

# Rhinology with Dr. John Craig

## Ologies Podcast

### June 18, 2018

Oh, hello! Heeyyy! Hi, it's little your newborn niece who looks like an old Greek sailor, Alie Ward, here with another episode of Ologies. So, in this episode we're gonna talk to a person who is passionate, so passionate, about those lumpy snoots we've all got sniffin' around right in the bullseye center of our faces. And this ologist really *nose* his stuff. So much information on allergies and smells and history and street drugs.

But, before we get to it, per usual, thanks to everyone making the podcast possible by buying into the Patreon membership. It starts at \$0.25 an episode. My heart is cheap. So, you guys let me pay an editor and buy mic cables and memory cards and you ask great questions, which I pass on to the ologists. Also, merch is available at OlogiesMerch.com and on Mondays I post photos on the Ologies Instagram of you sexy biscuits wearing your Ologies shirts and hats and pins. You can tag it #Ologiesmerch and let me see your faces, lil' babies. Also, for no money and very little effort you can be a friend of Ologies just by telling your carpet cleaner or aunt-in-law or account executive that you like it and they might also. And as a quiet, thirsty thank you, I read all of your reviews on iTunes each week and then to prove it I read you one. This week's review is titled *On Creepiness*. It's from jjpyo:

*Hello Alie, I would would you like for you to stop calling yourself creepy. Although you do often admit to some creepy things, reading all your own reviews is not creepy. So, if you're creepy that makes me creepy and I think it is rude that you are calling me creepy all the time. I digress. The podcast, it is very good. 5 stars.*

Okay, onto rhinology. Why-not-ogy? You likely have a firm but soft, and beautiful but gross, wedge of flesh holding court on your face. But how well do you know it? I mean it's a mystery in there man. It's a moist catacomb that leads to your brain? Is that how it works? We're gonna find out.

So first off, rhinology comes from the Greek for snout. I came to know this rhinologist through a Twitter lead. Someone was like, "Hey, pssst. I got a rhinologist for you." And I was like, "Let me at 'em!!" So, I happen to have been in Detroit last week shooting and I made some time to take a Lyft over in a torrential Michigan summer downpour to find the entrance at the Henry Ford Medical Center in the downtown D. No relation to the museum I also do work with. It's just in Detroit, literally everything is named after Ford, including a restaurant where I ate tater tots the same day. Now, this ologist, who by the by, has an entire YouTube channel brimming with sinus surgeries, took me to an office and we gabbed about noses for over an hour.

Side note: Okay, I can deal with a lot of gross shit. I've held spiders as big as my palm. I've eaten scorpions. I've even dated musicians, but I cannot deal with the word or the concept of this and I'm gonna whisper it one time, okay? *Mucus*. I did not want this episode to be a sonic minefield for my gag reflex. From now on when you hear the m\* [*ding*], that's just me bleeping the moist m-word. I'm gonna say the F-word freely, but I am censoring the word that rhymes with fucus, because I can and I will. So, to make it fun, feel free to take a sip of your beverage at the ding or do a tiny

imperceptible butt dance when you hear that noise in celebration of not hearing the word that it's replacing. I will do that on my end, with my end. Now if you love that word, feel free to lock yourself in a sauna and sing a song about it on a banjo I don't give a fuck. I just can't deal, so it's dings from here on out. It's Dad's podcast. She'll do it the way she wants.

Okay, alright. Oh man, in this episode, we talk all about hay fever and nose jobs and septums and piercings and snoring and snorting and smelling and I had *nose* idea of the mysteries deep, deep in my skull holes. So, open your ears, throat, and yes, your nose, for the life-altering wisdom of rhinologist, Dr. John Craig.

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**Alie Ward:** So, you know how microphones work. Yeah, get up in it!

**Dr. John Craig:** Right.

**Alie:** Thank you, by the way, for doing this.

**Dr. Craig:** Are we on?

**Alie:** We're on. We're already rolling. Thank you so much for letting me come to this hospital on a very, very rainy Sunday in Detroit.

**Dr. Craig:** We are in the depths of the D.

**Alie:** *[laughs]* We'll start with the basics. How long have you been a rhinologist and that is a word, correct?

**Dr. Craig:** It is a word, yes. So, I've been in practice for three years now. That's after doing a five-year residency in ENT surgery and then a one-year fellowship in dedicated rhinology.

**Alie:** When you were a kid, did you have a fascination with certain body parts or certain types of medicine? I mean, I want to ask how you picked noses, but I feel like how you selected noses this would be a better way of phrasing that.

**Dr. Craig:** Right, good call. No, there wasn't any particular... my father was an emergency room physician.

**Alie:** Oh, he was? So, you grew up around...

**Dr. Craig:** Yeah, my mother was an X-ray tech as well. So, there was a lot of medical conversation. I was just always fascinated by, not so much anatomy because we didn't talk about anatomy that much, but just the thought processes behind medical decision making. And for some reason that was interesting to me in the high school era.

**Alie:** Really?

**Dr. Craig:** Yeah. So, then I went to college and studied psychology and then it took on a whole nother level of understanding the doctor/patient interaction. And that combined with my kind of interest in science just made sense.

**Alie:** Do you find that when rhinologists get together, it's just, you all are chatter boxes?

**Dr. Craig:** Big dork session! Oh yeah.

**Alie:** Really? *[laughs]*

**Dr. Craig:** It's pretty common actually. It's probably one reason I liked it, too. Everybody's very passionate about the nose and the sinuses. So, I definitely had a lot of sinus/nasal issues growing up and I don't think it drove me to choose to do this.

**Alie:** It must have.

**Dr. Craig:** There must be some subconscious process or maybe conscious that drove me.

**Alie:** There's got to be a, 'doctor heal thyself' situation.

**Dr. Craig:** Yeah.

**Alie:** Like, you know, "I'm also a client!" There's gotta be something there.

**Dr. Craig:** Right.

**Alie:** Now, I'm sure you get this a lot. ENT's. Why are ears, noses and throats all lumped together? Were you studying and you're like, "I'm learning about this throat and these ears, but I really care about the noses." Was there any part of you where you're like, "Let's just get to the noses?" Do you prefer the nose over the ears and the throat is what I'm asking?

**Dr. Craig:** Oh yes, very much so!

**Alie:** Okay. *[laughs]*

**Dr. Craig:** Yeah, since about midway through residency I was more fascinated by the inner workings of the sinuses and the nasal cavity. So, all those areas for me were just more interesting than the throat and the ears.

**Alie:** Poor throat and ears. The ears seemed like a whole other situation to be honest because I get that the nose and the throat are connected. Anyone who's ever gotten soda up a nose, or out a nose, I threw up Jell-O shots on my 21<sup>st</sup> birthday *out* of my nose. So, we get that they're connected, but the ears? That's hearing. Did you have to learn everything about ears as well? And then you could say, "Okay, noses, I'm onto you."

**Dr. Craig:** I think that's a very insightful comment you just made. *[DJ airhorn]* A lot of us do feel that the ears are their own world. I think that the people treating the nose definitely view the ear as a separate entity a lot of times. The hearing apparatus is definitely a separate entity.

**Alie:** I do also feel like ears are like, *[snobby voice]* "We have the smallest bone in the body and everyone knows that fact about us."

**Dr. Craig:** Yes, that's true, too.

**Alie:** Okay ears, we get it.

**Aside:** So, quick aside. This was going to be an insert to just talk shit on the the smallest bone in the body. And the ear for being like, "Yes, I *do* contain the smallest bone in the body," but I looked up this little thing. It's called the [*phonetic: "Stay-peas"*] stapes. It means stirrup, because it's shaped just like the metal stirrup you'd slide your boot in, while hoofing around on a horse. It also looks like a tiny, tiny wishbone glued to a plate. And I wanted to be like, "Whatever, ears. Who cares?" But I gotta be straight with you. I gotta come clean and say that it's a really cute fucking bone. It is so tiny. It's smaller than your pinky nail, this cute little thing, and it's held aloft in your inner ear by tendons. And it makes the femur look like Godzilla. It's *so cute* that you have two of these, probably gently rattling around in your skull like micromachines. Oooh!

