

# Jennifer Maclachlan - an Interview

**Co-Owner, PID Analyzers, LLC**

*Reprinted from ACS Industry Matters Newsletter, October 15, 2020*



As a co-owner of her family owned and operated analytical and environmental monitoring instrumentation manufacturing business, PID Analyzers, LLC, Jennifer Maclachlan is responsible for managing relationships with distributors and key clients, as well as the web-based marketing, social, and digital media initiatives, of which she was an early adopter.

In 2018, Maclachlan served as Chair of the ACS Multidisciplinary Program Planning Group (MPPG) and completed three years of service as Chair of the ACS National Committee on Public Relations and Communications (CPRC), and is currently serving as a second year Associate to the ACS Committee on Chemical Safety.

Since 2010, Maclachlan has been the Public Relations Chair for the ACS Division of Small Chemical Businesses (SCHB), where she currently runs a weekly SCHB Zoom Happy Hour meeting to discuss business that is important to small chemical business owners. She has done this for the past 28 weeks and counting.

She is a founder of the Cape Cod Science Café, which she started in 2011, with support from the Northeastern Section of the ACS (NESACS) and an International Year of Chemistry (IYC2011) mini-grant.

STEM Journey, of which she is a founding member and organizer, is an award-winning K–12 annual public outreach, day-long event with collaborative efforts from the ACS

Local Section (NESACS), the Cape & Islands Boy Scouts, Sandwich STEM Academy, and PID Analyzers, LLC.

In 2020, Maclachlan became Chair of the American Industrial Hygiene Association's (AIHA) Teen Workplace Health & Safety Committee after completing three years of service to AIHA as Chair of their Teen Workplace Health & Safety Task Force, which she founded with administrative support from AIHA.

In her local community on Cape Cod, Maclachlan completed service as Rear Commodore during the summer 2020 season at the lake yacht club, where she was in charge of implement-ing and enforcing COVID-19 protocols and running daily operations at the grill with a teenage workforce.

COVID-19 is not only killing people all over the globe, it is proving to be lethal to small businesses. In its August 1, 2020 issue, the Wall Street Journal reported that "...as many as 1.4 million small businesses closed their doors or temporarily suspended operations in the second quarter ...

**Q:** *What are your biggest concerns about the pandemic's impact on your small business?*

As the Managing Director of a small, family-owned manufacturing company, my two biggest concerns have been and continue to remain the same: 1) Protecting personnel by operating smartly and safely and 2) Effective management of our supply chain when the products we manufacture aren't mass-produced.

After receiving notification of the local school closures on March 13, 2020, I instructed our employees to bring home whatever tools/supplies/widgets/products etc. after each shift, that they would need, in case we needed to shut down the building, and shelter in place: that way they could keep working from home and we could continue to pay them.

When the Stay-At-Home order was issued for Massachusetts effective March 24, 2020, we were prepared and able to continue operations in our facility under the 'Chemical' provision as an Essential Business, however, in order to keep our workers safe and healthy, we determined that some workers could be entirely remote, and others would need to be hybrid, and we would therefore have to employ a staggered workforce.

This triggered a sophisticated cooperative and collaborative effort, beyond shared work-calendar scheduling, as it forced greater focus on certain projects, real prioritization, with

increased productivity while simultaneously creating an interdependency of totally remote employees with those who were onsite essential employees.

For instance, certain personnel were now also responsible for additional tasks when scheduled for onsite work like 'being a pair of hands' for my father, who was designated to work from home, and was using a remote desktop to connect to his gas chromatograph onsite at our facility, while one of the onsite engineers was having to make the manual injections and other physical chromatographic condition adjustments, while my father watched the video of the work bench from the stationary camera feed and used a video conference platform to give directions.

This combination camera, remote desktop, video call setup is something that we have been using for the past couple years to support our international clients, so it was easy to apply this technology to our daily operations so we could continue business as usual throughout the early stages of the pandemic.

In late March I routed all shipments to my house for two reasons: 1) With a staggered workforce we would surely miss critical component shipments, which would immediately slow down production and 2) For building security: Now that the building was restricted to key employees working alone, we couldn't leave the front door unlocked without an attendant to receive packages and we also needed to prevent unauthorized entry into our facility.

