

---Introduction Music---

Wait, Wait, Wait,

Let me be the substrate to your ear receptors.  
And let this not just be one endeavor, yea.  
I get crunk (Kronk) on the science, yea, pull the lever.  
And with the music, I just hope you say, "Dang, he clever."

Whatever, bringing mass to what matters.  
All the while my life is scattered.  
You surge on in general, I guess you're David Satcher.  
And you bet I got you when it comes down to the laughter.  
And whatever may come after.

Scientifically sound, so profound, gonna convert energy like its dollar to the pound.  
Just listen to this while making some hash browns.  
Or maybe later after you rake in some cash mounds.

Yea, who am i it's Ralph from the South  
Who raps out my mouth.  
And we bringing music to the science that's around.  
And thats periodt!  
And I just thank you for hearing this.

Scientifically Sound.

---Presentation Begins---

### **Who?**

Hi. Wait, no, no, wait, Hi. Wait, That's weird. Just be yourself. Hello, everyone! Who am I? I am Ralph White III, also known as Ralph from the South. I'm a graduate student at the University of Minnesota in the Department of Pharmacology. I'm currently studying mechanisms of resistance when it comes to prostate cancer. And on this side, I'm a musician, fellow crate digger, and a lover of music and music history.

### **What?**

So, I'm the host of a podcast that I created back in the beginning of this year called Scientifically Sound. Scientifically Sound is a science storytelling podcast from the creative perspective of music and music history. Whether it's dissecting a title, an album's creation, or even understanding a scientific discovery or concept and its basis, I try to find a relation between the two in a fun, informative way.

### **When?**

We are currently in our first year of this podcast, starting in January. I've been talking, I believe, what was I talking about January? I think it was Minnie Riperton and a cell organelles being discovered. Weird, right?

### **Here's A Sample...**

Now you're probably wondering what techniques they were using back in the 1970s just to make this big discovery. I'll tell you. The first is electron microscopy. And the second is cellular fractionation, for your education. Bars. I'm sorry, but just to get back to the techniques they use. The first was electron microscopy. Electron Microscopy is a technique that takes an accelerated electron beam to give high-res photos. We could probably get selfies on them and probably get an image of your thoughts right now, I'm just saying. And this particular technique was used for quality control and biological imaging, especially with metals imaging. Now, the second technique that they use is cell Fractionation. What cell Fractionation is, is it actually separates the cellular components that you have in cells to identify individual function. What is done is actually take the solution of cells, you spin them around at multiple different speeds, in order to isolate out a particular organelle, or a particular component of the cell. An analogy for this process would be like, you're on the playground with your friends and your own swing and they spin you around and around and around, and then they let you go, and it starts spinning really fast and you're losing part of your outfit. It's kind of similar to that because you're separating out a component of who you are. Same with the cells when we are separating out a particular organelle. With these two techniques we now know what the cell even looks like on the inside and what it's even doing on the inside. We never knew anything about this. We knew cells existed, even Minnie Riperton knew this. That's what she meant in her song, "Long ago we played hide-go-seek, Kissing under the apple tree Who could tell me that this would bring, Me to you, you to me, she knew that we didn't know this stuff, and now we do. It's crazy.

### **Where?**

Look around. Everything, when it comes to Scientifically Sound is done in-house. I go buy records, I look through records, a lot of the time. I start researching about the record. I research in terms of the scientific discoveries or scientific concepts all on my own. It's really fun. It's really a lot of knowledge taken in.

### **Why?**

Why? Because why not? I'm just kidding. I'm a proponent of science given to the general public in a fun way. A lot of the time, the general public may be turned off from science. Whether it's in the nature that it's given. Whether it's the jargon, or maybe the complex setups that are being explained to us, and sometimes it doesn't need all that. Sometimes you just need a story. In order to make something, understandable, and more relatable and retainable in you. And that's why I created Scientifically Sound.

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4thescientificsound@gmail.com. I'm Ralph from the south, and I'm the host of Scientifically Sound. Come by my poster so we can chat. See you there.