Anyway, Dr. Craig cares about nose medicine in particular, because as we mentioned in his upbringing, having shitty nose function can be a real buzzkill. Sinus issues suck!

**Dr. Craig:** But they can cause significant quality of life issues for patients. If you have trouble breathing through your nose, a lot of m\* [*ding*], a lot of pain, or bleeding. These things affect your daily life. It's hard to conduct a normal work day if you always have blood or fluid pouring from your nose.

**Alie:** It's true. Like a first date with a bloody nose? Not happening.

**Dr. Craig:** Not good.

**Alie:** Do people ever shove tampons up their noses when they have bloody noses? Sorry, I'm just going to ask.

**Dr. Craig:** Some version of that, yeah. Some type of packing material can be placed...

**Alie:** It seems perfect for it to be honest.

**Dr. Craig:** I've actually definitely seen a patient show up to my office with a tampon in their nose. So it's possible.

**Alie:** [*laughs*] Was it a lady or a man?

**Dr. Craig:** Man.

**Alie:** I have a feeling he borrowed it from someone.

**Dr. Craig:** I think he did, yes.

**Alie:** Were you like, "Well done, Sir."?

**Dr. Craig:** I definitely applauded his efforts. He got the job done.

**Alie:** When you talk about pathologies, run me down some of the biggies. Or maybe run me down what your most common issue is? Is it like, "I can't sleep because my nose is messed up?" Or is it allergies?

**Dr. Craig:** That's a great question. So, the full gambit I would say, from inflammation to tumors. So, inflammation would be things like allergies, sinusitis. Sinusitis can actually be either inflammation driven or infection driven. So, it doesn't always mean an infection.

**Aside:** Just a heads up: *itis* just means inflamed, or swollen, red, painful. So, sinusitis just means, inflamed nasal area. Now, if you've ever had senioritis your last semester of school, you have been maybe inflamed, and hot, and swollen. Which honestly, sounds a lot more like a freshman problem but, I am not a doctor. So, I don't know. Okay. Onto nose problems.

**Dr. Craig:** Nasal obstruction is a huge one. What do I mean there? Just trouble breathing through your nose.

**Alie:** I thought you meant someone shoving something up there.

**Dr. Craig:** No, no, we'll talk about that. With nasal obstruction it can be an anatomic cause. People talk about a deviated septum. Those would be the more common things, but then you have the rarer things such as tumors. And then this area that I also work on, it is called the skull base, which is the bony separation between the sinus cavity and the brain cavity.

**Alie:** Oh, there's a bony separation there?

**Dr. Craig:** Yes. They're very close to each other.

**Alie:** I didn't realize that we had a bony separation because I feel like you always learned about this with Egyptian mummies. They would use a hook to gather the brains through the nose. I figured it was a straight shot into the dome.

**Dr. Craig:** It's kind of a straight shot, but yes, you would have to go through the skull base to do that.

**Alie:** Oh, you'd have to poke through? You'd have to perforate it? How thin is it?

**Dr. Craig:** Ah, it's a good question. It's pretty thin overall. Some areas are a couple of millimeters. Some areas are less than a millimeter.

**Aside:** Is anyone else having an existential meltdown thinking about a millimeters thin plate of bone separating your brain from the entire world, including but not limited to, the air of a porta potty or the door handle of a mall? We have thin bone plates in our skeleton heads! What the fuck!?

**Alie:** You had to do a lot of dissecting corpses in your life.

**Dr. Craig:** Many, many. And I also have a weird interest in cadaver dissection. I've actually published a number of papers on that. So, it's okay. *[laughs]*

**Alie:** Wait! Okay, you have a weird interest in cadaver dissection. Explain to me what a *normal* interest in cadaver dissection would be because I feel like...

**Dr. Craig:** *[laughs]* That might be true.

**Alie:** What do you mean by that? Because I am terrified of it.

**Dr. Craig:** Well, it just means that, in training, you're always expected to do some degree of cadaver dissection as part of your learning. But I just realized that it's harder to read it in books than it is to just get in there. And so, in both residency and fellowship and even now whenever we have cadavers available, I stress to the residents that I teach that it's really important to get in there and really explore the anatomy.

**Alie:** I have a friend who's a doctor who said that once you crack someone open, there are so much more variation than you would imagine.

**Dr. Craig:** Oh yeah.

**Alie:** You think, "This is where of the liver goes," but just as people's faces look different, their livers look different and their pancreas looks different. Like, you really gotta see a lot of them. Was it scary the first time you cut open a cadaver? I'm sorry, I've got to ask.

**Dr. Craig:** I wouldn't use the word scary, but different for sure.

**Aside:** I feel like different is what you call something like pineapple couscous or jazz fusion. Cutting open a husk of a person seems like a bit of an understatement for that word. But once again, ol' Ward here is not a doctor. I have never filleted a dead volunteer in order to fix living people.

**Dr. Craig:** Gives you a different perspective on life.

**Alie:** Did you, do you find that having been around cadavers, that you embrace your living life more? You're more aware of mortality or no?

**Dr. Craig:** No, it doesn't affect me that way I guess.

**Alie:** I feel like I would be like, "THAT'S GONNA BE ME SOON!" Would you ever donate your body to science?

**Dr. Craig:** Uh, yes. I haven't officially done that yet, but I've considered it.

**Alie:** Well, you're alive. But you've considered it?

**Dr. Craig:** Yes.

**Alie:** The one thing that's weird about the nose, is it's something that's in our face, but you look at a skull and you're like, "There's just an empty cavity." Noses are just cartilage

which is kinda crazy to me. So, can you give me the breakdown of the anatomy of a nose? Like what is the nose made out of?

**Dr. Craig:** Alright so, if you think of the nose as an external component —the kind of floppy part that you actually see— there are cartilages that form the external architecture. But they are in places that you wouldn't really predict. So, it's not like one solid sheet of cartilage. There's two sets of cartilage that do some weird curvature things. But that's how the tip of your nose is formed. Then, we call them the sidewalls, kind of the floppy nostril parts. They provide support there. And then the inner lining of the nose is made up of what we call mucosa. Mucosa is like the inside skin. Of course, you've got the nostrils that lead into each respective nasal cavity. And then how deep do we want to go inside the nose here? [*repeated, very low voice, "How deep do we want to go inside the nose here?"*]

**Alie:** By the way, I had a boyfriend whose Polish grandmother called nostrils, nassholes. She didn't realize that wasn't the word for them. Ever since then I've always loved the term.

**Dr. Craig:** That's pretty good. I'll remember that.

**Alie:** What are the sinuses?

**Dr. Craig:** Okay, you've got cheek sinuses, we call them the maxillary sinuses, in each cheek. Then the forehead or frontal sinuses, up in the forehead. Then you have these other weird sinuses that go further back in the nose between the eyes, called the ethmoid sinuses. And then way back about seven or eight centimeters back in the nasal cavities, you have the sphenoid sinuses.

**Aside:** So, to recap: you are just lousy with sinuses. Just tiny hidden rooms in your face and your skull. But wait, how many? And what exactly are they? What are they doing there?

**Dr. Craig:** In total we say there are eight sinuses; four on each side. And then what are they? They're basically just air-filled spaces within the bones of the face. But they're lined by that mucosa that we spoke of. So, the mucosa, that's what gets swollen when we talk about allergies and sinusitis. You can imagine if you have these sinus chambers draining into the nasal cavities, they drain through small holes.

**Aside:** Ahhhhh, gross! But stay with me...

**Dr. Craig:** So, if circumferentially around that opening, the tissue, that mucosa, swells up too much, that's when we have problems with m\* [*ding*] draining. And if you have that swelling occurring inside the nose too much, you could have trouble breathing through your nose.

**Alie:** So, a lot of the stuff that comes out of your nose originates in these, uh, m\* [*ding*] caves in your face?

**Dr. Craig:** Yes.

**Alie:** What happens when you have, let's say, allergies or you have an infection? Why does this tissue insist on swelling? What does the inflammation help? What's the point? Why is it like, "Oh, there's pollen in the air. Well, for you, I'm going to swell up so you can't breathe."

