

The AMS Board for Early Career Professionals wants to highlight members of the weather, water and climate enterprise who exemplify the AMS Mission just a few years into their career. Our “Perspectives from Early Career Professionals” segment aims to highlight early career achievements in multiple sectors of meteorology.

This segment features Matt Lanza, the meteorologist at Cheniere Energy, Inc. in Houston, TX. He is also managing editor for a popular Houston area weather blog called Space City Weather (Link below).

BECP: What do your daily work duties entail?

ML: For Cheniere, I am currently the (one and only) meteorologist. I forecast daily weather and temperatures at our LNG (Liquefied Natural Gas) export terminals in Cameron Parish, LA and near Corpus Christi, TX. I work closely with various operational groups in our company to help them understand how weather will impact our operations. I am also looped into our various crisis management and emergency folks, helping them during Houston floods, ice storms, or hurricane risks, as well as at the LNG terminals. I am extremely focused on Atlantic tropical risks during hurricane season reasons and produce a daily tropical update. I also forecast US weather in the medium range, sub-seasonal, and seasonal timeframes for our natural gas traders to determine how weather might impact energy demand. I also work with folks in London to help them understand some global weather impacts on demand, with a focus on Europe and Asia. For Space City Weather, I write weekly forecast posts, typically just on Fridays, that are published in our blog. I fill in as needed when Eric (the head of the site) is out. I also research and write about Houston weather history as time allows.

BECP: Balancing a "side hustle" along with a forecasting day-job, what are some tactics you use to work efficiently and prevent burnout?

ML: I don't? Just kidding. I try and triage where I can. Can something wait? Does this really have to be right now? I won't lie. There are moments where it's exceedingly difficult, but I think back to how the response was after Harvey. I feel a responsibility now because of Harvey that my side hustle is less "side" than it was originally intended to be. But I've had a lot of support at my day job to help lighten the load a bit. I know what my priorities are, and those are what I focus on when I have to. But overall, it's all rewarding enough that it motivates me to keep going.

BECP: What do you focus on the most as a forecaster in communicating extreme weather events to a) the corporate world and b) the general public?

ML: In both cases, it's actually similar... Ultimately, the end user of a forecast wants to know "what does it mean for me?" Every forecast I make seeks to answer that question. That's great that there might be record heat in the Dakotas, but how does that impact energy demand? Does it? There might be rain in Houston tomorrow, but will there be flooding? Will I be able to get to the store and to run the errands I have to get to? My goal for extreme weather is to cut through the noise, because there is a ton of it out there, and just answer the "what does it mean" question.

BECP: What path did you take to get to your current position?

ML: I've taken an interesting road I think. Like a lot of meteorology students, I wanted to start in TV, so I forced myself to hold out until that happened. I worked part time, mostly behind the scenes at

WSYR-TV in Syracuse doing weather producing and supplementing with a part time job at Barnes & Noble. I took a full time offer down the road in Utica about 8 months later. After 3 years I saw what a friend in the energy industry was doing and decided that was the route I wanted to take. I spent about 18 months applying and being interviewed with several rejections until I landed at Southern California Edison in L.A. My end goal was really Houston, so I made contacts and connections and used them to eventually land full-time in Houston at Deutsche Bank...with the requirement of spending a year in the Jacksonville, FL office. We closed our operations down and I got laid off, but a former colleague hired me where I am today at Cheniere Energy.

BECP: What is a major challenge you experienced as an early career professional?

ML: Overcoming the anxiety that I might not be good enough or I might mess something up, get a forecast wrong, etc. I always feel like I have to keep proving myself to solidify my role. Most of it is self-driven pressure. My supervisors have constantly provided positive feedback. But having been laid off once, and hearing other stories from people I respect, can sometimes plant some seeds of doubt. And trying to get over that has been difficult, but I've managed. Being laid off was a big challenge, but it also got me active on Twitter, which allowed me to make so many new contacts, and it allowed me to end up where I am today. Trying to make lemons out of lemonade isn't always easy, but it can happen.

BECP: How important were internships early on to get to where you are today?

ML: I had two big internships in college: One at a local TV station, where the forecaster left in the middle of my internship, and they threw me on air! That was fantastic experience. The other was a pilot project with a utility in New Jersey, where a group of us provided forecast updates to help them direct power crews during severe weather... At the time, they were critical experiences for me to prop up my resume with. Obviously, without them I'm not sure if I would have had the opportunities I had early on in my career.

BECP: What was the most difficult part of the job search process for you?

ML: Out of college, it was trying to decide how long I was willing to hold out to get what I wanted and how distant I could handle moving away. Could I wait for the right opportunity, or should I just get my foot in the door and go from there? And did it *have* to be TV? That one I really struggled with, but ultimately I decided it's what I wanted. Would I be willing to move to a place 2,500 miles from friends, family, and my girlfriend or did I want to stay close? Quality of life issues are real, and they will be things you'll need to reckon with. And if you have a significant other, you have to include them in that conversation. There's no right answer to what works, but obviously more flexibility (if you have it) offers you more options.

