UP?

“We have the results of your specific gravity test, and we were able to calculate a time for you. Do you want to hear it?”

YES. Then, a beat later, I THINK.

“Okay. According to the most recent results, you have a 95% chance of reaching terminal misting at 9:04PM. There’s a small chance that it could happen a minute or so earlier or later, but we are very certain of this time.

TODAY?

“Um... yes.”

YOU’RE ONLY ABLE TO TELL ME TWO HOURS BEFORE IT ACTUALLY HAPPENS??

“I’m sorry, Chris. If we were able to tell you sooner, we would have.”

They sat in silence a few minutes.

WHAT DO I DO NOW?

“Well, I could call the chaplain.”

I'VE TALKED TO HER ENOUGH. CAN AMANDA VISIT?

“Unfortunately, she can't. You're still technically in quarantine.”

FUCK THAT.

Dr. Nwoko reflected for a few seconds. “I can tell you, though, that it would be very hard to tell if you escaped, and that I already have all the information I need to write your missing certificate.”

Part 3: The Riverside

Amanda stood at the sandy edge of the river, wringing her hands. The moon shone off the water, giving everything a silvery glow. She checked her watch and looked at the nearby hospital: seven minutes until Chris misted away. He had told her he'd be there five minutes ago. *Where was he now?* She noticed a glinting, see-through figure in the distance running towards her.

“Chris!”

She ran over and grabbed him, trying to warm him through his aerogel blanket. They held each other, weeping together as long as they could; a silhouette hugging a shadow. Chris craned his lips up to Amanda's ear and whispered.

“I love you.”

And with that, he vanished.