**Dr. Craig:** Yeah, well it's definitely not an adaptive measure. It's not normal for people to have this swelling, right, the average human being? So, you get fluid seeping to the tissue that causes swelling and that's when you get a lot of the symptoms. Now, patients with allergies, they have a significant histamine response. So, they have certain cells in their tissue that release histamine and that sets off a whole cascade of different symptoms.

**Aside:** Now, histamines —before you float them to the top of your shit list— can have your back. When things are good, they keep you awake and they help flush out bacteria that might want to kill you. But with allergies, like to pollen, or dust, or pets, the immune system senses it, freaks the fuck out [*alarm noise*] like, "This pollen is trying to kill us. All hands on deck." And sends a group text essentially to your body being like, "If you see this pollen around, 86 this mofo. We hate it." Pollen's like, "Hey, I'm just airborne plant sperm. I don't even want to be in your nose holes. You inhaled me, calm down." But histamines tell your blood vessels to get leaky, y'all. And your eyes and nose water to flush it out of your body.

Now, why do some people have shitty allergies and others are like "I've got 99 problems, but ragweed season is not one." It's mostly genetics. So, thanks to your Mom and Dad, but there's also something called the, "Hygiene hypothesis." So, if you weren't raised around enough low-key grime, like animal dander and fungus spores, your body freaks out when it encounters it. I myself grew up digging for worms in fields. I have no allergies. Thank you, Mom and Dad, for letting me go dig for worms.

Speaking of which, you can also *eat* worms to help your allergies. I mean, yes, there are antihistamines and steroids which block your body from launching that inflammatory attack. But also, you can eat hookworms. So, these little parasites attach to your gut walls and some studies show that they may release compounds that tell your immune system to just, "Take it down a notch, son." Not a lot of hookworms in the developed world. But, it's hookwormpalooza in other parts of the globe where they have fewer allergies. You can also try local honey (as discussed in the bee episode, Melittology) which may help your body warm up to neighborhood plant jizz, or immunotherapy, where you're slowly introduced to allergens so your immune system calms down and stops being, let's be honest, kind of a bigot. But if you don't want to get shots, or take drugs that make you sleepy, or get intestinal parasites on purpose, Dr. Craig has some other, saltier advice.

**Alie:** But what do you tell people who have allergies? Is there anything that you can do on the front end that's not just a tamping down the histamine response?

**Dr. Craig:** Yeah, so I'm going to throw out a disclaimer first off. While I am a rhinologist, I lean on my allergy colleagues here significantly. So, I can tell you what I do and then when



things get too complex, I definitely employ an allergist. But, in general, if you have kind of run-of-the-mill allergies, I think the simplest, safest thing you can do is actually topical saline to your nose. It's actually been shown that, we don't know why precisely, but if you can flush m\* [*ding*], the allergens that might be in the nose, get them out of the nose, then you, in general, have a better baseline of symptoms.

**Alie:** Oh! Like a Neti pot?

**Dr. Craig:** Yeah, much like a Neti pot.

**Alie:** I've never used a Neti pot.

**Dr. Craig:** Oh, you gotta try it.

**Alie:** I imagine you have.

**Dr. Craig:** It's liberating

**Alie:** Is it really? Okay, there's part of me that knows I'm not going to flood my brain with saline, but I'm like, "What if I'm the one person that has just a gaping hole in my skull base bone and I just flood my brain?"

**Dr. Craig:** Well, we could put one thing to rest. If you don't have clear fluid pouring out of your nose at baseline, you probably don't have a spinal fluid leak. Which means you probably don't have a hole in your skull base. [*group of kids yelling, "YAAAY!"*] But no, the one-in-a-trillion type situation of that happening. I wouldn't worry about.

**Alie:** What does it feel like? I've never done it.

**Dr. Craig:** If you do it properly, you know, head over a sink —I use a squeeze bottle personally, but some people do the Neti pot —fluid will go inside one nasal cavity, it comes out behind your nose, back out the other nasal cavity. So, you squirt it on the right, it's going to come out the left.

**Alie:** Where's it going in the meantime?

**Dr. Craig:** That's a good question. If you have not had sinus surgery before, most of it just goes through the nasal cavities and in some of these nooks and crannies called the [phonetic "Mee-aye-tie"] meatus, within those. But, if you haven't had sinus surgery, they don't usually get into the sinuses themselves. So, they just go in and out. Basically, you're flushing out any crust debris, maybe thinning out the m\* [*ding*] layer that's in your nose. But it does seem to help.

**Alie:** So, squeeze bottle, Neti pot.

**Aside:** So, Dr. Craig says that while the salty nose enema is a great starting measure, most patients might need an over the counter topical steroid, like a Flonase, which will drop the inflammatory response in the nose. Or an oral antihistamine. Those are tablets. But remember that histamine also keeps you awake. So, don't take antihistamines

before a 4-hour annual sales symposium or when you're about to walk into a Catholic wedding ceremony [*soft snoring*] because that's asking to drool on yourself, which I have recently done.

Now in Japan, I just looked this up, nodding off in public —they have a word for it!— is called, "Inemuri" and means, "To sleep while present." It happens on trains and in the office all the time. The Japanese are like, "Good on *you*, dude. You must be working hard. Also, it's nice that you didn't just leave. You just stayed at this dinner party and napped upright." So, inemuri isn't a bad thing. However, it's frowned upon in, like, assembly lines and such. So, your Benadryl may have those side effects including inemuri, which I've got to be honest, is my new favorite Japanese thing since their game shows. Did you know some of they're game shows involve discovering if everyday objects like tables and chairs are actually made of candy by biting them? And climbing slippery stairs covered in soap? And getting a butt in your face if you answer trivia wrong. A naked butt. [*sounds from a Japanese gameshow*] I love you, Japan. Anyway...

**Alie:** Have you ever been super flummoxed or just stumped by a case?

**Dr. Craig:** Both the interesting part and the problem in my field is that there's a lot of rare pathology. Some tough ones that come to mind would be nasal polyps. Nasal polyps, if you've never heard of them, they're basically extreme swelling of tissue inside the sinus and nasal cavities. They turn into basically swollen grapes hanging down in your nose.

**Alie:** [*gag!*]

**Dr. Craig:** And so, they can cause the whole spectrum of sinusitis symptoms, trouble breathing through the nose, lack of smell, would be the classic ones.

**Alie:** Ooof, nose grapes. Who wants them? No one.

**Dr. Craig:** No, no, not a good fruit to have.

**Alie:** This is a stupid question, but can you spot a nose job a mile away?

**Dr. Craig:** Usually, yes.

**Alie:** You can!? How?

**Dr. Craig:** So, rhinoplasty is separate from my field. I collaborate with rhinoplastic surgeons when I need the external portion of the nose addressed. And so, do you mean the classic aesthetic rhinoplasty? How you tell?

**Alie:** Yeah.

**Dr. Craig:** Usually there's a narrower look to the nose. Perhaps the nasal tip is a little more upturned than average. And just, in general, smaller.

**Alie:** Have you seen any trends with that where, you know, I mean if you look at hair trends over the last 30 years, there have been some good ones and some bad ones. Do you see

that happening in, and I know that you don't focus on rhinoplasty, but do you see that happening in like cosmetic surgeries at all? Like, is this nose very *in* from this year to this year?

**Dr. Craig:** Definitely in the 80s and 90s there was a characteristic nose that people were going for, definitely the narrower look. There are definitely trends like with fashion.

**Alie:** It's probably just look up the Kardashian's Instagram or something.

**Dr. Craig:** Oh, I won't comment on that.

**Alie:** But I wonder if people are like, "I want a Jane Fonda nose."

**Dr. Craig:** Yeah, I'm sure that happens.

**Alie:** And it changes. *[laughs]*

**Aside:** I looked this up and that is indeed the case. So, a bunch of plastic surgeons are saying that the tiny, Eurocentric look is falling out of fashion. People don't want perfectly straight or symmetrical noses either. They're like, "Change it up a little bit. I still wanna look like me. Don't make it too boring." Also, now some people are getting non-surgical nose jobs where instead of shaving down your cartilage fins, essentially, a doctor will pump some filler into the bridge of the nose just to fill out a line. And other folks are getting kind of a reverse job, with implants added to restore what their nose looked like pre-surgery. They're like, "You know what, I just wanna look like me." Speaking of putting things into noses...

