

Transcript of Lab 017 \_\_\_\_

Zakiya: If we sound crazy, it's because we had a wild night last night.

**Titi:** Was it wild? We're too old to have wild night.

**Zakiya:** Yeah. We went to dinner. We went we went to dinner late.

**Titi:** We had a late dinner. That's a wild night for us . Hear that?

**Zakiya:** I feel like if I'm eating at 9:00...

**Titi:** Something went wrong during the day or I'm out with my friend.

**Zakiya:** A nine o'clock dinner feels like....

**Titi:** It was practically breakfast.

Zakiya: Yeah! It felt like 2000 o'clock I'm like"what is happening?".

Titi: For real I'm like "What the?! ".

**Zakiya:** How is this restaurant still open?

**Titi:** Right! What are all these people doing? There were children there.

Zakiya: Yes!

**Titi:** Remember those little girls we saw...i was like "unh unh".

**Zakiya:** Are eating that late, they're going to have heartburn.

Titi: I'm Titi.

**Zakiya:** And I'm Zakiya.

**Titi:** And from Spotify Studios. This is Dope Labs.

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**Zakiya:** I think we feel like that because it's so dark outside.

**Titi:** Yes. It's been starting to get dark at like what? Six-thirty?

**Zakiya:** Too early.

**Titi:** Way too early. And it just messes with you. As soon as you get out of work, it's dark. It's crazy.

**Zakiya:** And all that does is lead to seasonal depression.

**Titi:** That is real, in places that don't get that much sun. I lived in Michigan for two years. Seasonal depression is real.

**Zakiya:** So while I do like it when it's winter time, that's something I hate. I feel like it gets dark so early and then on top of that. Then we move the blast and we're like "more darkness!". I don't understand.

**Titi:** Right.

**Zakiya:** Today's episode is exploring...

Both: Daylight savings.

**Zakiya:** Is anybody else drowning in time?

**Titi:** Oh! Daylight saving drives me crazy.

**Zakiya:** Who came up with that?

**Titi:** I think it's stupid. I think daylight saving is stupid.

**Zakiya:** All you are going to do is forget to change your clock. Be somewhere late. And if you like me and you're already late, you're gonna be super late. And you got a problem?

**Titi:** Are we falling back? We're falling back, not springing forward. So that means that what?? See all of it is confusing for me. Will we be late or early?

**Zakiya:** I don't know. I don't understand. And that's the thing. That's why. That's why nobody should be using this time right here. This is a textbook example.

**Titi:** I really just want to know why this was put into place. Like, Whose idea was this and what problem were you trying to solve?

**Zakiya:** Yeah. Don't if it's not broke, don't fix it.

Titi: Exactly.

**Zakiya:** Turn to your textbook on page 37. Let's get to the bottom of it.

**Titi:** Let's get into the recitation. First of all, apparently we've been saying it wrong this whole time.

Zakiya: Yeah.

**Titi:** It's not daylight savings time with an S. It's daylight saving time.

**Zakiya:** Time to save the daylight. Is that what it means?

**Titi:** Yeah, that's what it means.

**Zakiya:** But are we??.

**Titi:** But everybody says "Daylight Savings Time", And that's not right. So, you know, when you hear your friends saying daylight savings, say, "sorry, that's not right".

**Zakiya:** And so I've been thinking that daylight saving time starts in November, but it's ending.

**Titi:** Mind blown, like, honestly, like I never thought of it like that. I thought that daylight saving was when we fell back.

**Zakiya:** No. So in the US, daylight savings starts in March it's the second Sunday in March. And that's when we move our clocks forward. And then it ends when we turn our clocks back. And that's the first Sunday in November. So even though we've been feeling like it's been getting dark, we're really about to just deep dive into the abyss.

**Titi:** Oh, my gosh.

**Zakiya:** It's like we're basically going underground now.

Titi: Yes.

**Zakiya:** We're going to be mole people.

Titi: Mole rats.

**Zakiya:** Now that I have learned that tidbit, it still doesn't change the thousand questions that I have.

**Titi:** For real. I mean, whose idea was this and why was it put in place? I know that daylight saving time is not a thing everywhere.