By mid-April, we had installed a doorbell and video surveillance throughout the facility to monitor the building for security and safety, since solo-work was being performed. By mid-May, we began to re-integrate multiple workers into the facility, using a variety of protective controls including but not limited to temperature taking/reporting upon entry, bleach-soaked doormat at the entrance, mandatory facial barriers, cleaning protocols for high touch surfaces, hand-sanitizing, cleaning management of individual work spaces etc.

By mid-June, we had a safe return to work plan in place for my father, who was incredibly patient throughout this whole process, but quite frankly done with the work from home part. We were able to accomplish this by converting a conference room into a combination office/testing lab, which is physically isolated from the rest of the workers.

Supply chain is always a challenge as a small manufacturing company, particularly since we primarily use vendors like ourselves: small niche, bit providers. All of our analyzers, detectors, continuous multipoint monitors and portable/lab/process gas chromatographs are made to order. Reducing the number of unique parts by streamlining standardization

across the product lines has been an ongoing development process for us, and having such a strong in-house software team has made the re-engineering exciting, not arduous.

For certain product lines, we can manufacture and deliver quickly, in 1-2 weeks. For the more typical delivery time, especially with a customized application, we are in the 4-6 or 8-10 week delivery period, often based on a long standard delivery time for specialty components. We experienced some unanticipated delays in materials due to the California wildfires in 2019, which caused an interruption in one of our manufacturing processes. As a result of that, we began holding onto more critical inventory so we can mitigate future similar supply chain issues.

As the number of daily positive COVID-19 cases in Massachusetts is steadily on the rise, we remain alert and adaptable, should we need to revert back to strictly staggered for the safety and wellbeing of our workforce.

*Q: In an April 2013 issue of the Barnstable Patriot, in response to a question about how to encourage girls to become more interested in science, you replied, "Exposure." Would you elaborate on that?*

Sure! When I said exposure is the key to encouraging girls into science, I meant through local community Informal Science Education (ISE) programs designed for a K-12 audience, such as National Chemistry Week/Chemists Celebrate Earth Week events, science festivals, the Cape Cod Science Cafe, STEM Journey, Girl Scouts, and science clubs. Being exposed to numerous extracurricular STEM activities on a regular basis, as in a well-orchestrated public event, particularly those with hands-on activities, led by a variety of passionate activity presenters, and compelling speakers with exciting STEM jobs, can spark a continued interest in STEM topics outside what is being taught in the classroom.

*Q: According to National Science Foundation data, the percentage of bachelor's degrees awarded to women in the physical sciences increased from 19.2% in 1997 to 20.7% in 2006, but dropped to 19.3% in 2016. Those numbers have barely budged in over 20 years. What is your reaction to this state of equilibrium?*

If we want to encourage more women into the physical sciences, we need to start earlier by working with middle school science and STEM teachers on a cool-factor marketing plan for how to really keep girls interested in STEM subjects. Evaluate the curriculum, make it relatable and elevate their enthusiasm. We need to make ourselves, as chemistry

professionals, available to volunteer to guest lecture to their students and share why we love the chemistry/STEM profession and how we got to this career. We need to connect with our local high schools and volunteer to be their ACS Local Section liaison and help them start an ACS Chem Club. This WILL make a difference and is an opportunity to give back to your local community. Not sure how to get started? Contact me and I'll help you navigate your way into the local school system and connect with your educators.

*Q: How have your parents influenced your leadership style?*

Having parents who placed a high value on education and were both able and willing to get into my classrooms and volunteer, who achieved their own goals by working hard and pushing past obstacles with determination and grace, served as role models for me and positively influenced both my strong leadership as well as my parenting style.

*Q: Only five years after getting your undergraduate degree from Boston College, you became a co-owner of a small business (PID Analyzers, LLC). What motivated you to pursue that opportunity?*

I was so entrenched in the sales, marketing, personnel and project management segments of the business that this was the obvious next step in my career advancement at the company.

*Q: If you hadn't made the decision to co-own a small business with your father in your late 20's, what was Plan B? Were you seriously considering other career opportunities?*

There really wasn't ever a Plan B. I did back then, and still really do enjoy what I do. I recognized early in my career that it was unusual both to love your job as much as I did and to get along so well 'working for' and then 'working with' a parent in the family business. What makes it so enjoyable? Part of it is the pure pride of working in the family business, and the rest is the getting to wear many hats, learning all the jobs at the company, putting out the fires, the thrill of the kill with a big sale, and the overall management of the business entity.