**Alie:** Weirdest thing you've seen shoved up a nose?

**Dr. Craig:** Uh, an undone paperclip.

**Alie:** WHYYYY!?

**Dr. Craig:** Uh, so it was actually a child...

**Aside:** Oh man. Ouch. Poor kid.

**Dr. Craig:** ...that placed it up their respective grandparents' nose while sleeping.

**Aside:** AWW NEVER MIND! THAT CHILD IS RUTHLESS!

**Alie:** Okaaay... What did they do?!

**Dr. Craig:** Well, we had to go to surgery and it was interesting to say the least.

**Aside:** Once again, interesting is good for pineapple couscous. This is intense and brutal. P.S., it wasn't *A* paperclip.

**Dr. Craig:** And actually, it was multiple paperclips.

**Alie:** WHAT!?

**Dr. Craig:** Yeah, luckily, they're malleable. So, you can kind of bend them with instruments and get them out of the nooks and crannies of the sinuses.

**Alie:** Multiple? When you say multiple, are you saying two or are you saying eight?

**Dr. Craig:** I believe there were three.

**Alie:** That's too many. Once you get over one, it's too many paper clips.

**Dr. Craig:** *[laughs]* One would argue one is a lot, but yeah.

**Alie:** I think that's more than enough. How was the patient's morale?

**Dr. Craig:** So, it's funny. This case that always comes to mind, was when I was in training and I didn't follow the patient pre- and post-operatively, so I don't totally know. But one would imagine there may be some familial tension after that.

**Alie:** Uh, yeaah you think? I wonder what the kids next birthday was like. It's like, "Grandpa's on a cruise on purpose and is never going to make it to your birthday again." Man, that's rough. Did you ever see that *Simpsons* episode where Homer puts a crayon up his nose?

**Dr. Craig:** No, I didn't.

**Aside:** *[Female doctor: "Mr. Simpson, I'm afraid you have a crayon lodged in your brain."]*

**Alie:** They find that he has a blue crayon up his nose and that is why Homer is Homer. They take it out and Homer realizes how dysfunctional society is and how sad...

**Dr. Craig:** Oh wow. Was it in his brain?

**Alie:** It was in his brain.

**Dr. Craig:** Oh, interesting.

**Alie:** And I think at the end he puts the crayon back in because he was just like, you know.

**Aside:** *[clip from The Simpsons]*

Mo the bartender: "Tell me when I hit the sweet spot."

Homer: "Deeper you pusillanimous pilsner pusher!"

**Dr. Craig:** Maybe he had a spinal fluid leak afterwards.

**Alie:** Let's debunk some flimflam. What do you think is the biggest myth about noses and sinuses that you're like, "That is not correct!"?

**Dr. Craig:** Love this question. One thing is that facial pain is most commonly *not* from sinusitis.

**Alie:** What is it from?

**Dr. Craig:** Most commonly, and this has been studied, some form of neurogenic pain. So, whether that's a migraine would be a very common one actually. Migraine, everybody thinks of the classic migraines, but there are atypical forms of it where you can just have isolated facial pain and a runny nose and nasal obstruction.

**Alie:** Really??

**Dr. Craig:** Because it affects nerves. Nerves supply, the tissue within the nose as well as the tissue of the skin. So, you can get the runny nose factor, the congestion feeling. A lot of times they'll feel like just things are full. And then of course, the severe stabbing pain, over their cheeks or forehead. And unfortunately, this information is not disseminated to all physicians as well. So, it's a tough one because if you're not seeing noses all the time, and putting scopes inside the nose to see where the sinuses drain, I think the tendency is to hear that somebody has a runny nose, trouble breathing, facial pain that matches all the symptoms of sinusitis. But if you do sinus surgery for all these people, you're going to find that the pain does not reliably go away.

**Alie:** Oh no! And it might just be an unlucky migraine.

**Dr. Craig:** Yes.

**Alie:** Oh god, that's gotta be frustrating.

**Dr. Craig:** It can be very frustrating. And so, whenever I see patients with those conditions, I just get them checked out by a facial pain person and it almost every time —like seriously, almost every time— they find something that they can treat medically and then we avoid sinus surgery.

**Alie:** How often would you say that it's that case where it's like it's just an unlucky migraine.

**Dr. Craig:** So, we're talking isolated facial pain? It's over 90% of the time.

**Alie:** Really!?

**Dr. Craig:** Oh yeah.

**Alie:** That's so interesting. I didn't know that.

**Dr. Craig:** It's crazy. I probably see 20, 30 patients a day, I see at least three per day with isolated migraines.

**Aside:** So, if you have a faceache instead of a headache, it might be a migraine! How crazy is that?

**Alie:** Now why does our nose run? Why do we get stuffy when we cry?

**Dr. Craig:** So, if you cry too much, you could get some tears literally coming out of your nose. And then there's probably some emotional nerve response that again, signals those same

nerves that sometimes get signaled with migraines and can cause a runniness. That the congestion though, does that happen when you cry a lot? I guess I don't cry very often.

**Alie:** I feel like you get congested when you cry.

**Aside:** Evidently, when your nose cries, like literally tears come out of your nose! Your tissues get coated with liquid sadness and things just jam up a bit in there. Also, your tissues swell causing you to need tissues.

**Dr. Craig:** I'm going to blame the same nerve reflex.

**Alie:** I'm sure it is.

**Dr. Craig:** It's got to be a nerve reflex.

**Alie:** Your brain's just like, "Are we sad? Let's jack some things up to distract you." Perhaps. And now, how much of your work involves smell and disorders with smell?

**Dr. Craig:** Percentage wise? Isolated smell loss is not a major part of my practice. I mean I definitely see those patients. Yeah, it's a very difficult condition. You kind of break it down into how long it's been there and you try to figure out why it occurred. Sometimes you don't come up with a true reason. People just develop spontaneous smell loss.

**Alie:** My friend Micah had a fever as a baby. He has no sense of smell. So, you don't have to shower when you go out to brunch. Fart as much as you want. It's great. Not for him, though.

**Dr. Craig:** Yeah, other people.

**Alie:** But what is happening when you're smelling something? It's going through your tissues. Does the air hit your sinuses and then your sinuses pick it up and tell your brain what smell it is?

**Dr. Craig:** Sort of. But it's more about the location of those smell fibers. So, air brings in odor molecules. Those molecules hit the nasal surface. It's more than nasal cavity than the sinuses. So, airflow normally doesn't go into the sinuses. It actually just goes through that central kind of inner chamber that we spoke of. And so, the olfactory receptors on specific nerves are located high up in the nose. And then there are certain structures in the nose where there are higher concentrations of these olfactory cells. Then that triggers a whole cascade of chemical and neurogenic reflexes that go to the brain. And then that's how we interpret smell.

**Alie:** So, there are certain areas of the inside of your nose that smell and certain areas that are like, "That's not my job."

**Dr. Craig:** Most of it definitely occurs just through the nasal cavity.

**Alie:** Do people give you a lot of nose gifts, like coffee mugs in the shape of noses?

**Dr. Craig:** I wish, but no.

**Alie:** There's not a lot of like Etsy items for a rhinologist?

**Dr. Craig:** There actually are. I mean I've got a Picasso painting that has a big nose on it.

**Alie:** [laughs]

**Dr. Craig:** Whenever I do see weird nose art or anything, I definitely pick it up.

**Aside:** Side note, I popped on over to Etsy to see what kind of nose gifts the Craftosphere had to offer and first off, there are a lot of delicate nose rings out there. And also crocheted nose warmers which look like a macramé bikini top and a surgical mask, bred tiny children. There was also an item advertised as a bronze nose refrigerator magnet which seems like, at \$18, a steal for a solid bronze. But it turns out, it's painted plaster object. And according to the seller, "An exact replication of my own nose!" I popped over to Amazon and I found a tank top bearing simply, "#rhinologist," and a bike bell stating its user was the world's best rhinologist. So, there's some gifts there. In the end, I 'primed' Dr. Craig a plastic schnoz that was also a pencil sharpener. I'm sure you can imagine how that worked. It cost \$5, but I sprung for the \$4 giftwrap to include a note of thanks for his appearance on Ologies, and that I couldn't have *picked* a *sharper* expert who *nose* his material. This is why I call myself your Dad.