Zakiya: Right.

**Titi:** So who makes this decision? Is it the government?

**Zakiya:** Who keeps holding it over me? Because I don't want to participate.

**Titi:** I don't think most people want to participate. I don't know who benefits from daylight saving time.

**Zakiya:** Raise your hand, if you like. Daylight saving time and it makes your life better. I want to know...

Titi: I don't see no hands.

**Zakiya:** ..Who you are, and how that works. I think I also have questions like I really want to know how it works because if it is dark when I wake up, and you say we are going to fall back andI don't even...People say, "Oh, yes, fall back, spring forward". That doesn't make sense to me because fall foward sounds good too! So I also never know which way the clock is supposed to go. I always need to be with someone like "help me".

**Titi:** But now our phones do it on their own. So it's like if you got a clock in your house, it's the only thing you gotta worry about.

**Zakiya:** Is Daylight Saving Time scientific? Is it a social construct? Like when you say who came up with it? Who does it belong to? Does it belong to the physicist?

Titi: Right.

**Zakiya:** Biologist Somebody who's saying we need sunl.

**Titi:** Plant your flag in daylight saving time and tell us who who is responsible? What community?

**Zakiya:** I need more I need more info. And then you said that is some people participate and some people don't. How does that work?

**Titi:** And like we know that it messes all of us up?

Zakiya: I know how I feel.

**Titi:** Exactly. But on the grander scheme, are there bad parts about daylight saving time? What are the pros and cons of having daylight saving time?

**Zakiya:** Yeah. Like what are some of the greater implications?

Titi: Yeah.

**Zakiya:** And what are the greater implications when you don't have everyone participating?

Titi: Right.

**Zakiya:** I don't know how you can have a system where everyone doesn't participate...

**Titi:** Not even everyone in the United States Participates in daylight saving time.

**Zakiya:** And that's what's wild. That's like if not everybody followed the traffic light. Some people just don't participate. That's madness.

**Titi:** It's crazy. It's like when you go to Jersey and I went to pump your gas for you. No.

**Zakiya:** Thank you actually, I like it. I hate getting out.

**Titi:** Then you got a tip then I'm like, I could do this myself.

**Zakiya:** You got to tip them?

**Titi:** You don't tip them.

**Zakiya:** I don't know.

**Titi:** I thought you supposed to tip them.

**Zakiya:** Are you getting conned? I thought it was a bundle deal that was rolled into the price. Like suppose to be the United States.

**Titi:** We aint united. Not on this.

**Zakiya:** Not on that.

**Titi:** Definitely not on daylight savings or on pumping gas, apparently.

**Zakiya:** Oh, all right. So we've got to get some answers to these questions.

**Titi:** Yes. So let's get into the disection.

**Zakiya:** But before we introduce today's guests, we really need to just talk about time. If you think about it, times are pretty abstract concept.

**Titi:** The first thing is that it's manmade.

**Zakiya:** So I'm never late.

**Titi:** That's not true.

**Titi:** So time is something that has been determined by humans. And right now, there is a place in Colorado. It's called the National Institute of Standards and Technology. They have the atomic clock. And that clock kind of like calibrates all of us. That is the official time in the world.

**Zakiya:** Everywhere.

**Titi:** Yeah. So they have determined what a second is scientifically. So the technical definition of the second is defined by taking the fixed numerical value of the cesium frequency or the unperturbed ground state hyper fine transition frequency of the cesium 133 atom to be 9,192,631,770 when expressed in the unit Hertz.

**Zakiya:** Girl, the only thing I know from that is Hertz. This definition hurts. what does that mean?

**Titi:** The way that most of us think of a second is how we say, OK. There's 24 hours in a day. There's 60 minutes in an hour. They're 60 seconds in a minute. So if you do the math, you end up with 86,400 seconds in a day. But what they realize in the 1950s is that the earth's rotation isn't consistent enough for that to be valid all the time. So they were like, how can we make this more accurate? And then they thought about it some more and they said, well, maybe we can base it off of atoms and they based it on a very specific atom. But before we get into that specific atom, let's talk about the basic structure of an atom. So an atom is made up of three things, the nucleus, which is made up of protons and neutrons, and then you have electrons that are orbiting all around it. So the atom that they were looking at to determine what a second is is the cesium 133 atom. And they looked at it because cesium 133 only has one electron that's orbiting in its outermost shell. So that was unique to it. And what they discovered is that that specific electron switches its spin from one to another and back about nine billion times per second. And so that became the standard for how we determine what a second is. The reason why they do it that way is because that nine billion times that the spin changes that is standard, like it never changes. Cesium 133 is always on time. It always has that same number every single time and it always hits the second. It is so consistent that after a month it'll only be off by one nanosecond. So that's pretty accurate.