*Q: Best thing about working side-by-side with your father?*

I get to see, interact and hang out with my dad every day. It's no secret: He's my favorite human.

**Q:** *On what business-related issue did you and your father most disagree? How did it get resolved?*

We've had differences of opinion on personnel from time to time over the past 26 years. Those kinds of issues naturally resolve with the help of corrective action measures, etc. On the big stuff: Financial decisions, sales & marketing, manufacturing & product-ion, we're always on the same page, even often times without discussing it first; we know where we each stand.

**Q:** *You are the founding partner and event planner for the Cape Cod Science Café. What's the mission of the café? And how, if at all, has that mission been compromised by the pandemic?*

The mission of the Cape Cod Science Cafe is to connect scientists with the general public to discuss scientific topics of high interest in a relaxed atmosphere. We also do pop-up versions of the Cape Cod Science Cafe for K-12 students, sometimes on its own, as a Science Sunday Funday event such as the International Year of the Periodic Table lecture and hands-on event at the Sandwich Public Library in 2019, or the Science in Your Swimsuit events at the lake (2017-2019).

In August, I was able to hold a sold-out event under the Cape Cod Science Cafe banner at the yacht club, with proper social distancing and other COVID-19 protocols in place. This was a dinner cafe, with a rum tasting and three guest lecturers that covered these topics: Shipwrecks, Pirates and Rum Tasting.

I'm observing what other ACS groups and other STEM partners are doing for virtual events and am formulating a plan for virtual execution in 2021 of Cape Cod Science Cafe events as well as STEM Journey 2021.

I am also seeking virtual partners who are interested in speaking, leading activities, as well as co-sponsoring/co-promoting/co-producing thematic ISE lessons/lectures that can be used by K-12 teachers worldwide under the STEM Journey branding. Connect with me if you are interested in participating in this project, in any capacity.

**Q:** *What personality trait has served you best in your professional life? What personality trait do you wish you had in greater supply?*

Confidence. For sure, it's confidence that has served me well as a manager, in customer support and service, and in sales and marketing. My internal confidence comes from an

upbringing where my sister and I were told and encouraged by our parents to be anything we wanted, do anything we wanted.

My outward confidence comes from years of performing in recitals: dance and on the ice, on the stage singing in chorus and from performing in nearly 20 theatrical productions in high school. What both my dad and I could use in greater supply is more work/life balance. The burden to ‘always be on’ when you run your own business comes with the role of entrepreneur. That’s something we are both still learning to leverage.

**Q:** *What is the one thing you wish you had learned earlier in your career?*

From a networking perspective, I wish I had joined more groups, like local chapters of scientific societies, community-based groups, planning groups within the conference structures as an early career professional. I did eventually find my way to joining then nearly immediately volunteering at these groups like ACS, AIHA, my local Civic Association, the local Historical museum, PTA, High School Science Advisory Board and Science Club, but it would have been more advantageous professionally to have been engaged in these peripheral special interest pursuits in my twenties rather than in my mid-thirties.

**Q:** *In ‘normal’ times, your job involves lots of travel, both domestically and internationally. What is your most memorable business trip?*

It was in 1999, when I went to France to work with the Director of our French subsidiary and visit the hazardous waste site where our equipment was being used to monitor the contaminated soil before, during, and after the remediation process. There is something truly thrilling about getting to see our products at a client’s location.

There is a lot of respect associated with a visit from the manufacturer in the eyes of the client, so I was wholeheartedly welcomed onsite. While our systems are used for a myriad of applications, the hazardous waste market is near and dear to my father, as that was one of the first uses of our field portable equipment back in the 1970’s, at Love Canal. So, it was a big deal for me to be able to see and experience a hazardous waste application of our product in real life instead of in product literature.

This trip also scored me a weekend in Paris, where I got to see attractions I hadn’t on previous trips to France for tradeshow, like the infamous Père Lachaise Cemetery, where I had the opportunity on the tail end of this particular trip to visit the gravesite of legendary American rock star, Jim Morrison. That’s the neat thing about business travel, if you make the arrangements, time and effort, you get more out of the trip. Of course, that’s a good life lesson, as well.

*This article has been edited for length and clarity. The opinions expressed in this article are the author's own and do not necessarily reflect the view of their employer or the American Chemical Society.*