**Alie:** Do you dream about noses?

**Dr. Craig:** Oh yeah.

**Alie:** You do!?

**Dr. Craig:** Oh yeah!

**Alie:** What's your latest nose dream?

**Dr. Craig:** It's usually more perioperative stress. You know, like you just did a case and you think about the inside. I see people's sinuses in my mind all the time.

**Alie:** You do?

**Dr. Craig:** Oh yeah, I remember people's sinuses. It's weird.

**Alie:** Like how you would remember a dog or a face.

**Dr. Craig:** I'm probably better with that than I am with remembering names. [laughs]

**Alie:** What do they look like?

**Dr. Craig:** Well, you just remember their surgical anatomy and some of the challenges during the case and specific surgical maneuvers and things like that.

**Alie:** What was your first surgery like on a live human being? Because you're good at cadavers. The first time they're like, "All right, Doc. You're up."

**Dr. Craig:** Yeah, it's creepy. Yeah, it's nerve wracking. Plus, you have people watching you and critiquing you. So, it's always, it's a unique experience to say the least.

**Aside:** Cutting into a person is unique. Like a good pineapple couscous!

**Dr. Craig:** In training, you start, not so much in the operating room, but maybe in the ER and you're closing up lacerations in the face. And that's always a unique experience as a young resident in training.

**Alie:** To stitch up people's bleeding faces.

**Dr. Craig:** They can be pretty extensive lacerations or dog bites or things like that.

**Alie:** So, surgically they kind of train you and you go up and up until you get deeper into the face perhaps?

**Dr. Craig:** Sort of, yeah. You definitely start with more run-of-the-mill surgeries upfront, things like tonsils and adenoids. And then more in the middle of your training, you develop the endoscopic skills for sinus surgery.

**Alie:** So, you've had to do tonsillectomies?

**Dr. Craig:** Oh yeah.

**Alie:** I got one of those.

**Dr. Craig:** Oh, at what age?

**Alie:** 26, dude!

**Dr. Craig:** Not pleasant.

**Alie:** It was not okay. It was the only time I've ever been put under and I remember waking up being like, "That wasn't so bad." And then I looked in the mirror and I just saw a little smear of blood under my chin that they had not wiped up, that they had missed. And I was like, "What happened here?" Like if this is just a smear that they missed, there must have been blood all over my face, right? Like, is that what happens?

**Dr. Craig:** Who knows? It could have been when the anesthesiologist pulled the tube out, you know?

**Alie:** Okay. I was just like, "Wow!"



**Dr. Craig:** Never the surgeon's fault.

**Alie:** No, no...

**Dr Craig:** *[laughs]*

**Alie:** ...but I was like, "What kind of *Game of Thrones* shit was going down when I was asleep?"

**Dr. Craig:** Well, that's a whole nother world. The operating room environment.

**Alie:** This always surprises me that, as surgeons, you guys talk and play music. I've pictured just steely silence like, you could hear someone breathing. What is the actual environment like? What's the mood? What's the atmosphere?

**Dr. Craig:** I mean it definitely varies by surgeon personality. So, they're definitely some people that prefer a very quiet OR. I don't prefer it that way. I like music. I like people talking because I do a lot of teaching. So, I expect people to be asking me questions throughout the whole case and I also fire questions back at them. So, it's very interactive OR environment with me.

**Alie:** Oooh! That's cool, though. I'm pretty much half-dead on the operating table. So, there's no reason for everyone else to have stony silence, right? What do you listen to?

**Dr. Craig:** Ooooooh... I am a hip-hop fan. And I'm in Detroit and I've always been an Eminem fan. So I do listen to Eminem. I also listened to a lot of 90s hip-hop. I'm from the west coast, so I'm a big Tupac fan. I often will listen to hits stations. And, I don't want to offend anybody. So, if anybody's offended by rap than I definitely will just go to the hits.

**Alie:** Well, the patient can't object. That'd be great if they came out of it and suddenly, they were like, "You know, let's put on some Tupac on the way home."

**Dr. Craig:** *[laughs]* A little subconscious recollection would be cool.

**Aside:** So, what kind of situation would get you on the rhinologist's table? *[Tupac song clip: "Girl keep your head up."]*

**Alie:** As a professional, as a rhinologist, what should people be on the lookout for when it comes to their nose health? Because we don't think about our noses unless we're contouring them or there's fluid pouring out of them. What should we be aware of?

**Dr. Craig:** There are some more red flag symptoms that sometimes get overlooked and we might as well just highlight them. So, I always think of anytime you have one-sided symptoms. If for the last month or two, the left side of your nose is completely blocked and not the right, or you only have left sided nosebleeds, it's probably time to get checked out. You know, it could be something as simple as a deviated septum, but you don't want to miss the bad things. And so, when I see one sided nasal obstruction, the first thing that goes through my head is I need to make sure there's no tumor. So, tumors tend to grow and affect one side. And they usually sit in the sinuses for a while before they grow out into that inner chamber.

**Alie:** And now you will put a camera up a nasshole and poke around. Has that been like revolutionary?

**Dr. Craig:** Yes, game changing. It's totally changed the field.

**Alie:** You must have to use less radiology as well, right?

**Dr. Craig:** Exactly! Great comment! Yes, I actually am very principled against unnecessary radiographic imaging because I can see the important areas where the sinuses drain and so, we don't need to be getting CAT scans and things to radiate people all the time.

**Alie:** Anything else that anyone should look for?

**Dr. Craig:** Yeah, another one that has been popping up in the media, too, is the spinal fluid leak.

**Alie:** [*wincing*] Oh godddd!

**Aside:** Ummm... okay, so yeah. This is brain fluid. Stuff from the comfy watery sack surrounding your brain. Kind of like when you buy a pickle in pouch at 7-11, but it's brain fluid. Out of your face. Dr. Craig says that if you ever have clear fluid leaking from your nose, especially if it's one sided, definitely get checked out. Because normally clear nasal drainage should be both sides. One quick question: WHAT THE FUCK?

**Alie:** Walk me through this. A spinal fluid leak is when the shit around your brain is dripping out of your nose.

**Dr. Craig:** Correct.

**Alie:** That should be like fire alarm emergency. Like that's not something you want to happen.

**Dr. Craig:** No, you don't. But the problem is, it's not common enough to where a whole lot of physicians are thinking about it all the time. So, if patients present and they have a runny nose, they might just get put on some sprays and then, "Follow up in three months."

**Alie:** Oh my god! How mad would you be if your brain fluid was leaking out your nose and someone's like, "Take some Claritin."?

**Dr. Craig:** I know it happens. It's not that uncommon for that to happen.

**Alie:** I feel like it's too bad that brain fluid isn't tinted a certain color, like transmission fluid or something. "Oh, it's blue. Like, this is a real issue." What would cause that?

**Dr. Craig:** So, two main causes. One would be trauma. So, if you have a high velocity head injury, you can crack that skull base bone and the leak may occur then, or it could occur months later just from a delayed wound healing process. Or, there's another type called spontaneous spinal fluid leaks.

**Aside:** [*echoing like it's being broadcast to a stadium*] SPONTANEOUS SPINAL FLUID LEAKS.

**Dr. Craig:** The thought is, you get chronic pressure changes at that skull base that's already thin. Eventually it thins to a point where it's gone. Then one way or another, there's a tear in the lining of the brain and that then allows fluid to drip.

**Alie:** Oh, so it's like a burst dam, kind of?

**Dr. Craig:** Yeah.

**Alie:** Oh, Man. So, watch out for those things. What's happening when people put cocaine up their nose? When people are crushing things and snorting them, I'm sure that you have a cautionary tale or two.