**Zakiya:** So now that we got that primer from Titi, let's dig into daylight saving time specifically. To help us we called Dr. Laura Grant.

**Dr. Grant:** I am a professor at Claremont McKenna College and I study environmental and public economics. In essence, I look at how I can get people to work in better cooperation and in better improvement for the environment and society.

**Titi:** Dr Grant examined how daylight saving affects energy use because saving energy was the real reason why we started changing our clocks in the first place.

**Zakiya:** So this has nothing to do with the Sun?

Titi: Girl...

**Zakiya:** Saving energy when? When did this?

**Titi:** Arent we doing that with the wind turbines?

**Zakiya:** Yeah. Like what? What blew my mind, though, when you think about it, is when she told us that this traces back to Benjamin Franklin. It really is all about the Benjamins. That is so corny. But I love it. When she told us that this traces back to Benjamin Franklin. I just had to roll my eyes.

**Titi:** Things were way less complicated back then, so maybe changing the clocks wasn't a big deal. But in our new age,.

**Zakiya:** It is a big deal. That was the late 1700s. So he came up with this idea when he was a diplomat in France.

**Dr. Grant:** So instead of turning on lights during the during the morning or in the evening, if we lived more by sunlight, then we won't use as much energy. That's the hypothesis.

**Titi:** But what Dr. Grant says is that it was low key, a joke.

**Dr. Grant:** He was joking about this fact that they were staying up late, having fun, playing poker and sleeping in. And one morning he said, oh, my goodness, the sun's out. To my surprise, we could be living by like the economy of sunshine rather than burning candles at night. Right. So he said he wrote this essay that was very whimsical and is a fun essay that basically said, why would we waste candles when we could wake up in the morning? And in fact, he kind of proposed what I would call an economic solution. He said that we should clanging bells at dawn and ban shutters all again in jest, more or less saying we should live during the daylight.

**Titi:** But at first, Ben Franklin's idea wasn't taken very seriously by any government for a very long time.

**Zakiya:** Yeah. It wasn't until the early 1900s that a few cities in Canada began changing their clocks.

Titi: Canadians.

**Zakiya:** But it was World War One that took Daylight Saving Time global,.

**Dr. Grant:** And all the energy resources were really necessary. We wanted to conserve and we were really concerned about energy resources. So the Germans first implemented it actually, and many other countries followed suit. But we repealed it afterwards. People didn't like it.

**Titi:** And we still don't.

Zakiya: Right.

**Titi:** OK, so we. Meaning the United States.

Zakiya: Yeah.

**Titi:** And of course, we all know that daylight saving didn't stay repealed because we are currently experiencing it.

**Zakiya:** Unsurprisingly, war again brought it back.

**Dr. Grant:** And then World War 2 comes around. We practice again because again, energy conservation, all of our resources need to go towards the war and repeal again.

**Titi:** That's right. We repealed it again.

**Zakiya:** Why can't we learn our lesson? Why are we like war... Energy conservation... Lets live crazy... War... Energy conservation, why can't we just conserve energy all around.

**Titi:** Its just like Fool me once. Shame on you. You're not gonna fool me again.

**Zakiya:** Yeah, we're over it. But even though it's no longer federally mandated, some places continue to practice daylight saving. And that obviously became very confusing.

**Titi:** Yeah, because you have certain cities or certain states that still change their clocks and everybody else wasn't. So you go down the road and they re like "it's 9 o'clock" you like actually it's eight.

**Zakiya:** Can you imagine go into a different town like in. I mean, it's already confusing enough when we travel different time zones. But I'm talking about ten minutes down the road, a different city.