BECP: How do you feel the field has changed? Where do you think it's going?

ML: It's getting a lot more difficult to come out of school with just a meteorology degree. You need to have some capacity to understand something related or another field you can apply meteorology. The field (at least the operational side) will require people that understand communication, writing, computer programming, GIS, economics, business, decision-making, or other semi-related areas. The more diversified you are as a job candidate, the more luck you'll have I think.

BECP: What do you want to be doing in 5 years? Why?

ML: I love my job right now, and I hope to be in the same seat 5 years from now (or perhaps doing something slightly different at our company). Of course, if Major League Baseball wants to hire a full time staff meteorologist, I might listen. 😊

BECP: To reach this point in your career, what role have mentors and advisors played?

ML: In college, I never had the advisor or mentor I hoped for. I had good professors, but I never established that kind of relationship, which is mostly on me of course. But I was fortunate in my first couple jobs to learn from Dave Longley at WSYR and Amanda Gabeler at WKTV. Dave taught me a lot about forecasting and recognizing biases and what really matters in communicating. I credit him for helping me right out of school to really set me on the right forward path. Amanda reinforced similar lessons to me at WKTV. It was also valuable for me to see the extra pressures and challenges a female chief meteorologist has that male colleagues often don't realize or witness. Being a good colleague and ally to others in our field is just as important as being a good meteorologist.

BECP: Who do you seek out for advice and why? To whom do you routinely provide advice, if anyone?

ML: I often turn to former classmates or colleagues that I'm good friends with. Truthfully, my wife is a big source of providing advice too. I also have amazing supervisors at work, and I'm not afraid to go to them if I need to. [Advice] doesn't always have to be from someone *in* the field. But usually the people that know me as a person *and* a meteorologist best, provide good, healthy advice. I try to routinely provide advice to students. I'm in the AMS Board for Private Sector Meteorology (BPSM) mentorship program and have two students this year. I'm also in the National Weather Association's mentor connection program. Our company allows me to hire a summer meteorology intern, so I spend a significant amount of time mentoring them and then often keeping in touch after. I try to offer as much as I am physically able to for students. I think I'm motivated by the fact that these are opportunities I would have loved to have when I was in school.

BECP: What is something unique you've been able to accomplish/experience so far in your career?

ML: I have helped two large businesses adequately, if not successfully navigate incredible storms. While at Deutsche Bank, I helped our New York City metro area offices prepare for Hurricane Sandy in 2012 with conference calls and briefing emails regularly through the event. That ended up merely being practice for Hurricane Harvey in 2017, where I was embedded in so much of Cheniere's business operations because it impacted our entire company from the hurricane conditions near Corpus Christi to the flooding in Houston and the Beaumont-Port Arthur area. I briefed our entire executive team (including our CEO) ahead of, during, and after the storm. While I hope and pray we never, ever see a Harvey again, I know that I acquired a very unique skill set working that storm, and I view our "surviving" it as a testament to the value of having a meteorologist on staff at a business. I fiercely believe that most large weather exposed businesses should have one embedded within the organization, not just relying on a forecasting service. Harvey was also unique for Space City Weather, where we had over 1 million visitors on our peak day and earned a good deal of praise for how we wrote about it. Again, I hope we never, ever see anything like it again, but we're prepared if we do.

BECP: You wrote a detailed post-mortem (link below) on Hurricane Harvey for your Blog, Space City Weather, along with several follow-up and/or related posts regarding Harvey's impacts to your local community (the greater Houston area). What do you see as being the biggest success so far in changed policy/action/attitude over the past year in regards to catastrophic flooding mitigation or prevention efforts?

ML: I would say the new Houston development rules (link below) were a big step. That fact that the city of Houston was able to regulate development stricter than it has in the past was a huge feat. The impact won't be as great as some other measures, but it proves that this time we are at least trying to learn. The next big test will be the bond issue up for a vote on the one year anniversary of Harvey. It will dedicate over \$2 billion to flood mitigation projects. It's a no-brainer, but you never can be sure how these things turn out. Everyone has reasons not to vote to increase their property taxes. But truthfully, our survival as a viable city is at stake. The status quo can't continue if Houston is to be a prominent global city of the future.

BECP: Again referencing your Harvey post-mortem, you touch on the physiological and psychological stresses forecasting Harvey imposed on you. In finding your way forward, what has been the most effective tool you've found to cope with the survivors guilt and trauma you experienced?

ML: I think talking to other meteorologists that have gone through it has been helpful. You know that so many went through Harvey, let alone other hurricanes, tornadoes, etc. in the past. Hearing their experiences has helped lighten the load a bit. Seeing the city recover, albeit gradually, has also been helpful. I did a little volunteer work late last year (and I need to do more), but that also helps. And truthfully, having discovered some house damage several months after Harvey lightened the load a bit too.

LINKS

[Space City Weather, Powered by Reliant](#)

[Matt's Hurricane Harvey Post-Mortem](#)

[New Houston Development Rules](#)