**Dr. Craig:** You know, it's funny. I haven't seen that many people yet. I mean, I've seen a few. So, what's happening is cocaine basically acts to constrict blood vessels. It's extreme, we call it vasoconstriction, and so there's obviously mechanical trauma from the actual shards of cocaine or whatever and that can cut the nose and then it gets deposited in the tissue. That'll cause a really extreme constriction of the blood vessels. So that, over time, can basically cause death to the tissue. And so, the nasal septum is a very highly susceptible area because it's right there in the front of the nose. And so, if you hit it with cocaine for a long period of time, the mucosa on either side of the septum can die. And then the cartilage in between doesn't have a blood supply. So, it's gone. So that's how people get holes in their septum from cocaine use.

**Alie:** Ugh, god... Why do people snort some drugs instead of just putting them in their body through other mucosal areas?

**Dr. Craig:** I couldn't give you perfect answers but, for one, it gets absorbed fairly quickly. I think that gives the like initial high quicker. But I don't know if there's an ingestible form of cocaine to be honest.

**Aside:** It didn't strike me until later later but yes! If you've ever read up on altitude sickness in Machu Picchu, you may have heard that a lot of hikers keeping a soggy lump of chewed up coca leaf in the cheek, or you can drink coca tea. Also booty bumping! What's booty bumping? Oh, it's the same as keistering, or plugging, or butt chugging. Which is when you mix drugs with water and stream them up the dark canals of your posterior, thereby bypassing the pesky delay that digestion might afford. Now this, all according to a blog post entitled, "*Everything You Need to Know About Butt Chugging*," written by a retired police sergeant named Keith Graves. I wish I went to his retirement party. I bet that was *so* fun.

But wait, ingestible cocaine. Hmm... Hello, soft drinks! Lest we forget that Coca-Cola got that coca from somewhere. Now, in the late 1880s, it was invented by Dr. J Pemberton, who was a confederate soldier who was addicted to morphine and wanted to make a health tonic. He was like, "Man this cocaine juice will fix your fucking life!" and began selling it in drugstores. Then he died suddenly two years later. But his family was like, [*super fast Alie voice*] "Yeah man, yeah. You know what? Let's make this a business, like it'll one day be the biggest business in the world and people will wake up and drink

it and we'll sponsor the Olympics. Holy shit, man. Yeah, let's do it!" because they were on cocaine.

Now originally, Coca-Cola had about 9 mg of cocaine per glass, which is about a fifth of what you would see when a chubby line is snorted in movies about 1980s stockbrokers. Or like on *Entourage*. I don't know. By the way, what are those actors really snorting? Well, it turns out it's usually lactose powder. Or the prop master coats the inside of the rolled up hundred-dollar bill with Vaseline so that the lactose sticks to the inside. But either way, doing pricey street drugs that rot your septum and turn you into a maniac d-bag, probably not the best life choice if you can avoid it. Just picture an image of a rainbow star streaking across the cosmos and a *The More You Know* graphic. [*The More You Know piano*]

**Alie:** It's a bad idea. Dude, but it's also seems very expensive.

**Dr. Craig:** That probably is also true, yes.

**Alie:** If anyone really needs an upper, I drank Yerba Mate for a number of years and boy oh boy, that thing. Have you ever had it?

**Dr. Craig:** What's that?

**Alie:** It's a type of South American tea.

**Aside:** Seriously though, Yerba Mate, man. I don't know how it's legal because a month supply is \$4 and I would scrub my bathroom grout at midnight for fun. I had to finally quit because I drank too much and I turned into the human equivalent of a scared Chihuahua. [*Brandon from the Cynology episode: "The Chihuahua."*]

**Alie:** Yeah. I had some friends who were like, "Are you on drugs?" And I was like, "No. I discovered a tea at Trader Joe's! It's very caffeinated!" It's intense. I'm sure a lot cheaper than street drugs. How do you feel about septum piercings? When you see it are you like, "No!" Or are you like, "Go for it."

**Dr. Craig:** Hmmm. There is of course the potential when you take it out that you would have a hole in your septum. So, to me it would seem like unnecessary risk. But, if it's a strong personal preference, I don't know. I haven't seen too many problems from them in terms of holes in the septum.

**Alie:** That's good. So, you don't see a lot of people coming in just like dragging themselves into the ER with an infection?

**Dr. Craig:** I haven't, but I mean it's of course a possibility.

**Alie:** Let's say you had a child that's like, "Dad, I'd like a septum piercing." Would you be like, "Okay, but I'm doing it."?

**Dr. Craig:** I would probably just be with them at the piercing studio and hyper-analyze exactly what they're doing.

**Alie:** I feel like it's an easy one to fake though, you know what I mean? I feel like there's some good clip on septum rings.

**Dr. Craig:** It could be true. Kind of makes sense. It might be a market you should explore.

**Aside:** I tried to find out what percentage of septum piercings you see in the wild are actually piercings and what percentage are just clip-on. But, like a bowtie, you'd have to tug on it, or ask, or launch a multi-faceted study on it. Now I did learn that they don't actually pierce your cartilage. They find what's called your sweet spot, scientifically known as the columella, which is a little bit of flesh at the tip of your nose past your actual septum, which makes the whole shebang less drilly and really more gentle pokey. But can I just say that hot dang, if you're afraid of blood or commitment and you want clip on septum piercing, Etsy is coming *through* for you! But what about things on the outside of your whiffer?

**Alie:** Oh, I did forget to ask, do strips that you stick to your nose that open your nose up to prevent snoring, do they work and how?

**Dr. Craig:** They work, but it's not so much for the snoring. What it works on is what we call, nasal valve collapse.

**Aside:** *[sultry Alie voice w/ lounge music]* Oooh, get in bed with nasal valve collapse.

**Dr. Craig:** So, the floppy part of the nose, the nostrils, we call them the nasal valve region. It's actually pretty common to have some degree of narrowing or collapse there. So, with the Breathe Right strips or generic strips are helping with is they'll just lift the floppy nostril outward. Kind of like flaring the nose. So, if that is your area of obstruction, which isn't necessarily the case but if it is, then it should improve airflow. And in those situations, if that's your only cause for snoring, it'll help with snoring. But snoring is multifactorial. You can have obstruction at any level of the throat that won't help with a Breathe Right strip.

**Alie:** Does snoring sound different if it's a nose snore versus the throat snore? Like if someone played you an audio clip, could you be like, "Hmm. That's a floppy nasshole."

**Dr. Craig:** That's a good question. I'm not aware of any literature on it and I don't watch enough snorers.

**Alie:** So, if you try it and you were told that you're still snoring, it might be in the throat. It might be something else.

**Dr. Craig:** Snoring actually is not a prominent primary complaint.

**Alie:** I would think that would be the first. You just have a line of snorers that are in there with like maybe tired, cranky spouses being like, "Get it fixed!"

**Dr. Craig:** Well, in some people's clinics, yes. But in my rhinology clinic, it's not the primary. But it's definitely a huge area of healthcare right now; obstructive sleep apnea. So, a lot of people see that.

**Aside:** I looked at one website, appropriately called StoptheRumble.com, that tried to describe the sounds of snores based on the cause. But it had a lot of weird pop up ads, so I don't know if it's even trustworthy. Now, as soon as I have a somnologist on, this is gonna be a top order of business. Trust me. Okay, onward and upward.

**Alie:** Nose hair trimming. Should we do it? Should we not do it?

**Dr. Craig:** Probably overall, the recommendation should be you don't do it. There is some function to the nose hairs. They catch debris.

**Alie:** But you could trim it up and it's fine.

**Dr. Craig:** I mean, listen, if you are having nose hair growing out of the nostrils and it bothers you, it's safe to clip them. You're not going to cause too many problems. But if you do trim the tissue and cause a nosebleed, then you could have a problem.

**Alie:** Do you know why it hurts so much if you pluck a nose hair? We've all done it. It's horrible.

**Dr. Craig:** Yeah, it is quite unbearable.

**Alie:** It's the worst.

**Dr. Craig:** It's just the nerve innervation. It's those nerves again.

**Alie:** They have to be very, very sensitive. Oh god, what a form of torture. I mean, as a person who's had a lot of things waxed, there's nothing... I would rather wax my entire body twice, than one nose hair.