**Titi:** Especially if it's like someplace you trying to get food and are like, "sorry, the kitchen's closed", huh? That's the easiest way to get me upset. You know that

**Zakiya:** I do. So in 1966, the federal government passed a law called the Uniform Time Act. It standardized the start and end dates for daylight saving across the country. So today the US is one of about 70 countries that practice daylight saving.

**Titi:** So now we know why we started observing daylight saving. But why does the amount of daylight we get fluctuate in the first place?

Zakiya: Yeah,.

**Titi:** This all has to do with planetary rotation and the earth's axis.

Zakiya: Annnd back to Titi.

**Titi:** So the tilt of the earth's axis defines the amount of daylight we see. And daylight hours are shortest during each hemispheres winter. So in the wintertime we get the least amount of sunlight.

Zakiya: Right.

**Titi:** Between summer and winter solstice.

**Zakiya:** So that's June 21st for summer solstice and December 21st for winter solstice this year.

**Titi:** Yeah. The number of daylight hours decreases. And the rate of the decrease is larger at higher latitudes.

**Dr. Grant:** The further south you are, the more your days are the same all year. So down here in Southern California, our days change slower than yours do or somebody in New York City or Chicago. And that's actually also why a lot of tropical countries, they're not going to practice daylight saving time. They're on the equator. And by definition, equal days on the equator. So they don't need daylight saving time. Right.

**Titi:** So that's why in places like I think Iceland, they have 24 hours of darkness and other places that are super high up on our hemisphere. And so the fewer sunlight hours, the colder the nights get. And so that's when winter starts.

**Zakiya:** And that's why winter is different in the northern and southern hemispheres.

Titi: Mm hmm.

**Zakiya:** Because when is winter and we're having short days in the northern hemisphere. It's summer and they're having long days in the southern hemisphere.

Titi: Yes.

**Zakiya:** All of this because the tilt of the earth.

Titi: MmHmm.

Zakiva: WOOoo

**Titi:** Imagine the earth stood up straight.

Zakiya: Mm! stand up!

**Titi:** Respectability politics. Pull up your pants earth!

**Zakiya:** Now in theory. Daylight saving is supposed to occur in the winter and summer. But in the U.S., that's not the case.

**Titi:** The federal government has changed our start and end dates twice to extend daylight saving. And as of 2007, we observed daylight saving eight months per year.

**Dr. Grant:** This seems a little absurd to me that it's not just half and half or that it's centered on the solstice.

**Zakiya:** Well, they need to change it back because you might as well go ahead and extend it some more.

Titi: All year round!

**Zakiya:** Because Now it drops off and it's drastic.

**Titi:** Exactly. But it's like why is something like daylight saving, which was started in order to save energy and all this stuff, Why is it regulated by the government? It should just be regulated by science.

**Zakiya:** Yeah, like the solstice.

Titi: Exactly.

**Zakiya:** Well, I guess we shouldn't feel so bad because we're not the only country that practices daylight saving for more than half the year.

**Dr. Grant:** When we extended it.

**Zakiya:** By we she means the United States.

**Dr. Grant:** Mostly because it now includes Halloween and the candy companies like that. Halloween has more daylight so that people go more trick-or-treating. So you get lobbyists involved. Right. But as soon as the United States change it, Canada immediately followed suit because their economy is so intertwined with us. It would be ridiculous for them to be off schedule with us for a few weeks in the spring, in a few weeks in the fall.

**Titi:** A lot of other countries, though, like some countries in Europe, they were not into the idea of changing their start and end dates.

**Dr. Grant:** Europe practices daylight saving time and does not coordinate perfectly with our start dates..

**Zakiya:** And we don't even coordinate perfectly within our own United States.

**Titi:** Yeah. Hawaii doesn't observe daylight saving.

**Zakiya:** Hawaii. That feels like, OK, you guys are floating out there in the ocean. You're doing your own thing. But Arizona doesn't even observe daylight saving in there right there. That part of the contiguous 48 states.