**Dr. Craig:** Yeah, it's crazy how painful that is.

**Alie:** Do you want to do a lightning round?

**Dr. Craig:** Sure.

**Alie:** These are questions from listeners about noses to you specifically. Christa Avampato asks: "My eye doctor once gave me exercises to strengthen my eyes and they worked wonders. Is there anything we can do to strengthen our sense of smell?"

**Dr. Craig:** So, there's some, some good evidence when you have smell loss that something called olfactory training helps. I'm not aware, if you already have good smell, then I don't know if it'll strengthen it. But if you've lost your smell, then some studies have shown that if you get some of those extract oils like citrus, rose, geranium, things like that. If you smell those 30 seconds each, four scents, around three times a day, that may stimulate more smell function.

**Alie:** Really?

**Dr. Craig:** Yeah. And actually, I've seen it work, so it's got good evidence behind it at least.

**Alie:** Oh, that's amazing. I thought you were just shit out of luck there. You're just plum out of luck.

**Dr. Craig:** Sometimes. Sometimes you are, but sometimes you can fix it.

**Alie:** So, huff some essential oil, see what happens. Great. LateNitePie wants to know: "I frequently get allergies. What can help me breathe better? Any nose exercises or herbal remedies that you suggest?" Anything herbal?

**Dr. Craig:** I'm not aware of any herbal remedies. I'm sure there are some that would work, but just from evidence based medicine per se, I would say a topical steroid is very safe for long periods of time and the saline rinse that I mentioned before are just good simple nasal treatments, and then if you have a lot of the itchiness, itchy nose, itchy eyes or some other, body hives, antihistamines would be great.

**Alie:** Okay. I've got a couple of questions about sneezing. Tyler Q wants to know: "What's the deal with bright lights making people sneeze? What's the correlation there?" I have that where if I'm going to sneeze and I'm about to lose it, if I look at light, I think your pupils constrict and there's some like photo-sneeze reflex.

**Dr. Craig:** I need to read more apparently. Yeah, that's interesting. I wanted to blame it on migraines, but I guess maybe there's actually...

**Alie:** You know when you lose a sneeze and it's just devastating. And you're like, "Where did it go!?" If I look at a bright light then my pupils get small and then that's what triggers the sneeze. But my DNA profile said, "You're likely to have a photo-sneeze reflex." And I was like, "Damn straight I do!"

**Dr. Craig:** Interesting!

**Aside:** So yes, this is called photic-sneeze reflex, and it happens to about 20-30% of people and it is inheritable. So, next time you're about to disseminate your nose contents away from your body at 100 mph, which is what a sneeze is, but it might go away, look at light and see if that does the ol' trick. Also, this whole thing is called, ready for this, Autosomal Compelling Helio-Ophthalmic Outburst which sounds like a real mouthful but guess what, it stands for ACHOO. Yes, someone backronymed that shit so hardcore and I have to say that HACHIEVEMENT is nothing to sneeze at. [*Whaa whaa whaa whaaaa muted trumpet*] Sorry! YOU LOVE IT! YOU LOVE ALL OF IT!

**Dr. Craig:** I love these questions.

**Alie:** I know. Hereiskarl wants to know: "Does mucophagy boost your immune system?" That sounds like eating m\* [*ding*] and I'm going to [*low Alie voice*] barf right now onto my computer. Does it help your immune system?

**Dr. Craig:** I don't think so. I mean we all swallow our own m\* [*ding*]. About one to two quarts a day.

**Alie:** One to two QUARTS!?

**Dr. Craig:** Four to eight cups if you want to do the measurements. So, we're all swallowing it. Only a certain percentage of people actually notice it and get bothered by it.

**Alie:** Oh my god! How do we make that much fluid?

**Dr. Craig:** Well, it's part of the mucosa. It's a m\* [*ding*] secreting powerhouse. Just keeps going.

**Alie:** Oh my god, that's a lot. Julie Rose says that: "Her nose runs every time she eats, even if it's not anything spicy. Everytime she eats." Now, why do spicy things make our nose run and why does her nose run every time she eats? She says it's been happening as long as she can remember.

**Dr. Craig:** Definitely read up on vasomotor rhinitis.

**Aside:** Now, if this happens to you, it might be an overactive nerve response, or something is wonky at the junction between a nerve and a gland. But Dr. Craig says there are other triggers like temperature change or wine. Now, with, "Rosé on a patio" season upon us, what do you do?

**Dr. Craig:** There's actually a nasal spray that works usually very well for it. It's called Atrovent. It basically binds a receptor on the gland and just blocks it from secreting. And there's actually a new treatment out that I do offer—I think I'm one of the few people in Michigan right now—it's an intranasal cryotherapy.

**Alie:** [*gasps!*] Freezing?

**Dr. Craig:** Yeah, there's a publication from Stanford last year; very encouraging. This is a very difficult problem to treat, so when patients either aren't responding adequately or just don't love using Atrovent nasal spray whenever they have a runny nose, it's an option and it's a nonsurgical option. You usually do it in the office with them awake.

**Alie:** So, you just freeze off an area.

**Dr. Craig:** Yeah, just one area in the back of the nose where most of the nerve fibers supplying glands are. And then if that fails there is a surgical option that most people don't need. But every once in a while, you'll have to consider cutting a nerve, further back, a little trickier procedure but...

**Alie:** But think of the money you're gonna save on Kleenex.

**Dr. Craig:** There you go. See?

**Alie:** Is there a Kleenex type that you're like, "Don't use the kind with lotion in it. Use the kind with lotion in it. Splurge for organic."?



**Dr. Craig:** I think I would just go with whatever feels smooth and less annoying to the tip of the nose, but nothing sticks out as superior.

**Alie:** Is toilet paper okay to use on your nose?

**Dr. Craig:** Not the rough stuff.

**Alie:** Okay. Just checking. Charles Anderson wants to know: "What is the best technique for blowing your nose when you're super stuffed up?" What do you do when it's just a traffic jam up there?

**Dr. Craig:** Oh yes. So, usually the problem is not blowing. The problem is it's just too swollen in there. So it feels like something's blocking and you can clear it. But a lot of times there's something in your nose called your turbinates.

**Alie:** Turbinates?

**Dr. Craig:** They're tissues that swell up periodically. It's like their job. They're kind of puffy, bulbous structures on the inside of the nose, on the sidewalls. They're made of bone on the inside and then puffy tissue on the outside. And so those are what classically get crazy swollen during allergies. So, even a normal person without any disease at all may notice sometimes that one side's blocked and then a few hours later the other side's blocked. And then it switches back and forth. What can happen when you have a cold or bad allergies, those tissues on both sides get crazy swollen. And then it's tough to breathe in, but it's also hard to blow out. So, if you're in that situation, I would say start by using a topical therapy. Flush your nose with saline and see if it's getting through at least. Try the Flonase. Now you've got to be careful with the decongestants. Alright everybody, here's the myths... Well, they're not myths. They're real. But, Afrin spray...

**Alie:** Yes! Can you get addicted!?

**Dr. Craig:** Yes. It causes something called tachyphylaxis, which is when your body immediately needs more of it, pretty much. Then you have to keep using it and keep using it. And when it wears off, the tissue gets even more swollen. That's a condition that we call rhinitis medicamentosa. It's not a great scenario because it's hard to get rid of because patients don't want to stop using their Afrin.

**Alie:** Right? You're chasing that dragon!

**Dr. Craig:** Exactly. So, we do have ways to try to temporize that, but obviously if it's not getting better, if this is not a temporary congestion and issue blowing your nose, you really should get checked out. But usually it'll be a fleeting thing. You just have to deal with it for hours to a day or something.

**Alie:** But that's really interesting to know that you can get addicted. I had a friend in high school named Jeff who was addicted to Afrin and we're like, "Well, if a kid's going to get addicted to something, I guess let it be Afrin. But still."

**Dr. Craig:** You don't have withdrawal from it, if anybody's wondering. It's just annoying to try to get off it.

**Alie:** How long would it take to kick Afrin? *[laughs]*

**Dr. Craig:** So I actually, it's funny, when I was in college, I had no idea about this, and I had a horribly deviated septum, couldn't breathe through my nose. And so, I used Afrin because somebody told me to try Afrin and I just used it for a few weeks. And then I tried stopping and I was like, "Oh my gosh, I can't breathe at all through my nose." So, it took me, as I recall, two weeks before I felt like, "I don't need it anymore," but I kicked it. I just went cold turkey.

**Aside:** Dr. Craig says you can kick Afrin addiction with a little topical steroid spray, which Afrin is not, kind of like weaning you off and then assess what caused you to need the Afrin. So, Flonase is like the methadone in this situation. I think. I don't know. Now, this next question is quick and gross, but we're gonna get through it together.

**Alie:** Michael Kierce has a question about if boogers serve any real purpose other than being annoying and embarrassing?

**Dr. Craig:** No, not really. Just dried out m\* *[ding]*. That's annoying.

**Alie:** Okay, good to know. I could talk about drain clogs, and I have in this podcast, but for some reason boogers are one of those things where my gag reflex chokes up and that's very rare for me. I've let spiders crawl on my body, like I'm not grossed out by a lot, but that's one thing that I'm like, "Ughhhh."

**Dr. Craig:** Yeah, I pick a lot them out every day.

**Alie:** *[laughing]* Oh god, that's good karma. Last question for the lightning round. Jamie Gibbs wants to know: "Why is smell such a big trigger for memories?" But, I think that's more a neurological thing.

**Dr. Craig:** No, there's a specific section of your brain responsible for a smell-related memory. It's strong, too. I mean it's a very strong neural connection.

**Aside:** Side note: blame this heavy whiff of nostalgia on the olfactory bulb having direct connections to the amygdala and the hippocampus. These are parts of the brain that deal with memory and emotion. Your smell center essentially cuts the line and is like "Hi! I'm here for the emotions!" Right through the backdoor.

**Alie:** It is nuts. You can smell a perfume from high school and be like, "Oh, all the memories!"

**Dr. Craig:** So true.

**Alie:** Prom! So we just talked a little bit about having to pick boogers, but what's the worst part about your job? The thing that you're like, "Ugh." Is it spreadsheets? Is it anything disgusting?

**Dr. Craig:** Well, I suppose as a physician, definitely there's issues with the administrative side separate from the clinical side. So, I mean the administrative things, we as doctors, it's just part of the job now. You have a lot of paperwork and now it's e-work. You spend a good couple of hours every day after a long day doing documentation. It comes with the territory. It's probably the less gratifying part of the job. I mean as far as clinically, honestly for what I do, there aren't too many downsides.

**Aside:** Once again, this brave hero would rather literally pick strangers' noses than fill out forms, and honestly, I get it.

**Alie:** What do you love about your job the most? What's the most gratifying? What moment has been like made you want to cry about it? In a good way.

**Dr. Craig:** I mean there's just something gratifying about going to work every day, working hard to fix people's problems. I don't think there's *one* thing that makes my job the most gratifying, but there's definitely something fascinating behind deeply understanding an area that is very rare in terms of the diseases that affect the nose. The longer you do this, the more patent sinuses you see, very gratifying. Because usually patent, nice widely open sinuses, result in better outcomes. So, I always joke with patients and say that pretty much, the second purpose in my life is to keep sinuses open. Literally. So, my day deteriorates the more sinuses as I see in the office that are starting to close down because then I have to find ways to keep them open.

**Alie:** It's like *Whac-a-mole* with sinuses. Just keeping 'em open. Keeping 'em open. Everyone! Sinuses! Keep 'em open!

**Aside:** May your nose tears be joyous and your sinuses be as open as your heart.

**Alie:** Have you considered getting a satin jacket with the words, "Dr. Nose Best" embroidered on the back?

**Dr. Craig:** I would not be against that. I have made a sweatshirt already.

**Alie:** What does it say?

**Dr. Craig:** It just says, "Henry Ford Rhinology" with my name on it.

**Alie:** But you got it made?

**Dr. Craig:** I make them for the residents too. But no, satin is a good spin on that. I might have to consider that next time.

**Alie:** Just saying. Just some fancy embroidery. Perhaps a couple of more nose puns in your life. I think there's room for it to be honest.

**Dr. Craig:** Very.

**Alie:** I learned so much! I know I can't stop thinking about my skull plate base.

**Dr. Craig:** Oh, yes, yes. The skull base.

**Alie:** No spinal fluid dripping out of it. Yes!

**Dr. Craig:** Well, thank you so much for having me.

**Alie:** Oh my god, I loved it!

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So, to hear more about Dr. Craig's rhinology work you can head to his [YouTube channel](#), which I'll link in the show notes, or you can just search Henry Ford Rhinology on YouTube. Or you can look for the Facebook page for the Henry Ford ENT Group. Now, I'll also post more links on my website at [Alieward.com/Ologies](#).

You can follow Ologies on Instagram [@Ologies](#), also on Twitter as [Ologies](#). I'm on [both](#) as [alieward](#). Now to cover your human body with Ologies merch, like pins and baby onesies and shirts head to [OlogiesMerch.com](#). Sales support the production of the show. Thank you Boni Dutch and Shannon Feltus for that. Also, if you're looking for some good karma, maybe you need a boost and want to help one of my favorite kids. Shannon Feltus's son Aidan, you can help him make it to camp for special needs kids. You can get a very cool shirt designed by Boni Dutch. The proceeds send Aiden off to camp. That's at [InktothePeople.com/aidanstyle](#). I'll put a link in the show notes in case you wanna buy a shirt and send a very cool kid to camp. I'm just throwing that out there because I think it's a really great cause.

Now to join the Facebook group where Ologies listeners share photos of bee swarms and pictures of dogs and links to cool science news, you can find [Ologies Podcast on Facebook](#) and one of the wonderful admins, Erin Talbert or Hannah Lippow will approve you. Thank you guys for doing that.

You can join the behind the scenes club at [patreon.com/ologies](#). That gets you access to video messages and you can submit questions to ologists before I record the episodes. Those funds help me pay my cherished editor, Steven Ray Morris, who edited this episode while in a metal tube over the Atlantic instead of watching a bunch of quality rom-coms and action flicks on his flight to and from London. Thank you for that! You should be sleeping! The theme music was written and performed by Nick Thorburn, who I just saw driving around my neighborhood recently. I got very excited and I waved.

Now if you stick around until the very, very end of each episode, you know I tell you a secret just for saying, "Thanks for sticking it through the credits," and I am going to give you one follow up secret. Rubbing hemorrhoid cream on a blemish did not help at all. If anyone needs to a tube of barely used hemorrhoid cream, please contact me reach out on Twitter. I will mail it to you. You can put it anywhere you want. That's none of my business.

The other secret I'm gonna tell you, let's make it nose related and blemish related. Once I had a blemish on my nose after my senior year of high school. It was there for six weeks. It left a tiny scar and boyfriends had asked me "Oh, what's this from?" And, told a couple of them that it was from chicken pox. I am sorry I lied to you. Now everyone knows. If you zoom in, you can see it on pictures. It's very small. It looks like a chicken pox scar, but really, that was a hard summer you

guys. *[laughs]* I remember when it finally went away my mom was like. "Oh, I am so happy for you." I was like "Thanks, Mom." Anyways, there is my secret. Berbye.

*Transcribed by Katie K., your outgoing accountant friend who collects rubber ducks in Portland, Oregon* ☒

### **Some links which you may find helpful:**

Fine, EARS, your [smallest bone](#) is really cute

[Seasonal allergies: retired viewing](#)

[Inemuri video that is very cute](#)

[Wait, WHAT is inemuri](#)

[Slippery Steps Japanese gameshow](#)

[Nose job trends](#)

[Doctors Give Homer some news](#)

[Crayon goes back into Homer's nose](#)

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Uh, [bike bell?](#)

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[Septum stuff](#)

[Here are some cool but fake septum rings](#)

[Stoptherumble.com](#)

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