**Titi:** Right. But then even within Arizona, the Navajo Nation, they observe daylight saving.

**Zakiya:** So it's not even Arizona as a whole has opted out.

**Titi:** Right. So if you're in Arizona, time depends on where you are.

**Zakiya:** Well, now that I know a state can opt out of daylight saving time,.

**Titi:** I'm declaring my house a state.

**Zakiya:** Yeah. It's really frustrating. And I always feel like I don't want to do this. But I guess now I know what it's supposed to do, which is to provide some type of, you know, economic benefit. Saving energy, all of that. It feels like, OK, maybe I should get on board. But what I still don't know is, is it actually doing that?

**Titi:** And how does it affect us personally? We'll dove in all these questions right after this break.

**Zakiya:** We are back. We're talking about daylight saving and how it all started with Ben Franklin in the 1700s.

**Titi:** Making a joke.

**Zakiya:** Yeah, it's kind of crazy if you think about it. But to go from Ben Franklin suggesting like, hey, we should change the time so we're not burning as many candles to the government implementing this in the 1960s and then to extending daylight saving time in the early 2000s. And now we're, you know, using this time for over eight months of the year. A lot has changed since the 1700s.

Titi: For real.

**Zakiya:** And we have to really ask, I feel like we need to ask the really big question in the room, which is, is daylight saving still saving energy?

**Titi:** Exactly. Because back then they were burning candles, wenot burning candles,.

Zakiya: Candles and LCD are different.

**Titi:** Very different.

**Zakiya:** And I don't know how much a candle cause back then,.

**Titi:** But them candles these days you go to a Yankee candle. They always got a sale. They'd be like, yes, six candles, large candles for like three dollars.

Zakiya: Yankee candy, you boujie.

**Titi:** So we've got some real, real questions about if Daylight saving is actually saving anything.

**Zakiya:** And Dr. Grant had the same question.

**Titi:** So Dr. Grant and some colleagues decided to look for a relationship between energy use and daylight saving.

**Dr. Grant:** Actually, I thought it might even cost more energy because of all of our new modern day appliances are much different than light bulbs. Right.

**Zakiya:** The way economists study questions like these is to look for real world examples. And they found Indiana was the perfect test ground for this. So Indiana used to be one of those states that did not participate in daylight saving. And then in 2007, they began to participate.

**Dr. Grant:** And so here we have what we call a natural experiment. Right. Which is a really great place to say, oh, well, then let's look at their electricity data and say what happened before and after.

**Titi:** So a natural experiment is just being a fly on the wall.

**Dr. Grant:** So what we wanted to do is compare it to then the either the state's next door or like the counties within. And that's exactly what we got to do, is we actually got to say, OK, these people did not change daylight saving time. These people did change daylight saving time. And then we kind of have this control group and a treatment group going forward.

**Zakiya:** So this is really cool because like you said, being a fly on the wall, you get to observe what happens. So you have kind of two things that you can look at. You can say Indiana, which was not practicing daylight saving time compared to neighboring states that were practicing daylight saving time.

**Titi:** And comparing Indiana to itself.

Zakiya: Yes.

**Titi:** Before and after they implemented daylight saving.

**Zakiya:** Yes. And it's so great that she's able to do states next door. Right. Because like you said, about latitude and location, having a big role in how much daylight you get, therefore, how much energy you need to use.

**Dr. Grant:** So we looked at several years of these data and this before and after. And so we got something like eight million observations on residential utility bills.

**Zakiya:** We all know those bills go up in the winter to heat their home.

**Titi:** I went to the very last second to turn my heat on because that gas bill is crazy.

Zakiya: You saw me over your house and my coat on Instagram. She tried to freeze me out.

**Titi:** I'm not playing around like I turned it on when I need to. Everybody else just needs to put on socks.

**Dr. Grant:** When Indiana went on daylight saving time. They used more energy and we found that it cost Indiana millions of dollars per year.

**Zakiya:** So you mean to tell me we're out here listening to Benjamin Franklin? You see, I don't have any respect for him anymore.

**Titi:** She is calling him by his full first name last name. BEnjamin

**Zakiya:** Bennie, OK. We're listening to Benjamin Franklin, he's got us out here waking up at 0 dark 30 and going this getting off work, trying get dinner in the dark.

**Titi:** She is a military kid.

**Zakiya:** Oh, I definitely a military kid.

**Titi:** I'm like, huh?, is that a pie?

**Zakiya:** It's wild that Dr. Grant found that they weren't even saving energy by going on daylight saving time.

**Titi:** I'm not surprised because when Benjamin Franklin was doing this, things were very different. Now, all the tech and everything that we have that heat our homes and light our rooms, I'm not surprised that we're we're not actually saving any energy.

**Zakiya:** And not only are we not saving energy, we're not saving dollars. Benjamin Franklin is in my bag. Get out.

**Titi:** Right. Benjamin Franklin dead and gone. And all of us are wasting coins.

Zakiya: Not anymore.

**Titi:** Hey, the secret is out.

**Zakiya:** Yup! I mean, I can think of what changed, but I want to know what Dr. Grant thinks about this. Like, why does daylight saving time no longer help us save energy?

**Titi:** Right. We're so busy thinking about the wintertime, but we really need to think about summer.

**Dr. Grant:** We have just aligned our day with the sunlight, which means the hottest part of the day. Which means we're going to crank up air conditioning and you can probably guess that air conditioning versus a light bulb. Air conditioning does use more energy, so that swamps it. So, yes, we get some savings with lighting in the summer, but we're coming home to the hottest part of the day. Our houses are hot. We change the thermostat and use more energy.

**Zakiya:** And even though it gets cooler when we get into the fall, our energy use doesn't really go down.

**Dr. Grant:** And what happens is as we approach that date, what you'll notice is that you're actually waking up in the dark. It's the coldest time of the year. So you're going to crank up your heat. Right. And it's the coldest time of the day, you're not doing anything except for just changing your lighting from the evening to the morning.

**Zakiya:** Dr. Grant, study was of Indiana. And we don't know that is going to work for everybody. You know, usually you want to have more than one study and look at different cases. But I for one...

**Titi:** Right there is enough information for me.

**Zakiya:** I propose that at least where I live in Maryland. That we all just boycott daylight savings and let's do it. Let's look at our bills. Let's all just not fall back, lets fall forward. Let's just fall out of all of this stuff.

**Titi:** Let's just fall into the gap.

**Zakiya:** I just want to know, how does it affect me? Because I know I mean, I'm really interested in the energy conservation piece. I'm definitely interested in my budget. But I know I feel something in my body, too. Is anybody else struggling out here?

**Titi:** Me.. I's struggling.

**Dr. Grant:** No matter what, an hour change is pretty shocking to our economy and to our bodies and our society.

**Titi:** So let's look deeper into these two things. First, our bodies. How does daylight saving affect our physiology?

**Zakiya:** Our circadian rhythm is our sleep wake cycle, right? So as your body gets into this zone. Mine is a little off. We've talked about this.

**Titi:** Yes it is, Zakiya doesnt go to bed until 2:30 in the morning and then wakes up two hours later.

**Zakiya:** When your circadian rhythm gets off or upset, a whole host of negative things can happen. We're not going to go into too much detail this episode, but for now, what you need to know is that messing with your body's internal clock doesn't just cause drowsiness, it can cause stress, exacerbate any existing health problems, and even can lead to seasonal depression. So just know you want to hit the sack. right. And daylight saving.

Titi: Its way deeper than just beauty sleep.

**Zakiya:** Yes, it can have some spillover effects. Some studies have shown that sleep deprivation from daylight saving has led to an increase in vehicle and workplace accidents.

**Titi:** Let me tell you,.

**Zakiya:** Maybe we shouldn't go to work.

**Titi:** That's what I'm going to tell my boss. Its Daylight saving. I'm sorry. I don't want to crash my car. I'm going to stay home and sleep today.

**Zakiya:** I'm going to telework. I think I work better in my pajamas anyway.

**Titi:** I definitely do.

**Zakiya:** Now, let's move on to the second thing. Dr. Grant mentioned society. The time change has multiple effects.

**Dr. Grant:** Transit schedules are an issue. Airline schedules are a real issue.

**Titi:** And it can also make pollution worse.

**Dr. Grant:** When we use more energy. Especially in the Midwest, we burn something, we tend to burn coal there still. Or natural gas. And when we burn things, we emit pollution. So we have that much more pollution as well, which is a form of smog and carbon.

**Zakiya:** So that's a whole lot of negative in my book. But adjusting our clocks also does have some benefits. We have to, you know, say both sidea.

**Dr. Grant:** It does increase recreation. So the recreation industry really likes it because you do tend to have people go do recreated tend to recreate more in the afternoon or evenings, especially socially. So that is more likely than at 6:00 in the morning.

**Titi:** Yeah. I mean, there's more time for you to go out and do stuff outside. And so it's better for people who like to do those types of things like, you know, hiking, biking, going for walks.

**Dr. Grant:** It also does tend to reduce crime a little bit because things like muggings, things that would happen in the dark. And if we have less people in the dark, in other words, we're living during this sunlit hours, it's less just likely that those crimes of opportunity might happen.

**Titi:** So the results of daylight saving are kind of a mixed bag and here in the U.S. It doesn't look like things are going to change on a wide scale anytime soon, even though some people, not just me and Zakiya, but also Dr. Grant would really like to get rid of daylight saving permanently before we let her go. She gave us her pitch.

**Dr. Grant:** A lot of us have these opportunities now, like telecommuting and working from home. Freelance opportunities where we have the Internet and we have instant communication and we have instant messenger and, you know, updates constantly barraging us. It kind of doesn't you know, you can check in and find out if somebody is awake or not really quick. And I really think that we might actually be like kind of a post clock period pretty soon. And then localities could go back to actually the way it was in the 1800s. Where each locality had a little bit more of their own time zone and said, this works for us. This works for our school district. This works for our work. We're going to allow our workers a little more flexibility when they come and go. And I do think we have that opportunity now.

Zakiya: I'm ready to move into a post clock society.

**Titi:** I imagine that would be amazing. You create your own work schedule. You decide what? Like what is socially acceptable in your own house

**Zakiya:** Yes. Actually, I may be living there already.

**Titi:** It seems like it sometimes.

**Zakiya:** Do you remember? I was like, would you like to come in? You were like it's 2:30 Im going home, , I want to wake up in my own bed.

**Titi:** Yes. This happened literally the other night. OK. friend, would you like to know? I'm getting in my car. I'm going home. I want to wake up in my own bed.

**Zakiya:** I wasn't planning on going to sleep, so I didnt understand.

**Titi:** My friend needs to get some sleep. Forget daylight saving. Save me from Zakiya.

**Zakiya:** You don't mean that and I know you don't. You are just lashing out at the ones you love.

**Titi:** That's it for lab 17. Don't forget to check out our Web site for a cheat sheet of today's episode. You can find it and sign up for our newsletter at Dope Labs podcast dot com.

**Zakiya:** Also, we love hearing from you. Last week, somebody called and talked to me about their insta pot. What did you think? I enjoyed it. What did you think about today's lab? What are your ideas for future labs? Our number is 2 0 2 5 6 7 7 0 2 8.

**Titi:** You can also find us on Twitter and Instagram at Dope Labs podcast.

**Zakiya:** Titi is on Twitter at dr\_tsho.

**Titi:** And you can find Zakiya at zsaidso

**Zakiya:** Follow us on Spotify or wherever else you listen to your podcast.

**Titi:** Special thanks to our guest. Dr. Laura GRant.

**Zakiya:** Dope Labs is produced by Jenny Radelet Mast of wave runner studios mixing in sound design by Hannis Brown additional production help from Elizabeth Nakano. A special thanks to Steve Alman.

**Titi:** Original theme music is by Taka Yasuzawa and Alex Sugiura.

**Zakiya:** Dope Labs is a production of Spotify studios and megaohm media group and its executive produced by us.

Titi: Titi Shodiya.

**Zakiya:** And Zakiya whatley.

**Zakiya:** My second is like however long as M-I-S-S-I And what is that thing like? No, I know what it is. One Mississippi. Two Mississippi.

**Titi:** And what were you doing befor?

**Zakiya:** That was M I SS I S S I P P I. That's how I learned to spell Mississippi. But that's not what I meant.